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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA, WESTERN DIVISION

ERICA JIMENEZ, individually and on behalf of a class of similarly situated individuals,

Plaintiff,

v.

DR. ERICA PAN, in her official capacity as Director of the California Department of Public Health; DR. BARBARA FERRER, in her official capacity as Director of the Los Angeles County Department of Public Health; MANUEL CARMONA, in his official capacity as the Director of Public Health for the Pasadena Public Health Department; LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH; and PASADENA PUBLIC HEALTH DEPARTMENT,

Defendants.

CASE NO. 2:26-cv-03500

COUNTY DEFENDANTS DR. BARBARA FERRER AND LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH'S OPPOSITION TO PLAINTIFF'S MOTION FOR PRELIMINARY INJUNCTION

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I. INTRODUCTION

In Los Angeles County, Black infants die at 2.9 times the rate of White infants, and Black women experience a maternal mortality ratio of 4.6 times that of White women. These stark disparities remain even when controlling for income, education, and other socioeconomic factors. The federal government, the State of California, the County of Los Angeles, leading world health organizations, and national experts agree that this persistent, decades-long, race-specific gap cannot be waved away as a statistical anomaly. It is precisely the kind of documented, evidence-based crisis that justifies—indeed demands—the targeted public health intervention Defendants provide through the Black Infant Health ("BIH") Program.

Courts have long recognized that the government's interest in protecting public health is among the most compelling interests a state can assert. And evidence has shown that race-neutral interventions alone have not worked to remediate the Black-White gap in maternal and infant mortality. This is the reason why, in 1989, the California Legislature enacted BIH, a targeted, evidence-informed and expert-driven approach to combat this public health crisis.

Since its inception, the BIH Program has been extensively studied and refined by public health experts to best meet its goal of reducing Black maternal and infant mortality rates. BIH has shown documented positive outcomes—reflecting an ongoing rigorous, evidence-driven approach. Current public health research has identified the culturally specific, group-based intervention model utilized by BIH as the most promising strategy for improving birth outcomes among Black women. But the work is not done. The striking disparity in mortality rates for Black mothers and infants compared to other races persists. Thus, the program continues to be necessary and properly targeted to address this serious public health crisis.

The Ninth Circuit has upheld race-conscious measures where they are supported by research and expert judgment. *Hunter ex rel. Brandt v. Regents of the Univ. of Cal.*, 190 F.3d 1061, 1066–67 (9th Cir. 1999) ("[C]ourts should defer to

researchers' decisions about what they need for their research" and "should show great respect for the faculty's professional judgment."). That principle applies with even greater force where the stakes are of the highest order, namely, prevention of infant and maternal death in a population that dies at 3–4 times the rate of others. BIH is not an affirmative action program affecting competitive, zero-sum university admissions; it is a targeted public health intervention designed to address the documented, measurable, and ongoing crisis of disproportionate Black mortality.

BIH is scientifically grounded, as it is informed by public health surveillance morbidity and mortality data. BIH's objective (to reduce the Black-White gap in maternal and infant mortality) is concrete and measurable, and is not comparable to universities' diversity goals, which the Supreme Court criticized as being "standardless" and "inescapably imponderable." *Students for Fair Admissions, Inc. v. President and Fellows of Harvard Coll.* (*SFFA*), 600 U.S. 181, 215 (2023). Plaintiff's reliance on affirmative action cases in higher education is misguided. BIH is not trying to remedy past societal discrimination; rather, Defendants are incrementally improving the protection and preservation of existing and future human life. No government interest is more concrete or compelling.

As set forth in the declarations concurrently filed with Defendants' Oppositions, the BIH Program is necessary to address this health crisis, and broad-based interventions alone have not been successful in closing the Black-White gap in maternal and infant mortality rates. Plaintiff asks this Court to second-guess the expert judgment of public health experts and professionals who have spent decades studying, designing, and refining the BIH Program. The Court should decline that invitation. Plaintiff is not likely to succeed on the merits of her claims.

Plaintiff has also not satisfied her burden to show irreparable harm or that the public interest weighs in her favor. Plaintiff's only superficial claim of any harm is that she will become ineligible for BIH by approximately September 2026 (six months postpartum from her March 2026 delivery). But Plaintiff does not provide

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any evidence that she wants to participate in BIH, let alone that she will benefit from its services. She does not claim that she experienced any health complications or that she lacked, or lacks, access to maternal and infant health care services. Indeed, she admits being offered other programs but apparently declined them. She has not even applied for BIH, stating only that she is "ready and able to apply."

It is indisputable that there are many additional government-funded programs that provide similar services that Plaintiff can use. "No mother in Los Angeles County, regardless of race, is without access to publicly funded maternal and infant health services." (Declaration of Melissa Franklin ("Franklin Decl.") ¶ 64.) There is no irreparable emergency affecting Plaintiff, especially when there are many other similar beneficial services available to her.

The public interest further weighs decisively against an injunction. Plaintiff asks this Court to gut and restructure a public health program serving one of the County's most vulnerable populations so that she can participate in group sessions specifically designed around the cultural experiences of Black women, for reasons she has not articulated. Fundamentally altering BIH's culturally targeted group dynamic and therapeutic model would undermine its purpose and effectiveness for the very population it was designed to protect—all to benefit a plaintiff who has identified no concrete harm to herself or her child. Any disruption to BIH risks interfering with the positive outcomes to date and exacerbating the Black-White gap in mortality rates. That is not a harm this Court should impose based on the record before it. The Court should deny Plaintiff's motion for preliminary injunction.

II. BACKGROUND

A. The Black Mother and Infant Mortality Crisis

Black infants and mothers face an alarmingly elevated risk of pregnancy-related mortality when compared to infants and mothers of other races. (Franklin Decl. ¶¶ 16–17 & Ex. A.) As such, Los Angeles County Department of Public Health ("LA County DPH") studies the issue and maintains data tracking infant and

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maternal mortality stratified by demographics and geography across the County. (*See id.*) The empirical evidence is striking.

As illustrated in a September 2025 LA County DPH data report, from 2021–2023, the Black infant mortality rate was 2.9 times the White infant mortality rate. (Franklin Decl. ¶ 17 & Ex. A at 18.) And from 2019–2023, Black women in the County had a maternal mortality ratio 4.6 times higher than that of White women. (Franklin Decl. ¶ 17 & Ex. A at 33.)

These disparities are not fully explained by income, education, or other socioeconomic factors. (Franklin Decl. ¶ 18.) Poor birth outcomes among Black women and babies persist even when Black women have a pregnancy at an optimal age, have high income, and are well-educated. (*Id.*) The data demonstrates, among other things, that Black women remain 3 to 3.6 times more likely to die from pregnancy-related causes than other races, and Black babies are 1.4 to 2 times as likely as infants of other racial or ethnic groups to be born at low birth weight. (*Id.* & Ex. A at 47.) Further, Black women with a Master's degree or higher have nearly the same risk of preterm birth—a leading cause of infant mortality—as White women with less than a high school education. (Franklin Decl. ¶ 18.)

B. International Health Organizations and Scientific Research Recognize This Crisis

Leading health organizations make clear that infant mortality is not an abstract data point. Rather, it is one of the most widely recognized indicators of the overall health of a society. The World Health Organization identifies the infant mortality rate as a measure that "reflect[s] the social, economic and environmental conditions in which children (and others in society) live, including their health care," and uses it to "identify vulnerable populations." (Declaration of Amnon Z. Siegel ("Siegel Decl.") Ex. G. at 33.)

The U.S. Centers for Disease Control and Prevention likewise recognizes that "[t]he infant mortality rate is an important marker of the overall health of a

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society." (Siegel Decl., Ex. H at 37.) A peer-reviewed study of 180 countries published in the *Journal of Epidemiology and Community Health* found a strong linear association between infant mortality and disability-adjusted life expectancy, concluding that infant mortality rate "remains an important indicator of health for whole populations . . . ." (Siegel Decl., Ex. I at 40–43.) And a 2023 National Academy of Medicine publication described the infant mortality rate as "a proxy indicator of overall societal health because it is strongly associated with fundamental causes of poor maternal health, such as limited resources, structural racism, the social determinants of health, and gaps in care systems in a community." (Siegel Decl., Ex. J at 53.)

The Black-White infant mortality gap is a symptom of structural conditions that threaten the health of an entire population. The most recent CDC data confirm that Black infants die at 2.4 times the rate of White infants nationally (10.93 versus 4.48 per 1,000 live births). (Siegel Decl., Ex. K at 65.) In Los Angeles County, that gap is even starker: the mortality rate for Black infants is 2.9 times that of White infants; and the pregnancy-related mortality rate for Black mothers is 4.6 times higher than White mothers. (*E.g.*, Franklin Decl. ¶ 17.)

C. The Federal Government Recognizes This Crisis

For decades before BIH took its current form, public health authorities relied on broad-based maternal and infant health interventions, including generalized prenatal care outreach. Earlier programs were not designed around the distinct drivers of poor birth outcomes for Black women, including chronic stress associated with racial discrimination, transgenerational poverty, and related social determinants of health. (Franklin Decl. ¶ 21.) These broader approaches did not work to close the Black-White mortality gap. (*Id.* ¶ 22.)

The failure of general, broad-based health interventions to address racial disparities in infant and maternal mortality has been recognized at the highest levels of the federal government. (*Id.*) In 1985, the U.S. Department of Health and

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Human Services ("HHS") published the *Report of the Secretary's Task Force on Black & Minority Health*—known as the Heckler Report,[1] named after Margaret Heckler, then Secretary of HHS—which was the first comprehensive federal study to document and officially acknowledge the persistent disparities in health outcomes between Black and White Americans. (*Id.*)

The Heckler Report specifically identified infant mortality as one of six cause-of-death categories in which minority excess deaths were concentrated. (*Id.*; *see also* Siegel Decl. Ex. N at 131–32.) The Report recommended ***targeted*** interventions focused on the specific populations experiencing the disparities. (Franklin Decl. ¶ 22*; see also* Siegel Decl. Ex. Q at 193, 200.) The Heckler Report led directly to the creation of the Office of Minority Health ("OMH") within HHS, which continues to operate today. *See* 42 U.S.C. § 300u-6. Yet, despite the Report's findings and the programs that followed, the Black-White infant mortality gap has persisted. (Franklin Decl. ¶ 22; Siegel Decl. Ex. L.)

Consequently, Congress continues to appropriate funding to the National Center for Health Statistics to collect and analyze health data "specific to particular ethnic and racial populations." 42 U.S.C. § 242k(l). And it continues to mandate that the OMH: (1) "[d]evelop mechanisms that support better information dissemination, education, prevention, and service delivery to individuals from disadvantaged backgrounds, including individuals who are members of racial or ethnic minority groups" (*id.* § 300u-6(b)(5)); and (2) "[a]dvise in matters related to the development, implementation, and evaluation of health professions education in decreasing disparities in health care outcomes, including cultural competency as a method of eliminating health disparities" (*id.* § 300u-6(b)(10)). These goals mirror

[1] Relevant portions of the Heckler Report are attached to the Siegel Declaration as Exhibits N–Q. The full Heckler Report can be found and downloaded at this government website, https://collections.nlm.nih.gov/catalog/nlm:nlmuid-8602912-mvset. (Franklin Decl. ¶ 22.)

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those of BIH. (*See infra* § II.D.)

D. The State Creates the BIH Program to Address This Crisis

In 1989, four years after the Heckler Report, and in recognition of the troubling Black-White infant and maternal pregnancy mortality rates, the State of California created the BIH Program. The program and its framework were established through two pieces of legislation: Senate Bill 165 ("SB 165"), which established the BIH Program itself; and Assembly Bill 1701 ("AB 1701"), which led to the amendments to California Health and Safety Code sections 123259 and 123260.

The legislative history for these bills underscores the severity of this public health crisis and makes clear that the BIH Program has always been intended to address, and remedy, a unique public health issue facing the Black community, namely, statistically higher rates of infant mortality compared to non-Black populations. Those same bills say ***nothing*** about the creation of the BIH Program to "remedy past discrimination," because that is not the purpose of the program.

The legislative history for SB 165 states that certain funds were to be appropriated and used "for new and innovative projects to reduce the rate of black infant mortality in California." (Siegel Decl. Ex. D at 16; *see also id.* at 13 ("the second priority shall be to increase services addressing black infant mortality and other high-risk infant populations").) This appropriation was deemed necessary due to the "disparity between the black and non-black populations in infant mortality," and as part of the appropriation, sought research, and presentation, of "information which evaluates current programs; assesses current and ongoing needs; contains legislative, programmatic, and funding strategies" as well as "specific program recommendations" regarding reducing the disparity. (*Id.* at 17–18.) The legislative history for the 1989 legislative session makes no mention of appropriating funds to address past discrimination against Blacks.

Studying, and addressing, the disparity between Black and White infant

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mortality continues to be the driving force behind the BIH Program. An April 11, 2023, analysis of AB 1701 by the Assembly Committee on Health notes that, while disparities in Black infant mortality exist nationally, the problem is even more stark in California. (*See* Siegel Decl. Ex. E at 22.) (finding that "the infant mortality rate per 1,000 live births in California was highest for Black infants . . .").)

What's more, the disparity between Black infant and maternal health "persist[s] even when controlling for certain underlying social and economic factors, such as education and income," and "appear[s] to be less dependent on age, economic status or education" than infant mortality rates in other racial groups. (*See id.*) As recognized in comments by the Senate Rules Committee ("SRC") on AB 1701, "the statewide mortality rate for Black infants continues to be two to four times higher than rates for other groups." (Siegel Decl. Ex. F at 28.) Thus, California continues to appropriate funds for the BIH Program to support "evidence-based" programs to assist in addressing this ongoing disparity between Black and non-Black infant mortality rates. (*See id.* at 28–29 (identifying five separate programs that can be implemented using appropriated funds).)

E. <u>The BIH Program's Evolution, Services, And Outcomes</u>

BIH is not a static, blunt instrument but rather an iteratively refined, evidence-informed intervention. In 2006, the California Department of Public Health commissioned a comprehensive assessment by the University of California San Francisco ("UCSF") Center on Social Disparities in Health. The UCSF assessment found that generic prenatal care alone would not close the Black-White gap in birth outcomes and that the most successful interventions were group-based models emphasizing social support and empowerment. (Franklin Decl. ¶ 23.) The current BIH program curriculum was adapted from other nationally recognized curricula (e.g., Effective Black Parenting) and focuses on health issues for pregnant women, health disparities for Black women, and culturally relevant health information. (*Id.* ¶ 29.)

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The BIH Program pairs structured group-based prenatal and postpartum intervention (10 prenatal and 10 postpartum sessions) with complementary planning. (*Id.* ¶ 30.) Attendees engage in discussions about risk factors and issues Black mothers and infants face at a disproportionately high rate, such as sudden infant death syndrome, pre-eclampsia, and safe sleep issues. (*Id.* ¶ 31.) At these sessions, Black mothers are provided with a culturally-supportive environment that focuses on unique issues faced by them with the aim of reducing pregnancy stress and fostering a sense of community. (*Id.* ¶ 32.)

Attendees are also provided with discussions about life-planning and goal-setting for their pregnancies, as well as referrals to other widely available County resources for mothers. (*Id.* ¶ 33.) Additionally, the BIH Program website contains a multitude of online resources that include videos and written guidance for pregnant mothers. These materials are publicly available to any individual who visits the website. (*Id.* ¶ 34; Siegel Decl. Ex. M.)

BIH's evidence-informed approach is designed to enhance life skills, build societal support among Black mothers, and reduce maternal stress—a key driver of the above-discussed mortality issues. (Franklin Decl. ¶¶ 27, 35.)

The BIH Program's curriculum and group sessions are specifically designed around the cultural experiences of Black women. Each group session includes activities designed to address internalized racism, discussions of Black cultural heritage as a source of pride, and content that speaks to the particular stressors Black women face in society. These are not generic maternal health topics; they are tailored to the specific needs identified by evidence-informed public health research. (*Id.* ¶ 36.)

Data has shown that these types of targeted measures have had, and continue to have, a positive impact on Black mothers and have contributed to stemming the tide of pregnancy-related mortality among Black infants and mothers. The California Department of Public Health's 2015–2018 evaluation of 1,571 BIH

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prenatal participants demonstrated statistically significant positive change in 13 of 18 intermediate health outcomes among participants in the group-based model, confirming the group-based approach creates meaningful social support and produces measurable health improvements. (*Id.* ¶ 29.) These results demonstrate that BIH's targeted approach is having a positive and measurable impact on Black mothers and infants. (*Id.* ¶ 37.)

F. Los Angeles County's Administration of the BIH Program

Although the County, through DPH, helps foster the BIH Program, the funding comes from the State of California. (Franklin Decl. ¶ 39.) Each year, the County applies for use of its state funding allocation for the BIH Program. (*Id.* ¶ 40.) To receive funding, the County is required to demonstrate there is a need for the program within the County, as well as a target population that will be served by the program. (*Id.* ¶ 41.) In so doing, the County analyzes, among other things, disparate trends in infant and maternal mortality. (*Id.* ¶ 42.)

The County itself does not administer services through the BIH Program. (*Id.* ¶ 43.) Those services are provided by three different County contractors, one of which is the City of Pasadena. (*Id.*) Each year, when it applies for funding, the County must identify which contractors will receive funding and the target areas they will serve. (*Id.* ¶ 44.)

The State ultimately approves the County's funding request and thus which areas of the County will be served by the BIH Program. (*Id.* ¶ 45.)[2] Those target areas are specifically selected because they show greater disparities in health and mortality outcomes between Black mothers/infants and those of other races. (*Id.*) Community conditions contributing to infant and maternal health outcomes in these target communities are also considered. (*Id.*) As a result, the BIH Program is not

[2] The State also provides robust training to the County staff and contractors regarding program delivery. (Franklin Decl. ¶ 46.)

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available in all parts of the County. It is only available in the specific areas where disparities are greatest and services are most needed. (*Id.*) The program serves approximately 450 individuals annually in the County. (*Id.*)

After receiving its funding, the County then allocates that funding to the contractors identified in its application and conducts annual audits to ensure the money has been spent properly. (*Id.* ¶¶ 47–48.)

G. <u>There Are Similar Maternal and Infant Services in the County</u>

The BIH Program is one of many in Los Angeles County that provides services to expecting or new mothers and their infants. (Franklin Decl. ¶¶ 49–64.) These other alternative programs serve thousands more (approximately 45,000 per year) than BIH and are available to all races across the County. (*Id.* ¶¶ 49–50.)

For example, LA County DPH offers a Home Visiting Program that is designed to foster a system of health and support among expectant individuals and new families. (*Id.* ¶ 51 & Ex. B.) Most of the participants in that program are not Black but are of other races. (*Id.* ¶ 52.) The County also administers a program called Project Healing Opportunities for Parenting and Empowerment ("HOPE"), which provides support for newly pregnant clients and parenting families who are unhoused or face housing insecurity. (*Id.* ¶ 53.) This program, too, is comprised of families of all races. (*Id.* ¶ 54 & Ex. C.)

The County further provides one-on-one support and resources to families County-wide through its Community Health Outreach Initiatives ("CHOI"). (*Id.* ¶ 55.) CHOI collaborates with community groups, cities, schools, and clinics to help people sign up for free and/or very low-cost health insurance. (*Id.* ¶ 56.) CHOI connects families to programs that provide food, housing, mental health support, legal help, and other important services. (*Id.*)

The Home Visiting Program, HOPE, and CHOI are just three examples of programs available to County residents, but there are more. (*See id.* ¶¶ 57–64.)

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H. Plaintiff's Allegations and Surface-Level Declaration

Plaintiff is a 33-year-old woman. She states that, on February 23, 2026, she completed an interest form on the Pasadena Public Health Department webpage. (Declaration of Erica Jimenez ("Jimenez Decl.") ¶ 3.) On February 27, 2026, she spoke with a City of Pasadena employee who, according to Plaintiff, told her that because she and her child are not Black or African-American, she was not eligible for the program. (*Id.* ¶ 4.) That is not what happened. (Declaration of McKenzie Scott ("Scott Decl.") ¶¶ 6–11.) Consistent with the training not to make eligibility decisions during an initial phone call, the BIH staffer at the City of Pasadena described the program and described other, similar resources in the County that could provide Plaintiff with pregnancy-related services. (*Id.*) Indeed, Plaintiff's race was not even discussed during this lone phone call. (*Id.*) Plaintiff was, however, provided with information about other services and programs available to her. (*See* Jimenez Decl. ¶ 4.)

Plaintiff did not actually apply for the BIH Program, only filling out an interest form and stating that she is "ready and able to apply." (*Id.* ¶ 6.) She does not state that she wants to participate in the program or explain how she might benefit from it. In sum, she filled out a short form, had one telephone call (where it is disputed what was discussed), and did nothing else. She did not follow up or attempt to use the BIH Program's exception procedure, which allows individuals who may not meet all program criteria to seek admission. (*See* Scott Decl. ¶ 7.)

The County is not aware of any individual being denied admission to the BIH Program based solely on race or any policy or practice of denying admission to applicants based solely on race. (Franklin Decl. ¶ 65.) The State further confirms it is not aware of anyone who has been turned away based on race. (*See* Declaration of Rita Nguyen.) And the City of Pasadena is aware of several instances in which it has allowed individuals who did not identify as Black to participate in the program; Pasadena's policy and practice, like the State's, is not to turn anyone away from the

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BIH Program based solely on race. (Scott Decl. ¶ 11.)

III. LEGAL STANDARD

"[A] preliminary injunction is an extraordinary and drastic remedy, one that should not be granted unless the movant, *by a clear showing,* carries the burden of persuasion." *Mazurek v. Armstrong*, 520 U.S. 968, 972 (1997); *Riverside All of Us or None v. City of Riverside*, No. 5:23-cv-01536-SPG-SP, 2023 WL 7751774, at *3 (C.D. Cal. Nov. 14, 2023) (noting that preliminary injunctions are extraordinary and not granted as a matter of right).

A plaintiff must demonstrate "that serious questions going to the merits were raised and the balance of hardships tips sharply in the plaintiff's favor." *All. for the Wild Rockies v. Cottrell*, 632 F.3d 1127, 1135 (9th Cir. 2011). A plaintiff must also establish irreparable injury and that the injunction serves the public interest. *Id.* This analysis creates a continuum: the less certain the district court is of the likelihood of success on the merits, the more plaintiffs must convince the district court that the public interest and balance of hardships tip in their favor. *Sw. Voter Registration Educ. Project v. Shelley*, 344 F.3d 914, 918 (9th Cir. 2003) (en banc).

IV. THE COURT SHOULD NOT ISSUE A PRELIMINARY INJUNCTION

Plaintiff falls far short of the exacting preliminary injunction standard. She cannot show she will prevail on the merits, as the BIH Program is narrowly tailored to serve the compelling interest of saving lives. She cannot clearly establish irreparable harm, and the balance of hardships/public interest tips sharply against her and in favor of the government Defendants.

A. Plaintiff Lacks Standing

"[C]ourts do not opine on legal issues in response to citizens who might 'roam the country in search of governmental wrongdoing.'" *Food & Drug Admin. v. All. for Hippocratic Med.*, 602 U.S. 367, 379 (2024). This common-sense principle guards against manufactured litigation; as such, a plaintiff cannot maintain a lawsuit without the threshold showing of Article III standing. *E.g.*, *Cetacean*

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Cmty. v. Bush, 386 F.3d 1169, 1174 (9th Cir. 2004). To satisfy standing, a plaintiff must allege: "(1) injury in fact; (2) causation; and (3) likelihood that a favorable decision will redress the injury." *P.P. v. Compton Unified Sch. Dist.*, 135 F. Supp. 3d 1098, 1122 (C.D. Cal. 2015). "An 'injury in fact' consists of 'an invasion of a legally protected interest which is (a) concrete and particularized, and (b) actual or imminent, not conjectural or hypothetical.'" *Id.* "In other words, the 'threatened injury must be *certainly impending* to constitute injury in fact' and 'allegations of *possible* future injury are not sufficient.'" *Davidson v. Kimberly-Clark Corp.*, 889 F.3d 956, 967 (9th Cir. 2018).

Courts have held that even where a plaintiff alleges a defendant's action prevented them from receiving services, there cannot be standing unless and until the plaintiff first ***applies*** for those services and is denied. *See, e.g., Alexandre v. Amazon.com, Inc.*, No. 22-cv-1459-MMA (VET), 2024 WL 2445705, at *4 (S.D. Cal. May 23, 2024). In *Alexandre*, plaintiffs claimed Amazon maintained an application policy that prevented them from being hired as delivery service partners, but they never applied before filing suit. *Id.* Amazon moved to dismiss on standing grounds; the plaintiffs responded by arguing that an application would have been a "futile gesture." *Id.* The district court rejected that argument, finding that plaintiffs failed to demonstrate standing because they failed to apply to the program. *Id.* at *5.

Plaintiff cannot establish standing for two primary reasons. First, Plaintiff has not suffered an injury in fact. The declaration of Pasadena Public Health Department employee McKenzie Scott confirms that the City of Pasadena never told Plaintiff that she could not participate in the BIH Program. Plaintiff never submitted an application for the program (just an interest form), never availed herself of the BIH Program's exception procedure, and was never actually denied services. Plaintiff does not even state that she applied to and ***wants*** to participate in BIH, only that she would be "ready and able to apply." (Jimenez Decl. ¶ 6.) She thus lacks standing. *Alexandre,* 2024 WL 2445705, at *4.

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Second, the Scott declaration states the City advised Plaintiff of additional programs that are available to her. (Scott Decl. ¶ 6.) Plaintiff admits this fact. (Jimenez Decl. ¶ 4.) But Plaintiff has not attempted to avail herself of any of these programs. Instead, she claims she is harmed specifically because she did not apply for or participate in a program that provides services tailored to the unique issues facing Black mothers, while ignoring other, similar programs available to her.[3] There is simply no "injury" here. Plaintiff has not established Article III standing.

B. The BIH Program Satisfies Strict Scrutiny

This case is about whether government can maintain a forward-looking, evidence-informed public health intervention specifically designed to protect the lives of a vulnerable segment of the population. The answer is resoundingly yes.

1. The Strict Scrutiny Framework

"Context matters when reviewing race-based governmental action under the Equal Protection Clause." *Grutter v. Bollinger*, 539 U.S. 306, 327 (2003). "Not every decision influenced by race is equally objectionable, and strict scrutiny is designed to provide a framework for carefully examining the importance and the sincerity of the reasons advanced by the governmental decisionmaker for the use of race in that particular context." *Id.*

Thus, strict scrutiny is not an absolute bar on any race-based classification; instead, it serves to "'smoke out' illegitimate uses of race by assuring that [government] is pursuing a goal important enough to warrant" such a classification. *Johnson v. California*, 543 U.S. 499, 506 (2005). The government is tasked with showing that its use of a racial classification: (1) furthers a compelling government interest; and (2) is narrowly tailored. *Id.* at 505. The BIH Program satisfies both of

[3] Plaintiff also suggests she has standing because she may want to become pregnant again in the future. This type of conjecture does not confer standing. *Davidson*, 889 F.3d at 967.

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these elements.

2. Defendants Have a Compelling Interest to Save Lives of Black Mothers and Infants

There can be no interest more compelling than a government protecting the health and wellbeing of its citizens, especially its children. "States have a compelling interest in and a solemn duty to protect the lives and health of the children within their borders." *PJ ex rel. Jensen v. Wagner*, 603 F.3d 1182, 1198 (10th Cir. 2010); *Globe Newspaper Co. v. Superior Ct. for Norfolk Cnty.*, 457 U.S. 596, 607 (1982) (observing that "safeguarding the physical and psychological well-being of a minor" is a compelling state interest). Thus, as the Supreme Court has acknowledged, "in some situations a State's interest in facilitating the health care of its citizens is sufficiently compelling to support the use of a suspect classification." *Regents of Univ. of Cal. v. Bakke*, 438 U.S. 265, 310 (1978); *see also Hodel v. Va. Surface Mining & Reclamation Ass'n, Inc.,* 452 U.S. 264, 300 (1981) ("Protection of the health and safety of the public is a paramount governmental interest which justifies summary administrative action."); *Hill v. Colorado*, 530 U.S. 703, 715 (2000) ("It is a traditional exercise of the States' 'police powers to protect the health and safety of their citizens.'").

The Ninth Circuit has recognized that race-based medical decisions can serve as compelling government interests. In so doing, it acknowledged the unremarkable proposition that medical data can establish that different races may require specialized types of treatment. *Mitchell v. Washington*, 818 F.3d 436, 446 (9th Cir. 2016) (citing scholarly sources "suggesting that sufficient empirical data to treat African–Americans differently than whites may constitute a compelling government interest"). As the *Mitchell* court stated: "It is not difficult to imagine the existence of a compelling justification in the context of medical treatment." *Id.* And the court recognized that there may be instances where a race-based classification for medical treatment would be "beneficial." *Id.* at 445.

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The federal government, the State of California, Los Angeles County, the world's leading health organizations, national experts, and peer-reviewed scientific literature all agree that infant mortality reflects the structural health of a society and that a substantial, decades-long, race-specific gap in that metric must be addressed through targeted public health interventions.

The federal government studied the Black-White mortality rate in depth and concluded, via the Heckler Report, that specific, targeted interventions were needed to address the issue. (*See supra* Section II.C.) The Heckler Report led directly to the creation of the OMH, which continues to operate today with the stated goal of combating race-based health disparities. (*See id.*)

The California State Legislature developed the BIH Program explicitly to address the Black-White infant mortality disparity: "The Legislature finds and declares that there continues to be a statewide gap between mortality rates for Black infants and those for other population groups. While there have been modest but statistically significant declines in infant mortality generally, including a decline in Black infant mortality, the rate of mortality among Black infants continues to be two to four times higher than the rates for other groups statewide." Cal. Health & Safety Code § 123259(a). Indeed, the State's appropriation for the BIH Program was deemed necessary due to the "disparity between the Black and non-Black populations in infant mortality," and as part of the appropriation, sought research on, and presentation of, "information which evaluates current programs; assesses current and ongoing needs; contains legislative, programmatic, and funding strategies," as well as "specific program recommendations" regarding reducing the disparity. (Siegel Decl. Ex. D at 17–18.)

The most recent CDC data confirm that Black infants die at 2.4 times the rate of White infants nationally (10.93 versus 4.48 per 1,000 live births). (Siegel Decl., Ex. K at 65.) And in Los Angeles County, that gap is even starker: the mortality rate for Black infants is 2.9 times that of White infants; and the pregnancy-related

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mortality rate for Black mothers is 4.6 times higher than White mothers. (*E.g.*, Franklin Decl. ¶ 17.)

The BIH Program exists to fix this problem. It cannot be reasonably disputed that a program that safeguards the lives of citizens serves a compelling interest.

3. The BIH Program Is Narrowly Tailored

Factors considered in evaluating narrow tailoring include "the efficacy of alternative remedies; the flexibility and duration of the relief, including the availability of waiver provisions; . . . and the impact of the relief on the rights of third parties." *W. States Paving Co. v. Wash. State Dep't of Transp.*, 407 F.3d 983, 993 (9th Cir. 2005). "Although narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require serious, good faith consideration of workable race-neutral alternatives." *Id.* (citation modified).

A "narrow" tailoring need not be a "perfect" tailoring. *See Wolfson v. Concannon*, 811 F.3d 1176, 1185 (9th Cir. 2016). At bottom, what a court must determine is whether the race-based classification issue was motivated by an "illegitimate racial prejudice or stereotype." *Grutter*, 539 U.S. at 333. If not, then the classification must survive. *See id.*

BIH was not created out of racial prejudice or stereotypes. Rather, as discussed above, it came out of legitimate epidemiological health disparities in Black pregnant women and their infants. (*See supra* Sections II.A–D.) This is not a "prejudice" or "stereotype"; it is an empirical fact. *Compare with Bakke*, 438 U.S. 298 (disfavoring "preferential programs" that "reinforce common stereotypes holding that certain groups are unable to achieve success without special protection").

Along the same lines, numerous courts have recognized that medical programs that draw race-based classifications can survive strict scrutiny. *Hunter*, 190 F.3d at 1066 n.11 ("No one would challenge a decision of UCLA medical school to explicitly consider ethnicity in selecting study participants for research on

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Gauchers disease or Tay–Sachs—diseases that occur predominantly in the Jewish population. Nor would anyone have a problem with a study on the effects of nutrition in the prevention of sickle-cell anemia that limited study participants to Black children."); *see also Bush v. Vera*, 517 U.S. 952, 984 (1996) (stating that a hypothetical program providing sickle cell anemia services to Black patients would "no doubt" be "benign"); *Nuziard v. Minority Bus. Dev. Agency*, 721 F. Supp. 3d 431, 491 (N.D. Tex. 2024) ("Narrow tailoring is not impossible to pass. For instance, Justice Stevens' hypothetical of a program for victims of sickle cell anemia in *Bush v. Vera,* . . . shows an agency could consider race but only include groups necessary to achieving an identified compelling interest.").

In *Hunter*, the Ninth Circuit even upheld the use of race in admissions to a university's laboratory elementary school, recognizing that courts should give deference to researchers/academics running the school, including their use of race to achieve the precise student population required for their research. *Hunter*, 190 F.3d at 1066–67 (citing *Univ. of Penn. v. EEOC*, 493 U.S. 182, 199 (1990) (cautioning that courts should "avoid[] second-guessing of legitimate academic judgments . . . and should show great respect for the faculty's professional judgment")). The State's interest in the BIH Program, which literally involves life and death, is even more compelling than the educational interest in *Hunter*. Just as *Hunter* required deference to academics, so too should this Court defer to public health authorities' decisions about how to address and remedy the Black-White infant mortality gap.

Defendants have studied and refined BIH over decades to come up with the most effective and targeted health intervention. As discussed, empirical data established that broader alternatives did not lessen the gap. (*See, e.g.*, Franklin Decl. ¶¶ 19, 22.) The BIH Program is the only program that has made a positive impact on those numbers. (*See id.* ¶ 26.)

Moreover, there are numerous alternative programs in Los Angeles County for mothers and infants for which Plaintiff could apply and seek services. (*See id.*

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¶¶ 49–64.) But Plaintiff did not—instead taking aim at one specialized program designed to address Black mortality rates. BIH does not supplant these other robust programs—it supplements them in a targeted way to address a problem affecting a particular segment of the population.

The narrowly tailored nature of BIH is further evidenced by its limited scope: it operates in only three service areas within the County where mortality rates are higher and services are needed most; serves a modest number of participants (approximately 450 per year compared to 100 times that number of County residents (45,000) being served by other, similar programs); and has a narrow eligibility window (pregnant women or up to six months postpartum).

4. Plaintiff's Legal Authorities Are Unavailing

Plaintiff relies on affirmative action cases that are nothing like this case. Those cases have not been applied to a government program designed to combat a public health crisis, let alone used to invalidate one. The affirmative action cases are readily distinguishable.

First, unlike the universities in *SFFA*, Defendants have demonstrated a meaningful connection between the means employed and the goals they are pursuing. BIH's history of study, assessment, redesign, and evaluation by national experts demonstrates precisely the kind of rigorous means-ends connection required by strict scrutiny—and it is the opposite of the "trust us" posture the *SFFA* majority criticized. *SFFA*, 600 U.S. at 217. The design of BIH is not an artifact of political preference. Rather, it is the product of evidence-informed, expert-driven analysis by leading public health authorities, experts and academic institutions.

Second, the underlying goal of the BIH Program is different from the race-based admissions standards at issue in college admissions cases. The stated goal of affirmative action in *SFFA* was to foster on-campus diversity. *Id.* at 214. The same is true of *Fisher*. *Fisher v. Univ. of Tex. at Austin*, 570 U.S. 297, 311 (2013). That is not the case here, where the BIH Program was developed to address an ongoing,

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epidemiologically driven public health crisis.

For that reason, Plaintiff's argument about the lack of a "termination date" for the BIH Program misses the point. The Supreme Court in *SFFA* criticized the affirmative action programs at two universities because the stated goals of increasing diversity and breaking down stereotypes were ethereal and could not be tied to a logical endpoint. *SFFA*, 600 U.S. at 224. That is not the case here. The BIH Program is designed to combat the concrete disparity in Black mother and infant mortality. The program will end when the scientific evidence shows this health crisis has been ameliorated. This is not an amorphous goal—it is one that can be readily measured by empirical data. Indeed, Defendants regularly conduct such analyses and evaluations. (*See* Franklin Decl. ¶¶ 16–18, 23–25 & Ex. A.)

Third, Plaintiff argues that, in order for the County to provide a program designed to save the lives of Black infants and mothers, it must identify specific instances of past discrimination. (Mot. at 12:18–13:3.) That is simply wrong. *See Hunter*, 190 F.3d at 1064, n.6 ("The Supreme Court has never held that only a state's interest in remedial action can satisfy strict scrutiny."). Plaintiff's argument reflects an improper extension of cases involving affirmative action programs whose stated purpose was to remedy past discrimination. But BIH is not such a program—its goal is to preserve human life, an undoubtedly compelling government interest.

As discussed *supra*, the compelling interest justifying the BIH Program is not the remedying of *past* discrimination; instead, it is a *forward-looking* public health intervention aimed at reducing mortality rates for Black mothers and their infants. Plaintiff's argument about the County's failure to identify past instances of discrimination is a meritless distraction.[4]

[4] Plaintiff's reliance on cases like *Shaw*, for example, is misplaced. There, the State of North Carolina attempted to remedy past discrimination through racial gerrymandering. *Shaw v. Hunt*, 517 U.S. 899, 902 (1996). The Supreme Court recognized that a state's interest in remedying past discrimination can be compelling

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Fourth, as a practical matter, the affirmative action cases cited by Plaintiff all involve "zero-sum" games where race was used as a "negative" criterion. This is not a program with a competitive admissions process like a university. The BIH Program is a government intervention to address a specific public health crisis. That Plaintiff may not benefit from a program designed to combat Black mother and infant mortality does not mean she was improperly excluded as a "stereotype" or "prejudice"—it simply means the program is not designed to address a unique need she faces. Contrary to Plaintiff's claim, Defendants are ***not*** "essentially presum[ing] that race determines maternity and health outcomes" (Mot. at 15:26–27); rather, they are relying on objective, epidemiological evidence to create a program tailored to the unique needs of the Black community and designed to address the Black-White mortality gap. Targeting an intervention to a population with a demonstrated 3–4 times mortality disparity is no more a "stereotype" than targeting a tuberculosis intervention to populations with high TB prevalence.

C. No Irreparable Harm Justifies a Preliminary Injunction

Plaintiff's motion should also be denied because she fails to establish irreparable harm. Plaintiff articulates two bases for harm: (1) a presumption of harm based on her merits arguments; and (2) unspecified harm resulting from the failure to be included in the BIH Program. Both fail.

First, Plaintiff is not entitled to a presumption of irreparable harm simply because she brings a constitutional claim. (*See* Mot. at 17:16–19.) Irreparable harm is not presumed where the plaintiff has failed to demonstrate success on the merits. *Associated Gen. Contractors of Cal., Inc. v. Coal. for Econ. Equity*, 950 F.2d 1401, 1412 n.9 (9th Cir. 1991). When a court concludes that a plaintiff cannot succeed on the merits of their constitutional claim, a presumption of irreparable harm is "too

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where the discrimination was readily identified, and there was an evidentiary basis for remedial action. *See id.* at 909. Again, this does not apply to the BIH Program.

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tenuous." *Am. Soc'y of Journalists & Authors, Inc. v. Becerra*, No. CV 19-10645 PSG(KSx), 2020 WL 1444909, at *11 (C.D. Cal. Mar. 20, 2020). Put another way, "the degree of irreparable harm required for a preliminary injunction increases as the probability of success on the merits decreases." *Earth Island Inst. v. U.S. Forest Serv.*, 351 F.3d 1291, 1300 (9th Cir. 2003). Since Plaintiff has not shown she is likely to succeed on the merits, there is no such presumption.

Second, Plaintiff does not show any specific harm she faces. The only evidence Plaintiff puts forth is her cursory, six-paragraph declaration. But Plaintiff does not state that she wants—let alone needs—the services provided through the BIH Program. (*See generally* Jimenez Decl.) She does not even state that she has applied, merely that she "would be ready and able to apply." (*Id.* ¶ 6.)

Plaintiff does not say she has been harmed, or will be harmed, by not joining discussions with Black mothers that are aimed at fostering the health of Black infants. Essentially, she asks the Court to presume injury. The Court should not. *Schmidt v. Safeway Inc.*, 864 F. Supp. 991, 1000 (D. Or. 1994) ("[J]udges are not required to leave their common sense at the door when they take the bench each morning."). Moreover, there are a multitude of other, similar programs that provide services to 100 times more County residents than the BIH Program that Plaintiff can utilize. (Franklin Decl. ¶¶ 49–64.) Plaintiff has not met her burden to establish irreparable harm.

D. <u>The Balance of Hardships Weighs Strongly Against Plaintiff</u>

Where a government entity is a party to a preliminary injunction motion, the equities and public interest factors merge. *Drakes Bay Oyster Co. v. Jewell*, 747 F.3d 1073, 1092 (9th Cir. 2014). This Court must determine who will be more harmed by allowing Plaintiff to upend a tailored program designed to prevent Black infant and maternal mortality. Plaintiff, on the one hand, has not presented any evidence of harm or hardship, has faced no elevated risk, and has available to her a multitude of other government programs that can provide her with similar services.

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The government Defendants, on the other hand, serve targeted interventions through the BIH Program for Black mothers and infants who do face such an elevated risk and who would suffer from the fundamental purpose of the program being upended. The equities tip sharply in Defendants' favor.

As Chief Justice Roberts has observed, it is the government, and its citizens, who suffer irreparable harm when the government is enjoined from implementing public safety measures. *See Maryland v. King*, 567 U.S. 1301, 1303 (2012) (characterizing an injunction that affected a state's "public safety interests" as an "ongoing and concrete harm" to the state); *see also Reach Cmty. Dev. v. U.S. Dep't of Homeland Sec.*, No. 26-1575, 2026 WL 1133351, at *4 (9th Cir. Apr. 27, 2026) (staying district court's entry of a preliminary injunction because "[t]he public has a compelling interest in promoting public safety"). BIH is a key health intervention, designed to protect those most vulnerable to pregnancy-related mortality.

Additionally, as the Ninth Circuit has recognized, where a plaintiff has alternative options to ameliorate their alleged harm, the balance of hardships weighs against the plaintiff. For example, in *Carlucci*, the Ninth Circuit affirmed the denial of an injunction sought by of a group of fishermen who claimed they were harmed by the government's dumping of dredging material near Half Moon Bay. *Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci*, 857 F.2d 505, 506 (9th Cir. 1988). The fishermen claimed the dumping harmed their ability to fish. *Id.* at 514. In determining the balance of hardships tipped against the plaintiff-fishermen, the Ninth Circuit noted, *inter alia*, that "the plaintiffs have failed to show that they would not be able to fish elsewhere, possibly nearby, or that the fish and crab would not be able to relocate or repopulate, or the extent that the fish or crab would be destroyed, if at all." *Id.*

The same common-sense principle applies here. There are numerous other programs that provide support for mothers and infants. (*See* Franklin Decl. ¶¶ 49–64.) Plaintiff herself states she was advised of alternative resources but apparently

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has not availed herself of them. (*See* Jimenez Decl. ¶ 6.) Considering these available programs, the balance of hardships weighs against Plaintiff.

This Court has previously granted a partial permanent injunction where it determined that "the harms will fall almost entirely on Plaintiffs." *See Riverside All of US or None*, 2023 WL 7751774, at *6. This is the opposite scenario: by allowing Plaintiff to insert herself into—and fundamentally alter—a program designed to combat the Black-White mortality gap, it would undermine the objectives of a carefully tailored intervention promoting the health of Black infants and mothers. The law, facts, and equities mandate the rejection of Plaintiff's requested injunction.

E. Plaintiff's Derivative Title VI Arguments Likewise Fail

Plaintiff acknowledges that Title VI mirrors the equal protection framework. (Mot. at 16:24–28.) *SFFA*, 600 U.S. at 198 (noting that racial discrimination that violates the Equal Protection clause also violates Title VI). Because Plaintiff's equal protection claim fails, so too does her derivative Title VI claim.

V. CONCLUSION

For the foregoing reasons, the Court should deny Plaintiff's motion for a preliminary injunction.

DATED: May 6, 2026

MILLER BARONDESS, LLP

By: _____

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CERTIFICATE OF COMPLIANCE

The undersigned, counsel of record for County Defendants, certifies that this brief does not exceed 25 pages, which:

☐ complies with the word limit of L.R. 11-6.1.

☒ complies with the page limit set by this Court's standing order.

DATED: May 6, 2026

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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA, WESTERN DIVISION

ERICA JIMENEZ, individually and on behalf of a class of similarly situated individuals,

Plaintiff,

v.

DR. ERICA PAN, in her official capacity as Director of the California Department of Public Health; DR. BARBARA FERRER, in her official capacity as Director of the Los Angeles County Department of Public Health; MANUEL CARMONA, in his official capacity as the Director of Public Health for the Pasadena Public Health Department; LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH; and PASADENA PUBLIC HEALTH DEPARTMENT,

Defendants.

CASE NO. 2:26-cv-03500

DECLARATION OF DR. MELISSA FRANKLIN IN SUPPORT OF COUNTY DEFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PRELIMINARY INJUNCTION

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DECLARATION OF MELISSA FRANKLIN

I, Melissa Franklin, declare as follows:

1. I am Director of the Division of Maternal, Child, & Adolescent Health for the Health Promotion Bureau of the Los Angeles County Department of Public Health, a party in the above-entitled action. I have served in that role since November 2022. I have personal knowledge of the facts set forth herein. If called as a witness, I could and would competently testify to the matters stated herein. I make this declaration in support of County Defendants' Opposition To Plaintiff's Motion For Preliminary Injunction.

My Background

2. For almost a decade, I have worked to address unique and dire health and safety issues faced by Black infants and mothers. I have also been working for more than a decade to address dire health and safety issues facing Los Angeles County communities.

3. From November 2010 to February 2014, I worked as a manager at First 5 Los Angeles ("First 5").

4. First 5 is a non-profit organization dedicated to the health and welfare of children in Los Angeles County. Its stated mission is to ensure that every child in Los Angeles County reaches their full developmental potential from the prenatal stage through age five.

5. During my time at First 5, I worked on that organization's Best Start program. The Best Start program focuses on preparing children for kindergarten in order to foster success. The program is spread across 14 different geographic regions across Los Angeles County, from Long Beach up to the San Fernando Valley.

6. My responsibilities at First 5 included strategic messaging and outreach to the communities served by the program. During that time, I helped forge partnerships between organizations and community groups with the goal of

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maximizing child health, safety and welfare.

7. Since 2013, I have also served as Chief Executive Officer for Growth Mindset Communications, a consulting firm I started in Los Angeles that focuses on child health, public education and community welfare. Through Growth Mindset, I assist school districts, government offices, and non-profits with programs to improve maternal, child, and community wellbeing.

8. In 2016, during my consulting with Growth Mindset, I was awarded a coveted Pritzker Fellowship. Through that fellowship, I partnered with First 5 and the Los Angeles County Department of Public Health ("DPH") to lead DPH's collaborative effort to reduce the mortality gap between Black infants and mothers and those of other races.

9. Based on my more than fifteen years of experience working in maternal and child public health programs in Los Angeles County, this is a serious health issue facing Black infants and mothers. Historically, the Black infant mortality rate in Los Angeles County is approximately three times higher than the mortality rate for white infants. Similarly, the pregnancy-associated mortality rate for Black mothers has historically been more than 4.5 times higher than the mortality rate for white mothers.

10. In 2018, along with the County, we launched the African American Infant and Maternal Mortality Prevention Initiative, which provided resources and services to Black families and infants in order to address the unacceptably high Black infant and mother mortality rates.

11. In November 2022, I joined DPH as Director of Maternal, Child, and Adolescent Health ("MCAH"). That is the same role I hold today.

12. In my role as MCAH Director, I oversee more than 20 different programs aimed at providing support to mothers and infants across Los Angeles County. As discussed below, these programs range in services and scope to serve various different communities across Los Angeles County. One of those programs

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is the state-sponsored Black Infant Health ("BIH") Program.

13. In addition to my above qualifications and experience, I possess a Doctor of Education in Organizational Change in Leadership from the University of Southern California.

History of the BIH Program

14. In 1989, the California Legislature created the BIH program to combat the aforementioned disparity in pregnancy-related mortality between Black mothers and infants and mothers and infants of other races.

15. Indeed, the California Legislature itself has found and declared that "there continues to be a statewide gap between mortality rates for Black infants and those for other population groups" and that "the rate of mortality among Black infants continues to be two to four times higher than the rates for other groups statewide." Cal. Health & Safety Code § 123259(a). This legislative finding is consistent with the data I review in the ordinary course of my duties and underscores the continuing need for the BIH Program in Los Angeles County.

16. In my capacity as Director of MCAH with LA County DPH, I regularly access, review, and rely upon the County's infant and maternal health data in the ordinary course of my duties. I am personally familiar with the data report attached hereto as **Exhibit A**, which was prepared by DPH in September 2025 and presents Los Angeles County infant mortality, preterm birth, low birth weight, and maternal mortality data through 2023, broken down by race/ethnicity, geographic area, and maternal education. The data shown in Exhibit A is drawn from birth and death records the Department compiles and maintains in the ordinary course of its public health functions, and reflects the most recent data available for Los Angeles County. Attached hereto as **Exhibit A** is a true and correct copy of that data report, which represents the most recent data available for Los Angeles County.

17. As illustrated in the County data (Ex. A), Black infants and mothers still face an alarmingly high risk of pregnancy-related mortality when compared to

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infants and mothers of other races. For example, in Los Angeles County:

a. from 2021–2023, the Black infant mortality rate was 2.9 times the White infant mortality rate. The disparity is even more stark in certain parts of the County where the BIH program is offered.

b. from 2019-2023, Black women had a maternal mortality ratio 4.6 times higher than the maternal mortality ratio of White women.

18. These disparities are not fully explained by income, education or other socioeconomic factors. Poor birth outcomes among Black women and babies persist even when Black women have a pregnancy at an optimal age, have high income and are well educated. The data demonstrate, among other things, that Black women remain 3 to 3.6 times more likely to die from pregnancy-related causes than Asian/Pacific Islander, Hispanic/Latina, and White women, and Black babies are 1.4 to 2 times as likely as infants of other racial or ethnic groups to be born at low birth weight. Further, the data shows that Black women with a Master's degree or higher have nearly the same risk of preterm birth—a leading cause of infant mortality—as White women with less than a high school education. In my professional opinion, this pattern means that broad-based interventions addressing socioeconomic disadvantage alone cannot close the Black-White gap in maternal and infant outcomes.

19. The BIH Program exists in Los Angeles County for precisely this reason: to address a disparity that broader, non-targeted programs alone have repeatedly failed to close.

20. The BIH Program was not the first attempt by the County or other government entities in attempting to address the crisis of Black infant and maternal health.

21. For decades before BIH took its current form, public health authorities relied on broad-based maternal and infant health interventions—most notably, generalized prenatal care outreach—that were not designed around the distinct

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drivers of poor birth outcomes for Black women, including chronic stress associated with racial discrimination, transgenerational poverty, and related social determinants of health.

22. These broader approaches did not close the Black-White gap. Indeed, the failure of broad-based health interventions to address racial disparities in infant and maternal mortality has been recognized at the highest levels of the federal government for over four decades. In 1985, the U.S. Department of Health and Human Services published the *Report of the Secretary's Task Force on Black & Minority Health*—commonly known as the Heckler Report, named after Margaret Heckler, then U.S. Secretary of Health and Human Services— which was the first comprehensive federal study to document and officially acknowledge the persistent disparities in health outcomes between minority populations and White Americans. The Heckler Report specifically identified infant mortality as one of six cause-of-death categories in which minority excess deaths were concentrated. The Report recommended targeted interventions focused on the specific populations experiencing the disparities. The Heckler Report led directly to the creation of the Office of Minority Health within HHS, which continues to operate today. Yet, despite the Report's findings and the broad-based programs that followed, the Black-White infant mortality gap has persisted. In my professional opinion, this underscores the inadequacy of broad-based approaches not tailored to the unique needs of the Black community and the necessity of specific, targeted interventions like BIH. The Heckler Report can be found and downloaded at this government website, https://collections.nlm.nih.gov/catalog/nlm:nlmuid-8602912-mvset, which is maintained by the National Library of Medicine, a center within the National Institutes of Health, which is itself part of the U.S. Department of Health and Human Services.

23. Further, a 2006 comprehensive assessment commissioned by the California Department of Public Health and conducted by the UCSF Center on

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Social Disparities in Health concluded that solely getting prenatal care would not close the gap and that the only interventions that showed promise were group-based models emphasizing social support and empowerment. Following the 2006 evaluation by the California Department of Public Health, the BIH program was slightly redesigned to focus on empowering Black women through culturally affirming group sessions and life planning, which improved birth outcomes by addressing social stressors and supporting healthier behaviors. However, despite a gradual decline in African American infant mortality in Los Angeles County since 2007, African American infants in the County continue to die at more than three times the rate of White and Asian infants. *See also Improved Birth Weight for Black Infants: Outcomes of a Healthy Start Program*, Nat'l Library of Medicine, *available at* https://pmc.ncbi.nlm.nih.gov/articles/PMC4011095/ ("Over the past several decades, as overall infant mortality has declined in the United States, the gap between Blacks and Whites has remained significant … In sum, substantial evidence exists that stress affects health and birth outcomes through multiple biopsychosocial pathways and that the stress associated with racism contributes to the Black-White disparity in birth outcomes.").

24. More recently, California and other states have implemented birth facility-focused maternal and perinatal care collaboratives to standardize and improve the quality of care that all pregnant patients receive during their birth admissions. Despite overall improvements in recognizing and preventing severe maternal morbidity and mortality through these efforts, disparate outcomes by race persist in peer-reviewed evaluations. It is acknowledged that these interventions alone are not sufficient to improve Black infant and maternal health outcomes. *See* https://www.cmqcc.org/toolkits-quality-improvement/health-equity and https://pubmed.ncbi.nlm.nih.gov/31978432/ and https://pmc.ncbi.nlm.nih.gov/articles/PMC6502679/.

25. BIH was developed to fill this gap in documented health disparities

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with a targeted, evidence-informed model. California Department of Public Health's 2015-2018 evaluation of 1,571 prenatal participants across 17 sites in 15 local health jurisdictions found statistically significant positive change in 13 of 18 intermediate health and health-related outcomes. In my role as MCAH Director, I also regularly review and rely upon the California Department of Public Health's published evaluations of the BIH Program, including the 2015-2018 BIH Program Evaluation data briefs, which report the results of a statewide evaluation of the BIH prenatal group model across 17 sites in 15 local health jurisdictions. I am personally familiar with this evaluation and rely upon this data in the ordinary course of my duties in overseeing the BIH Program in Los Angeles County. A copy of the California Department of Public Health BIH Program Evaluation, referred to as "Intermediate Outcomes Among Prenatal Group Model Participants," can be found at this State of California website, https://www.cdph.ca.gov/Programs/CFH/DMCAH/BIH/CDPH%20Document%20Library/Data-Briefs/BIH_Data_Brief_Intermediate_Outcomes_2015-2018.pdf.

26. The State and County's implementation of the BIH Program provides the level of targeted, effective care that was lacking through previous broad-based programs. As demonstrated by the 2006 UCSF assessment finding, the Heckler Report history, and the County's own data showing the gap persists despite decades of broad-based programs, no less focused program has worked.

27. While there has been some progress, the work of BIH is not done. Today, there is a continuing 3:1 disparity in Black infant mortality in Los Angeles County. Based on this continuing disparity in infant mortality, the persistence of Black-White maternal and infant health disparities across income and education levels, the documented failure of generic, broad-based prenatal interventions to close that gap, and the measurable, evidence-based intermediate-outcome improvements achieved by BIH participants, it is my professional opinion that the BIH Program, as currently designed and delivered in Los Angeles County, is the

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most effective tool presently available to address the maternal and infant health-outcome disparities faced by Black mothers and infants in this County, and that no comparable broad-based or less-tailored intervention has been shown to achieve equivalent results.

Services Provided Through the BIH Program

28. The BIH Program offers a variety of services to mothers and infants, but the core focus of the program is to reduce maternal stress and foster a sense of community between new or expecting Black mothers and their families.

29. The current BIH program curriculum was adapted from other nationally recognized curricula (e.g., Effective Black Parenting) and focuses on health issues for pregnant women, health disparities for Black women, and culturally relevant health information. If a prospective participant does not meet all eligibility criteria and local BIH staff believes that she would benefit from participation in the program, the BIH coordinator can request an exception for that woman.

30. A 2006 UCSF Center on Social Disparities in Health assessment of the BIH Program found that the only interventions showing promise for closing the Black-White gap in birth outcomes were group-based models emphasizing social support and empowerment. Consistent with that finding, California Department of Public Health's 2015–2018 evaluation of 1,571 BIH prenatal participants demonstrated statistically significant positive change in 13 of 18 intermediate health outcomes among participants in the group-based model, confirming that the group-based approach creates meaningful social support and produces measurable health improvements.

31. The BIH Program provides these group-based sessions for both the pre-natal and post-birth periods. It pairs a structured group-based prenatal and postpartum intervention (10 prenatal and 10 postpartum sessions) with complementary planning.

32. Attendees engage in discussions about risk factors and issues that Black

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mothers and infants face at a disproportionately high amount, such as sudden infant death syndrome, pre-eclampsia, and safe sleep issues.

33. At these sessions, mothers build a sisterhood and sense of camaraderie. They are provided with a culturally-supportive environment that focuses on unique issues faced by Black mothers in society with the aim of reducing pregnancy stress and fostering a sense of community.

34. Attendees are also provided with discussions about life-planning and goal-setting for their pregnancies, as well as referrals to other widely available County resources for mothers.

35. Additionally, the BIH Program website contains a multitude of online resources that include videos and written guidance for pregnant mothers. These materials are readily and equally available to any individual who visits the BIH website. *See* https://blackinfanthealth.org/resources/.

36. Taking all of the above together, this complement of services and resources enhances life skills, builds societal support among Black mothers and, most importantly, reduces maternal stress—a key driver of the above-discussed mortality issues.

37. The BIH Program's curriculum and group sessions are specifically designed around the cultural experiences of Black women. Each group session includes activities designed to address internalized racism, discussions of Black cultural heritage as a source of pride, and content that speaks to the particular stressors Black women face in society. These are not generic maternal health topics; they are tailored to the specific needs identified by the public health research discussed above.

38. Data have shown that these types of targeted measures have had, and continue to have, a positive impact on Black mothers and infants across Los Angeles County, and have contributed to stemming the tide of pregnancy-related mortality among Black infants and mothers. The California Department of Public Health

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evaluation data supports the effectiveness of these targeted measures among BIH participants. These results demonstrate that the BIH Program's targeted approach has had, and continues to have, a positive and measurable impact on Black mothers and infants across Los Angeles County.

The County's Involvement With the BIH Program

39. Although the County, through DPH, helps foster the BIH Program, the funding comes from the State of California.

40. Each year, the County applies for use of its state funding allocation for the BIH Program.

41. To receive funding, the County is required to demonstrate there is a need for the program within the County, as well as a target population that will be served by the program.

42. In so doing, the County analyzes, among other things, disparate trends in infant and mother mortality. *See, e.g.*, Exhibit A.

43. The County itself does not administer services through the BIH Program. Those services are provided by three different County contractors, one of which is the City of Pasadena.

44. Each year, when it applies for funding, the County must identify to the state which contractors are to receive funding, and the target areas they serve.

45. The State of California ultimately approves the County's funding request, and thus which areas of the County will be served by the BIH Program. Those target areas are specifically selected because they show greater disparities in health and mortality outcomes between Black mothers/infants and those of other races. Community conditions contributing to infant and maternal health outcomes in these target communities were also considered. In fact, the BIH program is not available in all parts of the County, as it only applies to the specific areas in the County where disparities are greatest and services are most needed. The BIH program serves approximately 450 individuals annually in the County.

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46. The State also provides robust training to the County staff and contractors who implement BIH regarding program delivery. Trainings sometimes focus on specific areas or topics, e.g., mental health.

47. After receiving its funding, the County then allocates that funding to the contractors identified in its application.

48. Thereafter, the County performs an annual audit to ensure the money has been spent properly.

Other Maternal and Infant Care Services Offered by the County

49. The BIH Program is just one of many services offered in Los Angeles County to expecting or new mothers and their infants. In my role as MCAH Director, I oversee more than 20 programs that serve families of all races across the County. These programs provide important and wide-ranging services. However, based on my professional experience and my familiarity with the data, none of these programs is designed to address the specific, documented drivers of the Black-White disparity in maternal and infant mortality—including the effects of chronic stress associated with racial discrimination, internalized racism, and culturally specific barriers to care—that persist across all income and education levels. While BIH serves approximately 450 people per year in the County, the other programs that I oversee on behalf of expecting or new mothers, infants and families that are not tailored to the unique needs of the Black community, serve thousands more (approximately 45,000 per year) than the BIH program and provide services across the entire County, whereas BIH is limited to three service areas within the County.

50. As of today, there are thousands of individuals County-wide of all races who are availing themselves of these programs.

51. For example, DPH provides a Home Visiting Program that is designed to foster a system of health and support among new families. A true and correct copy of the Home Visiting Analysis Report is attached hereto as **Exhibit B**.

52. As of the fiscal year 2024 and 2025, program data shows that the

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overwhelming majority of individuals enrolled in that program are not Black. Program participants include families that are White, Asian, and Hispanic or Latino.

53. The County also administers a program called Project Healing Opportunities for Parenting and Empowerment (HOPE), which provides support for newly parenting families who are unhoused or face housing insecurity.

54. Project HOPE is likewise comprised of participating families of all races, and the majority of the program's participants are not Black. Attached hereto as **Exhibit C** is a true and correct copy of an informational flier for Project HOPE.

55. The County also provides one-on-one support and resources to families Countywide through its Community Health Outreach Initiatives ("CHOI"). *See* https://admin.publichealth.lacounty.gov/mch/choi/choi.htm.

56. CHOI collaborates with community groups, cities, schools, and clinics to help people sign up for free and/or very low-cost health insurance. CHOI also connects families to programs that provide food, housing, mental health support, legal help, and other important services. CHOI serves approximately 40,000 individuals of all races across Los Angeles County each year.

57. MCAH also refers individuals to other County programs providing prenatal support and postpartum care to mothers. For example, MAMA's Neighborhood serves people receiving health care through the County. *See* https://dhs.lacounty.gov/womens-health/our-services/womens-health/prenatal/mamas-neighborhood/.

58. The program provides education and resources on numerous subjects, such as stress, mental health, nutrition and housing that is tailored to pregnant and postpartum individuals. It also provides care coordinators to help participants with medical appointments and connect them with needed social services and mental health support. The MAMA's Neighborhood program serves County patients of all races.

59. The Los Angeles County Office of Education provides an Early Head

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Start program for young children that is targeted at success in school at a young age. The program provides support from families from the time of pregnancy through age five. *See* https://prekkid.org/about/. MCAH also refers individuals to this program. This Early Head Start program is again comprised of families and children of all races.

60. The County also refers pregnant and parenting individuals to supportive programs administered by community partner organizations, such as SHIELDS for Families. These programs provide care and support to pregnant mothers, infants and children. *See* https://www.shieldsforfamilies.org/community-family-services/.

61. SHIELDS provides services aimed at child development, including home visitation services, early childhood parent education and support programs for parents and health programs for children up to 18 months.

62. Participants in SHIELDS are comprised of families of multiple races across Los Angeles County.

63. Though each of the programs described above provides valuable services to mothers, infants and families across Los Angeles County, they do not offer the culturally specific, group-based intervention model that the BIH Program uses—an approach that public health research, including the 2006 UCSF assessment and the 2015-2018 California Department of Public Health evaluation, has identified as the most promising strategy for improving birth outcomes specifically among Black women. As I discussed above, the data demonstrate that the Black-White maternal and infant health disparity persists even among Black women with high income and advanced education, which means that an eligibility criterion based on income or socioeconomic need alone would fail to reach the population most at risk and would not address the race-specific factors driving the disparity.

64. The MCAH, County, and community programs I described above—including the Home Visiting Program, Project HOPE, MAMA's Neighborhood, CHOI, and SHIELDS for Families—are available to all eligible mothers in Los

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Angeles County regardless of race, including Plaintiff. These programs provide a range of prenatal and postpartum services, including group support, case management, care coordination, and referrals to community resources—which are the same types of services and support provided under BIH. MCAH provides referrals to these programs. No mother in Los Angeles County, regardless of race, is without access to publicly funded maternal and infant health services.

65. I am not aware of any individual who has been denied admission to the BIH Program based solely on race. Nor am I aware of any program policy or practice to deny admission to applicants based on race.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on this 6th day of May, 2026, at Los Angeles, California.

Signed by:
Melissa Franklin
31FB82A2080348A...
Melissa Franklin

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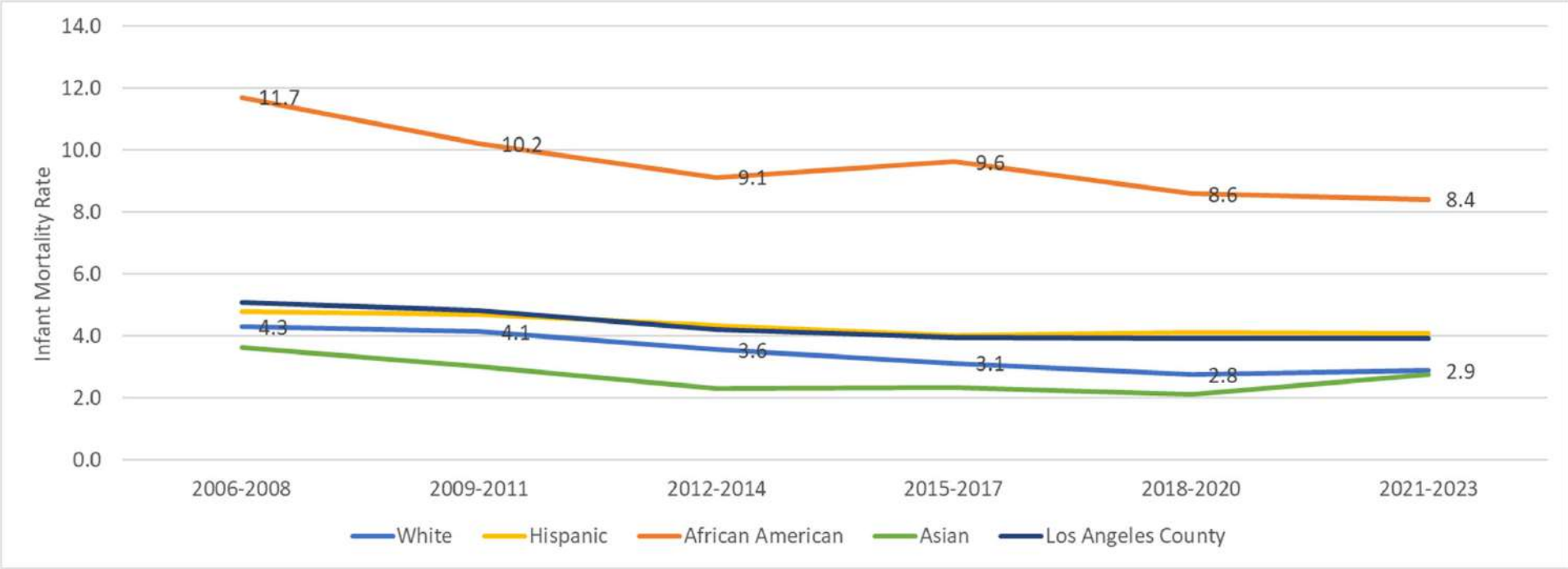
INDEX OF EXHIBITS TO THE DECLARATION OF MELISSA FRANKLIN

Exhibit No.	Description	Pg. No.
A.	September 2025 Data Report by Los Angeles County Department of Public Health	16-56
B.	July 2018 Home Visiting Analysis Report by Los Angeles County Department of Public Health	57-167
C.	Informational Flier for Project HOPE by Los Angeles County Department of Public Health	168-169

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EXHIBIT A

Infant Mortality Rate (infant deaths/1,000 live births) by Mothers' Race/Ethnicity, 3-Year Averages, Los Angeles County 2006-2023

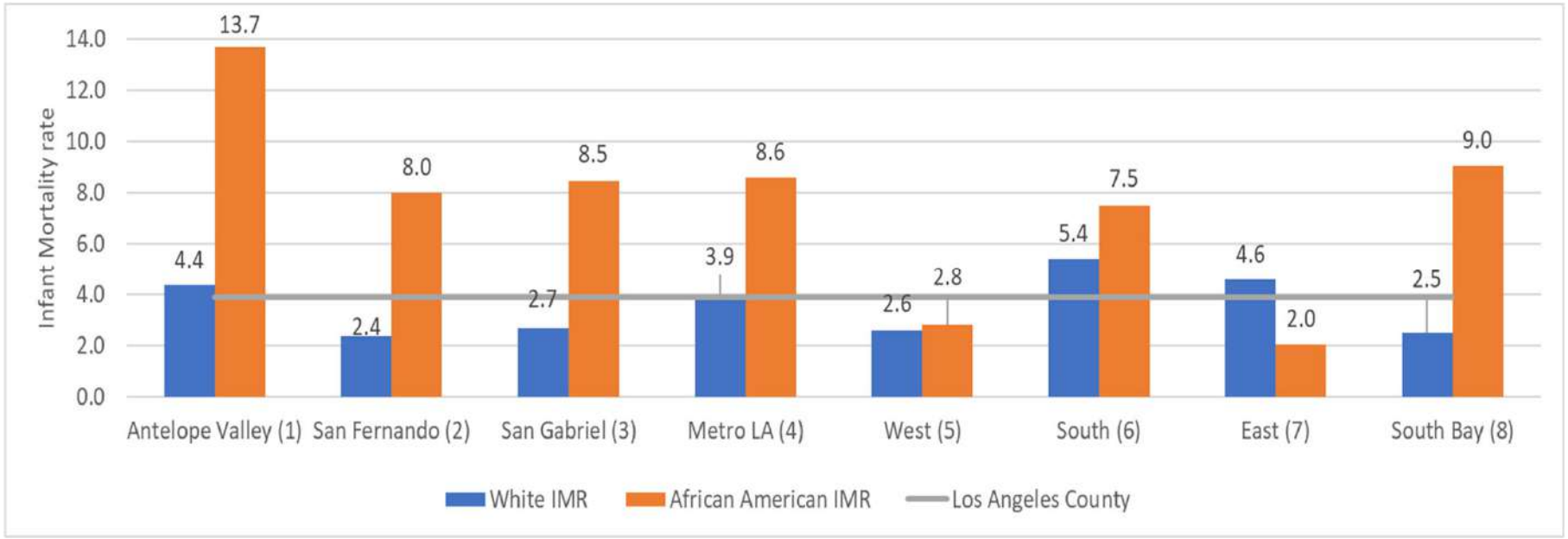


Notes: Infant mortality rate is defined as the number of deaths to infants within the first year of life per 1,000 live births. Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates. Three-year averages are used to account for random and annual rate fluctuations.
Data Sources: 2006-2017 California Department of Public Health, Birth and Death Statistical Master Files. 2018-2023 Annual Birth & Death Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Infant Mortality Rate (infant deaths/1,000 live births) by Mothers' Race/Ethnicity, 3-Year Averages, Los Angeles County 2006-2023

- Infant mortality rate (IMR) is defined as the number of deaths to infants within the first year of life per 1,000 live births.
- In this graph, IMR is presented on the y-axis, the time frame is presented on the x-axis, and the lines in the graph represent the groups being compared.
- Three-year average rates are used to produce a more stable estimate due to the relatively small number of infant deaths by race/ethnicity each year.
- The 2006-2008 Black infant mortality rate was 2.7 times the White infant mortality rate. While infant mortality has decreased over the years the gap between Black and White IMR has not decreased. Looking at the far-right hand side of the slide, the 2021-2023 Black infant mortality rate (8.4) was 2.9 times the White infant mortality rate (2.9).

Infant Mortality Rate (infant deaths/1,000 births) by Mothers' Race and Service Planning Area (SPA), 3-Year Average, Los Angeles County 2021-2023

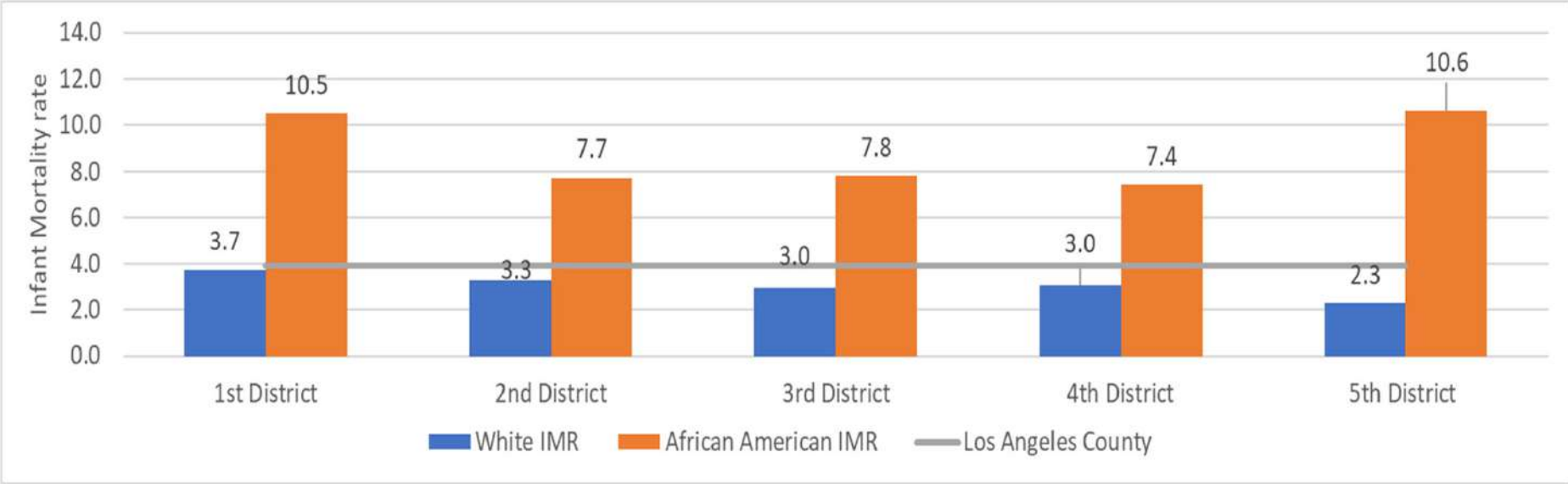


Notes: Infant mortality rate is defined as the number of deaths to infants within the first year of life per 1,000 live births. Data not shown for Hispanic, Asian, for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races . Three-year averages used to account for random annual rate fluctuations. SPA designations based on 2020 census data.
Data Source: 2021-2023 Annual Birth & Death Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Infant Mortality Rate (infant deaths/1,000 births) by Mothers' Race and Service Planning Area (SPA), 3-Year Average, Los Angeles County 2021-2023

- In this graph, infant mortality rate (IMR) is presented on the y-axis, the geographic location (SPA) is presented on the x-axis, and the bars in the graph represent the groups being compared (White vs Black).
- The focus is on one time period, 2021-2023, and the three-year average infant mortality rates are shown.
- IMR stratified by race and SPA result in smaller groups and wider 95% CL. Caution should be used in interpreting rates as significantly different from one another.
- While the overall gap between Black and White IMR was 2.9 in 2021-2023, the gap varies depending on the SPA that one resides in. For example, in SPA 8 the Black IMR is approximately 3.6 times the White IMR, whereas the Black IMR in SPA 5 is approximately 1.1 times the White IMR.

Infant Mortality Rate (infant deaths/1,000 births) by Mothers' Race and Supervisorial District, 3-Year Average, Los Angeles County 2021-2023

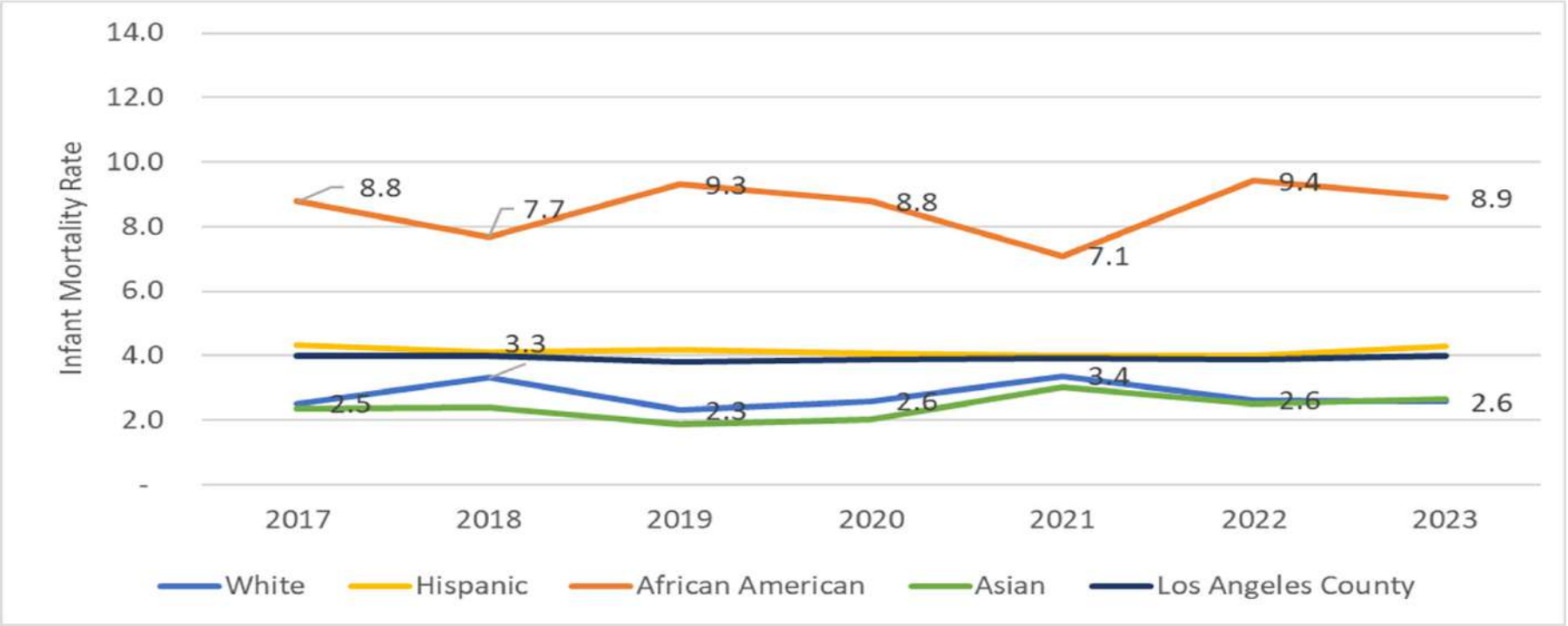


Notes: Infant mortality rate is defined as the number of deaths to infants within the first year of life per 1,000 live births. Data not shown for Hispanic, Asian, for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races . Three-year averages used to account for random annual rate fluctuations. Supervisorial District designations based on 2020 census data.
Data Source: 2021-2023 Annual Birth & Death Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Infant Mortality Rate (infant deaths/1,000 births) by Mothers' Race and Supervisorial District (SD), 3-Year Average, Los Angeles County 2021-2023

- In this graph, infant mortality rate (IMR) is presented on the y-axis, the geographic location (SD) is presented on the x-axis, and the bars in the graph represent the groups being compared (White vs Black).
- The focus is on one time period, 2021-2023, and the three-year average infant mortality rates are shown.
- While the overall gap between Black and White IMR was 2.9 in 2021-2023, the gap varies depending on the Supervisorial District that one resides in. For example, in SD 5 the Black IMR is approximately 4.6 times the White IMR, whereas the Black IMR in SD 2 is approximately 2.3 times the White IMR.

Infant Mortality Rate (infant deaths/1,000 live births) by Mothers' Race/Ethnicity and Year, Los Angeles County 2017-2023



Notes: Notes: Infant mortality rate is defined as the number of deaths to infants within the first year of life per 1,000 live births. Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates.
Data Sources: 2017 California Department of Public Health, Birth and Death Statistical Master Files. 2018-2023 Annual Birth & Death Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Infant Mortality Rate (infant deaths/1,000 live births) by Mothers' Race/Ethnicity and Year, Los Angeles County 2017-2023

- Infant mortality rate (IMR) is defined as the number of deaths to infants within the first year of life per 1,000 live births.
- In this graph, IMR is presented on the y-axis, the year is presented on the x-axis, and the lines in the graph represent the groups being compared.
- While the 3-year average IMRs provide a more stable estimate, viewing the single-year estimates allows us to see the actual variation in the data from one year to the next.
- Rates based on small numbers will fluctuate more than those based on large numbers.
- In Los Angeles County, there were 90,452 births in 2023; 19,385 White, 50,272 Hispanic, 10,906 Asian, and 6,179 Black births.
- In 2023, the California IMR was 4.1* and the Los Angeles IMR was 4.0.

Infant Mortality Rate (infant deaths/1,000 live births) and counts by Mothers' Race/Ethnicity and Year, Los Angeles County 2021-2023

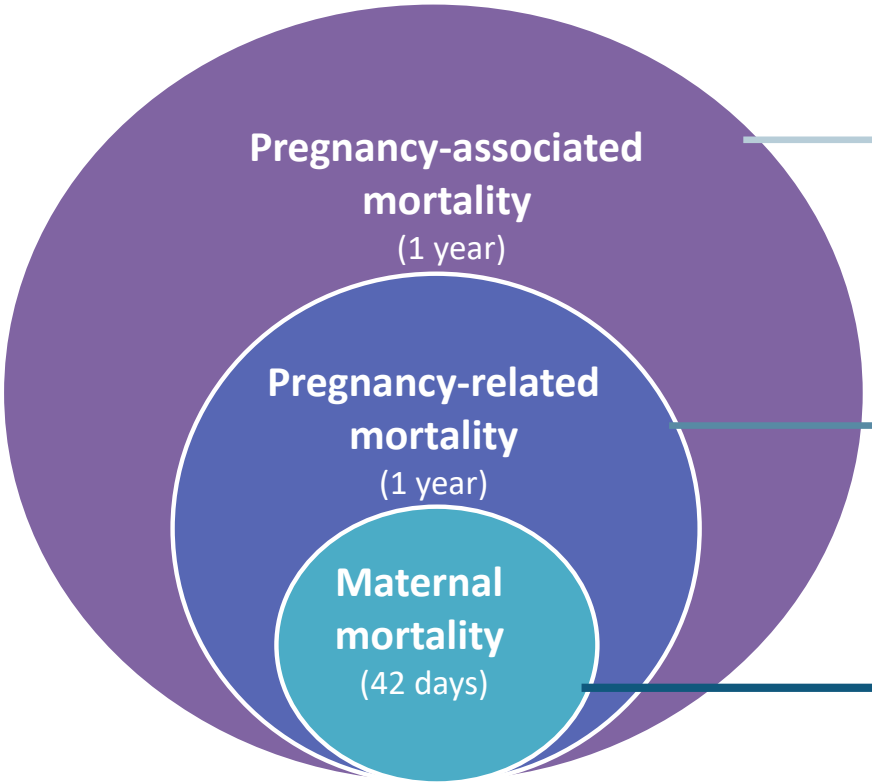
	2021					2022					2023				
	LIVE BIRTHS	INFANT DEATHS	IMR	95 % CL		LIVE BIRTHS	INFANT DEATHS	IMR	95 % CL		LIVE BIRTHS	INFANT DEATHS	IMR	95 % CL	
White	21,065	**71**	3.4	2.6	4.2	20,124	**53**	2.6	1.9	3.3	19,385	**50**	2.6	1.9	3.3
Hispanic	52,502	210	4.0	3.5	4.5	53,070	212	4.0	3.5	4.5	50,272	215	4.3	3.7	4.8
African American	7,469	**53**	7.1	5.2	9.0	6,793	**64**	9.4	7.1	11.7	6,179	**55**	8.9	6.6	11.2
Asian	11,906	36	3.0	2.0	4.0	11,527	29	2.5	1.6	3.4	10,906	29	2.7	1.7	3.6
Los Angeles County	95,734	376	3.9	3.5	4.3	95,313	370	3.9	3.5	4.3	90,452	361	4.0	3.6	4.4

Notes: Infant mortality rate is defined as the number of deaths to infants within the first year of life per 1,000 live births. Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates.
Data Sources: 2017 California Department of Public Health, Birth and Death Statistical Master Files. 2018-2023 Annual Birth & Death Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Infant Mortality Rate (infant deaths/1,000 live births) and counts by Mothers' Race/Ethnicity and Year, Los Angeles County 2021-2023

- Why do we look at rates?
  - Looking at count data, or the number of events, in this case infant deaths, can be very misleading. Looking at 2023, there were 50 White infant deaths, and 55 Black infant deaths. It would be easy to look at those numbers and surmise that Black infant mortality isn't much worse than that of White infants.
  - The piece missing when looking at the number of events is the population size from which those events occurred. In 2023, there were over 19,000 White live births whereas there were just over 6,000 Black live births.
  - If Black infants had the same rate of infant mortality as White infants in 2023, we would have expected 16 Black infant deaths instead of the observed 55.

Types of Maternal Mortality Measures



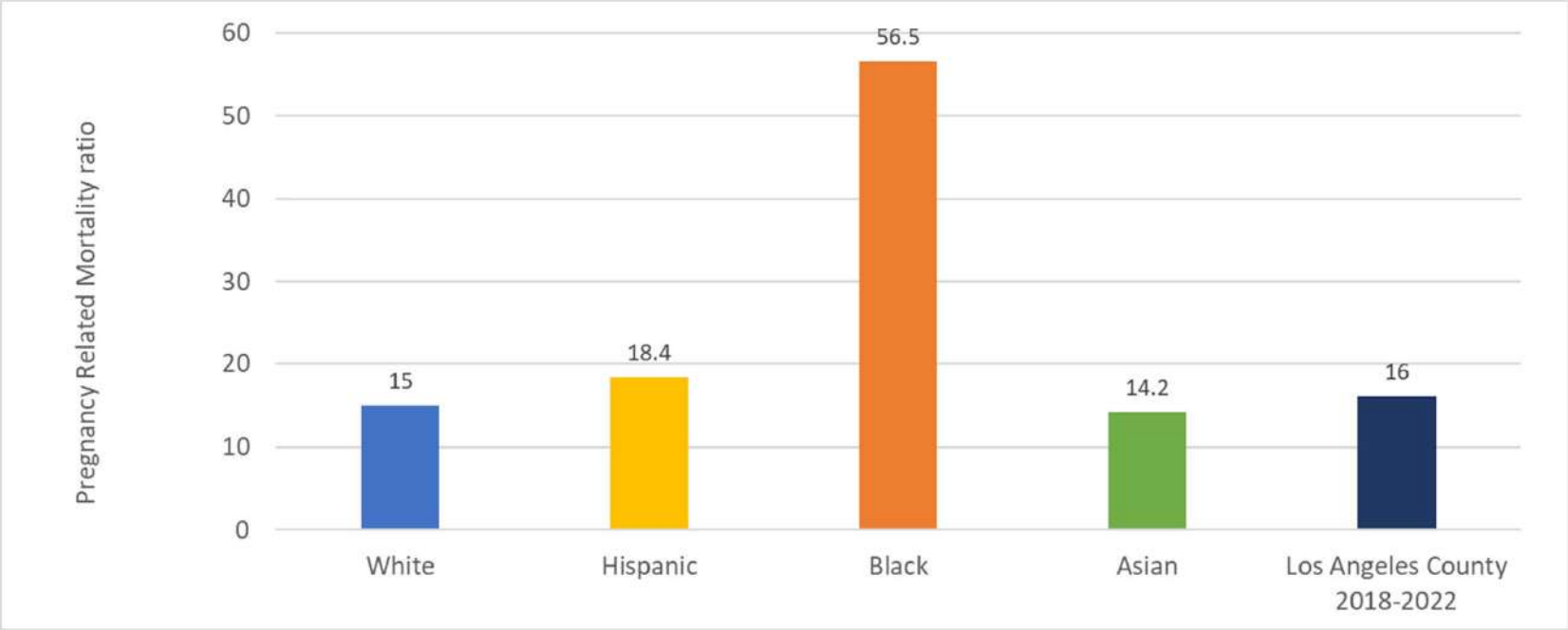
Pregnancy-associated mortality:
Deaths due to any cause during pregnancy and up to one year after pregnancy (includes deaths not related to pregnancy)

Pregnancy-related mortality:
Pregnancy-related deaths include deaths within a year of pregnancy from causes related to or aggravated by the pregnancy or its management, as determined by expert committee review.

Maternal mortality:
Deaths during pregnancy and up to 42 days after pregnancy that are related to pregnancy

How California is Tracking Maternal Deaths: Pregnancy Mortality Surveillance System (CA-PMSS). California Department of Public Health; Maternal, Child and Adolescent Health Division. 2022. www.cdph.ca.gov/pmss

Pregnancy-Related Mortality Ratio (deaths/100,000 live births) by Mothers' Race/Ethnicity, 3-Year Average, California 2020 – 2022

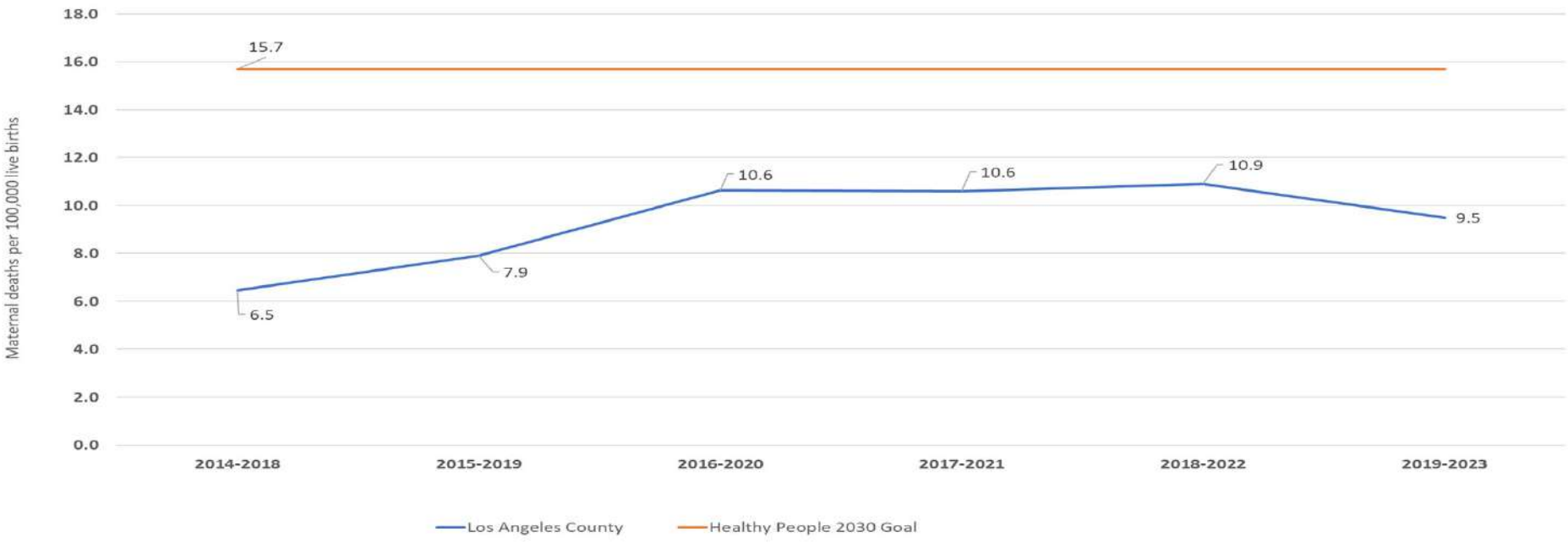


Source: https://www.cdph.ca.gov/Programs/CFH/DMCAH/surveillance/Pages/Pregnancy-Related-Mortality.aspx
Note: Due to small numbers, the Los Angeles County pregnancy-related mortality ratio is based on a 5-year average (2018–2022).

Pregnancy-Related Mortality Ratio (deaths/100,000 live births) by Mothers' Race/Ethnicity, 3-Year Average, California 2020 – 2022

- Pregnancy-Related Mortality Ratio – Pregnancy-related deaths, including deaths within a year of pregnancy from causes related to or aggravated by the pregnancy or its management, as determined by expert committee review, per 100,000 live births.
- In this graph, pregnancy-related mortality ratio is presented on the y-axis, mothers' race/ethnicity is presented on the x-axis along with the Los Angeles County total.
- In California, from 2020-2022, the pregnancy-related mortality ratio for Black women (56.5) was 3.8 times the ratio for White women (15.0).

Maternal Mortality Ratio, Los Angeles County, 5-Year Moving Averages, 2014-2023

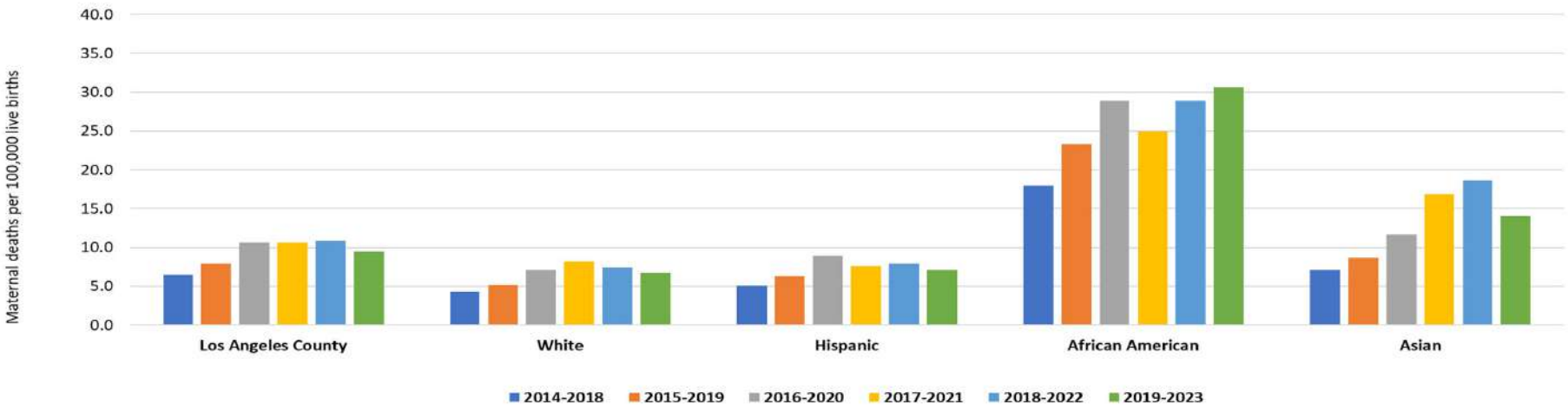


Note: Maternal deaths included to calculate MMR are defined by WHO as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes". Included in these deaths are ICD–10 codes A34, O00–O95, and O98–O99. Data not shown for American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Other and Unknown races due to small cell sizes and unstable estimates.
Prepared by: Analysis and chart provided by Division of Maternal, Child, and Adolescent Health
Data sources: California Department of Public Health (CDPH), Birth Statistical Master File, 2014 – 2017 & California Integrated Vital Records System, Births 2018-2019.
California Integrated Vital Records System, Deaths 2014-2019.
2020-2023 Annual Birth & Death Data Files, assembled from California Department of Public Health Vital Records Data by Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.
More information on MMR and other measures of maternal death are available at https://www.cdph.ca.gov/Programs/CFH/DMCAH/Pages/Health-Topics/Maternal-Mortality.aspx
More information on the 2030 HP goal is available at https://health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth/reduce-maternal-deaths-mich-04/data

Maternal Mortality Ratio (maternal deaths/100,000 live births) by Year, Los Angeles County and Healthy People 2030

- Maternal Mortality Ratio (MMR) - the number of maternal deaths, defined by the WHO as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes" per 100,000 live births. Calculated for a specified population is a specified period. Included in these deaths are ICD–10 codes A34, O00–O95, and O98–O99.
- In this graph, MMR is presented on the y-axis, the year is presented on the x-axis, and the lines in the graph represent the groups being compared (Los Angeles vs Healthy People 2030 goal).
- From 2019-2023, there were a total of 46 maternal deaths in Los Angeles County.
- More information on MMR and other measures of maternal death are available at https://www.cdph.ca.gov/Programs/CFH/DMCAH/Pages/Health-Topics/Maternal-Mortality.aspx

Maternal Mortality Ratio by Race/Ethnicity, Los Angeles County, 5-Year Moving Averages, 2014-2023

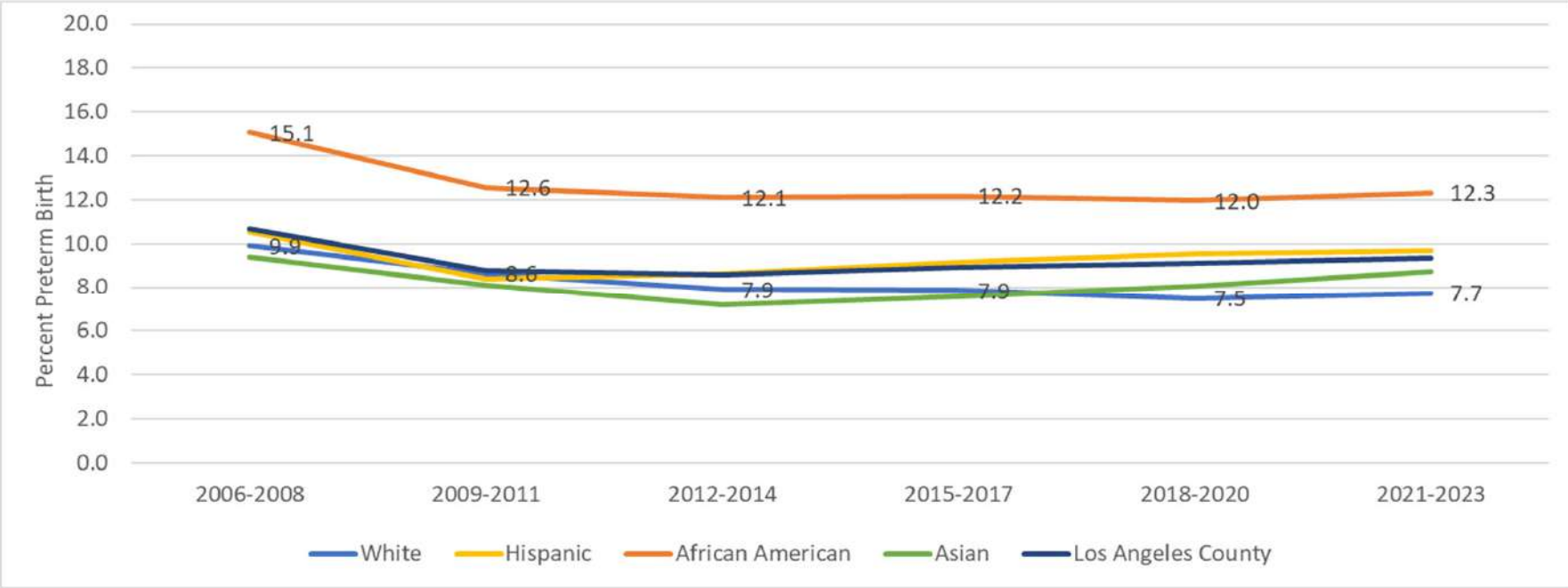


Note: Maternal deaths included to calculate MMR are defined by WHO as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes". Included in these deaths are ICD–10 codes A34, O00–O95, and O98–O99. Data not shown for American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Other and Unknown races due to small cell sizes and unstable estimates.
Prepared by: Analysis and chart provided by Division of Maternal, Child, and Adolescent Health
Data sources: California Department of Public Health (CDPH), Birth Statistical Master File, 2014 – 2017 & California Integrated Vital Records System, Births 2018-2019.
California Integrated Vital Records System, Deaths 2014-2019.
2020-2023 Annual Birth & Death Data Files, assembled from California Department of Public Health Vital Records Data by Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.
More information on MMR and other measures of maternal death are available at https://www.cdph.ca.gov/Programs/CFH/DMCAH/Pages/Health-Topics/Maternal-Mortality.aspx

Maternal Mortality Ratio (maternal deaths/100,000 live births) by Mothers' Race/Ethnicity, 5-year Moving Averages, Los Angeles County 2014-2023

- Maternal Mortality Ratio (MMR) - the number of maternal deaths, defined by the WHO as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes" per 100,000 live births. Calculated for a specified population is a specified period. Included in these deaths are ICD–10 codes A34, O00–O95, and O98–O99.
- In this graph, MMR is presented on the y-axis, mothers' race/ethnicity is presented on the x-axis, and the bars in the graph represent the groups being compared (5-year time periods).
- The Healthy People 2030 goal is to reduce the maternal mortality ratio to no more than 15.7 per 100,000 live births. Black women over the period of 2019-2023 had a maternal mortality ratio of 30.6, which was 4.6 times the maternal mortality ratio of White women (6.7) and 1.9 times the HP2030 goal.
- More information on MMR and other measures of maternal death are available at https://www.cdph.ca.gov/Programs/CFH/DMCAH/Pages/Health-Topics/Maternal-Mortality.aspx

Percent Preterm Births (<37 weeks) by Mothers' Race, 3-Year Averages, Los Angeles County 2006-2023

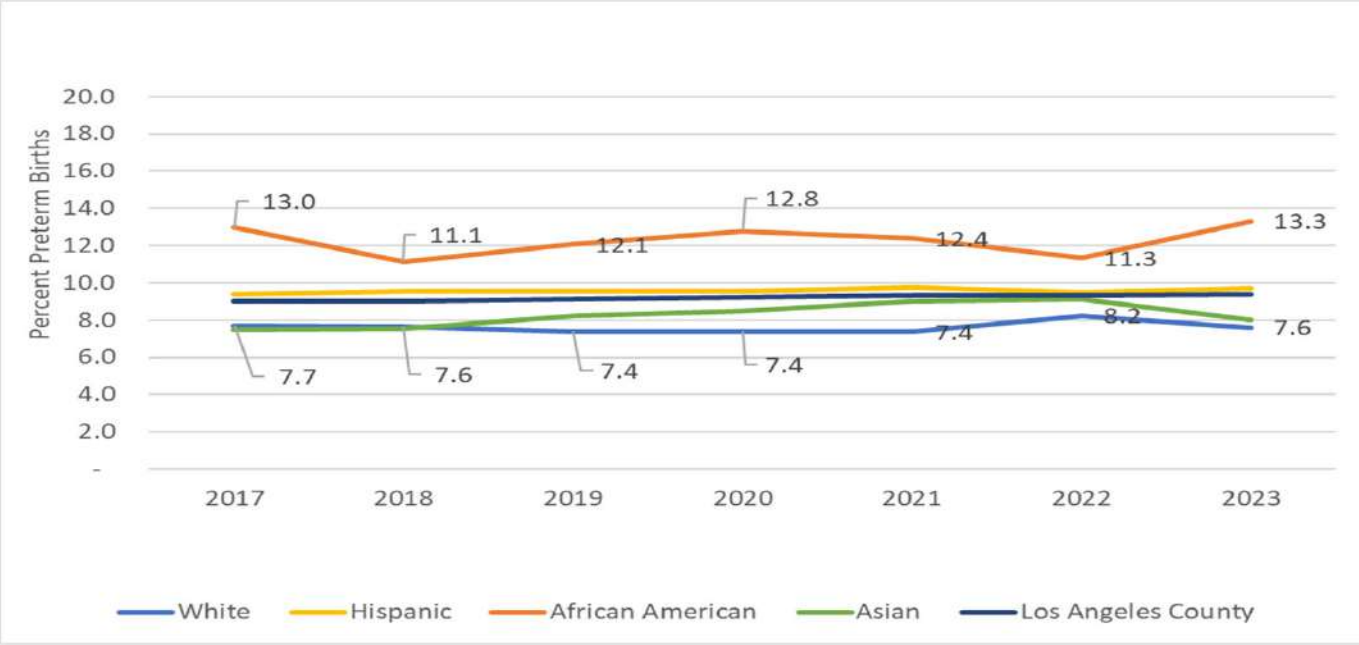


Notes: Preterm births are births occurring before 37 weeks gestation. Gestational age calculated based on first date of last menstrual period for 2006-2007 and based on obstetrical estimation for 2008-2023. Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates. Three-year averages used to account for random annual rate fluctuations.
Data Sources: 2006-2017 California Department of Public Health, Birth Statistical Master Files. 2018-2023 Annual Birth Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Percent Preterm Births (<37 weeks) by Mothers' Race, 3-Year Averages, Los Angeles County 2006-2023

- Preterm births are births occurring before 37 weeks gestation. Percent preterm birth is the number of preterm births per 100 live births in a group.
- In this graph, percent preterm births is presented on the y-axis, time period is presented on the x-axis, and the lines in the graph represent the groups being compared (mothers' race/ethnicity).
- The percentage of preterm births in Los Angeles County has decreased for White and Black infants over the last 15 years. Part of this decline may be due to a change that occurred between 2007 and 2008 in the way gestational age is calculated, potentially resulting in the dip seen in the preceding figure.
- The gap, however, between White and Black preterm births has remained unchanged. In 2021-2023, the percentage of Black preterm births was 1.6 times that of White preterm births.

Percent Preterm Births (<37 weeks) by Mothers' Race/Ethnicity and Year, Los Angeles County 2017-2023

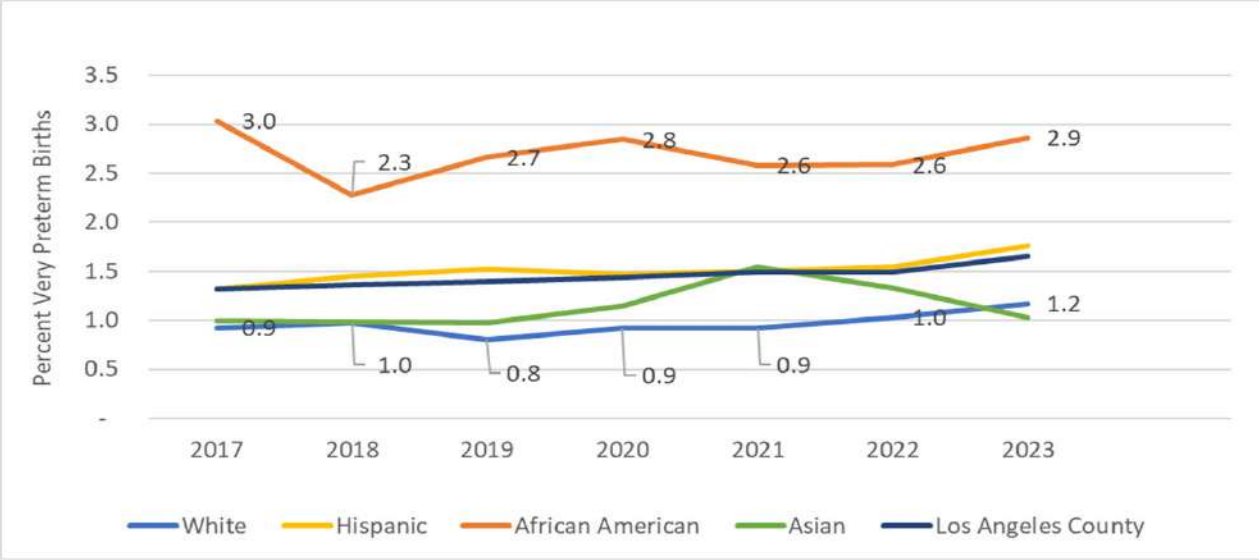


Notes: Preterm births are births occurring before 37 weeks gestation. Gestational age calculated based on obstetrical estimation . Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates.
Data Sources: 2017 California Department of Public Health, Birth Statistical Master Files. 2018-2023 Annual Birth Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Percent Preterm Births (<37 weeks) by Mothers' Race/Ethnicity and Year, Los Angeles County 2017-2023

- Preterm births are births occurring before 37 weeks gestation. Percent preterm birth is the number of preterm births per 100 live births in that group.
- In this graph percent preterm births (rate per 100) is presented on the y-axis, year is presented on the x-axis, and the lines in the graph represent the groups being compared (mothers' race/ethnicity).
- Looking at the single-year estimates lets us view some of the fluctuations in the data. In 2017, the gap between Black and White preterm births was 1.7. In 2023, the Black preterm rate was 1.8 times that of the White preterm birth rate.

Percent Very Preterm Births (<33 weeks) by Mothers' Race/Ethnicity and Year, Los Angeles County 2017-2023

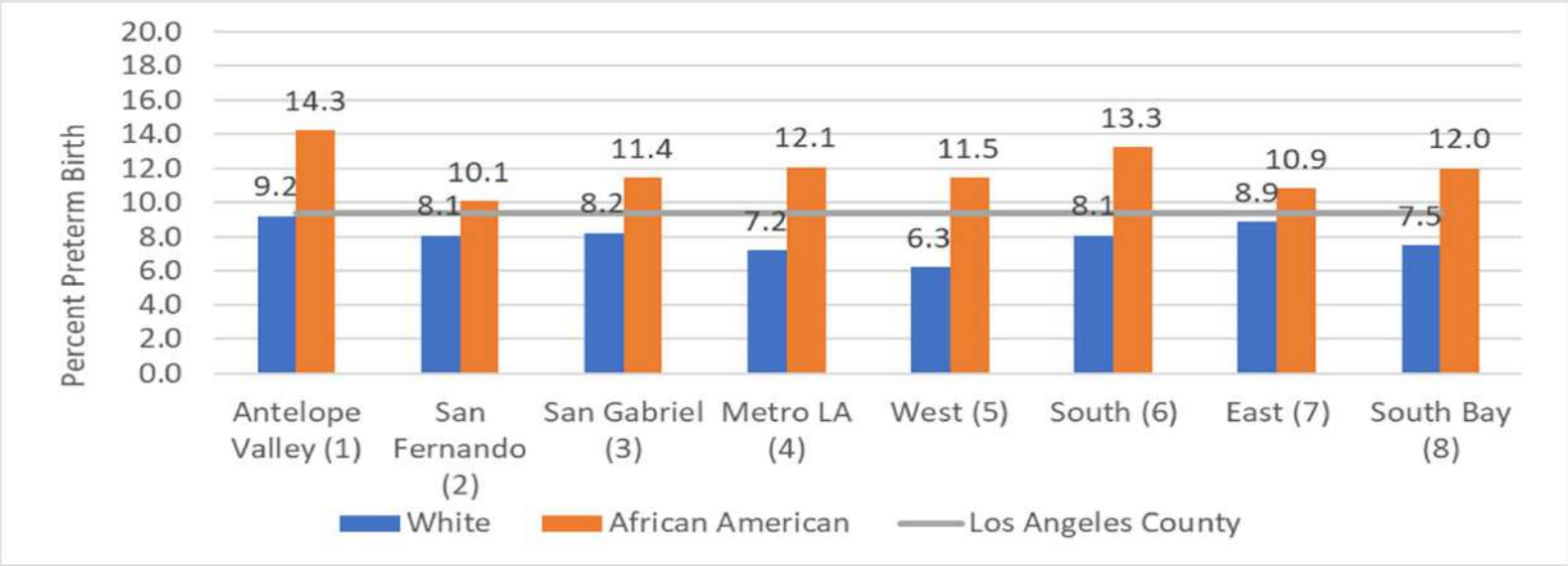


Notes: Very Preterm births are births occurring before 33 weeks gestation. Gestational age calculated based on obstetrical estimation. Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates.
Data Sources: 2017 California Department of Public Health, Birth Statistical Master Files. 2018-2023 Annual Birth Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Percent Very Preterm Births (<33 weeks) by Mothers' Race/Ethnicity and Year, Los Angeles County 2017-2023

- Very preterm births are births occurring before 33 weeks gestation. Percent very preterm birth is the number of very preterm births per 100 live births in that group.
- In this graph percent very preterm births (rate per 100) is presented on the y-axis, year is presented on the x-axis, and the lines in the graph represent the groups being compared (mothers' race/ethnicity).
- An important predictor of infant death is very preterm birth. Infants born very premature are incredibly vulnerable. While the gap between Black and White preterm births in 2023 was 1.8, the gap between Black and White very preterm births was 2.4. This trend of the White/Black gap being greater for the very preterm births than for the preterm births has been consistently observed in LA County.

Percent Preterm Births (<37 weeks) by Mothers' Race and Service Planning Area (SPA), 3-Year Average, Los Angeles County 2021-2023

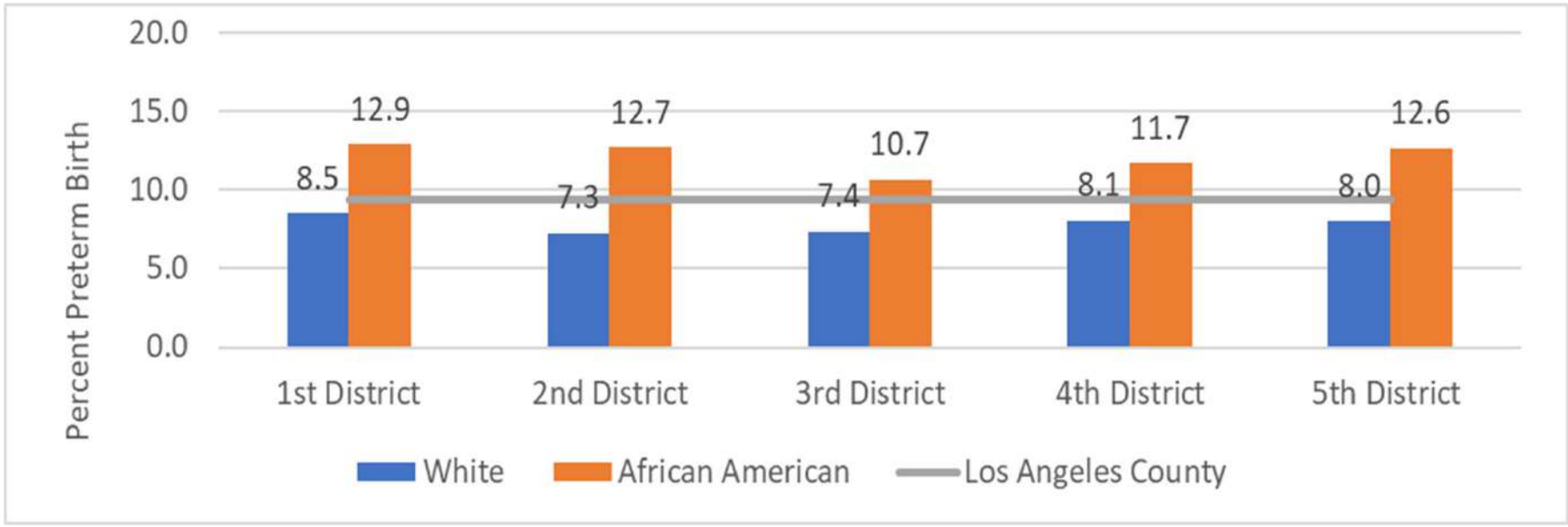


Notes: Preterm births are births occurring before 37 weeks gestation. Gestational age calculated based on obstetrical estimation . Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates. SPA designations based on 2020 census data.
Data Sources: 2021-2023 Annual Birth Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Preterm Births (<37 weeks) by Mothers' Race and Service Planning Area (SPA), 3-Year Average, Los Angeles County 2021-2023

- Preterm births are births occurring before 37 weeks gestation. Percent preterm birth is the number of preterm births per 100 live births in that group.
- In this graph percent preterm births (rate per 100) is presented on the y-axis, geographic location (SPA) is presented on the x-axis, and the bars in the graph represent the groups being compared (mothers' race/ethnicity).
- The focus is on one time period, 2021-2023, and the three-year average preterm birth rates are shown.
- Preterm birth rates stratified by race and SPA result in smaller groups and wider 95% CL. Caution should be used in interpreting rates as significantly different from one another.
- The size of the gap between Black and White preterm births varies between SPAs but in every SPA, Black infants are more likely to be born preterm.

Percent Preterm Births (<37 weeks) by Mothers' Race and Supervisorial District, 3-Year Average, Los Angeles County 2021-2023

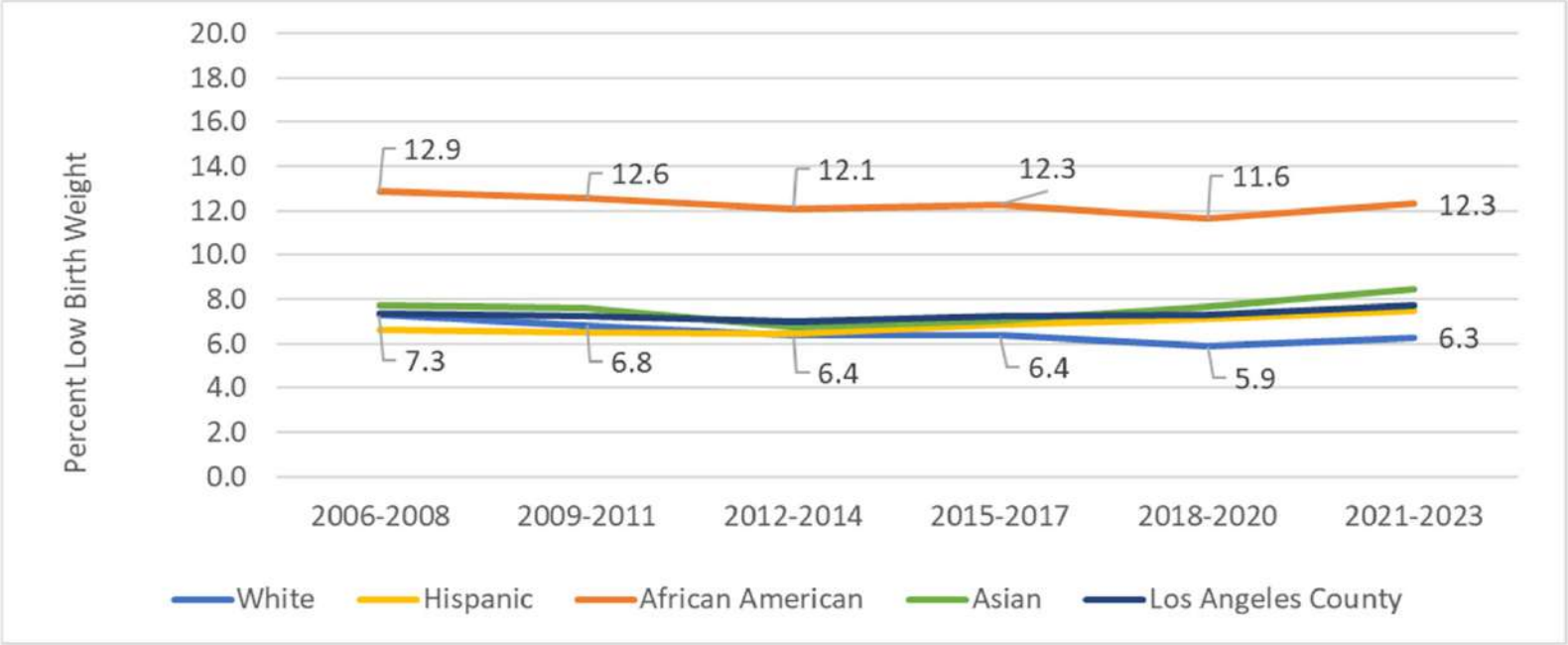


Notes: Preterm births are births occurring before 37 weeks gestation. Gestational age calculated based on obstetrical estimation . Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates. Supervisorial District designations based on 2020 census data.
Data Sources: 2021-2023 Annual Birth Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Preterm Births (<37 weeks) by Mothers' Race and Supervisorial District (SD), 3-Year Average, Los Angeles County 2021-2023

- Preterm births are births occurring before 37 weeks gestation. Percent preterm birth is the number of preterm births per 100 live births in that group.
- In this graph percent preterm births (rate per 100) is presented on the y-axis, geographic location (SD) is presented on the x-axis, and the bars in the graph represent the groups being compared (mothers' race/ethnicity).
- The focus is on one time period, 2021-2023, and the three-year average preterm birth rates are shown.
- The size of the gap between Black and White preterm births varies slightly between SDs but in every SD, Black infants are more likely to be born preterm.

Percent Low Birth Weight Births (<2500 grams) by Mothers' Race, 3-Year Averages, Los Angeles County 2006-2023

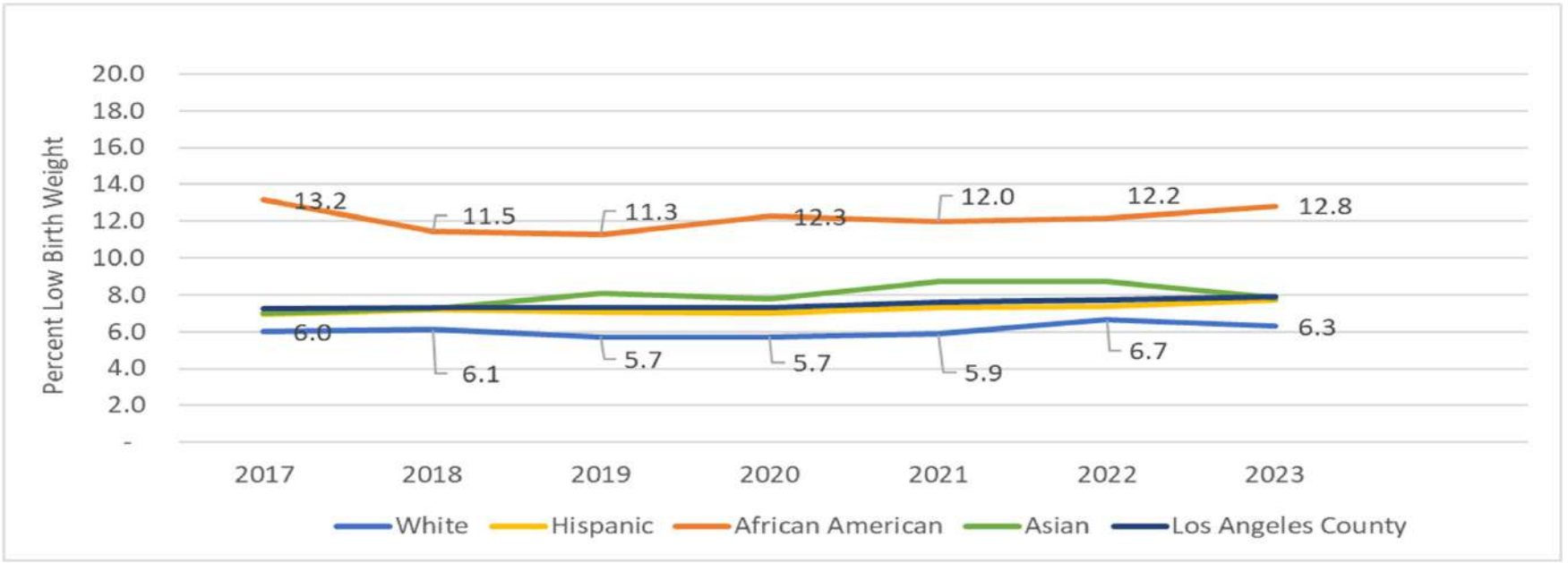


Notes: Low birth weight defined as birth weight below 2500 grams. Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates. Three-year averages used to account for random annual rate fluctuations.
Data Source: 2005-2017 California Department of Public Health, Birth Statistical Master Files. 2018-2023 Annual Birth Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Percent Low Birth Weight Births (<2500 grams) by Mothers' Race, 3-Year Averages, Los Angeles County 2006-2023

- Low birth weight is defined as birth weight below 2500 grams.
- In this graph percent low birth weight (rate per 100) is presented on the y-axis, time period is presented on the x-axis, and the lines in the graph represent the groups being compared (mothers' race/ethnicity).
- The percentage of low-birth-weight births in Los Angeles County has remained relatively stable over the last 2 decades. In 2021-2023, the percent of Black low birth weight was 12.3, which was nearly 2 times that of White infants.

Percent Low Birth Weight Births (<2500 grams) by Mothers' Race/Ethnicity and Year, Los Angeles County 2017-2023

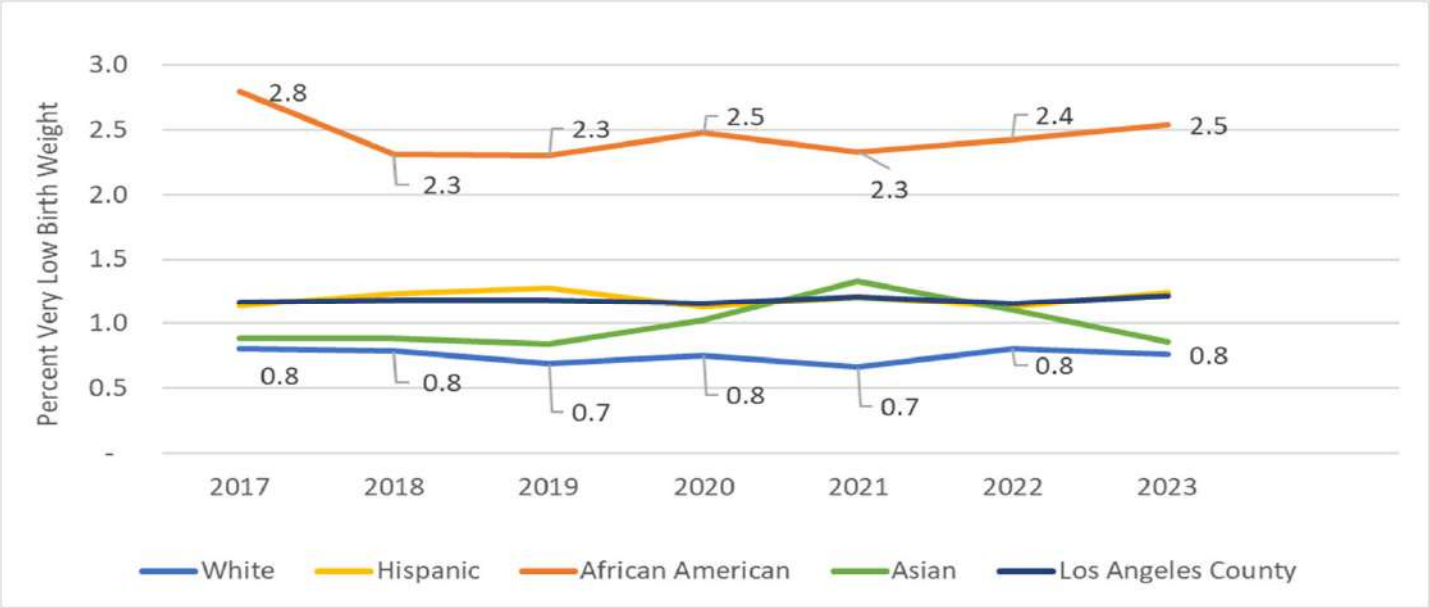


Notes Low birth weight defined as birth weight below 2500 grams at birth. Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates.
Data Source: 2015-2017 California Department of Public Health, Birth Statistical Master Files. 2018-2023 Annual Birth Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Percent Low Birth Weight Births (<2500 grams) by Mothers' Race/Ethnicity and Year, Los Angeles County 2017-2023

- Low birth weight is defined as birth weight below 2500 grams.
- In this graph percent low birth weight (rate per 100) is presented on the y-axis, year is presented on the x-axis, and the lines in the graph represent the groups being compared (mothers' race/ethnicity).
- Single year estimates between 2017 and 2023 have been mostly stable. In 2017, the percent of Black low birth weight was 2.2 times the percent of White low birth weight. In 2023, the percent of Black low birth weight continued to be 2 times the percent of White low birth weight.

Percent Very Low Birth Weight Births (<1500 grams) by Mothers' Race/Ethnicity and Year, Los Angeles County 2017-2023

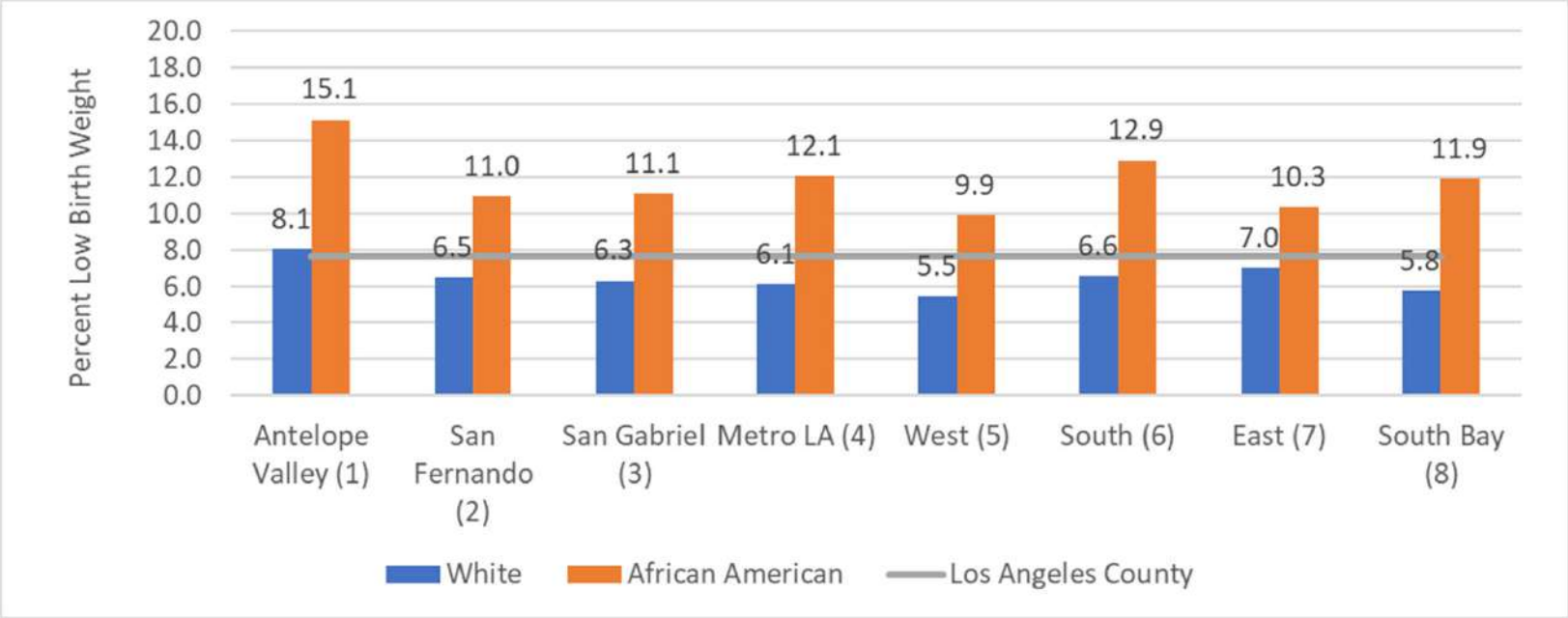


Notes: Very Low birth weight defined as birth weight below 1500 grams. Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates.
Data Source: 2015-2017 California Department of Public Health, Birth Statistical Master Files. 2018-2023 Annual Birth Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Percent Very Low Birth Weight Births (<1500 grams) by Mothers' Race/Ethnicity and Year, Los Angeles County 2017-2023

- Very low birth weight is defined as birth weight below 1500 grams.
- In this graph percent very low birth weight (rate per 100) is presented on the y-axis, year is presented on the x-axis, and the lines in the graph represent the groups being compared (mothers' race/ethnicity).
- Like very preterm, very low birth weight is also an important predictor of infant death. In 2017, the rate of very low birth weight among Black infants was 3.5 times the rate of very low birth weight for White infants. In 2023, this gap was 3.1.
- Like the trend seen among preterm and very preterm births, the Black/White gap is wider for *very* low birth weight compared to low birth weight.

Percent Low Birth Weight Births (<2500 grams) by Mothers' Race and Service Planning Area (SPA), 3-Year Average, Los Angeles County 2021-2023

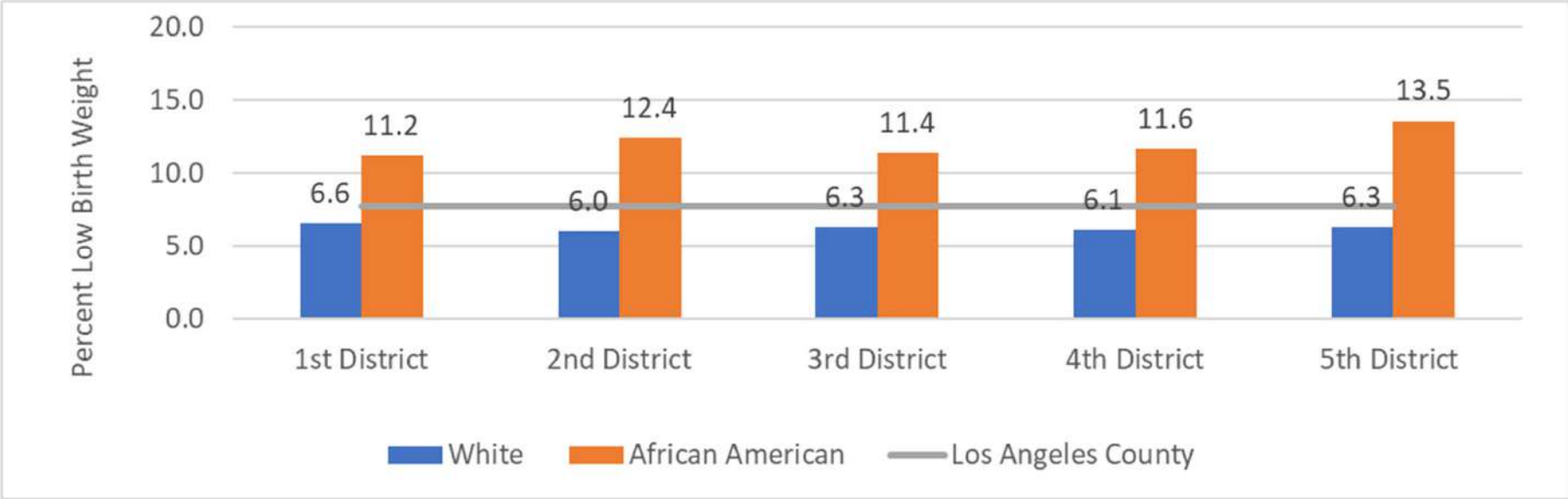


Notes: Low birth weight defined as birth weight below 2500 grams. Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates. SPA designations based on 2020 census data.
Data Sources: 2021-2023 Annual Birth Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Percent Low Birth Weight Births (<2500 grams) by Mothers' Race and Service Planning Area (SPA), 3-Year Average, Los Angeles County 2021-2023

- Low birth weight is defined as birth weight below 2500 grams.
- In this graph percent low birth weight (rate per 100) is presented on the y-axis, geographic region (SPA) is presented on the x-axis, and the bars in the graph represent the groups being compared (mothers' race/ethnicity).
- The focus is on one time period, 2021-2023, and the three-year average low birth weight rates are shown.
- Low birth weight rates stratified by race and SPA result in smaller groups and wider 95%CL. Caution should be used in interpreting rates as significantly different from one another.
- The gap between the rate of low birth weight varies between SPAs but in every SPA Black infants are more likely to be born low birth weight.

Percent Low Birth Weight Births (<2500 grams) by Mothers' Race and Supervisorial District, 3-Year Average, Los Angeles County 2021-2023

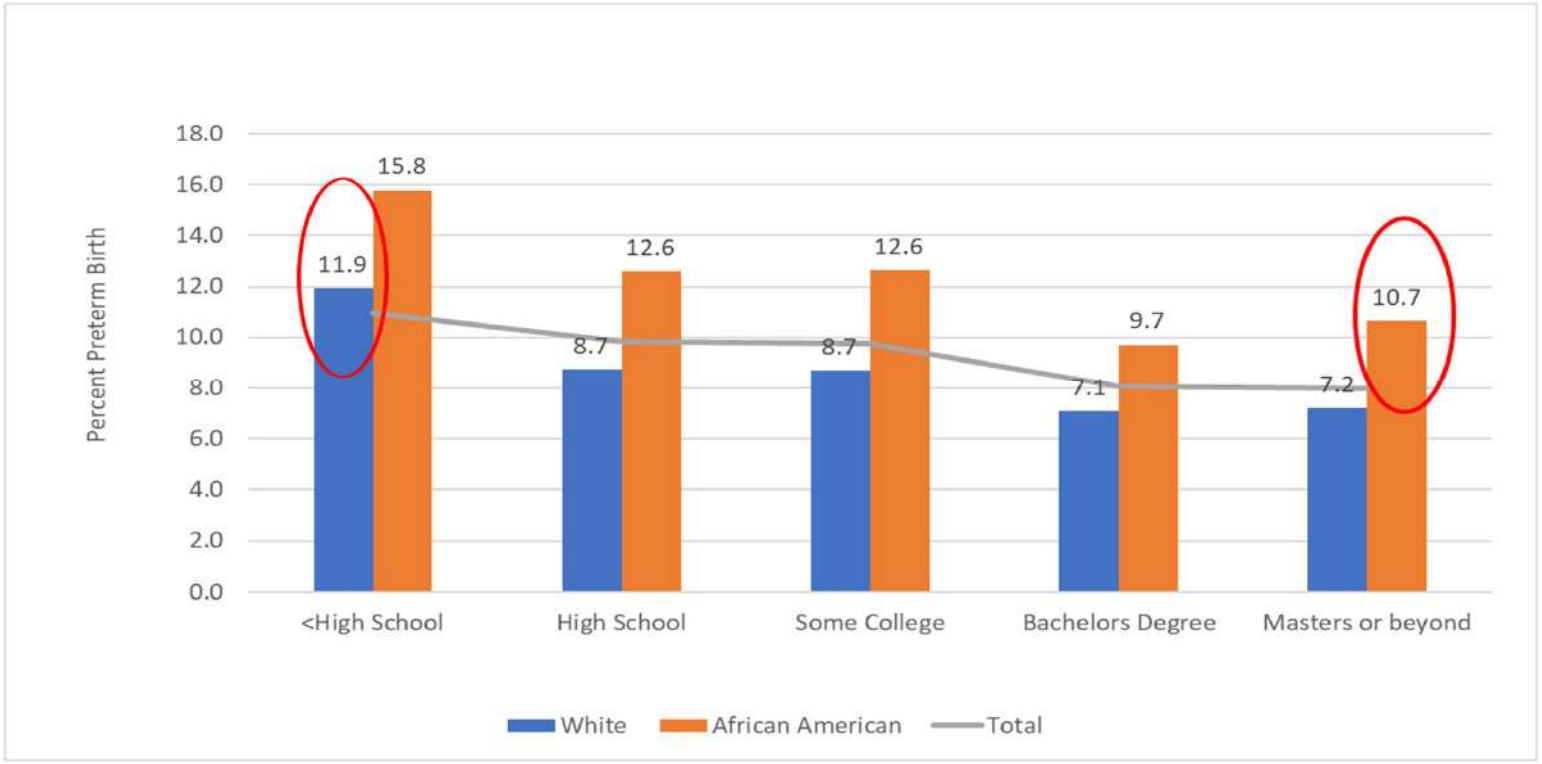


Notes: Low birth weight defined as birth weight below 2500 grams. Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates. Supervisorial District designations based on 2020 census data.
Data Sources: 2021-2023 Annual Birth Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Percent Low Birth Weight Births (<2500 grams) by Mothers' Race and Supervisorial District (SD), 3-Year Average, Los Angeles County 2021-2023

- Low birth weight is defined as birth weight below 2500 grams.
- In this graph percent low birth weight (rate per 100) is presented on the y-axis, geographic region (SD) is presented on the x-axis, and the bars in the graph represent the groups being compared (mothers' race/ethnicity).
- The focus is on one time period, 2021-2023, and the three-year average low birth weight rates are shown.
- The gap between the rate of low birth weight varies between SDs but in every SD Black infants are more likely to be born low birth weight.

Percent Preterm Births (<37 weeks) by Mothers' Race and Education, 3-Year Average, Los Angeles County 2021-2023

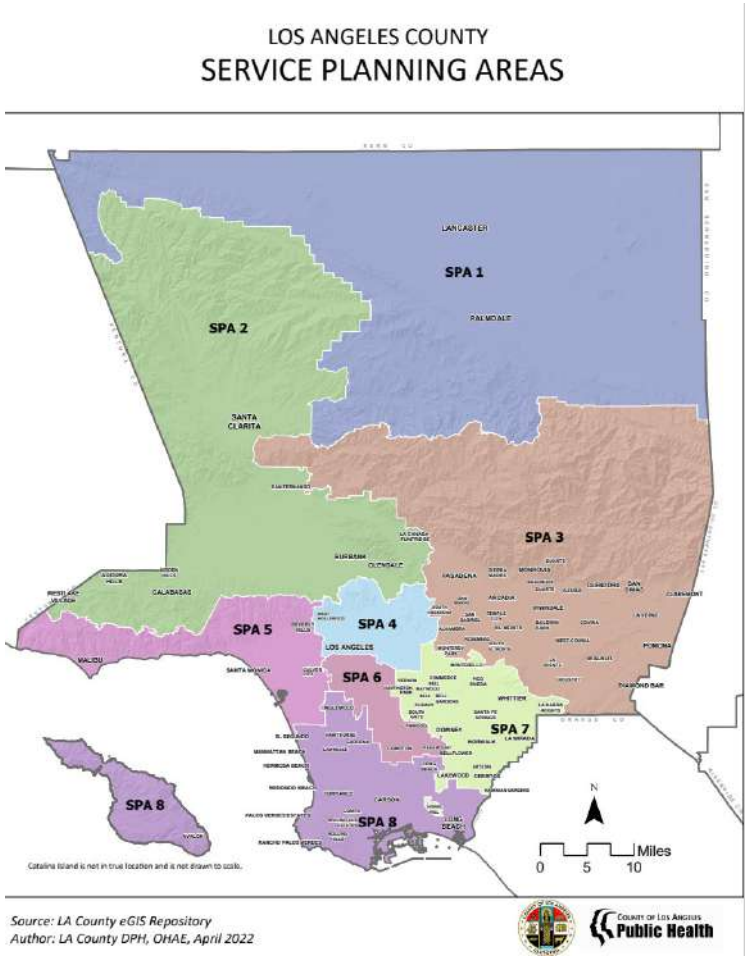


Notes: Preterm births are births occurring before 37 weeks gestation. Gestational age calculated based on obstetrical estimation. Education defined as educational attainment at time of delivery. Data not shown for American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Unknown races due to small cell sizes and unstable estimates.
Data Sources: 2021-2023 Annual Birth Data Files, assembled from California Department of Public Health Vital Records Data. Office of Health Assessment & Epidemiology, Los Angeles County Department of Public Health.

Percent Preterm Births (<37 weeks) by Mothers' Race and Education, 3-Year Average, Los Angeles County 2021-2023

- Preterm births are births occurring before 37 weeks gestation. Percent preterm birth is the number of preterm births per 100 live births in that group.
- In this graph, percent preterm births (rate per 100) is presented on the y-axis, mothers' education is presented on the x-axis, and the bars in the graph represent the groups being compared (mothers' race).
- The focus is on one time period, 2021-2023, and the three-year average preterm birth rates are shown.
- Preterm birth rates stratified by race and education may result in smaller groups and a wider 95%CL. Caution should be used in interpreting rates as significantly different from one another.
- The data show that greater maternal education is associated with decreases in the risk of preterm birth. However, Black women with a Master's Degree or beyond have nearly the same risk of preterm birth as White women with less than a high school education.

Geography Key



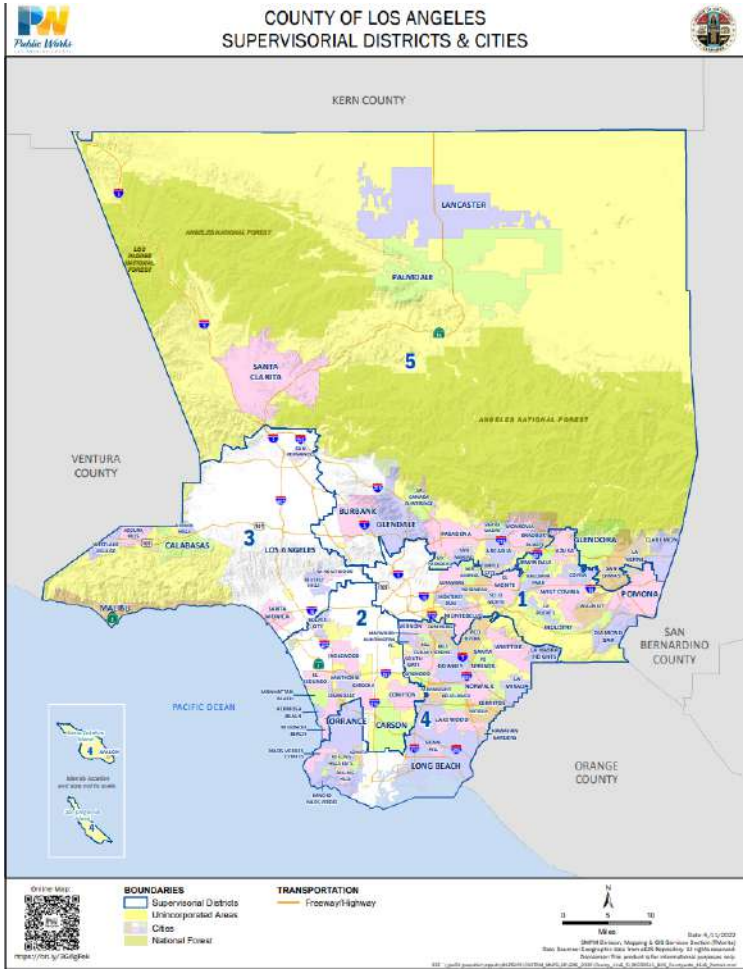


EXHIBIT B

COUNTY OF LOS ANGELES
Public Health

LOS ANGELES COUNTY HEALTH AGENCY

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July 18, 2018

TO: Each Supervisor

FROM: Barbara Ferrer, Ph.D., M.P.H., M.Ed.
Director Barbara Ferrer

SUBJECT: **STRENGTHENING HOME VISITING IN LOS ANGELES: A COMPREHENSIVE PLAN TO IMPROVE CHILD, FAMILY AND COMMUNITY WELL-BEING**

On December 20, 2016, your Board instructed the Department of Public Health (DPH), in collaboration with First 5 LA, the LA County Perinatal and Early Childhood Home Visitation Consortium (Consortium), the Office of Child Protection (OCP), the Children's Data Network (CDN), and the Departments of Health Services (DHS), Mental Health (DMH), Public Social Services (DPSS), Children and Family Services (DCFS), and Probation, to develop a plan to coordinate, enhance, expand, and advocate for high quality home visiting programs to serve more expectant and parenting families so that children are healthy, safe and ready to learn. Specifically, your Board directed DPH to:

I. Assess how national models and best practices, including those with a single entry portal, may inform or be adapted to improve outcomes for Los Angeles County.
II. Create a coordinated system for home visitation programs that includes a streamlined referral pathway and outreach plan to ensure maximum program participation, especially in Los Angeles County's highest risk communities. A single responsible department or organization may be identified to maintain the coordinated referral system.
III. Identify gaps in services for high-risk populations based on a review of effective national models, existing eligibility requirements, and cultural competencies. The plan should develop strategies to address these gaps.
IV. Increase access to voluntary home visitation for families at high risk of involvement with the child welfare system, consistent with the recommendations of the Los Angeles Blue Ribbon Commission on Child Protection.
V. Collect, share and analyze a standardized and consistent set of outcome data leveraging the Consortium's Los Angeles County Common Indicators pilot project.
VI. Include a framework to maximize resources by leveraging available funding, and, where possible, identify new and existing, but not maximized, revenue streams (through State and federal advocacy, and opportunities for local investments) to support home visiting expansion.

The attached report presents the resulting plan: "Strengthening Home Visiting in Los Angeles: A Comprehensive Plan to Improve Child, Family, and Community Well-being." This plan is the culmination of work and broad contributions by diverse stakeholders within both the Los Angeles County and national home visiting landscapes. Since shortly after the motion was passed, the leadership of all County Departments and organizations named have met regularly to build a common vision for planning and collaboration. Participants included Directors, Deputy Directors, and other high-level leadership. In addition, DPH convened a cross-agency research and advisory team to support the integration of best practices and other expertise into the planning process. Home visiting provider agencies also shared their wisdom and perspective during the planning process, both through participation at Consortium meetings and through Community Roundtable participation.

The plan outlines four areas of action to realize an optimal system of support in Los Angeles County.

1. *Coordination*: Building new technology and pathways to improve access
2. *Data*: Establishing common data to evaluate and convey shared impact
3. *Workforce*: Training and sustaining excellence
4. *Funding*: Expanding volume and flexibility of funding via Medicaid and County sources

The plan outlines these areas within the context of a shared, consensus-driven Vision and Principles, including that home visiting services represent one important resource within a broader set of family supports that we seek to coordinate for the betterment of families. Within each of the action areas, proposed next steps are delineated for DPH, the other County Departments, and partners within the nonprofit, business, and philanthropic communities to advance a coordinated system of home visiting programs in Los Angeles County. These next steps include creating electronic and telephonic referral tools; building new referral bridges from County departments and medical settings; pursuing recruitment, training, and career pathway development in order to bolster the strength of our workforce; increasing Medicaid leverage using Targeted Case Management; and applying other identified funding streams in order expand LA's home visiting capacity.

The action plan also includes a three-pronged approach to County-wide data management: 1) long-term outcome analyses utilizing data-matching with administrative data sets, led by First 5 and CDN and aligned with the OCP Prevention Plan evaluation framework; 2) annual common outcome indicator collection and analysis, led by the Consortium; and 3) annual assessment of home visiting capacity and utilization against community need. Through this three-pronged approach, the County will be well poised to measure both outcomes and capacity utilization, and thereby will be fully empowered to make quality improvement and investment adjustments to ensure that services optimally meet community needs.

The plan makes note of the Los Angeles County Health Agency's commitment to health equity for all, and the recent launch of the AAIM Higher initiative by DPH to reduce the disparate rates in African-American infant mortality (AAIM). The document acknowledges the increased risk of poor birth outcomes experienced by African-American women regardless of other individual risk factors and assures alignment between the strategies for expanding universal access to home visiting for all families, and the need to target this high risk population for outreach and referral to intensive services to ensure equitable outcomes for all communities.

This plan will serve as a blueprint for transformation and a guide for building the coordination and strategic investment that is needed. Many components of these strategies have launched and numerous County departmental bridges have already been built. The data and funding expansion work is already underway, and DPH will continue to engage County departments, community members, Consortium

workgroups, and home visiting provider agencies as appropriate to ensure concrete and coordinated implementation as we move forward this systemic effort. As we implement this plan, we will also continue to inform your Board of critical fiscal and policy issues.

If you have questions or need additional information, please let me know.

BF:lma

Attachment

c: Chief Executive Officer
County Counsel
Executive Officer, Board of Supervisors

STRENGTHENING HOME VISITING IN LOS ANGELES COUNTY

A Plan to Improve Child, Family, and Community Well-Being



LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC HEALTH
& HEALTH AGENCY

JULY 2018

Dedication

This report is dedicated to all the mothers and fathers of Los Angeles County, with gratitude for the love and resilience they share with our children each day.

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Executive Summary: Plan Purpose, Context, and Overview

This plan represents a collective promise to do better by Los Angeles County's next generation.

We know the health and well-being of Los Angeles County's future community members are deeply influenced by their experiences as children. While growth and development occur throughout childhood, the prenatal and early years are a critical period for early childhood intervention. The strategies laid out within this document embody more than just "next steps." They embody a commitment by the County of Los Angeles, the County's Department of Public Health, First 5 LA, and their community partners to provide the timely, powerful supports needed for our families and communities to thrive.

An optimal system of family supports would strategically layer an array of effective evidence-based, innovative, and community-responsive resources that assists in achieving strong outcomes for all families. In addition to offering high-quality interventions, this full suite of supports would be offered in a coordinated manner that would facilitate access for families to the full set of community resources each family may need. This plan focuses on the unique role of home visiting[1] within this system of care.

Home-based parenting support, termed "home visiting," has received local, state, and national attention as an effective prevention strategy. It has been proven through research to be a valuable intervention for helping families to be strong, healthy, nurturing, and successful.[2] It has even been lauded as "transformative" in local parent focus groups.[3] In general, home visiting improves family outcomes directly through coaching parents on topics such as parent-child relationships, maternal health, and child development. It also can play a key role as a connector within the broader human service delivery system, facilitating the efficient utilization of a full range of human services and basic community supports. When implemented with quality and fidelity, home visiting is a resource that helps families connect with health-promoting resources, nurtures relationships, promotes safety, and supports socioeconomic stability. In addition, it contributes to the health of the broader social support system by bridging clients to other needed services, identifying service gaps, and advocating for critical supports.

> *"The staff] always has great advice and resources! I like the visits and the activities we do according to my child's age and development. Even though I'm not a first-time mom, there's things I've learned that help me be a better parent and have new experiences with the baby."*
>
> *—Andrea, Child Care Resource Center PAT*

[1] For purposes of this report, home visiting is defined as follows: *Perinatal and early childhood home visiting is a family-centered support and prevention strategy with services delivered by trained staff in the home that: (1) is offered on a voluntary basis to pregnant women and/or families with children through the age of five; (2) provides a comprehensive array of holistic, strength-based services that promote parent and child physical and mental health, bonding and attachment, confidence, and self-sufficiency, and optimizes infant/child development by building positive, empathetic, and supportive relationships with families and reinforcing nurturing relationships between parents and children; and (3) is designed to empower parent(s) to achieve specific outcomes that may include healthy pregnancy, birth, and infancy; optimal infant/child development; school readiness; self-sufficiency; and prevention of adverse childhood and life experiences.* This definition was based on a definition established by the LA County Perinatal and Early Childhood Home Visitation Consortium and vetted by County leadership.

[2] See Appendix A | Summary of Outcomes for full details of the research relating to home visiting outcomes.

[3] See Appendix B | Excerpts from Focus Group Analysis for focus group findings.

Evidence-based home visiting has been a resource woven into our local landscape for over 30 years, with various home visiting programs being funded by a range of local and federal, public and private sources. Yet within Los Angeles County, there has never been a "system" that strategically connects these resources. Despite its strong models, Los Angeles has lacked the coordination needed to ensure that resources are allocated equitably and are sufficiently available throughout the region. The need to navigate among multiple home visiting programs with varied entry requirements, catchment areas, and service models has made it challenging for parents and professionals to link families to the programs that best meet their needs. This lack of coordination has impeded the most effective use of resources where they do exist. A better system of coordination and referral can increase the equitable allocation of resources and address existing gaps in home visiting services, especially for high-risk populations.[4] It can help improve access for populations at higher risk of poor outcomes resulting from multi-generational marginalization by strengthening linkages to home-based support and other family support services.

Home visiting functions optimally within a larger system of family supportive services. A fundamental component of home visiting is assisting families to connect with additional specialized resources so that their comprehensive needs and goals may be met. As one prevention model, home visiting will not necessarily be the full solution for families at highest risk. Some families will need more focused interventions depending on the nature and severity of family challenges. Families in which there is a prevalence of substance abuse, for example, will need more intensive mental and behavioral health interventions that are directly linked with their needs, beyond the scope of the home visiting program. Yet, while home visiting alone may not address all the needs of all families, building out a universal home visiting system is an innovative strategy for supporting both high- and low-risk families. Establishing a universal system helps foster a norm of parents seeking and accessing supports, which increases the identification and acceptance rates of families that may need intensive supports at the same time that it provides resources to all families. In addition, home visiting can help high-risk families navigate to the additional supports they need. In a large urban area like Los Angeles, understanding how to access existing early childhood education health and social service systems can be a challenge even for the most experienced. Families with young children need access to different kinds of help as their children grow and change. In addition, when home visitors identify those additional resources to be in short supply, their voices can proactively inform policy and system changes (as this report illustrates via the example of mental health resources).

"You helped me so much when I needed it the most. Being pregnant and depressed was something I never imagined I'd find myself feeling. Your visits got me through. Thank you for understanding me and knowing that I wasn't losing my mind … I learned how to be strong and take care of myself. And thanks to you and me, I feel better again and have my life back."
—Candice, Northridge Hospital Medical Center Welcome Baby

Recognizing the opportunities for improvement, the Board of Supervisors unanimously passed a motion on December 20, 2016, instructing the Department of Public Health (DPH), in collaboration with First 5 LA, the LA County Perinatal and Early Childhood Home Visitation Consortium (the Consortium), the Office of Child Protection (OCP), the Children's Data Network (CDN), and the departments of Health Services (DHS), Mental Health (DMH), Public Social Services (DPSS), Children and Family Services (DCFS), and Probation, to "develop a plan to coordinate, enhance, expand, and advocate for high-quality home

[4] High-risk may be defined in many ways, and in some cases has particular meaning specific to context. In keeping with the Board of Supervisors' motion and collective County departmental priorities, the term "high-risk," when used generally in this report, is inclusive of both risk of involvement with the child welfare system and risk of adverse health outcomes.

visiting programs to serve more expectant and parenting families so that children are healthy, safe, and ready to learn." Specifically, the Board directed DPH to:

I. Assess how national models and best practices, including those with a single entry portal, may inform or be adapted to improve outcomes for Los Angeles County.

II. Create a coordinated system for home visitation programs that includes a streamlined referral pathway and outreach plan to ensure maximum program participation, especially in Los Angeles County's highest-risk communities. A single responsible department or organization may be identified to maintain the coordinated referral system.

III. Identify gaps in services for high-risk populations based on a review of effective national models, existing eligibility requirements, and cultural competencies. The plan should develop strategies to address these gaps.

IV. Increase access to voluntary home visitation for families at high risk of involvement with the child welfare system, consistent with the recommendations of the Los Angeles Blue Ribbon Commission on Child Protection.

V. Collect, share, and analyze a standardized and consistent set of outcome data leveraging the Consortium's Los Angeles County Common Indicators pilot project.

VI. Include a framework to maximize resources by leveraging available funding, and, where possible, identify new and existing, but not maximized, revenue streams (through state and Federal advocacy, and opportunities for local investments) to support home visiting expansion.

The value of an enhanced home visiting system was affirmed in the Los Angeles County 2016–2020 Strategic Plan, Objective I.1.6, which directs the county to "support the leadership of First 5 LA, in partnership with the County, the Home Visitation Consortium, and others, to build a universal voluntary system of home visitation services through a streamlined system of referrals and improved integration of services." Similarly, the OCP prevention plan, *Paving the Road to Safety for Our Children* (Appendix C), identified home visiting as one of its seven core strategies for preventing child abuse. The OCP emphasized home visiting as part of an inclusive network of family supports, alongside early childhood education, prevention and aftercare services, and other systemic solutions. Home visiting also plays a role in meeting several priority areas and goals outlined in the 2015–2020 Los Angeles County DPH Community Health Improvement Plan (CHIP).

This home visiting system-building work is also intertwined with the County's focus on reducing health disparities. In 2017, in response to stark disparities in health outcomes among African-American families and other Angelenos, the Los Angeles County Health Agency launched the Center for Health Equity. As referenced in the Center for Health Equity's 2018 document *A Pathway to Equity: The Five-Year Plan to Close the Black-White Gap in Infant Mortality*, home visiting services can play an important role in reducing disparities in infant mortality and maternal and child health. Culturally responsive, high-quality home-based programs can help ensure that families are able to access needed health and social services and supports. In so doing, they can help to reduce the risk of preterm birth and other adverse health

outcomes.[5] The potential for synergy between home visiting and other efforts makes the current report particularly timely: we have a unique opportunity to make home visiting an important component in a coordinated, comprehensive system of care serving families from preconception through early childhood.

This report addresses each of the elements listed in the December 2016 motion, laying out a plan for transforming the home visiting landscape in Los Angeles that is comprehensive in scope, integrated with other systems, and responsive to community challenges.

In response to Board motion directive I, the report summarizes key lessons learned from the review of national systems, including those related to single-entry portals and opportunities to expand home visiting capacity by better leveraging funding. These lessons are outlined in the "What National Research and Local Gap Analysis Taught Us" section of this report starting on page 18.

The "What National Research and Local Gap Analysis Taught Us" section also identifies current service capacity and gaps (directive III in the Board motion) using quantitative analysis and stakeholder input. Opportunities identified include (a) building new referral partnerships and infrastructure to support broader and easier entry into home visiting; (b) filling service gaps by expanding the accessibility and volume of both targeted universal (offered regardless of individual risk status to all residents in communities facing elevated population risk) and programs designed for more specific high-risk groups; (c) improving perinatal mental health support; and (d) piloting innovative models to better serve high-priority populations (including families at risk of child welfare involvement or imminent adverse health outcomes). Discussions of the current local home visiting landscape highlight gaps in services that are a function of multiple causes. As the volume of home visiting services has grown, funds have been prioritized to identify and serve high-risk populations based on criteria set by models and by various funding sources. While availability and access has grown for these populations, limitations still exist based on geography, age, and enrollment period.

Gaps also exist related to disproportionately poor outcomes among segments of the county population that have historically been disenfranchised and could benefit significantly from improved outreach and inclusion. Most notably, there are opportunities to improve outreach and responsiveness to the African-American community and other racial or ethnic minorities who suffer from higher infant mortality rates and preterm births. It is crucial to the success of the Los Angeles County Health Agency equity initiatives to acknowledge that African-American maternal and infant health outcomes remain significantly worse compared to other racial and ethnic groups, and that these differences are not explained by traditional "high-risk" characteristics— income, education, health insurance access, for example. The deeply rooted structural racism that continues to pervade the culture explains much of this problem, and addressing that

[5] Published research demonstrating reductions in low birthweight, preterm birth, and infant mortality affiliated with home visiting programs include:

(1) Lee, E., Mitchell-Herzfeld, S., Lowenfels, A., Greene, R., Dorabawila, V., DuMont, K. (2009). Reducing Low Birth Weight Through Home Visitation A Randomized Controlled Trial. *American Journal of Preventive Medicine*, Volume 36, Number 2, 154–160.

(2) Olds, D. L., Kitzman, H., Hanks, C., Cole, R., Anson, E., Sidora-Arcoleo, K., Luckey, D.W., Henderson, C.R., Holmberg, J., Tutt, R.A., Stevenson, A.J., Bondy, J. (2007) Effects of nurse home visiting on maternal and child functioning: age-9 follow-up of a randomized trial," *Pediatrics*, 120 (4), e832–845.

(3) Olds, D.K. (2014). Effects of home visiting by nurses on maternal and child mortality: Results of a 2-decade follow-up of a randomized clinical trial. *JAMA Pediatrics*, 168(9): 800–806.

(4) Kitzman, H.O., et al. (1997). Effects of prenatal and infancy home visitation by nurses on pregnancy outcomes, childhood injuries, and repeated childbearing: A randomized controlled trial. *Journal of the American Medical Association*, 278(8), 644–652.

underlying social determinant is essential to the ultimate success of these efforts. As a result of this uneven playing field, while this report describes a vision and a plan to create a system that provides universal access to a spectrum of home visiting services for all families in the county, it is appropriate and important to include strategies that recognize and target the disproportionate need among African-American families and that ensure that population is being adequately reached and served. With those caveats, home visiting as part of an integrated support network can enhance health and social equity for all families.

Responses to the challenges of improved countywide coordination (Board motion directive II) and improved access for families at high risk of child welfare involvement (Board motion directive IV) are addressed in the final section of this report. That section lays out steps to develop a more coordinated and effective system that is responsive to community needs, easy to access and navigate, and anchored in community-level partnerships. The proposed home visiting system includes new referral partnerships for high-priority populations, an enhanced electronic referral infrastructure, perinatal mental health supports, and expansions both of current evidence-based and of innovative services. Recommended areas for investment include coordinated referral technology, the development of new pathways that increase linkages from County programs to home visiting services for families at high risk of involvement with the child welfare system, and a commitment to universal screening and parent coaching in the prenatal and early postpartum period to improve timely access to needed services. A universal approach is recommended to help foster a norm of perinatal parent support, both to improve outcomes for the entire population and to reduce stigmatization based on what may be perceived as a deficit approach to targeting.

To address the need for improved data standardization (Board motion directive V), the plan proposes a multi-pronged approach in the "Our Proposed Solutions | Data" section on page 30that includes (1) a long-term evaluation to assess program outcomes (including healthy births, child safety, family well-being, and cost-avoidance); (2) an annual analysis of program metrics, including but not limited to common indicators shared across all programs (Appendix B | Excerpts from Focus Group Analysis); and (3) the ongoing measurement of community need and subpopulation need, available capacity, and utilization, to inform continuous improvement of the overall system.

Strategies for better use of current funding and to add new resources (Board directive VI) are discussed in the "Our Proposed Solutions | Funding" section on page 37. These strategies can increase capacity for the more intensive home visiting models that are most appropriate for high risk families, as well as less intensive programs intended for universal use.

This proposed plan addresses two additional issues that are not explicitly mentioned in the Board directive but are closely linked to achievement of the aims that are addressed: 1) reinforcing linkages between home visiting and other family support system elements; and 2) recommendations regarding workforce development. The "Home Visiting's Role in Our Broader System of Care" section (page 10) explores ways in which home visiting services work with other key community investments to support strong, healthy families. The "Our Proposed Solutions |Workforce" section (page 34) lays out important activities related to strengthening the home visiting workforce capacity that are essential to ensure optimal support for families. Many of the recommendations in this section (such as the creation of

> *"If I didn't have this program, I wouldn't know what to do. When I first got pregnant, I was so scared … I was going to end up having an abortion … But all the stuff that [she] has been teaching me, learning how to stop being stressed out … stuff to bring me and my daughter closer together … learning how to help [my daughter with] her language development. I never knew that until she taught me about it."*
>
> *—Eniya, Child and Family Guidance Center HFA*

a perinatal mental health clinical support team and countywide training in implicit bias), are directly responsive to the current gaps identified in our system. Others relate to ensuring long-term workforce strength. In the closing section, the plan outlines recommended next steps, including commitments that County departments and partners have made to implementation, recommendations for countywide collaborative oversight, and opportunities for ongoing County support.

This plan, *Strengthening Home Visiting in Los Angeles County,* was developed at a time of widespread commitment to supporting families and improving outcomes for young families. It is intended to serve as a blueprint for transformation—a guide for building coordination and strategic investment that our families and future generations deserve. It will serve as a core framework on which to develop and layer more detailed implementation plans for County departments and partners to execute wherein universal home visiting may play a crucial role in a comprehensive set of strategies designed to maximize outcomes for young children and their families.

Acknowledgments

This report is the culmination of intense work and broad contributions by diverse stakeholders within the Los Angeles and national home visiting landscapes. A deep debt of gratitude is owed to all who helped to define our path toward the "North Star" of optimal family support in our community. This section attempts to capture our heartfelt thanks.

The leadership of all County departments and organizations named in the December 20, 2016, motion convened monthly to build a common vision for planning and collaboration, informed by the results of research and stakeholder input. Along with DPH leadership, participants included directors, deputy directors, and other high-level leadership of the departments of Children and Family Services, Public Social Services, Mental Health, Health Services, Probation, the Los Angeles County Office of Education, the Children's Data Network (CDN), First 5 LA, the OCP, and the LA County Perinatal and Early Childhood Home Visitation Consortium (Consortium), represented by staff from its backbone agency, Los Angeles Best Babies Network (LABBN). Through these convenings, County departments established a shared commitment to collaborating with provider agencies, community members, and one another to achieve an optimal and integrated system of high-quality home visiting support in Los Angeles County. Without such leadership, this plan would not have been possible.

In addition, DPH convened a biweekly cross-agency research and advisory team to support the integration of best practices and broader stakeholder engagement within the planning. This team (which included representatives from DPH, First 5 LA, OCP, the Consortium, LABBN, and CDN) completed national and local research and provided dedicated ongoing support throughout this planning process. The guidance, time, and hard work of this group were invaluable to this plan's development.

Numerous home visiting provider agencies shared their wisdom and perspectives during the planning process, both through their participation at Consortium meetings and through their Community Roundtable participation (see page 23). Parents shared their perspective via focus groups. Big Orange Splot, LLC, provided facilitation, research, and technical expertise to inform and support optimal planning. Ongoing national expertise was provided by Chapin Hall Senior Research Fellow Dr. Deborah Daro. The Doris Duke Fellows from Chapin Hall and doctoral students from the CDN and the Consortium contributed research on national models and the local home visiting landscape, respectively. This support was essential to ensuring that our plans integrated best practices and were responsive to local needs.

The health, business, and philanthropic communities also played important supporting roles. Senior leadership from Care First, Health Net, LA Care, and Health Care LA IPA lent their expertise both in individual interviews and as joint participants with DHS and DPH in Maternal Model of Care meetings hosted by First 5 LA. The Partnership for Early Childhood Investment funded the Consortium's local landscape research. The Reissa Foundation supported the DPSS pilot in SPA 6. The Blue Shield Foundation and First 5 LA co-funded technical assistance support for the rollout of DMH expansion funding. The Carl and Roberta Deutsch Foundation underwrote DHS's Mama's Neighborhood focus groups. Representatives from the California Endowment, the Partnership for Early Childhood Investment, the Crail-Johnson Foundation, the W.M. Keck Foundation, the Reissa Foundation, and First 5 LA also lent their expertise as ambassadors for the philanthropic sector as part of an ad-hoc funders workgroup. This group helped develop and vet the proposals coming out of the County's planning efforts, such as requests for data infrastructure and capacity-building. Collaborative partners also met with staff from the Los Angeles County Economic Development Corporation and the Los Angeles Area Chamber of Commerce, who lent guidance and expressed willingness to partner in support of future home visiting workforce development.

We deeply thank each of these entities for their contributions to this greater whole.

Vision and Guiding Principles

To frame the development of this plan, the leadership of each of the County departments and organizations named in the motion began by articulating a shared commitment to building an optimal home visitation system in Los Angeles County. Together, these collaborators developed a vision statement and guiding principles to serve as the foundation for inter-departmental and cross-sector collaboration around home visiting services for Los Angeles County families.

Our Vision

Together, we aspire to achieve the following vision of high-quality home visiting supports for Los Angeles County families:

A system of voluntary, culturally responsive, home-based family-strengthening services available to all Los Angeles families with children prenatally through age five that

- Optimizes child development
- Enhances parenting skills and resilience
- Safeguards maternal and infant health
- Prevents costly crisis intervention
- Reduces adverse childhood experiences
- Demonstrates improved educational and life outcomes

Under this vision, all Los Angeles families with young children would have access to trusted support and coaching in their homes, matched appropriately to their needs, so that they and their children may thrive.

Fundamental to these discussions was a recognition not only of the value of effectively connecting families to home visiting, but also of doing that in a way that is integrated within the broader set of family support programs available to parents. These tenets are reflected both in the Guiding Principles that stakeholders adopted (below) and the plans they collectively developed.

Our Guiding Principles

1. Universal access to effective prenatal and early childhood support is beneficial for all children's health and development, for maternal health, for enhancing parental capacity, and for our community as a whole.

2. Some families can also benefit from intensive home visiting support to address complex sets of challenges.

3. Home visiting has been proven through research to be an effective perinatal resource; it attains key family well-being and health outcomes, reduces the need for crisis intervention, and triages families to the appropriate level of additional resources and community activities.

4. Home visiting is not the only effective perinatal and early childhood resource and it is not the sole or optimal fit for all parents; however, for parents who voluntarily participate in home visiting services, research shows it is among the most impactful.

Families will have the opportunity to access resources through multiple paths. To maximize families' access to home-based support, we commit to building and refining referral pathways:

   a. That are attractive and easy to navigate from the family perspective (provided efficiently via trusted community providers)
   b. That are effective in finding and attracting "at-risk" and prenatal families in particular
   c. That are informed by process design principles so they work both for families and for staff in the involved departments

5. Effective data collection and coordination is essential to ensure the highest quality services and optimal resource allocation.

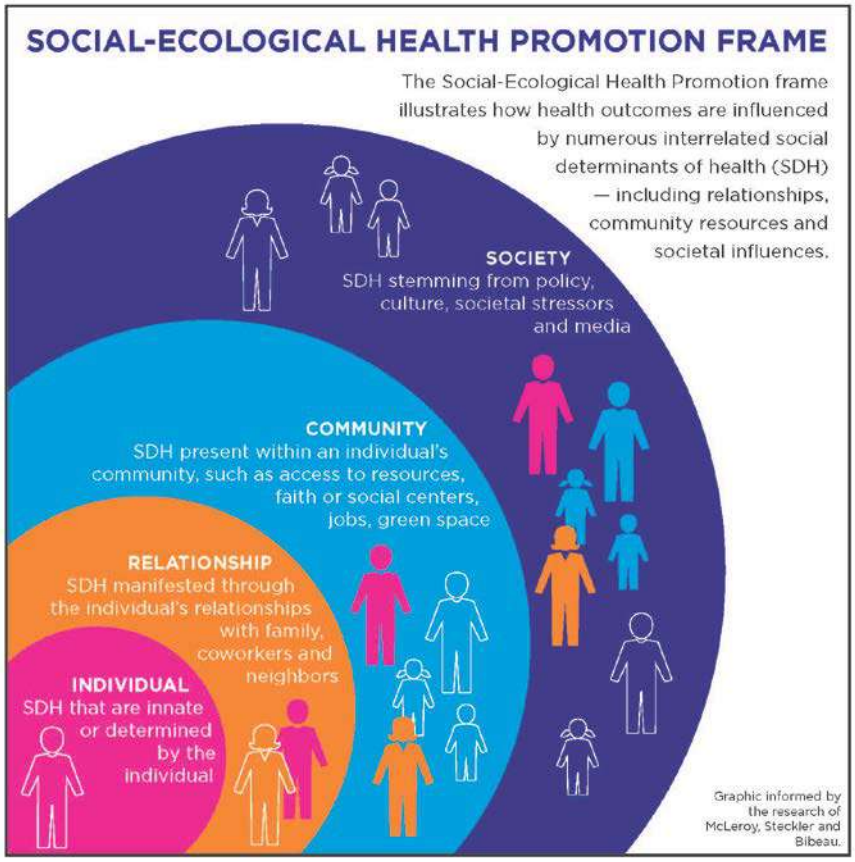
6. Improving coordination can result in even better outcomes for our families and our community by ensuring that (a) resources are maximized and (b) system connections are efficient and effective. Home visiting system coordination efforts should support, leverage, and be pursued in alignment with other change initiatives underway in Los Angeles County, including but not limited to the County Strategic Plan, the Office of Child Protection's prevention plan, Help Me Grow, and other early childhood systems-change initiatives.

7. There is a fundamental shortage of resources to meet the full potential need for home-based support in Los Angeles County. Expanded and more flexible financing is needed. Adjustments also should be made to current program recruitment and collaboration to ensure that existing funds are fully utilized, particularly for prenatal women, at-risk parents, and marginalized families.

Home Visiting's Role in Our Broader System of Care

The County's home visiting system coordination efforts will support, leverage, and be pursued in alignment with other change initiatives underway in Los Angeles County, including but not limited to the Health Agency's health inequity initiatives, the County Strategic Plan, the Office of Child Protection's prevention plan (Appendix C), Help Me Grow, and other early childhood systems-change initiatives.

As highlighted earlier, one of the guiding principles of this planning has been the knowledge that home visiting, while an important resource, is one of many valuable resources for families in Los Angeles. Family health and success are influenced by broad socioeconomic determinants,[6] including environmental factors (such as access to safe housing, nurturing early care and education, parks, and nutritious foods) and experiences with trauma (including violence, abuse, and racism). At a systemic level, it is important that we are addressing all of these factors in balance—ensuring both service-level resources and a community-level ecosystem that supports universal well-being.



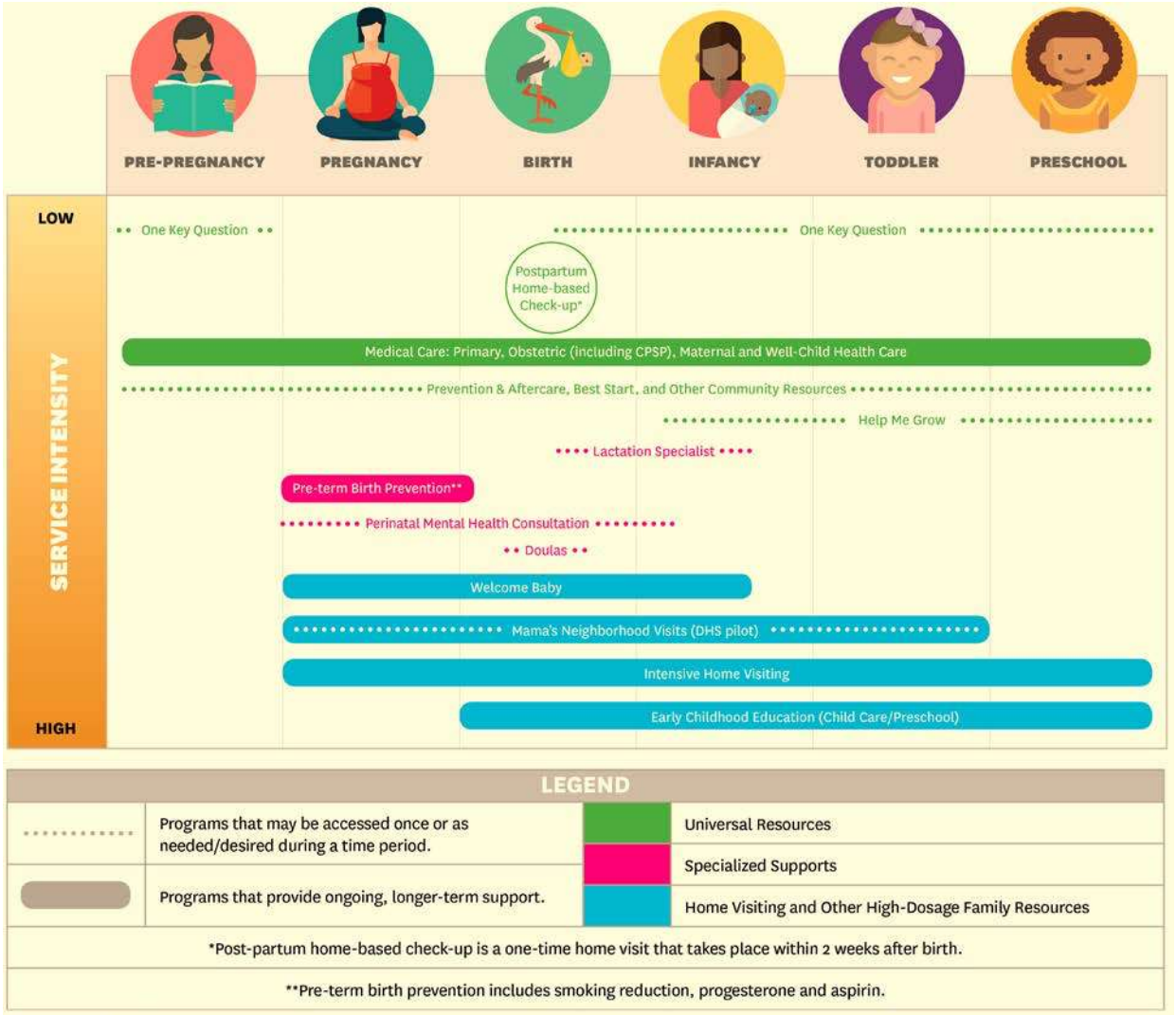
Other County investments are being pursued in parallel with this home visiting expansion. The alignment of these investments—particularly aligning resources to be timely, clear, and easily accessible from the family's perspective—is crucial for our success.

The graphic on the following page illustrates how home visiting investments will align with some of these other investments to support families through their life course. It captures how home visiting models work together and in parallel with other prominent County, First 5 LA, and health sector resources to provide a spectrum of service options for families that spans from low-intensity, universal resources to high-intensity, long-term supports. It maps mainstream resources—primary health care (including the universal use of One Key Question®), early childhood education, and community supports (such as DCFS- and DMH-funded prevention and aftercare services, First 5 LA–funded Best Start Community resources,

[6] Social-ecological health promotion concepts and graphic were informed by McLeroy, K. R., Steckler, A. and Bibeau, D. (Eds.) (1988). The social ecology of health promotion interventions. *Health Education Quarterly,* 15(4), 351–377.

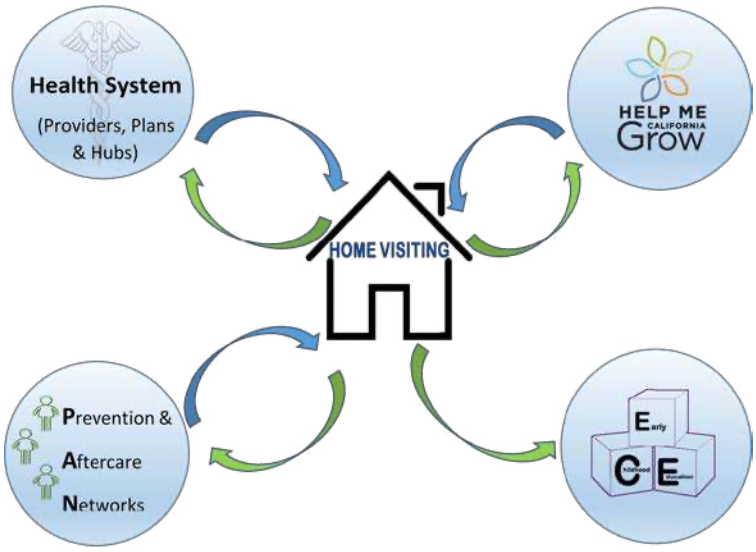
and Help Me Grow child development resources)—alongside interventions geared to address specific parenting scenarios (such as lactation specialists, doulas, pre-term birth interventions, and mental health consultation). It illustrates the piece of the puzzle that intensive home visiting models provide in the context of this whole—long-term, relatively more intensive support for families ready to engage with a trusted, trained coach to achieve family goals. It also maps how proposed concepts, such as a universal post-partum home-based check-up, fit within into health and service landscape.

It is important to note that the full set of dynamics and resources that influence family success extends far beyond what is captured in this chart.



These supports represent a web of mutually reinforcing resources connected by referral bridges. Home visiting both welcomes families from and ushers families to other system hubs within that web.

Because of these relationships, home visiting plays a valuable role in assessing the extent to which these resources are coming together to support families. If the balance of resources is off, home visiting agencies can be among the first to recognize which other resources are suffering capacity shortages most acutely.



Alignment of Home Visiting with County Health Equity Initiatives

Strategies that address health disparities and enhance home visiting investments will be mutually reinforcing. By strategically expanding access to home visiting, and by increasing the training and mental health resources available to home visitors, the County will be strengthening the impact that home visiting can have on infant mortality and birth disparities. At the same time, as the County's Center for Health Equity deepens its focus on reducing infant mortality, it will be rolling out additional resources and trainings that strengthen the knowledge and skills of home visitors and other key workforce groups (medical providers, educators, agency staff). Home visitors will serve as an ongoing resource for disseminating knowledge about these new resources and helping families access them in a timely manner.

The following chart outlines some of the many ways in which home visiting investments are anticipated to support the County's strategic initiatives on infant mortality, as outlined in its *Pathway to Equity* report.

Pathway to Equity Strategy	How Home Visiting Helps
One Key Question®	Home visitors will be trained on OKQ, enabling them to offer a reflective space for families to discuss family planning concerns or options, including dynamics between caregivers (including contraceptive coercion) that may be affecting family planning health.
Risk reduction	Home visitors provide ongoing referrals and support for smoking cessation and other risk-reduction goals (including stress management support).
Universal access to effective medical interventions	Home visitors associated with DHS's MAMA's Neighborhood Visits pilot will deliver medical interventions shown to reduce preterm births (including progesterone and low-dose aspirin) to patients for whom those treatments are indicated but inaccessible. In addition, all home visitors will help mothers become self-advocates in relation to perinatal health care and will support women in carrying out medically advised regimens.

Pathway to Equity Strategy	How Home Visiting Helps
Enhanced mental health services	Home visitors act as front-line mental health support for pregnant and parenting mothers, providing direct consultation for families (with the support of the enhanced mental health team described below), screening parents for depression and other perinatal mood disorders, and building bridges to more intensive therapeutic supports when appropriate.
Early referral to services	All home visitors in Los Angeles will be helping families use the validated instruments of the ASQ-3 and the ASQ-SE2 to assess child development, and will connect families in need of specialized services to the appropriate resources. Home visitors help families obtain transportation, child care, linguistic/cultural understanding, and other resources needed to attend appointments and follow through on medical or other advice.
Improving parent support, stress awareness, and self-confidence	In addition to providing direct support, home visitors play important roles in educating parents regarding the impacts of stress, stress reduction techniques, breastfeeding/parenting techniques, and community engagement activities so that parents feel confident and connected.

Alignment Among Home Visiting and Early Identification and Early Care and Education Systems

In well-coordinated early childhood systems, home visiting connects and refers families to health services, social services, and other family support systems. As part of this important connector role, home visitors can refer families to early identification and intervention (EII) supports to address a child's developmental delays and behavioral concerns. It can also provide parent education on how to identify high-quality early care and education (ECE) options, and can assist families in navigating the significant complexities of ECE program enrollment—something that is essential both for child development and economic stability.

There is significant alignment between home visiting and EII's desired outcomes, such as promoting healthy child development and school readiness. Approximately 1 in 4 children ages from birth through age six are at risk for developmental and behavioral delays.[7] Despite this prevalence, only 21% of young children receive timely developmental and behavioral screenings in California.[8] Home visitors help remedy this challenge. Home visitors monitor children's development, conduct screenings at the recommended periodicity, and refer to appropriate intervention services when needed. They equip families with tools to encourage healthy development and knowledge to monitor developmental milestones. In addition, they encourage them to talk to their child's health provider about healthy development. Home visiting programs can also act as an intervention support for children with or at risk for delays. Risk factors that prioritize families for more intensive home visiting (such as child maltreatment/neglect and parental substance use) are also predictors of developmental/behavioral delays in children. This presents an opportunity for home visitors to monitor these risk factors as early as pregnancy, identify children who

[7] Bethell, C.D., et al. (2011). A National and State Profile of Leading Health Problems and Health Care Quality for US Children: Key Insurance Disparities and Across-State Variations. *Academic Pediatrics*, 11(3 Suppl), S22–33.
[7] Macrides, P. & Ryherd, S. (2011). Screening for Developmental Delay. *American Family Physician*, 84(5):544–549.
[8] Children Now (2018). 2018 California Children's Report Card. https://www.childrennow.org/files/9015/1975/3343/RC18_FINALonlineSPR.compressed.pdf

may be at risk for developmental/behavioral delays, and provide more intensive supports as needed. Evidence indicates that high-quality home visiting programs can improve child development.[9]

The strong alignment between home visiting and EII efforts has been strengthened through federal policy and funding. In 2017, the U.S. Department of Education (which administers the Individuals with Disabilities Education Act–Part C, or IDEA Part C, funding for early intervention services for infants and toddlers with disabilities) and the U.S. Department of Health and Human Services (which funds Maternal Infant Early Childhood Home Visiting), released joint guidance[10] encouraging their grantees to better coordinate and collaborate across the two programs. The guidance recognizes that both funding sources require grantees to be embedded in a centralized or coordinated early identification, intake, screening, and referral system so that program providers are positioned to refer families to needed services in an appropriate and timely manner. The guidance also calls for integrated funding across early childhood sectors. One national example of this type of integrated funding in action is in Connecticut, which in 2013 established an Office of Early Childhood by combining programs and funding from five separate agencies including IDEA Part C, child abuse and prevention, EII, and home visiting.

In Los Angeles County, there have been many efforts to strengthen and better coordinate EII. DPH and First 5 LA are currently planning for the implementation of Help Me Grow (HMG) in Los Angeles County, a model that promotes local cross-sector collaboration to bolster the early screening and surveillance of developmental and behavioral delays for all young children. HMG seeks to coordinate existing systems that serve children with or at risk for delays and their families—such as home visiting—to ensure that families receive appropriate intervention services and supports. As of 2018, DPH has been recognized as the organizing entity for HMG–LA, which means it will be responsible for providing fiscal and administrative oversight for the long-term sustainability of HMG–LA and for facilitating cross-sector coordination to strengthen early identification and intervention in Los Angeles County.

DPH's role as both the organizing entity for HMG and the lead agency for home visiting within Los Angeles County provides a unique opportunity for leveraging and aligning these two systems. For example, one prominent opportunity for synergy includes the potential to bridge referral technologies related to both efforts into one "go-to" resource for families and professionals. Another is the opportunity to support the maximization of federal and state funding streams to support both efforts.

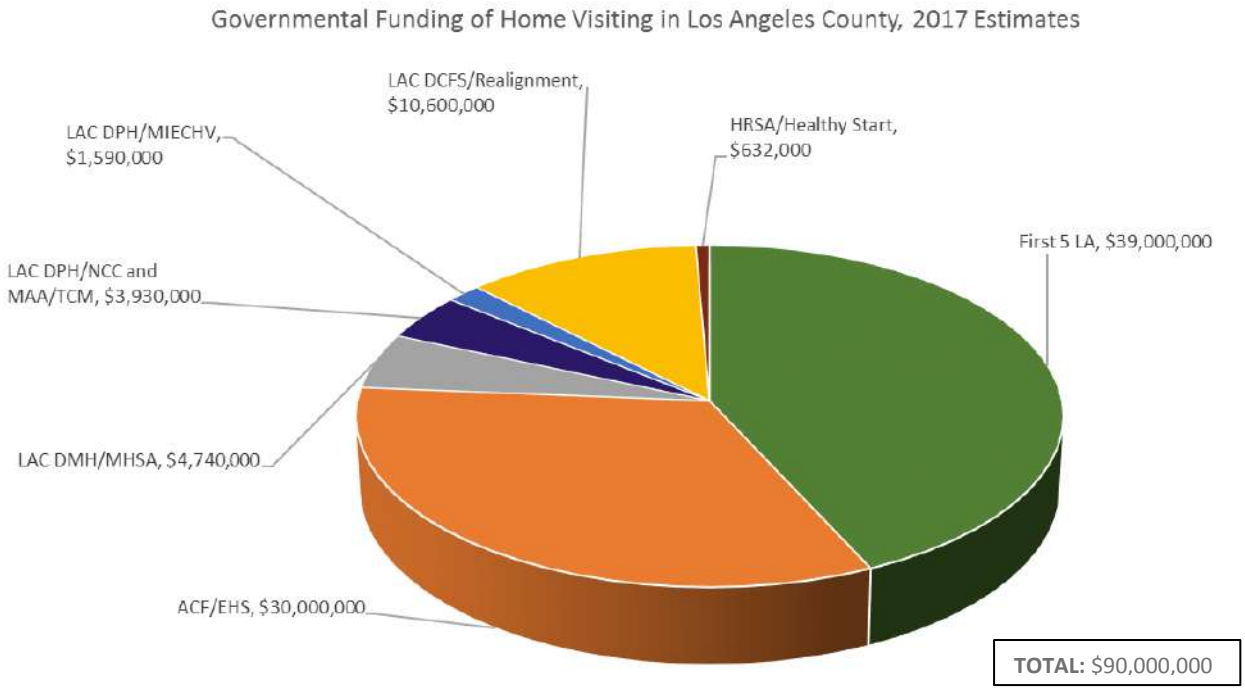
Similarly, DPH is uniquely positioned to support synergy between these initiatives and early childhood education resources in Los Angeles, as a result of its new role overseeing the Los Angeles County Office for the Advancement of Early Care and Education. DPH's position at the nexus of these three systems opens opportunity for cross-sector training, technological integration, financial leveraging, and other reforms to improve how these parts of our broader family support network come together to help families. These shifts present new opportunities to realign these systems to be more accessible, easier to navigate, more effective, and more responsive to families. In these three significant roles, DPH is uniquely positioned to help transform and better coordinate referral services and supports for the early childhood population.

[9] Supplee, L. & Adirim, T. (2012). Evidence-based home visiting to enhance child health and child development and to support families. *American Psychological Association.* http://www.apa.org/pi/families/resources/newsletter/2012/07/home-visiting.aspx

[10] U.S. Department of Education & U.S. Department of Health and Human Services. (2017). Collaboration and Coordination of the Maternal, Infant, and Early Childhood Home Visiting Program and the Individuals with Disabilities Education Act Part C Programs. https://sites.ed.gov/idea/files/ed-hhs-miechv-partc-guidance.pdf

Baseline Los Angeles County Home Visiting Investments

At the outset of this planning process, the baseline state of home visiting included a strong but disconnected foundation of publicly funded programs. As of 2017, publicly funded home visiting programs in Los Angeles were funded through the contributions of five local governmental entities, plus numerous contracts awarded by the federal government to local nonprofit organizations. The graph below illustrates these major public funding sources.[11] [12]



[11] Family interventions provided in the home (such as home-based therapeutic interventions) are not reflected here because they do not match the preventative home visiting definition above. Nonetheless, it is worth noting that a substantial amount of funding is also available for such services in Los Angeles, and comes alongside the funding displayed here to meet the full needs of our families, as may be appropriate based on each family's situation.

[12] Notes for "Governmental Funding of Home Visiting in Los Angeles County, 2017 Estimates":

**ACF/EHS*: The Federal Administration for Children & Families funds Early Head Start programs. This funding is estimated based on an extrapolation of actual capacity using comparative volume and intensity of services.

**LAC DMH/MHSA*: DMH supports home visitation programs using Mental Health Services Act (California Proposition 63) Prevention and Early Intervention funds.

**LAC DPH/NCC and MAA/TCM*: DPH uses County General Funds (Net County Cost) combined with Federal Title XIX (Medicaid) matching funds that can be claimed via the Medicaid Administrative Activities (MAA) and Targeted Case Management (TCM) programs.

**LAC DPH/MIECHV*: DPH also receives funds from the Federal Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program administered by the Health Resources & Services Administration (HRSA) Maternal Child Health Bureau.

**LAC DCFS/Realignment*: DCFS funds home visitation programs using state realignment funds.

**HRSA/Healthy Start*: The Health Resources & Services Administration (HRSA) Maternal Child Health Bureau administers the Federal Healthy Start program.

**First 5 LA*: First 5 LA receives funding from California's Proposition 10 tobacco tax and makes investments to optimize the health and early life experience of children from before birth through age five, including home visiting.

Collectively, these funding streams enable 55 local nonprofit organizations plus DPH Maternal Child and Adolescent Health (MCAH) to provide home visiting services with a total capacity for helping approximately 24,500 families per year, including intensive services to approximately 9,500 high-risk families per year. In addition, a handful of smaller home visiting programs are run by nonprofit agencies using philanthropic or grant dollars.[13]

All publicly funded models in Los Angeles focus their efforts on promoting healthy child development, addressing maternal mental and physical health, supporting nurturing family relationships, and assisting families in achieving self-defined goals (such as improved financial or relational stability). The specific foci, curricula, and restrictions of these programs vary by model. Each model has a defined curriculum, methodologies, staffing requirements, frequency of client contact, service length, entry requirements, intended outcomes, and actual outcomes as demonstrated through research. Eligibility for each model may be limited by model or by local funder to specific risk, income, geographic, and/or age criteria.

The majority of models operating in Los Angeles are restricted to families meeting a "high-risk" threshold based on family characteristics (such as poverty, substance abuse, or geography). Some of these thresholds are set based on national model guidelines; others have been established by local funders seeking to reach particular subsets of the population. These models offer services with high frequency (two to four visits per month) and longer duration (six months to five years). One model, Welcome Baby, screens families for level of risk and offers a lower frequency (six to nine contacts) to families who are identified as being at low or moderate risk, and refers families at higher risk and meeting geographic criteria to more intensive home visiting models. Welcome Baby has been implemented in 14 birthing hospitals delivering babies who live in some of the County's highest-risk communities.

Los Angeles County currently has multiple federally designated "evidenced-based" programs, including Nurse-Family Partnership, Early Head Start, Healthy Families America, and Parents as Teachers (see Appendix C | *Paving the Road to Safety for Our Children* for more detail). The remainder of Los Angeles' programs may be described as "evidence-informed," as they adapt elements of evidence-based programs and implement them in alternative service models tailored to meet the needs of specific populations.

The following chart summarizes the models and capacity funded by Los Angeles County departments, First 5 LA, and the federal government as of June 2017.[14]

[13] Based on simple calculations using the figures above, a rough estimate for the average cost of home visiting programs per family per year is $3,675. However, program costs can vary widely based on the program model implemented with differing staffing patterns, frequency of visits, duration of service, and other factors. Los Angeles County has the opportunity to adjust overall cost and capacity to serve a greater number of families by making strategic decisions regarding which models to invest in primarily.

[14] Appendix E | Executive Summary, Home Visiting in Los Angeles County provides additional details regarding the state of home visiting at the outset of our planning process.

Funding Entity	Models	Families/Year
First 5 LA	Welcome Baby Healthy Families America Parents as Teachers	15,000 general 3,100 high-risk
Federal Office of Head Start	Early Head Start	3,450 high-risk
Los Angeles County Department of Children and Family Services	Partnerships for Families	1,260 high-risk
Los Angeles County Department of Public Health	Nurse-Family Partnership Healthy Families America	1,210 high-risk
Los Angeles County Department of Mental Health		
Federal Health Resources and Services Administration	Healthy Start	500 high-risk

Also noteworthy at the outset of the planning process was the existence of a significant baseline of collaboration and infrastructure. Through the partnership of DPH, First 5 LA, LABBN, and community agencies, the Consortium has been acting as a bridge among programs for several years. Most notably, since 2015, with financial support from the Partnership for Early Childhood Investment and First 5 LA, Consortium members across multiple models have been collaborating to promote quality, coordination, measurement, and sustainability among home visiting agencies. Infrastructure already in place included data systems for each program that performed various types of outcome tracking, demographics, client interactions, and enrollment functionality. The Stronger Families database utilized by First 5 LA–funded programs provided a direct referral connection between hospital teams and home visiting provider agencies. Coordination, training, and technical support is provided to First 5 LA's Stronger Families Network of Welcome Baby and home visiting agencies through the Family Strengthening Oversight Entity, which is managed and delivered by LABBN, Maternal Child Health Access, and PAC/LAC (Perinatal Advisory Council: Leadership, Advocacy, and Consultation). Telephonic support was in place for DPH's Nurse-Family Partnership program. Along with the service investments outlined above, these existing leadership commitments, community collaborative efforts, philanthropic investments, and infrastructure elements contributed to a solid foundation that positioned Los Angeles well for the development and implementation of system-wide plans.

What National Research and Local Gap Analysis Taught Us

In keeping with the Board motion's sections I and III, analyses both of national research and of the Los Angeles County home visiting landscape were used to ground this plan in nationwide best practices and current local data. Inputs included:

1) Guidance from national and local experts funded by the Office of Child Protection and First 5 LA

2) Extensive research funded by the Partnership for Early Childhood Investment and First 5 LA on behalf of the Consortium to support system improvement efforts

3) Expertise and insights shared by home visiting provider agencies, advocates, and prospective client families at Consortium-hosted community input sessions and First 5 LA funded focus groups

Based on these combined sources, seven priority system changes surfaced as opportunities to better meet community needs:

1. Develop a centralized, coordinated referral technology to help families and professionals navigate complex eligibility rules

2. Expand resources by better leveraging existing funding and by identifying new sources

3. Expand eligibility criteria to reach families excluded by criteria built into current evidence-based programs

4. Increase prenatal recruitment and marketing activities to broaden access and improve birth outcomes

5. Explore additional opportunities to ensure that home-based services are optimally supporting health equity, such as by piloting innovative models or strengthening workforce practices, based on data analysis and evaluation results

6. Improve perinatal mental health supports

7. Improve connections with and the leveraging of health care system resources.

Details of the learning garnered from each source are explained more fully below, including the single-entry portal, national best practices, gap analysis, and funding exploration required by the Board motion.

National Research

Our review of national models and best practices included interviews with leading researchers from Chapin Hall (at the University of Chicago) and the University of Southern California. This review affirmed the value of many of the structures already in place and collaborative efforts already underway, such as current data tracking, best-practices adoption, and referral improvement efforts being led by the Consortium.

Research regarding portals of entry helped to inform our recommendations relating to the creation of a coordinated electronic infrastructure to improve access for families. Single-entry portals (mentioned specifically in the Board motion, and sometimes called "centralized intake") that require all applicants to

flow through one central application system have been implemented in some jurisdictions. Research found pros and cons to such systems that should be carefully weighed before pursuing such an investment, and that single-entry systems may be better suited to areas with less pre-existing infrastructure and more centralized authority.[15] [16] Los Angeles has a number of currently functioning referral pathways and enrollment systems. Requiring programs to fully forgo these existing paths and systems in order to adopt a single, centralized enrollment system poses three concerns: 1) there is a risk that existing working pathways are weakened; 2) the costs of changing enrollment and recruitment procedures to make this large a shift outweigh the anticipated benefits; and perhaps most importantly, 3) Los Angeles County does not have the authority to mandate participation by programs funded via federal or other non-local sources.

Research suggested that the optimal fit for Los Angeles would be a "coordinated" entry system, in which centralized technology and collaboration supports the broad and efficient engagement of families. Under this entry model, Los Angeles would benefit from coordinated referral technology that improves the connection of families from various gateways to the available programs that fit their needs. This type of centrally managed technological tool would help families identify and connect efficiently to the local programs for which they are eligible, so that they may easily choose and access the right resource for their family.

National-level research also identified valuable opportunities to expand funding, including:

- The use of untapped funding streams such as Temporary Assistance to Needy Families (TANF) and Mental Health Services Act—Prevention and Early Intervention (MHSA-PEI)
- The maximization of underutilized streams, such as Medicaid Targeted Case Management (TCM)
- Other health-sector strategies such as Medicaid waivers and the improved leveraging of health benefits available under Medi-Cal and private health plans.

Local Landscape Assessment

The assessment of local data in 2017 revealed three prominent "pain points" that systemic planning might help resolve:

- A lack of funds to meet the full community need
- Overly narrow eligibility criteria that limit access for families who could benefit from home visiting
- Under-developed prenatal recruitment

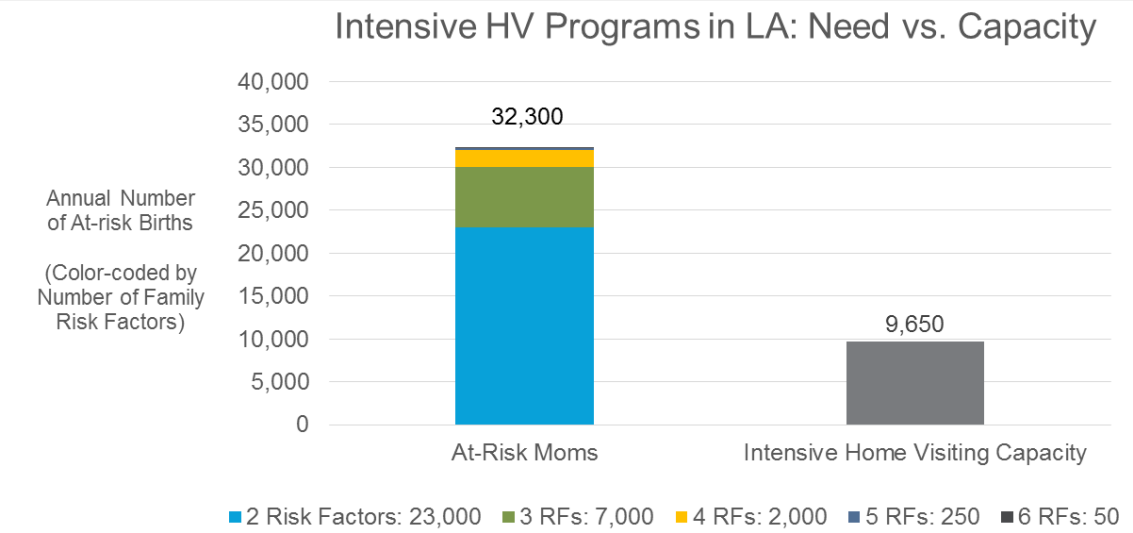
<u>Funding Gaps</u>

Comparing current home visiting capacity to full community need revealed substantial gaps in services for both high-risk populations and the general Los Angeles County population.

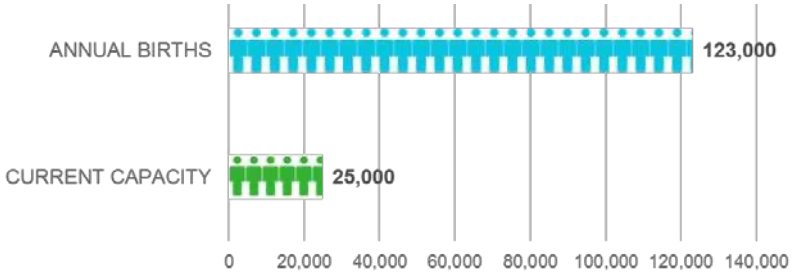
Using 2014 DPH Los Angeles Mommy and Baby project (LAMB) survey data and methodology informed by Children's Data Network research, the number of families giving birth in Los Angeles County each year who exhibit at least two risk factors[17] was estimated to be approximately 32,000. More recent

[15] National Evidence-Based Home Visiting Model Alliance. (2017).C-Intake: Lessons Learned and Recommendations.
[16] Maternal Infant and Early Childhood Home Visiting (MIECHV) Technical Assistance Center. (2014). MIECHV Issue Brief on Centralized Intake Systems. https://www.greatstartgeorgia.org/sites/default/files/miechv_issue_brief_centralized_intake.pdf
[17] Risk factors in our analysis included: teen mom, depressed while pregnant, used illicit drugs while pregnant, physically abused while pregnant, entered prenatal care after three months, achieved less than a high school education, and being homeless while pregnant. Risk factors were chosen based on a combination of Children's Data

calculations performed by First 5 LA in conjunction with the Children's Data Network estimated that achieving this estimate of 32,000 intensive service slots would correlate to a systemic capacity to reach approximately 60% of all children projected to have a child protective services referral by age 5.[18] Meanwhile, only 9,500 spots currently exist for intensive home visiting for these families in Los Angeles. The graph below illustrates this gap between the number of at-risk families and the volume of intensive services available on an annual basis.



Comparing the 15,000 openings for less-intensive home visiting services with the 123,000 births in Los Angeles County in 2016,[19] one can see the substantial gap remaining to achieve a truly universal system. Current funding provides sufficient capacity to serve only 12% of the general population.



Eligibility Challenges

Each Los Angeles–based home visiting model has its own eligibility requirements based on geography, age, income, and/or risk profile.[20] In some cases, these eligibility restrictions have been established by the

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Network research regarding child abuse risk factors and the expertise of the Consortium Data Workgroup. Findings from the LAMB survey were extrapolated to the number of women who give birth annually in Los Angeles County for a population estimate.

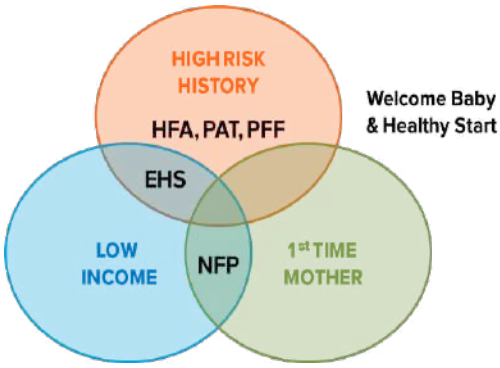
[18] The full Children's Data Network analysis may be accessed at https://s3.amazonaws.com/childrens-data-network/LA+HV+Consortium+Presentation+4.5.2018.pdf.

[19] Los Angeles County birth rate data source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics.

[20] *Geographic Restrictions*: Programs restricted to specific Service Planning Areas include Healthy Start and Antelope Valley Healthy Families America. Early Head Start is federally restricted by ZIP Code. Programs restricted to one of

local funding agency to focus resources on particular high-risk subpopulations; in others, by the national fidelity model. The combined impact of these restrictions is that many families are simply not able to access home visiting services because of local eligibility requirements. Substantial subsets of our population are left out of all home visiting programs.

Furthermore, the complexity of eligibility makes it very difficult for professionals and families to know which programs to reach out to for help. Without a centralized mechanism to match resources to family needs, even qualified families frequently miss out on available programs. This challenge will only be exacerbated as additional capacity is added to the system: when more services are available, it will be even more important for the complexity of eligibility to be ameliorated through technology or policy changes so that parents may efficiently connect with the best program for their family and so that resources are fully utilized.



Prenatal Outreach Opportunities and Birth Disparities

Our research also pointed to a need for greater prenatal outreach. Data in early 2017 and interviews with home visiting providers showed that the Los Angeles programs with unused capacity generally required prenatal or at-birth enrollment. Other programs were at full utilization or have since reached full capacity.

Furthermore, prenatal outreach is particularly important because it is key to supporting healthy birthweights and to improving equity in birth outcomes. Across the lifespan, Los Angeles County exhibits sharp disparities in health and social outcomes among different racial and ethnic subgroups. Most notably, infant mortality in Los Angeles County is 10.4 per thousand live births for African-American residents, compared to 3.9 per thousand for Hispanic residents, 3.2 per thousand for White, and 2 per thousand for Asian/Pacific Islanders. In other words, an African-American newborn in Los Angeles County is more than three times as likely to die in the first year of life as a White newborn, and more than five times as an Asian/Pacific Islander.[21] The following chart, from the Los Angeles County Center for Health Equity, shows these rates from 1996 to 2016. Events and exposure before, during, and following birth affect infant mortality rates.

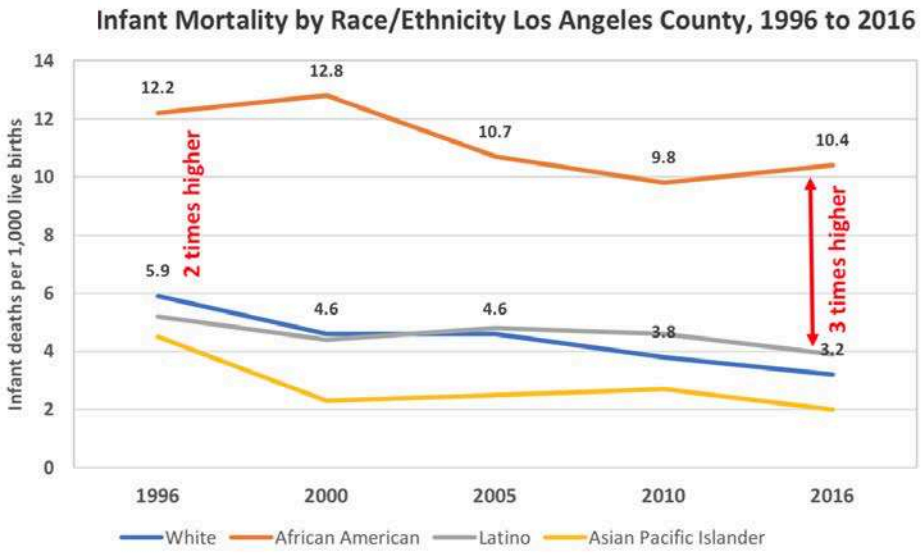
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the 14 localized Best Start neighborhoods include Welcome Baby, Healthy Families America, and Parents as Teachers per local First 5 LA guidelines.

Age Restrictions: Most intensive programs in Los Angeles require entry at or prior to birth. Nurse-Family Partnership is restricted to families entering before 28 weeks gestation. Healthy Family America and Parents as Teachers are available only to families immediately after hospital delivery per local First 5 LA requirements. Partnerships for Families is restricted to families entering prenatally or up to the child's first year. Welcome Baby is available only to families entering at or prior to birth. Entry into Healthy Start extends from the prenatal period through age two. Early Head Start is available from the prenatal period through age three.

Income and High-Risk Restrictions: Welcome Baby services are available to families of all incomes and risk profiles. Healthy Start is available to families who fit a demographic profile defined in each program's funding application based on a community history of risk. In Los Angeles County, Healthy Families America, Parents as Teachers, and Partnerships for Families are available only to families that have a history of high risk. Early Head Start is available to families that have a high-risk history and who are low income. Nurse-Family Partnership is available to low-income first-time mothers.

[21] Center for Health Equity, Los Angeles County Bureau of Health Promotion. (2018). A Pathway to Equity: A Framework to Close the Black-White Gap in Infant Mortality. http://paclac.org/wp-content/uploads/2018/06/IM-Brief.pdf



The following table also illustrates this point, comparing rates of low birthweight and very low birthweight neonates in addition to infant mortality rates among different races or ethnicities.[22] The significantly higher rates of both conditions among African-Americans again describe a situation not simply attributable to traditional socioeconomic or environmental risk factors. A growing and consistent body of research points to the toxic effects of chronic stress caused by exposure to pervasive structural racism. A model that measures and sums individual risk factors to assign those who would benefit from more intensive home visiting models may fail to consider this underlying cultural and societal issue, which places African-American women at higher risk for poor birth outcomes regardless of other individual characteristics.

Infant Mortality and Very Low and Low Birthweights
Los Angeles County, 2016

	Total Live Births	Infant Mortality		Low Birthweight Less than 2,500 grams		Very Low Birthweight Less than 1,500 grams	
Mother's Race/Ethnicity		**Total**	**Deaths per 1,000 Live Births**	**Total**	**%**	**Total**	**%**
African American	8,425	88	10.4	985	11.7	210	2.5
Asian	19,608	40	2.0	1403	7.2	166	0.8
Latina	67,666	261	3.9	4556	6.7	772	1.1
White	22,808	73	3.2	1429	6.3	194	0.9
County-wide Total	122,941	495	4.0	8,783	7.1	1,430	1.2

[22] Source: California Vital Statistical Birth and Death files, 2016; created by LACDPH MCAH Programs, Research, Evaluation and Planning Unit

These data point to opportunities to improve health outcomes through more intentional efforts to engage disenfranchised populations during pregnancy and between pregnancies. For example, building non-stigmatizing pathways into home visiting from medical providers, community-based organizations, health plans, early learning settings, and County Departments could improve our ability to reach such families, and thereby to affect birth outcomes. We also may be able to improve health equity via other efforts, including but not limited to piloting other innovative models. Last but not least, building a culturally responsive workforce can optimize perinatal and early childhood care and foster health and social equity.

Community Provider Roundtable and Parent Focus Groups

Over 90 local home visiting providers and advocates gathered at a Community Roundtable hosted by the Consortium to share their expertise and input regarding community needs and opportunities for system improvement. Key insights included:

- The need for improved perinatal mental health training, connections, and clinical supports for pregnant and new mothers suffering from perinatal mood and anxiety disorders
- A confirmation of the need for more flexible eligibility and funding to make home visiting services available to all families for whom they are a fit
- Interest in exploring medical billing options
- Interest in technological infrastructure to improve efficiency, outreach/engagement, referrals, billing, and outcome tracking
- A desire to strengthen ties with the medical community

Focus groups of current and prospective home visiting participants were conducted by SocialQuest and First 5 LA to gain community member perspectives. These sessions reaffirmed the themes enumerated earlier (see Appendix B | Excerpts from Focus Group Analysis). Parents cited the transformative impact of home visiting: those who commit to home visiting often experience deep, life-changing benefits and many wish they could have more visits. They also emphasized that home visiting acted as a gateway for them to other needed supports, such as housing and mental health counseling. At the same time, they pointed to the disappointment and frustration of current “leaky” referral pathways and eligibility complexity. They underscored the need for greater social support to counteract isolation and depression during the perinatal period. Parents also identified other opportunities for innovation and improvement, including improving the engagement of families (by better communicating the benefits of home visiting when offering programs and by increasing word-of-mouth promotion), increasing the use of texting, and greater father engagement.

Our Proposed Solutions

Four key areas for system change were identified as key to realizing an optimal system of support in Los Angeles County:

1. **Coordination:** Building new processes, technology, and pathways to improve access
2. **Data:** Establishing common data elements across programs to guide continuous quality improvement, measure results, and convey shared impact
3. **Workforce**: Recruiting, training, and sustaining excellence
4. **Funding:** Expanding the volume, flexibility, and capacity of our funding infrastructure



This section delineates the recommendations of the County Departments and their partners within each of these action areas, and the commitments that stakeholders have made to move those recommendations forward.

Coordination

This section delineates recommended strategies for realizing a coordinated system of supports that expectant and parenting mothers can access easily and early, and that provides the right combination and intensity of services to meet families' needs. It outlines key steps to achieving our vision of a system that provides access to families through multiple environments, including but not limited to County, medical, and community environments. It does so recognizing that home visiting services represent one important resource within a broader set of family supports that we seek to coordinate for the benefit of our families.

The concepts proposed herein build on national research on single-entry portal and coordinated entry systems, and the local gap analysis requested by the Board of Supervisors. This section highlights both technological and organizational opportunities. It brings together the strengths of governmental, medical, and community service providers both as referral pathways into home visiting *and* as resources to meet each family's needs.

The three strategies that emerged as most valuable for improving access to home visiting—especially for those Los Angeles County families who are most vulnerable—were:

- Building a coordinated referral infrastructure that includes centralized technology
- Increasing pathways from County programs into home visiting and other community supports to better meet the needs of high-risk populations
- Embedding universal prenatal and postpartum screening and access to home visiting within the primary health care system, leveraging and building upon existing health supports.

Bringing together the public and private sectors around these three system changes is a critical first step in helping Los Angeles County children and families thrive.

<u>Coordinated Referral Technology</u>

Investments in referral technology and related infrastructure could address the challenges currently faced by providers and families attempting to access appropriate services. Current challenges identified by stakeholders include:

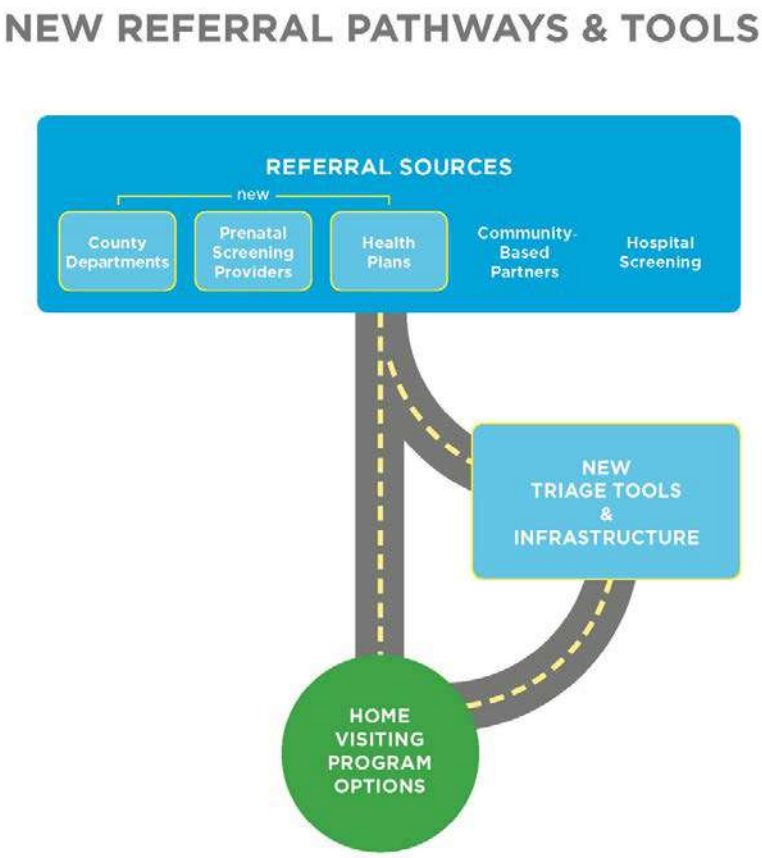
1. The diversity of programs and variability of eligibility criteria across programs make it challenging for referring agencies and health care providers to know which programs to offer families (which programs they are eligible for, which are located in their geography, and which are the appropriate fit for the family's needs).
2. The large volume of provider agencies across the county, along with the insufficient distribution[23] and dynamic nature of programs, makes it hard for referring agencies to maintain the up-to-date contact information and forms required to efficiently connect people with programs.
3. There currently is no shared[24] way for referring agencies to track or check real-time program enrollment or capacity; when programs are full, parents become frustrated, losing momentum and general trust in the resources being offered.

[23] Hasenfeld, Chen, Garrow & Parent. (2013) Spread thin: Human service organizations in poor neighborhoods. *The State of the Nonprofit Sector in Los Angeles Report.* UCLA Luskin School of Public Affairs Center for Civil Society. https://www.socalgrantmakers.org/sites/default/files/resources/The%20State%20of%20the%20Nonprofit%20Sector%20in%20Los%20Angeles%20Report%202013_Human%20Services%20Orgs.pdf

Building a coordinated electronic referral system, with affiliated telephone hotline, would help to resolve these challenges. DPH, the Consortium, and First 5 LA are ready to collaborate to develop and maintain this needed electronic system. This effort is anticipated to take place in two phases. Phase I is the development of electronic eligibility and program information look-up ("triage") functionality. Phase II is the integration of this functionality into broader DPH, First 5, and other electronic and telephonic referral systems.

The Consortium, DPH, and the Center for Strategic Public-Private Partnerships (CSPPP) are already collaborating on Phase I, transitioning the Consortium's existing manual referral directory into an electronic format. This electronic build is being made possible through the joint sponsorship of several philanthropic foundations with the coordinating support of the CSPPP. This step will address many of the difficulties professionals have in determining the correct program to meet their client families' circumstances and accessing the contact information and forms needed.

First 5 LA has also committed funding for DPH to engage in a one-year planning process to define the exact scope, system integration, resource requirements, and sustainability plan of Phase II. This planning year will allow sufficient time to clarify the optimal set-up to meet community members' needs, including but not limited to possible integration with Help Me Grow infrastructure, First 5 LA's Stronger Families referral mechanism, and other relevant systems. Such connections could help resolve the third challenge listed above—parent frustration—by enabling parents and referring professionals to know in real time whether or not agencies have the capacity to take on new families, before encouraging parents to enroll.



To accompany this electronic system, a telephonic resource for referral support will be established. Because of DPH's existing commitment to managing a hotline for both Nurse-Family Partnership and Help Me Grow, DPH is well positioned to provide this new resource. In fact, there is a benefit to merging all home visiting resources into existing systems—broadening their purpose rather than creating another stand-alone system. Leveraging and expanding existing resources offers a more streamlined referral system, providing professionals and families seeking services with one central resource rather than multiple numbers to call.

[24] At this time, the Stronger Families database provides this capability for First 5 LA–funded Welcome Baby, HFA, and PAT programs only.

New Pathways and Access for At-Risk Populations

The second key area of focus is the need for increased system-wide capacity to offer home visitation to families at high risk of involvement with the child welfare system, consistent with both the recommendations of the Los Angeles Blue Ribbon Commission on Child Protection and the Board of Supervisors' motion.

To address this need, multiple County Departments have committed to pilots, process changes, and investments to create and improve referral pathways into home visiting programs for high-risk, pregnant, and parenting clients.

In response to concerns about narrow eligibility criteria, DPH piloted an expansion of its Nurse-Family Partnership program criteria in Service Planning Areas (SPAs) 1, 3, and 8, accepting not only first-time parents but also parents who are already raising other children. It anticipates spreading this expansion countywide in the upcoming year.

DPSS launched two pilots to explore opportunities to connect its most at-risk families to preventative supports:

- A pilot in SPA 6 that refers Family Stabilization families with children from before birth to age three to the Prevention & Aftercare Network and home visiting supports (with financial support underwritten by First 5 LA)

- A pilot in SPAs 1 and 3 in which a DPH Public Health Nurse is paired with a clinical social worker to offer interventions, referrals, and services, including home visiting, to eligible California Work Opportunity and Responsibility to Kids (CalWORKs) families in crisis

These pilots illustrate creative cross-departmental collaboration and are potential models for the expansion of access to intensive home visiting services for DPSS families. Both pilots demonstrated great success in engaging parents and connecting them with resources. In fact, the SPA 6 pilot was able to fill all funded home visiting spots faster than was anticipated, and provided learning that informed state-level home visiting funding discussions. Building off the early success of these pilots, DPH and DPSS are dedicated to the expansion of these services Countywide in fiscal year (FY) 2018–2019, so that Family Stabilization clients in all SPAs will have access to referrals and health and home visiting support.

DCFS and DMH have committed to utilizing MHSA-PEI funds to help build linkages for families who have had a child abuse report filed that does not meet the statutory criteria for an in-person response, and who would like to be connected to community services. Research has demonstrated that such families are at higher risk for re-reporting and the later removal of children into foster care. DCFS is working with its Prevention & Aftercare Network partners to build intentional bridges for these families to connect to home visiting agencies and other supports. DMH is funding expanded resources for Prevention & Aftercare Networks to provide these linkages, as well as exploring ways to improve access to home visiting for DCFS-connected families who utilize Los Angeles County Medical Hub Clinics and other community supportive services. In addition, DCFS has collaborated with Early Head Start (EHS) providers to build a "Head Start and Early Education Referral System" to connect DCFS clients to EHS services. DCFS also refers DCFS-supervised pregnant and parenting teens to home visiting services when applicable.

DHS has also launched a pilot funded through its Section 1115 Whole Person Care waiver. The focus of this pilot is the creation of new home visiting offerings for high-risk[25], Medi-Cal–eligible clientele. This program is being built as an extension of DHS's existing MAMA's Neighborhood, which has set the standard of care for perinatal health support in Los Angeles through its success in recruiting vulnerable women and having an impact on their psychosocial and medical well-being. This pilot enables DHS to fill a gap it had identified in its existing service reach, allowing it to engage a very high-risk population to whom it must bring services to achieve retention in clinical and other supports. DHS is building out connections to these resources in the context of additional comprehensive prenatal and extended post-partum services.

Probation plans to train its investigation, supervision, and triage staff to connect pregnant and parenting families to home visiting supports. It anticipates rolling out training to approximately 500 staff beginning in early FY 2018–2019.

To support the inflow of at-risk families coming from these new County referral pathways, and to ensure more equitable access to services for at-risk families in general, DMH has identified MHSA-PEI funds that it is reallocating to new prevention programming, including funding for home visiting services in FYs 2018–2019 and 2019–2020. The focus of this investment will be the expansion of services for families at risk of child maltreatment and/or adverse birth outcomes. After this initial two-year period, DMH will review and determine future investment plans based on outcomes and on the availability of funding.

The expanded home visiting services funded through MHSA-PEI will be rolled out in collaboration with DPH, with DPH as the program operations and oversight lead. DPH and DMH have chosen the Nurse-Family Partnership, Healthy Families America, and Parents as Teachers models for this expansion because of their fulfillment of MHSA evidence-based criteria specifically in relation to the prevention of child maltreatment. They have also chosen to invest in two new, innovative models that seek to reach specific at-risk populations: MAMA's Neighborhood Visits, which will serve high-risk Medi-Cal eligible families interfacing with the County medical service system, and Family Stabilization Support, which will serve DPSS Family Stabilization clients. DPH, DMH, and DPSS are committed to these services being operational in early FY 2018–2019.

DMH and DPH will use this expansion opportunity to address the eligibility-driven access issues outlined in the "What National Research and Local Gap Analysis Taught Us" section starting on page 18. Healthy Families America and Parents as Teachers programming will be open to families in all areas of the county and will not be restricted to families referred from hospitals (consistent with national model guidelines), as with currently funded programs. Further, it will allow high-risk families living outside First 5 LA–designated Best Start communities to be offered one of these more intensive home visiting programs. MAMA's Neighborhood Visits will also be offered countywide. As mentioned earlier, Nurse-Family Partnership funding will be open not only to first-time parents (the restriction prior to the commencement of this planning process), but also to families expecting additional children. These modifications will add the flexibility needed to connect previously excluded at-risk families to the right home visiting program for their family.

Universal Screening, Achieved via Medical System Integration

The third pillar of improving access for families is the implementation of universal prenatal and post-partum screening, triaging, and resources. This approach ensures access to the most intensive services for families who would most benefit from these supports, while providing opportunities for all families to

[25] High-risk as defined by DHS includes homeless, at risk of homelessness, incarceration, domestic violence exposure, substance abuse, severe and persistent mental illness, or experiencing a medically high-risk pregnancy.

get off to a strong start. The goal of this type of "targeted universalism" is to achieve an outcome-driven division of resources, providing each family with the level of assistance they need to succeed.[26] [27]

This build-out of universal supports is crucial to ensuring health equity, as it assures that access to strength-based supports are open to all families, including specific populations who may not have had access to or elected to engage in prior service options. It de-stigmatizes maternal support, making key resources (such as lactation, perinatal mental health, and community referrals) part of standard practice.

> *"When we talk about universal services, we don't talk about giving everybody the same thing. We talk about giving people the level of service that they need. And that service may come from a publicly funded service. It may come from their own informal support system. It may come from their neighbors and friends. It's about linking families up to resources … looking at the context in which families live and asking if we can enrich that context with a set of services and a set of welcoming opportunities to receive services in ways that will really make a difference."*
>
> *—Dr. Deborah Daro, Chapin Hall*

This effort will have an intentional prenatal outreach emphasis for three reasons: (1) because of the importance of prenatal supports in reducing disparities in infant mortality; (2) because of the research demonstrating women's increased receptiveness to making healthy changes during pregnancy; and (3) because of the immense body of research demonstrating the impact that prenatal health can have on life-long, multi-generational health and other outcomes.

By building partnerships with the health sector, such as with health plans and Comprehensive Perinatal Services Program (CPSP) leadership, we aim to ensure that *all* mothers are connected with timely prenatal supports. This integration with the medical system will augment the bridges being built between home visiting and social service settings—such as DPSS, DCFS, Women, Infants and Children(WIC), and other pathways referenced above—to ensure universal access for all Los Angeles County families. This connection will include screenings and "warm hand-offs" to appropriate home visiting supports, as well as other important resources such as obstetric care, WIC nutrition supplements, and public assistance options. Pre-existing integrated screening mechanisms in each of these various environments will be leveraged whenever possible to avoid duplicative inquiries regarding sensitive information. These mechanisms will be used in conjunction with the new coordinated infrastructure to efficiently connect families to appropriate resources, using common factors to triage appropriately within the context of each environment.

The second universal outreach point we aim to make is at birth. Under this vision, all families would be offered the opportunity for at least one post-partum home-based coaching session to ensure that the transition into parenting is healthy and successful. This visit, scheduled automatically as part of the hospital discharge process, would include breastfeeding support, connections to pediatric care, maternal mental health screening, trauma screening, and referrals to resources as may be appropriate. Recognizing that family needs and/or interest in participation may change during pregnancy, families would also be (re)screened during this visit for their eligibility for home visiting. Families would then be offered services

[26] Powell, J.A. (2008). Post-Racialism or Targeted Universalism, *Denver University Law Review* 86, 785. "Targeted universalism" is the strategy of using population-specific interventions to achieve universally desired outcomes.
[27] Powell, J.A., Menendian, S., Reece, J. (2009). The importance of targeted universalism, *Poverty and Race*, 18 (March-April).

appropriately matched to their level of need and interest. Families with multiple risk factors could be offered the opportunity for up to five years of intensive home-based support to help realize optimal child development, family well-being, and life goals.

Under this vision, all pregnant women and families with young children in Los Angeles County would have access to trusted professional support and coaching in their homes—right-sized based on their needs and preferences—so that they and their children thrive.

Page 31 illustrates this model for universal access in Los Angeles.

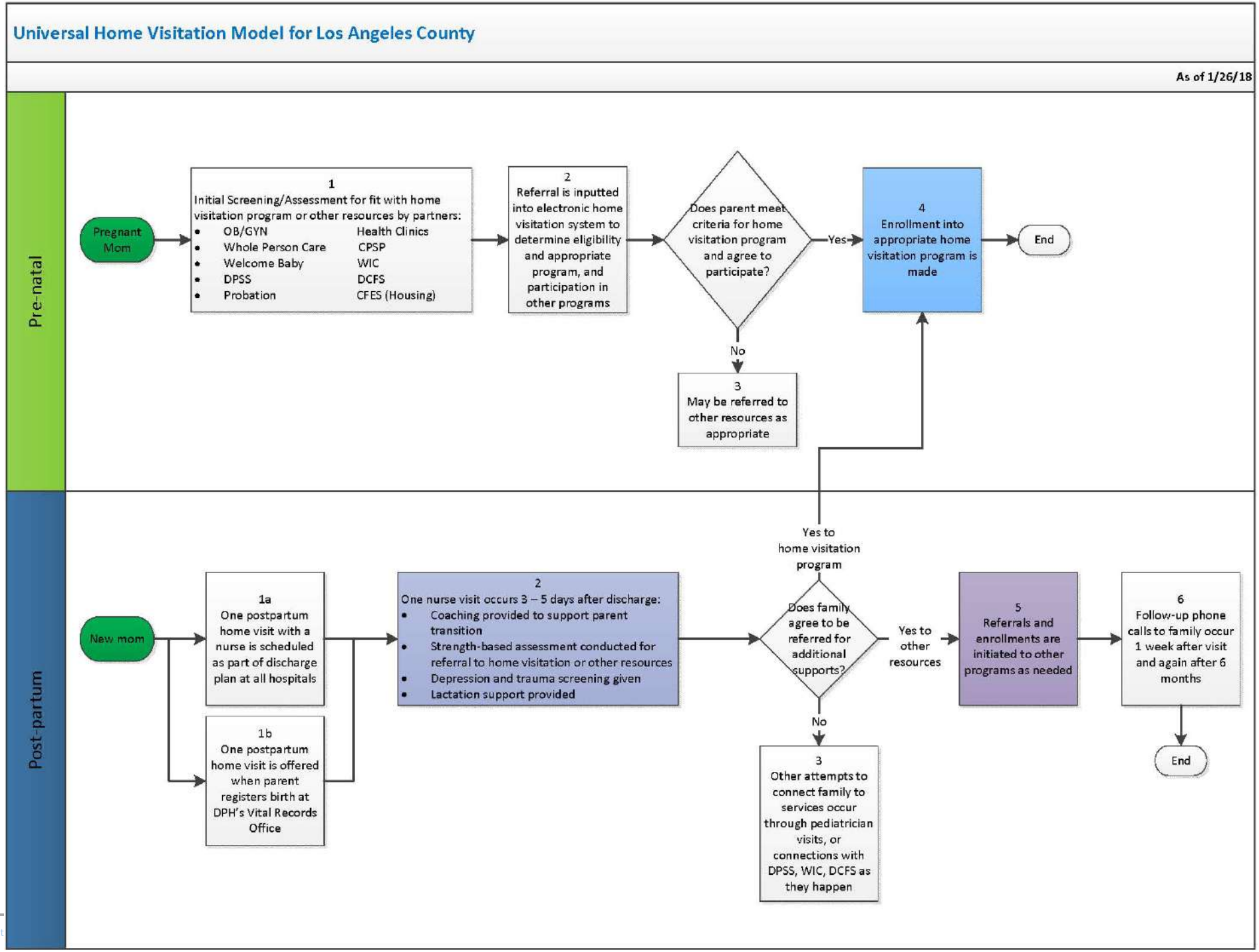
To move this vision forward to reality, County leaders and First 5 LA have developed strategic partnerships with health plan leaders, who are increasingly interested in improving coordination with community-based service providers. First 5 LA has taken the lead on this health sector partnership development. It hosted multiple forums to gain health plan input and leverage their expertise as we build a system of care for mothers and infants that incorporates home visitation. Interviewees and participants included senior-level health plan leaders in health education, care management, and medical services. These interviews and gatherings yielded significant information from the plans on their perspectives regarding the value of home visitation and their current initiatives to provide enhanced pre and postnatal support. In partnership with DPH and DHS, First 5 LA will continue to nurture the relationships with health plan leaders established during this planning process. These efforts will aim to further unite health plan resources and County maternal and child health services under a shared agenda of ensuring timely prenatal care and reducing birth inequities.

Data

Three interrelated purposes exist for collecting, analyzing, and reporting data on home visiting: 1) performance measurement; 2) continuous quality improvement; and 3) capacity development and resource planning. Some elements related to each of these purposes are already in place both at the individual program level (as supported by current home visiting funders) and at the countywide collaborative level (led primarily by the Consortium to date). The countywide home visiting system envisioned in this plan will build on these existing data systems. It will also align its efforts with the work underway through the Office of Child Protection to develop a countywide child maltreatment prevention measurement system.

We envision three major outcome domains—healthy births, safe children, and strong families—each of which would include multiple indicators and measures that could be used to understand results at the family, program, community, and system levels. A fourth domain focusing on finance is also proposed to help decision-makers track cost savings and cost avoidance. National research by the respected nonpartisan group Washington State Institute for Public Policy and other academics have found various home visiting models to yield between $0.12 to $20.25 for every dollar invested;[28] by incorporating an ongoing analysis of cross-departmental cost/benefits associated with home visiting programs into the Institute's research and evaluation strategies, we will gain invaluable information to inform future strategic investment and operational planning.

[28] Perrigo, J.L., & McCroskey, J. (2018). "Home visiting models: What do we know about cost effectiveness?" Unpublished manuscript, Suzanne Dworak-Peck School of Social Work, University of Southern California, United States. Detailed WSIPP cost-benefit reports may also be accessed at http://www.wsipp.wa.gov/BenefitCost.

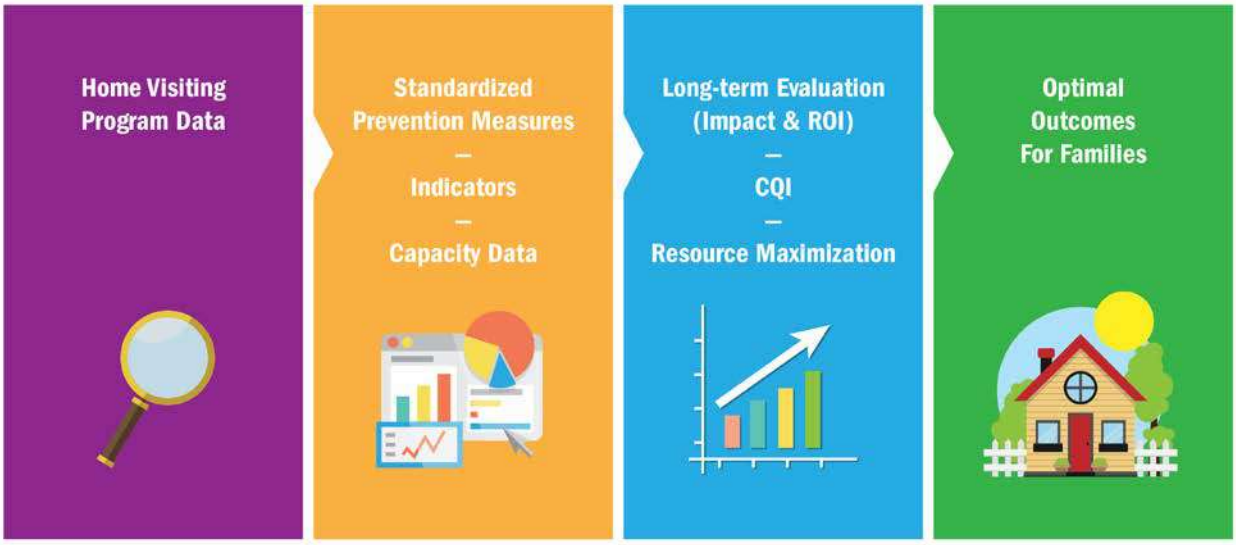

Universal Home Visitation Model for Los Angeles County
As of 1/26/18
Pre-natal
Pregnant Mom
1
Initial Screening/Assessment for fit with home visitation program or other resources by partners:
OB/GYN
Whole Person Care
Welcome Baby
DPSS
Probation
Health Clinics
CPSP
WIC
DCFS
CFES (Housing)
2
Referral is inputted into electronic home visitation system to determine eligibility and appropriate program, and participation in other programs
Does parent meet criteria for home visitation program and agree to participate?
Yes
No
3
May be referred to other resources as appropriate
4
Enrollment into appropriate home visitation program is made
End
Post-partum
New mom
1a
One postpartum home visit with a nurse is scheduled as part of discharge plan at all hospitals
1b
One postpartum home visit is offered when parent registers birth at DPH's Vital Records Office
2
One nurse visit occurs 3 – 5 days after discharge:
Coaching provided to support parent transition
Strength-based assessment conducted for referral to home visitation or other resources
Depression and trauma screening given
Lactation support provided
Yes to home visitation program
Does family agree to be referred for additional supports?
Yes to other resources
No
3
Other attempts to connect family to services occur through pediatrician visits, or connections with DPSS, WIC, DCFS as they happen
5
Referrals and enrollments are initiated to other programs as needed
6
Follow-up phone calls to family occur 1 week after visit and again after 6 months
End

To fulfill this crucial system need, we propose a three-pronged approach to performance measurement and information management:

1. Measurement and reporting on system-wide results in the four key domains—healthy births, safe children, strong families, and cost savings/avoidance

2. Regular tracking of programmatic reporting, including the core set of common indicators developed by the Consortium (Appendix D), as well as other potential standardized measures such as the Protective Factors Survey and parent feedback mechanisms

3. Ongoing analysis of administrative data to map program capacity, track system resource utilization, and assess needs and gaps (e.g., based on geography, underserved groups, and/or program selection criteria).



Roles and Metrics

First 5 LA, in partnership with the Children's Data Network (CDN), has made a commitment to the long-term countywide population-level measurement of results and will be leading our long-term countywide evaluation efforts. Using data-matching with available administrative datasets, partners will analyze the impact that countywide home visiting has on healthy birth, child safety, and family well-being metrics. It will also examine cost savings and cost avoidance achieved via the County's investment in home visitation. This analysis will be directly tied to and aligned with measurement of child abuse prevention efforts within the County, as called for by the Office of Child Protection in its prevention plan (Appendix C).

The Consortium's Data Workgroup has already provided leadership in developing common outcome, process, and descriptive "indicators" for tracking program performance across all home visiting programs in Los Angeles County (based on Maternal, Infant, and Early Childhood Home Visiting, or MIECHV, program data reporting requirements; the Pew Charitable Trusts' Home Visiting Campaign; Healthcare Effectiveness Data and Information Set (HEDIS) quality measures; and the data currently being collected by home visiting programs in the region). The Board of Supervisors' motion specifically calls for the leveraging of these indicators as a mechanism for achieving a common data platform for all Los Angeles County home visiting programs. In keeping with this directive, these indicators (Appendix D) will serve as a framework for shared outcome reporting and ongoing quality improvement across County, First 5 LA,

and other programs. The Consortium will continue to play the lead in this reporting effort, developing an online data visualization platform for easy review and use of the data. The Department of Public Health, First 5 LA, DCFS, and the Los Angeles County Office of Education will meanwhile play key roles in ensuring timely data contribution and the use of the information for quality improvement.

Additional standardized measures of family well-being or program effectiveness may also be adopted as our system evolves, including but not limited to a Protective Factors survey (which will be required for all DMH, DPH, and First 5 LA–funded programs as of July 2018). Each model also utilizes parental feedback loops (including exit surveys, focus groups, and/or parent advisory boards) and model-specific outcome analyses to inform continuous quality improvement.

Last but not least, to ensure that our investments are being optimally distributed over time, we propose that DPH, First 5 LA, CDN, and the Consortium partner to provide an ongoing assessment of home visiting program availability and usage compared to community needs. This assessment will entail monitoring the geographic, demographic, and linguistic distribution of community need and comparing that need to local home visiting program capacity and utilization. It also may include the assessment of additional measures of system health, such as the need for linkage to other resources, the success rates of such linkages, and participant retention. Having this type of high-quality capacity, utilization, community need, and gap assessment data is essential to achieving optimal resource allocation—not only for home visiting services, but also for related community-based family supports. By monitoring this pulse of resource availability and utilization, we will have the information we need to make informed future decisions about where resource adjustments and innovation may be needed.

Outcome Framework

Through commitment to the approaches outlined above, the County will be able to keep an ongoing watch on how well County home visiting programs are contributing (as part of the larger family support system) to crucial community-level outcomes, including ensuring healthy births, safe children, strong families, and cost savings/avoidance.

The following overarching outcome framework was developed to cross-walk how both long-term and annual data tracking efforts may come together to help us track, evaluate, and learn from our home visiting system. This framework was informed by input from the aforementioned County partners and developed in collaboration with the OCP Prevention Plan Evaluation Team and Children's Data Network leadership. Because the OCP countywide prevention measurement system with which we hope to align our home visiting evaluation work is not yet in place, this section describes an overall approach to measurement and data management rather than specifying a finalized measurement plan.

The chart on page 34 illustrates our four outcome domains, with proposed measurement methodologies and sample suggested metrics that could be affiliated with each outcome area. Steps needed before a specific measurement scheme is adopted would include system mapping, the analysis of existing data sets, and a cross-validation of possible measures.

Outcome Areas	Measurement Method	Sample Suggested Metrics[29]
Healthy Births	Children's Data Network	• Decrease in health disparities among racial subgroups • Reduction in pre-term births[I], low birthweight[H I], infant mortality[I], severe maternal morbidity
Safe Children	Children's Data Network & Consortium Indicators	• Decrease in child protective service referrals[C] • Decrease in substantiated abuse and neglect[C] • Decrease in removals[I C] • Increase in DCFS Hotline referrals to community supports • Decreased emergency room visits[I H]
Strong Families	Consortium Indicators and other measures of *Maternal & Child Health*	• Increase in well-child visits,[I H] post-partum visits,[I H] prenatal visits,[I H] immunizations,[H] and insurance rates[I] • Increased breastfeeding rates[I] • Increased maternal depression screening[I] • Improved postpartum family planning rates[I] and increased inter-pregnancy intervals • Improvement in California Maternal Quality of Care/ California Maternal Data Center (CMQCC/CMDC) measures
	Protective Factors (*includes Parenting and Family Financial Strength outcomes*)	• Increased parent knowledge of child development[P] • Increased parent resilience[P] • Improved social and emotional competence of children[P] • Improved access to concrete supports in times of need[P] • Increase in parental social support[P]
	Consortium Indicators & Help Me Grow/TBD measures of *Early Childhood Development*	• Increased screening and access to Regional Center services for child developmental delays[I] • Improved 6-year-old math and language scores
Cost Savings/ Avoidance	Children's Data Network and Consortium Indicators	• Exact cost savings and avoidance metrics will be determined by the Prevention Plan Evaluation Team. Metrics will be informed by County input (may include measures such as decrease in ER use and NICU/ICU stays, long-term special education needs, decrease in long-term use of public assistance, decrease in criminal involvement, others)[C]
[C] Indicates outcome that could be part of Children's Data Network evaluation [I] Indicates outcome or related process measure is tracked as part of LACPECHVC Indicators [H] Indicates outcome is a HEDIS measure, CHIPRA measure, and/or a health plan priority [P] Indicates outcome is tracked as part of the Protective Factors survey		

Workforce

Crucial to the success of these systems-change efforts is the recruitment, training, and preservation of a strong workforce. This domain is particularly important as we seek to activate home visiting as a resource for achieving health equity. To optimally help our diverse community, including high-risk, marginalized communities, we must be intentional about building a diverse and culturally humble workforce. As we expand funding for services, we need to simultaneously expand the volume and skills of our workforce.

[29] For the purposes of this table, suggested metrics include a sample of measures currently collected in different systems. Some focus on service processes and are important for quality improvement, while others reflect program outcomes. Only a subset are currently collected regularly for all families participating in home visiting programs.

Quality is essential; we must provide support to our teams to ensure that they are able to thrive and mature amid all these dynamic changes. As we launch new models, referral pathways, clinical resources, billing mechanisms, and data practices, we need to provide ample support to our staff.

Five workforce investments will be pursued to meet these needs:

- Increased perinatal mental health cross-training and clinical support
- Capacity-building and practice improvements to increase cross-cultural humility, improve engagement, and reduce implicit bias
- Recruitment of additional home visitors and program leadership from communities that mirror the diversity of our families
- Investigation into turnover and salary rates, accompanied with solutions to address any challenges identified
- An analysis of long-term opportunities to bolster the home visiting field by exploring opportunities for community members, students, and others to access career ladders and roles in the home visiting workforce

Perinatal Mental Health Capacity Building

The first of these efforts is already underway. DMH has committed to partnering with the Consortium, DCFS, and other home visiting networks to increase perinatal mental health cross-training and resource coordination. DMH and the Consortium have already launched trainings and training needs-assessments in four SPAs, and will be rolling resources out to all SPAs over the upcoming year. DMH will leverage its trauma-informed models, screening components, training modules, regional navigators, and field-capable home-based services as tools in these efforts. This work will build and strengthen the bridges between these resources and home visiting networks in Los Angeles County.

DPH and DMH have also committed to utilizing DMH-PEI funds to establish a centralized team of clinical social workers to provide therapeutic supports to home visiting clients and staff, as well as other professionals. With this improved perinatal mental health training, referral, and direct clinical support, home visitors will have a stronger capacity to help prenatal and post-partum mothers who are experiencing depression or other perinatal mood and anxiety disorders. Through the enhanced capacity these efforts will build, home visiting programs will be better positioned to achieve the desired outcomes of reducing the risk of adverse childhood experiences, of improving maternal health, and of improving parental capacity to provide nurturing, developmental stimulation, and economic well-being to their families.

Improving Cultural Humility, Engagement, and Implicit Bias

To address the inequities in our current health and social service delivery system, we must recognize and ameliorate the implicit bias and lack of cultural humility that have acted as barriers to effective family support. We will train and transform our workforce from leadership to front-line so that our full approach—including model structure, family connection/outreach, engagement, and ongoing service relationships—are more responsive to and respectful of the diverse perspectives, histories, and cultures of our population.

In 2017, the Los Angeles County Health Agency launched the Center for Health Equity (CHE), which is housed within DPH.[30] CHE's mission is to ensure that everyone in Los Angeles County has the resources and opportunities needed for optimal health and well-being throughout their lives; it strives to advance racial, social, economic, and environmental justice in partnership with committed County partners, local organizations, and community members. CHE includes the Institute for Cultural and Linguistic Inclusion and Responsiveness, which aims to improve cultural humility and respect, particularly within the County's health care delivery system. The principles, tools, trainings, and other resources offered by the Institute align with broader initiatives to improve cultural and linguistic respect and can inform efforts to improve the responsiveness of the home visiting workforce.

DPH, DMH, First 5 LA, and other partners are committed to providing training for the home visiting workforce on cultural humility, implicit bias, and other health equity related topics. The partners are also committed to identifying policy changes that may be needed to support our staff teams in providing optimal support. One step that has already been taken to support this effort has been the funding by First 5 LA of research and focus groups to inform future efforts. The results from focus groups of African-American mothers regarding the perceptions of service delivery systems and programs, and of research regarding how African-American women engage with clinical services, will be used to inform future program design and policy efforts that will frame the services our workforce delivers.

Recruitment

The third of these efforts is also already underway. The departments of Public Health, Mental Health, Health Services, and Public Social Services are in the process of rolling out a substantial expansion of Nurse-Family Partnership, Healthy Families America, Parents as Teachers, MAMA's Neighborhood, and Family Stabilization services in Los Angeles. As part of this effort, DPH will provide direct hiring and training for new Nurse-Family Partnership, Family Stabilization, and MAMA's Neighborhood Visits staff, and will also underwrite recruitment and training resources for Healthy Families America and Parents as Teachers. Los Angeles Best Babies Network will coordinate and deliver trainings and technical assistance to support high-quality practice during this staff expansion. To further health equity goals, there will be targeted efforts to increase diversity in the home visiting workforce, such as the inclusion of more people of color and individuals with a variety of language skills. This create not only more equitable employment opportunities for persons from many different communities, but a better alignment of the workforce with the population of clients being served can improve trust, bonding, effectiveness of communication, and overall outcomes for these families.

Human Capital Management

The fourth workforce investment is being led by First 5 LA, which is underwriting research on turnover and salaries among Los Angeles County home visitors, informed by the efforts of the Consortium. This research will then be utilized by the Consortium, DPH, First 5 LA, and partnering agencies to assess the adequacy of current workforce salaries and supports. Where systemic concerns or opportunities are identified, partners will work collaboratively to implement solutions that will guarantee a secure, dedicated, and well-maintained workforce.

Career Pathway Development

The Consortium, County, First 5 LA, and community partners are additionally interested in developing long-term workforce development opportunities. These explorations would include opportunities to create intentional career pathways into and within the home visiting field, opportunities to integrate pathways for community members into the field, and potential partnerships with higher education

[30] http://publichealth.lacounty.gov/CenterForHealthEquity/

institutions. With sufficient investment, the Consortium is particularly well positioned to lead this type of system-wide workforce development, as it operates as a strong platform for cross-model exploration, collaboration, and high-quality workforce support.

DPH is especially interested in the paraprofessional components of this exploration as an opportunity to improve engagement with and outcomes among disenfranchised community members. During the upcoming year, DPH will be examining opportunities to expand on the paraprofessional workforce in the system by increasing investments in the *promotora*, doula, and/or family partner–based models that employ trained paraprofessionals and community members in various perinatal support roles. These paraprofessional options are intended to provide more diverse resources to better meet the unique preferences of our community. These models would offer lower-intensity alternatives—provided by trusted community members—to "hard-to-reach" families who might otherwise not accept assistance. Focusing primarily on prenatal and post-partum health outcomes, they represent an opportunity for Los Angeles to innovate and reduce health disparities. They also have the additional benefit of providing career-ladder opportunities for community members who may not have a post-secondary or graduate education but who have valuable lived experience.

Funding

A key directive of the Board motion is "to identify a framework to maximize resources by leveraging available funding, and where possible, identify new and existing, but not maximized, revenue streams to support home visiting expansion." To this end, current research was reviewed and key experts interviewed on the types of financing strategies used by home visitation efforts in other states and localities. National resource-maximization strategies were assessed with an eye toward what may be feasible in Los Angeles County. Based on this work, several opportunities were identified.

Achieving scale is indeed one of the most pressing challenges facing the network of home visiting programs in Los Angeles County. As delineated above, research comparing the capacity of home visiting in the region to community need revealed a shortage of resources for both intensive and universal services. Furthermore, sustainability is a challenge. First 5 LA is currently the largest funder of home visiting in Los Angeles County, having invested approximately $39 million in FY 2016–2017. First 5 LA funding continues to decline with the loss of tobacco revenue, however, jeopardizing the long-term sustainability of existing service capacity in the system.

Opportunities identified to maximize resources in Los Angeles included:

- Leveraging previously untapped local funding streams, such as MHSA-PEI
- Improving the leveraging of federal funding streams by augmenting current billing and contracting mechanisms
- Ensuring that service providers have the appropriate training and technical assistance to participate successfully in federal fund leveraging
- Pursuing new or untapped state and federal sources, such as TANF funds and Medicaid Waivers
- Implementing multiple financing strategies simultaneously, in a blended and/or braided fashion
- Implementing advocacy strategies in parallel to sustainability efforts to ensure long-term outcomes are met

- Coordinating investments across funders in an intentional manner to maximize impact—including synchronizing how home visiting investments are utilized in concert with other health and social sector investments

Because of the varying levels of "readiness" of these opportunities, our framework recommends these opportunities be pursued in two phases.

Phase I: Immediate Term Opportunities to Expand Funding for Home-Based Services

To realize our vision for home visiting in Los Angeles, it will be necessary to both maximize available leveraging opportunities and identify new sustainable revenue streams. Strategies for expansion that are currently in various stages of execution include:

- DMH Mental Health Service Act (MHSA) investment
- Medicaid Targeted Case Management (TCM) expansion
- Temporary Assistance for Needy Families (TANF) investment
- Medicaid waivers

As explained earlier, DMH MHSA fund allocation is a major strategy that partners have committed to support both intensive services and innovative pilots in 2018. DPH and DMH will be utilizing MHSA-PEI dollars in FYs 2018–2019 and 2019–2020 to expand funding for evidence-based Nurse-Family Partnership, Healthy Families America, and Parents as Teachers models and for new MAMA's Neighborhood Visits and Family Stabilization services. They anticipate services launching July 2018. After this initial two-year period, DMH will review and determine investment based on availability of funding.

Targeted Case Management expansion is a key strategy being implemented in 2018 to maximize federal revenue for home visiting. TCM uses a combination of local funds (such as First 5 tobacco tax revenue) to leverage Federal Title XIX (Medicaid) funds. TCM services are the most commonly billed services by home visiting programs in the nation, but this strategy had not been fully maximized in Los Angeles County because of local restrictions. The Department of Public Health, recognizing that federal funds were being left on the table, has now made the requisite policy adjustments to enable participation by non-County entities including community-based organizations. In early 2018, First 5 LA and DPH partnered on a pilot with five First 5 LA–funded home visiting grantee sites to test the applicability of this strategy. The results of the pilot, which ended in April, demonstrate a strong alignment between home visiting models and TCM. The early financial projections also point to a considerable TCM federal return. Based on these promising findings, the pilot will be expanded to the remaining 16 First 5 LA grantee sites in a phased approach throughout the course of FY 2018–2019.

In 26 states across the nation, TANF is a source of funding for home visiting programs. This past year there were multiple bills and proposals to similarly dedicate TANF funds to home visiting at the California state level, thanks in no small part to the advocacy of First 5 LA and its partners. Multiple local entities, including DPSS, took part in educating state-level decision-makers regarding the valuable role home visiting can play in strengthening families and helping parents to access benefits. As proposals were discussed, a collective voice from Los Angeles County informed policymakers. Numerous organizations, including the Consortium, adopted official support positions. The pilots launched in Los Angeles County by DPSS (described in the Coordination section) helped pave the way for state-level investment by demonstrating the viability and value of such investment. As a result, a set-aside has been included in the 2018–2019 California Budget for a two-year pilot of TANF-funded home visiting across the state. This new state funding increases home visiting resources in California substantially; Los Angeles County is well

positioned to draw a significant portion of these funds. Los Angeles County's tracking and communication of results from this first-time state investment will be critical to supporting long-term sustainability.

Medicaid waivers represent both a short- and long-term strategy. As discussed earlier, DHS identified the Medicaid Section 1115 waiver's Whole Person Care program as an opportunity to expand home visitation in Los Angeles County over the next four years. In partnership with DPH, the program will serve as a mechanism to test a blend of programs in an evidence-informed effort to reach some of the region's most vulnerable pregnant and parenting families. The expansion of the DHS prenatal program MAMA's Neighborhood will not only fill short-term gaps in the existing home visiting landscape, but will also serve as a demonstration that can inform future state plan amendment proposals to secure sustainable medical funding streams.

In addition to expanding funding for home visiting programs, it will also be important to leverage County departmental supports to augment home visiting during Phase I. For example, although DCFS's Partnerships for Families program is included among the home visiting models described in this report, other DCFS family-centered services programs are not. It would be worthwhile to assess whether or not DCFS programs such as Family Preservation, Child Abuse and Neglect Prevention, Intervention and Treatment (CAPIT) , Adoption Promotion and Support Services, and Relative Support Services could be better aligned with evidence-based home visiting models. A recent analysis of funding for DCFS family-centered services contracts in 2016–2017 showed annual expenditures of over $50 million dollars. Lessons learned from evidence-based home visiting models could help to improve results for participating families, and extend the current system. Similarly, DMH programs (such as Wraparound, Full Service Partnership, Parent-Child Interaction Therapy, and Triple P) and health-focused programs led by the Health Agency offer additional supports in parallel to and/or layered on top of home visiting. Optimizing linkage and synergy among these programs will be important to fully maximizing the impact of our resources in Los Angeles.

Phase II: Additional Opportunities to Offset Costs and/or Expand Equitable Universal Perinatal Support

Over the next year, while Phase I implementation is underway, the partners will continue to explore additional opportunities to expand the resources available to support all families universally in their prenatal health and post-partum well-being. Such exploration will include an examination of partnerships that may provide new access ports, potential venues for screening/assessment, and/or potential cost offsets.

These potential Phase II opportunities include:

- Comprehensive Perinatal Services Program (CPSP)
- Women, Infants and Children (WIC)
- Private and public health plan partnership
- Expansion of state-approved extended health benefits for perinatal care
- Medicaid reimbursement
- Hospital community benefits funding
- Other potential Medi-Cal and health system–sponsored opportunities

The first three of these are leveraging and relationship-building opportunities. CPSP, health plan benefits, and WIC are all resources currently available to low-income families in Los Angeles, but they are not utilized by all families who are eligible. CPSP providers offer prenatal screening, prenatal and postnatal health education, and resources to Medi-Cal families, including in the home. WIC offers lactation, nutrition, and referral services. Health plans offer telephone referrals and other supports. Two health plans also offer home visiting specifically. Health Net has been piloting home visiting services in the

Antelope Valley. Molina Health Plan's Care Connections program offers free in-home postpartum visits by a nurse practitioner. The providers who deliver these services all are well positioned to provide prenatal screening and referrals to intensive home visiting where appropriate. They also each provide valuable low- and medium-intensity perinatal support services (such as lactation, nutrition, coaching, and resources), with CPSP in particular having the capacity to provide those services in the home environment.

TCM and hospital community benefits are both monetary resource opportunities. Similar to the expansion of TCM for intensive services, described above, TCM may be utilized to expand the funding of low- or medium-intensity programs such as Welcome Baby. Hospital community benefits are another potential funding source to underwrite low-intensity perinatal supports.

An important part of our plan will be partnerships with health sector and other players to deeply analyze and build upon these opportunities. Engaging health plan leadership, WIC leadership, and hospital leadership is a crucial step to ensuring that the home visiting system we build both fully leverages and smoothly integrates with health sector and other existing perinatal resources. In partnership with these leaders, we will further clarify the optimal prenatal screening and referral mechanisms, the suite of services available to low- to moderate-risk families, and the alignment of funding streams that will best finance those resources.

In late FY 2018–2019, learning from Phase I implementation will be integrated with learning about these potential Phase II partnership and funding opportunities. Phase I implementation is anticipated to garner important knowledge that will help inform Phase II implementation priorities—including but not limited to a clarification of workforce needs (through the salary and career-ladder studies), a clearer definition of Los Angeles County's birth disparities investments, and a more accurate quantification of cost savings/avoidance related to certain strategies (such as TCM billing expansion). This knowledge will be combined with learning about the health sector and other opportunities listed above as next steps are determined.

Together, these two components will inform a second potential rollout of investments that could begin as early as FY 2019–2020.

The following table summarizes these Phase I and Phase II opportunities.

Current Funding	Phase I Expansion	Phase II Opportunities
• DCFS • DMH • DPH • First 5 LA • Federal Administration for Children & Families (Early Head Start) • Federal HRSA (Healthy Start)	• DMH MHSA-PEI funds • Expanded Title XIX TCM billing • DHS/Whole Person Care Medicaid waiver • CalWORKs funds	• Medi-Cal and health system opportunities • Hospital community benefits • CPSP • Existing health plan benefits • WIC • Probation

Where Do We Go From Here?

The Department of Public Health and its partners (County departments, First 5 LA, the Consortium, the Children's Data Network, health sector leaders, and home visiting providers) are ready to implement the key elements outlined in the attached plan—building centralized referral tools, bolstering the strength of our workforce, solidifying common data practices, and rolling out new funding streams. These elements, including the specific commitments enumerated below, are anticipated to be completed during FY 2018–2019, with the exception of the Phase II referral technology build-out anticipated in FY 2019–2020. The partners will also continue to look for connections to integrate this home visiting work with other nascent related work underway in the county, such as prevention plan implementation, reduction in birth disparities, Help Me Grow, and early childhood education efforts.

County Departmental Commitments

The following are commitments made by each department to support the implementation of this plan.

Department of Public Health

- Building and maintaining coordinated telephonic and electronic referral infrastructure (including supporting a Phase I eligibility tool build being led by the Consortium and leading the Phase II integrated build)
- Launching DMH-PEI funded evidence-based service expansion
- Providing public nursing staff to be part of integrated teams in both the DHS MAMA's Neighborhood Visits pilot and DPSS's Family Stabilization program
- Expanding the Nurse-Family Partnership program to provide greater support in SPA 6 (in line with the Center for Health Equity's goals) and to enlarge the geographic reach of its expansion pilot so that non–first-time parents may access services throughout the county
- Collaborating with DMH to provide centralized clinical perinatal mental health services to home visiting clients
- Exploring and piloting innovative models for supporting highest-risk families and communities experiencing adverse health equity outcomes, including but not limited to infant mortality
- Ensuring that training resources are in place for the full home visiting workforce related to implicit bias and the smooth ramp-up of newly funded services
- Partnering with First 5 LA to expand TCM billing to First 5 LA–funded Healthy Families America and Parents as Teachers providers
- Pursuing an ongoing assessment of community need and service utilization, in partnership with First 5 LA, the Consortium, Children's Data Network, and other stakeholders

Department of Mental Health

- Funding service and infrastructure expansions using DMH-PEI funds during FYs 2018–2019 and 2019–2020
- Establishing a centralized perinatal mental health clinical support team
- Ensuring that training resources are in place for the full home visiting workforce related to trauma-informed care and perinatal mental health

Department of Health Services

- Fully launching MAMA's Neighborhood Visits, including establishing an evaluation for the program and realizing strong workforce development for its new teams

- Establishing a multidisciplinary collaborative care model for case management that includes a partnership with DMH and expanded paraprofessional roles within its home visiting teams
- Exploring the implementation in DHS of a doula program for women delivering babies, in partnership with community-based doula organizations
- Unifying DHS's prenatal care delivery with the Office of Diversion and Reentry, the Los Angeles County Sheriff's Department, Juvenile Court Health Services, and Probation to minimize care gaps and maximize engagement in home visiting programs

Department of Public Social Services

- Expanding the Family Stabilization pilot countywide, in partnership with DPH and DMH
- Pursuing new state funding, as may be approved in the Governor's budget, to support expansion of home visiting services for CalWORKs beneficiaries

Department of Children and Family Services

- Ensuring that Partnerships for Families home visitors are trained to administer ASQ and PHQ-9 screenings, to align screening and data practices with countywide efforts
- Modifying data-tracking system to capture countywide data indicators
- Participating in countywide data-sharing to support a cross-model, collective evaluation
- Integrating home visiting referrals into the suite of community resources made available to families through Prevention & Aftercare network navigators, both for families within the general population and for families who have been the subject of DCFS Child Abuse Hotline calls

Probation

- Providing training for probation staff to connect pregnant and parenting families to home visiting support and to recognize this as an essential component of case planning efforts
- Integrating home visiting referrals into the array of services made available to adult probationers, probation youth, and their families
- Combining resources and efforts with County stakeholders to explore new and innovative models for supporting parents/pregnant youth detained in probation facilities or in short-term residential treatment programs (STRTPs)

LACOE

- Participating in countywide data-sharing to support cross-model, collective evaluation
- Continuing to partner to bridge Early Head Start and other home visiting–related resources

Office of Child Protection

- Supporting coordination across departments as home visiting system changes roll out
- Continuing to support the alignment of home visiting data initiatives with other County child abuse prevention evaluation efforts
- Continuing to support alignment of home visiting with other prevention strategies such as ECE and Prevention & Aftercare Network investments
- Providing consulting support for plan implementation as needed

In addition, the following commitments have been made by partnering entities:

First 5 LA

- Continuing state and federal advocacy to expand resources and support for home visiting in Los Angeles County

- Leading health sector engagement, developing clarity on how health systems and social systems can best partner to support family well-being
- Funding focus groups and research to help partners better understand the experiences and perspectives of African-American families when interfacing with the health and social sectors
- Partnering with DPH to ensure that home visiting providers are supported in a smoothly coordinated expansion of Healthy Families America and Parents as Teachers
- Partnering with DPH to expand Targeted Case Management participation countywide in 2018; providing necessary capacity-building and technical assistance support for 21 First 5 LA grantee agency sites to join the TCM platform
- Providing funding to support SHIELDS for Families, Inc., to provide home visiting to 50 DPSS clients via the pilot mentioned above, and support future expansion of home visiting services that may be funded through state budget allocation
- Partnering with DPH to explore optimal integrated referral system development, including evaluating opportunities to integrate community resources, home visiting, Help Me Grow, and other family resources into existing and/or new infrastructure
- Providing funding for Children's Data Network–led long-term evaluation and actively participating in countywide data-sharing to support a cross-model, collective evaluation
- Providing state- and federal-level education to policymakers
- Funding Los Angeles Best Babies Network as a critical body for enhancing quality and workforce development for existing and new programs
- Funding a home visiting workforce salary and turnover analysis

LA County Perinatal and Early Childhood Home Visitation Consortium

- Providing timely ongoing feedback from home visiting providers and advocates regarding system gaps and needs (both within home visiting and within the broader community)
- Leading the data-indicator collection and analysis
- Leading the development of the Phase I online home visiting eligibility functionality
- Partnering with other entities to support best practices and a high-quality workforce
- Continuing to support the home visiting workforce through training, advocacy, and support
- Working with DMH to coordinate perinatal mental health training and referral supports for home visitors across programs

Children's Data Network

- Leading long-term evaluation efforts, including an integration with the OCP Prevention Plan Evaluation

Los Angeles Best Babies Network

- Leading workforce development and program quality initiatives
- Coordinating trainings for new MAMA's Neighborhood Visits, Healthy Families America, and Parents as Teachers staff
- Providing backbone staffing for the Consortium to help coordinate its data, best-practice, referral, and advocacy efforts

Center for Strategic Public-Private Partnerships

- Leading the integration of philanthropic expertise and resources into ongoing implementation
- Coordinating the sponsorship of the electronic referral eligibility technology build-out
- Coordinating the sponsorship of DMH expansion technical assistance by the Blue Shield Foundation

Guidance Body and County Leadership

To support ongoing systems-level coordination and quality improvement efforts, DPH proposes to initiate and host a long-term home visiting system guidance body. This body would include the following types of representation: home visiting clients, County departments that fund or refer into home visiting, nonprofit provider agencies (including representation across models and levels within these organizations), Consortium members, evaluators, independent advocates, health plans, hospitals, and other partners (such as WIC, housing, disability, employment, education, or philanthropy). In addition to this direct representation, the guidance body will also leverage existing resources (such as parent advisory boards, exit surveys, focus groups, Consortium workgroups, and other provider groups) to garner and integrate parent and provider voices. This body would be responsible for ongoing system monitoring, adjustment, and advocacy, as well as the identification of opportunities to deepen the connections between this home visiting work and other nascent related work underway in the County (such as prevention plan implementation, reduction in birth disparities, Help Me Grow, and early childhood education efforts).

DPH will also monitor and pursue system improvements outside of this guiding body, not only within DPH's own programs, but also as a champion and coordinator with its County partners.

Recommendations for Consideration by the Los Angeles County Board of Supervisors

- Adopt the policy that all County-funded home visiting programs will utilize validated screenings for maternal depression and infant-toddler development.
- Support the establishment of a countywide electronic referral system.
- Adopt the policy that all County-funded home visiting programs will participate in countywide data-sharing and analysis, as outlined above.
- Consider piloting universal postpartum support for mothers delivering at Los Angeles County birthing hospitals in FY 2018–2019, including requiring that a home and/or virtual visit be offered as part of the postpartum discharge of all mothers delivering at a piloting County DHS-operated hospitals.
- Consider establishing linkages between all County prenatal medical providers and home visiting family supports.

APPENDIX

LOS ANGELES COUNTY PERINATAL & EARLY CHILDHOOD HOME VISITATION CONSORTIUM

Mission:
To coordinate, measure and advocate for high quality home-based support to strengthen all expectant and parenting families so that the children of Los Angeles County are healthy, safe and ready to learn.

SUMMARY OF OUTCOMES:
What Research Proves Home Visiting Impacts

Report as of June 19, 2017

Big Orange Splot
A SOCIAL IMPACT ADVISORY FIRM

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Summary of Outcomes Research

The following table shows the impact of home visiting models on specific outcome areas, based on existing research, by each model type currently in operation in Los Angeles: Early Head Start ("EHS"), Nurse-Family Partnership ("NFP"), Healthy Family America ("HFA"), Parents as Teachers ("PAT"), Welcome Baby, Partnerships for Families ("PFF") and Healthy Start.

	EHS	NFP	HFA	PAT	Welcome Baby	PFF	Healthy Start
Increases Cognitive & Social Development	✔	✔	✔	✔	✔		
Improves School Performance		✔	✔	✔			
Improves Maternal Health		✔	✔	✔	✔		
Improves Child Health	✔	✔	✔	✔	✔		
Improves Mental Health	✔	✔			✔	✔	
Improves Family Safety & Parenting	✔	✔	✔	✔	✔	✔	
Increases Self-Sufficiency (Decreases use of Public Assistance; Increases Training or Employment)	✔	✔	✔				
Decreases Crime		✔					
Realizes Cost Savings		✔	✔	✔			

Details of Outcome Research by Impact Area and Model

The following tables outline the relevant existing research linking each applicable home visiting model in operation in Los Angeles with the individual impact areas listed above.

Increases Cognitive & Social Development	
EHS	▪ EHS showed positive impact on children's cognitive development by 36 months (Roggman, 2009). ▪ After a year or more of services, compared with a randomly assigned control group, 2-year-old EHS children performed better on measures of cognitive, language and social emotional development (Commissioner's Office of Research and Evaluation and The Head Start Bureau, 2001). ○ EHS children scored 90.1 on the Bayley Scales of Infant Development Index, compared with 88.7 for the control group. ○ A smaller percentage of EHS children scored in the at-risk range of developmental functioning (33.6 percent versus 40.2 percent in the control group). ○ Children were reported by their parents to have larger vocabularies and to use more grammatically complex sentences. ▪ Three-year-old EHS children performed significantly better on a range of measures of cognitive, language and social-emotional development than a randomly assigned control group (Administration for Family and Children, 2006). EHS children: ○ Scored 91.4 on the Bayley Mental Development Index, compared with 89.9 for control group children. ○ Scored 83.3 on the Peabody Picture Vocabulary Test, compared with 81.1 for the control. ○ Were significantly less likely than control group children to score in the at-risk range of developmental functioning. ○ Engaged their parents more, were less negative towards their parents, and more attentive to objects during play. Furthermore, EHS parents rated their children as lower in aggressive behavior than control parents did (Administration for Family and Children, 2006). ▪ EHS children were less likely to have delays in cognition and language functioning (Administration for Children and Families (2002b), 2002).
NFP	▪ NFP enrollees had higher cognitive and vocabulary scores at age 6 (Olds, et al., 2004).
HFA	▪ Rigorous studies report improvements in children's cognitive development at one and two years, and fewer behavior problems that can interfere with learning at two and three years (Healthy Families America, September 30, 2015).
PAT	▪ PAT children score higher on measures of achievement, language ability, social development, persistence in task mastery and other cognitive abilities (Drotar, Robinson, Jeavons, & Kirchner, 2009), (Pfannenstiel, 1989), (Pfannenstiel & Seltzer, New Parents as Teachers Project, 1985), (Pfannenstiel, Lambson, & Yarnell, 1991), (Wagner, Spiker, & Linn, 2002). ▪ 94% of children's language scores increased (Coalition, November 2016).
Welcome Baby	▪ Welcome Baby was associated with higher scores for children's communication skills and social-emotional skills, as measured by the ASQ Social-Emotional assessment tool at 12 months and the BITSEA at 24 and 36 months (Sandstrom, June 2015).

Improves School Performance	
EHS	▪ According to Health and Human Services' systematic review of the research on home visiting, several different home visiting models, including Early Head Start, Healthy Families America, Nurse Family Partnership, and Parents as Teachers all had a positive impact on child development and school readiness (Paulsell, 2010).
NFP	▪ NFP enrollees had higher grade point averages and test scores in math and reading at age nine (Olds et al., 2004 and 2007).
HFA	▪ Children who participated in Healthy Families America were half as likely to repeat first grade (3.5% vs 7.1%) as those who did not participate (Children Now, 2014). ▪ Children in HFA were more likely to be in a gifted program, fewer were retained in first grade, and fewer received expensive special education services (Healthy Families America, September 30, 2015).
PAT	▪ PAT children score higher on reading, math, and language in elementary grades (Drazen & Haust, 1995). ▪ Compared to non-PAT children, PAT children were shown to require half the rate of remedial and special education placements in third grade (Pfannensteil, Seitz, & Zigler, 2002) (Drazen & Haust, 1995). ▪ PAT parents are more likely to enroll their children in preschool, attend parent-teacher conferences, PTA/PTO meetings and school events, volunteer in the classroom, talk with their children's teachers, and assist their children with homework (O'Brien, Garnett, & Proctor, 2002) (Pfannenstiel, 1989) (Pfannenstiel, Lambson, & Yarnell, 1996). ▪ Teachers rated PAT children significantly higher than non-PAT children on multiple developmental indicators of school readiness (O'Brien, Garnett, & Proctor, 2002). ▪ PAT children score higher on standardized measures of reading, math, and language in elementary grades (Pfannensteil, Seitz, & Zigler, 2002). ▪

Improves Maternal Health	
NFP	▪ Several studies have shown that NFP increased the number of months between births. For example, Olds et al (1997) indicated a 28-month greater interval between birth of the first and second child (Kitzman H. O., 2000) (Olds D. K., 2004) (Olds D. K.-A., 2007) (Olds D. R., 2004). ▪ Several studies have shown that NFP helps reduce the number of children born to a mother (Kitzman H. O., 1997) (Olds D. K., 2004) (Olds & et al., Effects of Nurse Home-Visiting on Maternal Life Course and Child Development: Age 9 Follow-Up Results of Randomized Trial, 2007) (Olds D. R., 2002). One study showed 29% fewer subsequent live births (Kitzman H. O., 1997). Several studies have also shown that NFP reduces subsequent pregnancies (Kitzman H. O., 2000) (Kitzman H. O., 1997) (Olds D. K., 2004) (Olds D. R., 2002), including one study showed a 32% reduction in subsequent pregnancies (Kitzman H. O., 1997). ▪ One study demonstrated 7% fewer yeast infections among NFP mothers (Kitzman H. O., 1997). ▪ One study demonstrated 35% fewer cases of pregnancy-induced hypertension among NFP mothers (Kitzman H. O., 1997). ▪ One study demonstrated that NFP mothers had diets shown to be more in accordance with federal dietary recommendations versus the control group (Olds D. H., 1986). ▪ One study demonstrated a 44% reduction in maternal behavior problems due to substance abuse among low-income, unmarried NFP mothers (Olds D. K., 2010). ▪ One study showed the percentage of mothers dying from any cause was less among NFP participants than among a control group of mothers receiving only transport to prenatal appointments (Olds D. K., 2014). ▪ One study demonstrated a decrease in smoking among all NFP mothers who smoked at intake (Olds D. H., 1986). ▪ One study demonstrated a 79% reduction in preterm delivery in NFP mothers who smoked 5 or more cigarettes per day at registration (Olds D. H., 1986).
HFA	▪ HFA was shown to improve expectant mothers' linkage to primary care providers before birth (Lee, et al., 2009). ▪ HFA moms had 22% fewer birth complications (Galano J., 1999b). ▪ More moms in HFA reduced their alcohol use (Healthy Families America, September 30, 2015). ▪ A study of HFA mothers in Arizona showed greater contraception use among HFA mothers compared to the control group (Davis, March 2016). ▪ Young mothers enrolled in HFA Massachusetts program were significantly less likely than the control group of mothers (25% vs 36%) to have engaged in risky behaviors, including substance use, fighting, and unprotect sex in the preceding month, after 28 months of participation in the program (Francine Jacobs, November 12, 2015).
PAT	▪ A health literacy demonstration project conducted with Parents as Teachers programs in the boot-heel area of Missouri found significant improvements occurred in family planning (Carroll, Smith, & Thomson, 2015).
Welcome Baby	▪ The WB rate of return for postpartum care within 21-56 days of delivery (the HEDIS guideline) was 87.5%: higher than LA County's Medi-Cal plans, higher than the national Medicaid population, and higher than for patients covered by private insurance (Careaga, 2012).

Improves Child Health	
EHS	▪ EHS had small but statistically significant favorable impacts on the percentage of children who visited a doctor for treatment of illness (83% vs 80%), receipt of immunizations (99% vs 98%), and the likelihood of hospitalization for accident or injury (0.4% vs 1.6%), when compared to a control group (Administration for Children and Families, 2006, p. 1). ▪ EHS children were more likely than low-income children nationally to have health insurance (91% vs. 79%) (Administration for Children and Families, 2006, p. 2). ▪ EHS children were significantly more likely to receive Part C early intervention services due to higher rates of screening, referral and coordination with Part C partners (5.4% vs. 3.8%) (Administration for Children and Families (2002b), 2002, p. 1).
NFP	▪ NFP was shown to decrease emergency room visit use rates for child enrollees (Avellar & Supplee, 2013). ▪ Children in NFP are significantly more likely to be up-to-date on immunizations at 6, 18, and 24 months (Thorland, Currie, Wiegand, Walsh, & Mader, 2017). ▪ NFP moms exhibited longer inter-birth intervals (Olds & et al., 2007). ▪ An analysis by the Center for American Progress demonstrated that scaling the Nurse Family Partnership program to all eligible women in CA could prevent 2,735 infant deaths and 54,695 preterm births over 10 years (Herzfeldt-Kamprath, November 2015).
HFA	▪ Children in HFA had better access to health care, evidenced by rates of health insurance at ages one and two; connection with a primary care provider; and more completed Well-Baby visits (Healthy Families America, September 30, 2015) (Avellar & Supplee, 2013). ▪ HFA reduced the rate of low birth weight infants among women enrolled prenatally. Low birth weight is associated with higher infant mortality as well as substantial short- and long-term challenges to child health and development (Healthy Families America, September 30, 2015). A study of Healthy Families in New York demonstrated that women who receive home visiting services during pregnancy are nearly half as likely to deliver a low birth weight baby (Lee, et al., 2009). ▪ A study of HFA in Arizona showed that HFA mothers had higher rates of breastfeeding than the control group (Davis, March 2016).
PAT	▪ Children participating in Parents as Teachers were more likely to be fully immunized for their given age (Wagner, Iida, & Spiker, 2001) (Paradis, Sandler, Todd Manley, & Valentine, 2013). ▪ Children in Parents as Teachers were less likely to be treated for an injury in the year following their participation in the program (Wagner, Iida, & Spiker, 2001). ▪ A health literacy demonstration project conducted with Parents as Teachers programs in the Boot-heel area of Missouri found significant improvements occurred in the following health care literacy indicators: use of information, use of prenatal care, child well care, child sick care, child dental care, and child immunizations (Carroll, Smith, & Thomson, 2015).
Welcome Baby	▪ WB moms are 40%-60% more likely than a control group to exclusively breastfeed their babies at four months postpartum (Benatar & et al., 2012).

Improves Mental Health	
EHS	▪ Positive impacts were found for parent-child interaction and children's social-emotional development. Furthermore, among those families in which mothers were depressed at enrollment, EHS had even stronger favorable impacts on parent-child interaction (Administration for Children and Families, 2006, p. 1).
NFP	▪ NFP shows a treatment impact on an outcome correlated with depression; mothers in the intervention group had higher personal sense of mastery scores for the period from child age six months to child age six (Kitzman H. O., 1997); the paraprofessional home visitors group reported a greater sense of mastery and better mental health at child age four (Olds D. K., 2004) (Olds D. K., 2010) (Olds D. K.-A., 2007).
HFA	▪ A study of families enrolled in Healthy Families Arizona showed the Mental Health Index (which measures both psychological distress and psychological well-being) was higher in the Healthy Families group than in the control group (Davis, March 2016). ▪ In a study assessing the impact results from a randomized, controlled trial of Healthy Families Massachusetts, the only universal statewide home visiting program that specifically targets and wholly serves first-time young parents, it was found that HFA Massachusetts was successful in helping young, first-time mothers learn to control stress and in curbing externalizing and risky behaviors (Francine Jacobs, November 12, 2015).
Welcome Baby	▪ An evaluation of LA County's Welcome Baby program showed that moms had lower parenting stress and stronger maternal responsiveness at 36 months compared to the control (Urban Institute and University of California, Los Angeles).
PFF	▪ Participation in the LA County PFF program had a significant impact on reducing parental depression, mood swings, and aggression/anger, especially for prenatally enrolled moms (Reuter, Melchior, & Brink, 2016).

Improves Family Safety & Parenting	
EHS	▪ EHS was shown to reduce child welfare encounters between five to nine years of age, subsequent encounters, and substantiated reports of physical or sexual abuse (Green, et al., 2014). ▪ After a year or more of program services, when compared with a randomly assigned control group, the parents of EHS children scored significantly higher on many measures of the home environment, parenting behavior, and knowledge of infant-toddler development (Commissioner's Office of Research and Evaluation and The Head Start Bureau, 2001, p. iii). EHS parents: ○ engaged in important activities with their children more frequently than control group parents; for example, singing songs and nursery rhymes, dancing, and playing outside as well as creating a richer literacy environment for their children. ○ were more likely to read to children daily and at bedtime. ○ displayed more supportive parenting behaviors. ○ showed greater enjoyment, greater sensitivity, and less detachment, created more structure, and extended play to stimulate cognitive and language development. ○ were more emotionally responsive, displaying greater warmth, praise, and affection toward their children. ○ created more structure in their children's day by setting a regular bedtime. ○ were less likely to report having spanked their child in the past week than control group mothers. ○ were more likely to suggest using a positive discipline strategy when presented with hypothetical parent-child conflict situations, such as distracting the child or explaining to the child. In conflict situations, Early Head Start mothers were more likely to suggest only mild responses. ○ reported lower levels of family conflict and parenting stress (Commissioner's Office of Research and Evaluation and The Head Start Bureau, 2001, p. 6). ▪ Findings also suggest that EHS had reduced the stress of parenting (Commissioner's Office of Research and Evaluation and The Head Start Bureau, 2001, p. iii). ▪ EHS increased mothers' knowledge of infant-toddler development and developmental milestones (Commissioner's Office of Research and Evaluation and The Head Start Bureau, 2001, p. 6).
NFP	▪ NFP had a positive impact on reducing child maltreatment (Paulsell et al., 2010); the Nurse-Family Partnership home visiting program has been shown to reduce child maltreatment by 48% (Children Now, 2014). ▪ Center for American Progress estimated that scaling NFP to all eligible women in CA could prevent 196,902 incidents of intimate partner violence over ten years (Coalition, November 2016).
HFA	▪ According to Health and Human Services' systematic review of the research on home visiting, HFA had positive impacts on reducing child maltreatment (Paulsell, 2010). ▪ Five HFA studies show significant benefits in preventing adverse childhood experiences, including reduced child maltreatment, physical punishment, yelling, and improved use of non-violent discipline, based on parents' self-reports—a more comprehensive measure of child maltreatment than official cases (Healthy Families America, September 30, 2015). ▪ HFA has shown a reduction of domestic violence perpetrated by mothers (Healthy Families America, September 30, 2015). ▪ Results from a randomized trial found positive outcomes showing Healthy Families mothers read more frequently to their children, provided more developmentally supportive activities, and had less parenting stress than the control group (Greene, 2014).

Improves Family Safety & Parenting	
	▪ A Massachusetts study found mothers enrolled in the Healthy Families program reported less parenting stress than control mothers (Easterbrooks, 2012). ▪ An Arizona study found positive results in comparison to the control condition on use of safety practices, parenting attitudes (e.g., inappropriate expectations), reading to children, use of resources, reduced alcohol use, and greater maternal education and training (Davis, March 2016). ▪ A study of teen mothers enrolled in HFA in Massachusetts showed that parents enrolled in the program reported less difficulty with their children and less parenting distress after 28 months of participation in the program than teen parents in the control group (Francine Jacobs, November 12, 2015). ▪ A study of families enrolled in HFA Arizona showed that at six months the Healthy Families group had implemented more safety practices in the home, used more resources to meet family needs, scored higher on mobilizing resources, had higher quality the home environment, more regular routines, reduced chaotic household and increased reading to their child than the control group (Davis, March 2016).
PAT	▪ PAT families with very low income were more likely to read aloud to their children, tell stories, say nursery rhymes, and sing with their children (Wagner, Spiker, & Linn, The Effectiveness of the Parents as Teachers Program with Low-Income Parents and Children, 2002). ▪ Over 75% of PAT parents reported taking their child to the library regularly and modeling enjoyment of reading and writing (Pfannenstiel, Lambson, & Yarnell, 1996). ▪ PAT parents engage in more language activity and were more likely to promote reading in the home (Albritton, Klotz, & Roberson, 2004). ▪ PAT parents showed significant improvements over time in parenting knowledge, behavior, and attitudes (Owen & Mulvihill, 1994). ▪ PAT participation was related to 50% fewer cases of suspected child abuse and/or neglect (Drazen & Haust, 1993, August). ▪ Parents as Teachers had fewer documented cases of abuse and neglect compared to the state average in 37 diverse school districts across Missouri (Parents as Teachers National Center, Inc.). ▪ Short-term outcomes of PAT include: improved parenting practices; increased knowledge and practices of positive discipline techniques; more realistic expectations of age-appropriate developmental milestones; a home environment conducive to healthy child development; parent-child attachment; reduction of stress; fulfillment of basic needs; opportunities to interact with other parents; increased awareness and access to sources of information and support (Parents as Teachers National Center, Inc.). ▪ In another randomized trial, adolescent mothers in an urban community who participated in PAT scored lower on a child maltreatment precursor scale than mothers in the control group. These adolescent mothers showed greater improvement in knowledge of discipline, showed more positive involvement with children, and organized their home environment in a way more conducive to child development (Wagner, Iida, & Spiker, 2001).
Welcome Baby	▪ Welcome Baby moms demonstrated stronger teaching skills and affection towards their children at 36 months compared to the control group (Urban Institute and University of California, Los Angeles).
PFF	▪ PFF achieved reduced rates of re-referral to child protective services, substantiated allegations of maltreatment, DCFS case openings, and removal from the home over the length of the study (Brooks & et al., 2011).

Improves Self-Sufficiency (Includes Reducing Dependence on Public Assistance and Increasing Employment or Job Training)	
EHS	▪ EHS has been shown to positively impact parents' participation in education, job training activities, and employment (Admin. for Children and Families, 2006). ▪ After a year or more of program services, when compared with a randomly assigned control group, EHS parents were more likely to attend school or job training and to use employment-related services (The Commissioner's Office of Research and Evaluation and The Head Start Bureau Administration on Children, Youth and Families Department of Health and Human Services, 2001, pp. 1, 7). ▪ Note: 2001 research on EHS failed to show any impact on the percentage of parents employed, hours per week employed in all jobs, receipt of welfare benefits, or family income during the first 15 months after their participation in EHS (The Commissioner's Office of Research and Evaluation and The Head Start Bureau Administration on Children, Youth and Families Department of Health and Human Services, 2001, p. 7).
NFP	▪ NFP moms had less use of welfare and food stamps and fewer subsequent births than control group moms (Olds & et al., 2007). ▪ At age 19, daughters of NFP enrollees had fewer children and less reliance on Medicaid than children of moms in the control group (Eckenrode & et al., 2010). ▪ 31% of parents who entered the program without a high school degree attained a high school diploma or GED by the time their child turned 12 months old (Nurse Family Partnership National Service Office, Oct. 2015).
HFA	▪ HFA parents were five times more likely to enroll in school or training (LeCroy C. W., 2011). Most parents have not yet completed high school when they enroll in HFA, a critical step for future earning potential. HFA helps new moms find the motivation and resources to further their education, evidenced by three rigorous studies showing increased maternal education over one to three years in the program (Healthy Families America, September 30, 2015). ▪ A study of teen parents enrolled in HFA in Massachusetts showed that mothers enrolled in HFA were nearly twice as likely as control group mothers (17% vs 10%) to have finished at least one year of college (Francine Jacobs, November 12, 2015).
PFF	▪ 71% of PFF families' financial conditions improved while receiving services, as measured via initial and closing assessments using the Family Assessment Form (Brooks & et al., 2011).

Reduces Criminal Activity	
NFP	▪ At age 19, daughters of NFP enrollees were less likely to have been arrested and convicted than daughters of the control group (Eckenrode & et al., 2010).

Cost Savings of Home Visiting	
NFP	▪ A California-specific analysis of NFP estimated a net public savings of as much as $39,129 per family, in the form of fewer infant deaths, reduced child maltreatment, and fewer youth crimes in the long term (Children Now, 2014). ▪ Home visiting programs like NFP have been found to yield returns of $2.73 to $5.70 for each dollar invested (Ibid). ▪ For California, the ten-year cost savings of scaling NFP was estimated at $120,676,641 (Coalition, November 2016). ▪ If Medicaid were to fully fund the NFP program, the resulting savings per enrolled family to the federal and state governments would exceed the costs of providing the program to that family by the time the child turned 6 years old (Herzfeldt-Kamprath, November 2015).
HFA	▪ Every low birthweight or preterm birth costs states between $28,000 and $40,000 in medical care and other related costs. In New York's Healthy Families home visiting program, mothers who received home visits were half as likely to deliver low birthweight babies as mothers who were not enrolled (The PEW Center on the States, May 2010). ▪ In 2012, 33,655 babies (6.7% of all births) were born at a low birth weight in CA. Reducing this number by half could save the state as much as $673 million (Children Now, 2014).
PAT	▪ Parents As Teachers has an estimated benefit-cost ratio of $3.39 per dollar invested (Washington State Institue for Public Policy, February 2015).
Home Visiting in General	▪ For every dollar spent on home visiting efforts, at least $2 in future spending is saved (The PEW Center on the States, May 2010).

Summary & Details of Research on Program Efficacy with Specific Subpopulations and Cultures

Disproportionate representation in the child welfare system among racial and cultural minority families in the US remains a serious social issue. In response, researchers, policymakers, and practitioners are increasingly including an examination of *culture* as an integral part in developing child maltreatment prevention and intervention efforts. While the field has attempted to make—and has made—advancements in understanding the disproportionality of minority groups in the child welfare system, these advancements have only served to highlight the complex and multifaceted nature of culture, as well as its interaction with social stratification by race, ethnicity, and socioeconomic status. While it may not be realistic to imagine that all programs can be designed and evaluated for relevance to all cultural groups, nor that there are even a finite number of cultural groups in the US, the necessity of capturing and examining the dynamic nature of culture in relation to child maltreatment is clear (Megan Finno-Velasquez, 2015).

The findings of home visiting programs may be substantially impacted by cultural and community norms, including those of the racial/ethnic populations served as well as those of the communities in which studies have been conducted (Azzi-Lessing, 2013). That said, not all of the home visiting models have directly examined differential impacts for various racial/ethnic groups, nor have most studies addressed or discussed the substantial cultural differences that may characterize the different communities in which various programs operate. In many studies, the outcome analyses control for race, a common statistical approach, but one that might serve to mask positive outcomes that occur only within a particular subgroup (Greene, 2014).

The chart and narrative below shows studies that have been conducted related to a particular sub-population that have demonstrated a statistically significant impact on that sub-population. If a check mark is not shown for a particular sub-population for a home visiting model, it does *not* indicate that research proves the program ineffective on that sub-population, but rather more frequently that research has not been conducted on the impact of the home visiting model on that sub-population to date.

	EHS	NFP	HFA	PAT	Welcome Baby	PFF	Healthy Start
African-American	✔	✔					
Latino				✔		✔	
Asian-Pacific Islander							
Indigenous			✔	✔			
Teen	✔		✔	✔			
Mothers with less than a GED/high school degree					✔		

Early Head Start:

- EHS impacts were particularly large for African American families, and those with a moderate number of demographic risk factors. The program also had positive impacts on two groups that other studies have reported as difficult to serve and have an impact on: teen parents and parents who were depressed at baseline (Administration for Family and Children, 2006, p. 2).

Nurse-Family Partnership:

- Beginning in 1990, a randomized, controlled trial was conducted in Memphis, Tenn. to study the effects of Nurse-Family Partnership on low-income, primarily African-American mothers living in disadvantaged, urban neighborhoods. In July of 2014, JAMA Pediatrics published a study that found for participants in Nurse-Family Partnership there were lower rates of preventable child mortality and all causes of death among mothers (Kitzman H. O., 1997).

Healthy Families America:

- A small randomized trial was conducted with one Apache and three Navajo communities where paraprofessionals delivered the program prenatally. Program participants showed positive impacts on measures of parent knowledge and maternal involvement when compared with a control group (Barlow, 2006).
- In a large randomized study of the Healthy Families America home visiting program being conducted in Oregon (Healthy Families Oregon, HFO), it was found that the program impact on parenting behaviors was larger for non-depressed mothers (Greene, 2014).
- The same Healthy Families Oregon (HFO) study found stronger program impacts on both parenting stress and depressive symptomology for mothers with three or more risk factors; these effects were particularly pronounced for mothers with four or five or more risk factors. Additionally, these highest risk HFO mothers were significantly less likely to endorse the use of harsh physical punishment, compared to control mothers. This is a potentially important finding in that it suggests that the program is acting to buffer the influence of these risk factors on these important psychosocial and parenting outcomes (Greene, 2014).

Parents as Teachers:

- PAT teen mothers showed greater improvement in knowledge about discipline and organized their home environment in a more appropriate way (Wagner, Iida, & Spiker, 2001).
- Parents in tribal communities report that PAT helps:
  - Increase the amount of time they spend with their child;
  - Become more involved with their child's education;
  - More effectively interact with their child; and,
  - Increase their understanding of child development (Research & Training Associates, Inc., 2012).
- In a randomized trial in Northern California, results showed that participation in Parents as Teachers by Spanish-speaking Latino families benefited them significantly in the area of self-help development (Wagner & Clayton, 1999).

Welcome Baby:

- A study by First 5 LA of mothers in Los Angeles showed that among all Welcome Baby participants, less educated mothers appear to experience significantly larger gains than more educated mothers in:
  - their engagement in home learning activities;

- the quality of child behavior observed during parent-child play;
- reduction of parental stress; and
- in the demonstration of encouragement and affection toward their children (Sandstrom, June 2015).

Partnership for Families:

- A study by First 5 LA of over 3400 families in Los Angeles County illustrated that Latino children whose families were fully engaged in PFF had the lowest percentage of re-referrals to DCFS (36% vs 52%) and DCFS case openings (8% vs 16%) when compared to families receiving no services among all ethnic groups participating in the study (Devon Brooks, November 30, 2011).

Recognizing the reality of incomplete research on program effectiveness specific to ethnic and other sub-populations, and moreover recognizing the complex interplay between demographic and other cultural dynamics active in the diverse communities that make up Los Angeles County, we must look beyond these studies to answer important questions about the role culture plays within home visiting programs.

To continue efforts to reduce disparities and improve outcomes for *all* children and families in Los Angeles, below are recommendations for how we may best move the field forward, based on formative analysis published by Megan Finno-Velasquez:

(1) ***Recalibrate the Conceptualization of Culture***: The key is to continue instilling the notion that a family's culture is a product of experiences that cannot be categorized *monolithically* with easily visible shared characteristics and features such as racial or ethnic labels. The examination of the role of culture in child maltreatment and family well-being necessitates a close look at each family's heterogeneous experience, beliefs, and practices across multiple contexts that are uniquely relevant to each family's functioning, with the goal of addressing cultural processes involved in prevention and intervention efforts in a more nuanced manner (Megan Finno-Velasquez, 2015).

(2) ***Replace the Notion of Cultural Competence with Cultural Reciprocity***: To effectively serve diverse families, practicing cultural reciprocity or humility may be more appropriate than cultural competence as currently institutionalized. Cultural reciprocity places responsibility on the professional to engage in self-reflection and dialogue to consider their own and the families' cultural norms and participate in collaborative exchange to provide effective services (Megan Finno-Velasquez, 2015).

(3) ***Refine Child Maltreatment Research to Integrate Diverse Cultural Groups***: Continuing efforts are needed to define and measure child maltreatment for diverse racial or ethnic and cultural groups, as well as to better understand differences and similarities in the causes of maltreatment among many types of families. From a research perspective, scholars may help to advance this goal by carefully articulating the definitions and operationalization of maltreatment and well-being constructs included in studies, as well as assumptions about the cultural relevance of these constructs for the study population. We should move towards explicitly stating the strengths and limitations of the measures used to capture culture as a construct. Work is needed, both within and across cultural groups, to understand how contexts, neighborhoods, federal family and immigration laws, local child welfare policies and practices, and family characteristics interact with parents' culturally bound beliefs and behaviors in the US. Research would benefit from carefully defining child neglect so as to clearly distinguish it from family poverty. Despite the risk poverty creates – both for child development generally and for child neglect specifically – more focused research and clearer definitions of neglect and risks for neglect within culturally diverse groups could contribute substantially to the ability of

policymakers and practitioners to address these issues and promote child well-being (Megan Finno-Velasquez, 2015).

(4) ***Enhance Intervention Design and Testing with Diverse Cultural Groups***: Existing interventions often rely on 20th century, European American, middle-class values. There may be a need to diversify the parenting styles and norms that are driving intervention development and normalization. Experts may wish to consider more rigorous and targeted testing of existing interventions with diverse cultural groups (Megan Finno-Velasquez, 2015).

(5) ***The Use of More Holistic and Innovative Strategies***: Maltreatment prevention interventions should address multiple stressors typically clustered together within a specific racial or ethnic group or community context, including economic and cultural stressors (Megan Finno-Velasquez, 2015).

(6) ***Diversify who is developing and evaluating such programs***: An intentional commitment to increasing the cultural and racial diversity of leading researchers, teachers, service providers, and policy makers in the field of child maltreatment and well-being may be critical to improving interventions and supporting the well-being of an increasingly diverse pool of families (Megan Finno-Velasquez, 2015).

(7) ***Focus on participant experience***: Research could be strengthened by placing greater emphasis on the process and experiences of diverse families throughout the implementation of interventions. Such research might document perceptions of cultural relevance or resonance, shared understandings and worldviews among program participants and providers, experiences of discrimination or empowerment, and overall client satisfaction with providers and services. Perhaps more importantly, longitudinal data could be utilized to understand whether the effects of parenting interventions and prevention on culturally diverse groups hold in the long term. This information, along with more data about families' origins and cultural identities, could be collected and analyzed within the context of implementation trials to better understand the role of culture in response to intervention. Moreover, while evidence-based programs may be effective in promoting positive parenting outcomes for families with diverse cultural beliefs and backgrounds, alternatives could exist that work just as well. These alternatives might not require assimilation and adoption of culturally relative practices that may force suppression of divergent cultural values (Megan Finno-Velasquez, 2015).

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APPENDIX

Excerpts from:

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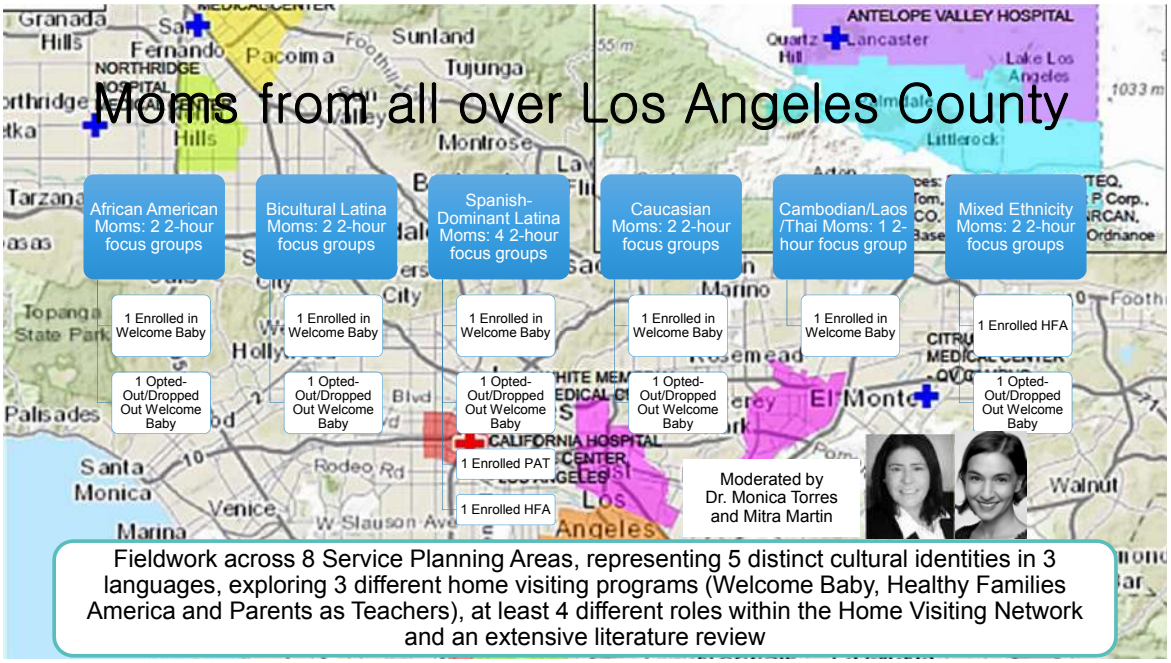
An Ecosystem of Communications to Support the Family Engagement Strategy

Findings from Home Visiting Qualitative Research Study

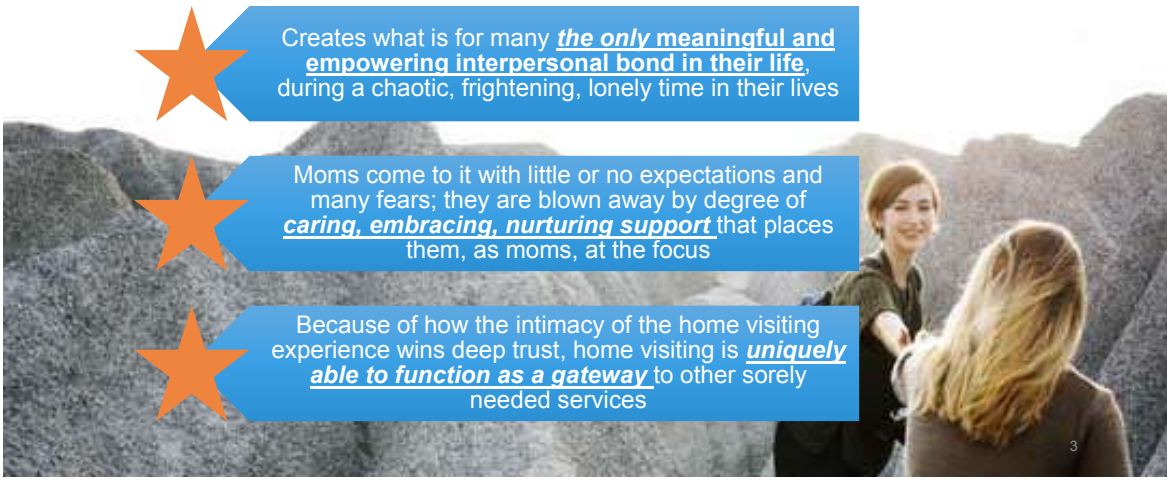
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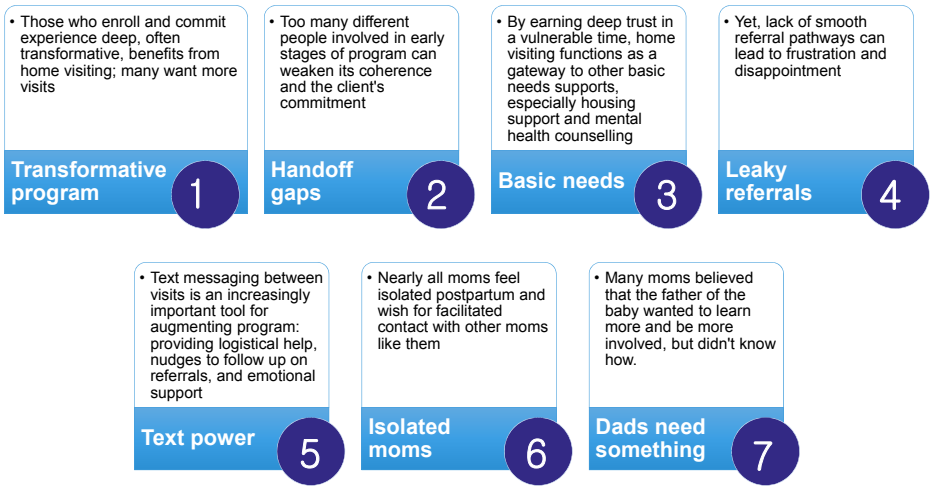
SocialQuest



Home visiting is a truly potent approach



Top findings related to programs



Top findings related to enrollment



APPENDIX

PAVING THE ROAD TO SAFETY FOR OUR CHILDREN:

A Prevention Plan for Los Angeles County



Los Angeles County Office
of Child Protection (OCP)

JUNE 2017

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Purpose of This Plan

What parents want for their children is what Los Angeles County wants—for every child to be healthy, to be growing and thriving in a strong family, and to be supported by a safe and nurturing community.

For children who come into contact with the child welfare system, however, this vision can seem unattainable. Many have already experienced some level of harm and trauma, and their families need intensive services to keep from entering (or going deeper into) the system.

In April 2014, in response to a tragic child death, the Los Angeles County Blue Ribbon Commission on Child Protection released a detailed report for improving the county's child protection system. It recommended the creation of the Office of Child Protection (OCP) to increase coordination and accountability, and to oversee the development and implementation of a comprehensive countywide prevention plan for reducing child maltreatment.

The OCP addressed this complex charge, in part, by studying the tremendous growth in community-based child- and parent-focused networks that Los Angeles County has seen over the past decade. These networks include organizations and individuals working together to build solid relationships and to share knowledge, best practices, new ideas, and perspectives. The ongoing success of these networks, coupled with their ever-stronger relationships with family-serving County departments, now presents an historic and unique opportunity for enhancing the protection and well-being of all children in our region.

This plan is our strategy for making the most of this moment. Many County departments and a wide array of partners contributed to the development of this plan, which is a blueprint for partnering with our region's diverse communities to coordinate and expand existing prevention-focused networks to further strengthen families, prevent child maltreatment, and reduce unnecessary burdens on the child welfare system.

Every one of us must "own" prevention. Keeping it at the forefront of all of our minds and every part of our work is the single most important way we can keep our children safe. We share responsibility for achieving this vision; it requires each of us to think differently about how we engage and support families, as well as how we engage and support each other.



What We Mean By Prevention

We believe that connecting families early on to positive family supports will reduce the number of children and families touched by the child welfare system, as well as decrease the length and intensity of interactions for those who must be involved.

By lessening families' contact with child welfare, we also hope to limit their involvement with other systems. A single child abuse hotline call—even when the allegation is not substantiated, a case is not opened, and the child is not removed from the home—can predict a family's later connection to other County systems. (A forthcoming study, for example, found that 83 percent of probation youth had previous referrals to child welfare, 43 percent of them before the age of five.[1]) This is especially true when families are not linked to supportive voluntary services at the time of the initial investigation. For families with very young children, research shows that home visitation and early care and education programs have significant effects on the prevention of child maltreatment and a family's reliance on other intensive services.

This plan's definition of "prevention" includes:

- Support for concrete needs like food and housing
- Opportunities for social, recreational, and community connections that reduce isolation and build personal support systems
- Access to economic and employment prospects
- Assistance in navigating the broad and often confusing array of available education, health, mental health, and other services

Research and experience show that a community-based family-strengthening approach offering these key elements can improve parenting skills, enhance child development, increase economic stability, and build a strong foundation for positive future outcomes. That approach should be coupled with improved access to formal government services, when needed, to provide families with a full spectrum of support. Formal services can't meet every need—there simply aren't enough of them—and informal community supports may not be intensive enough to address some families' complex demands. A balance is best.

We want to encourage a culture where communities are equipped to provide families the types of support and connections that reduce their need for more intensive services, and where it is both accepted and expected for families to reach out for help when necessary.[2]

While this plan begins by focusing on the family supports and services shown to have a positive effect on preventing child maltreatment, it is admittedly a starting place. Our goal is to expand community-based prevention efforts more broadly over time.



[1] Herz, D., Chan, K. (2017). *Los Angeles County Juvenile Probation Outcomes Study, Part II: Assessing the Experiences of Probation-Involved Youth Exiting from Out-of-Home Placements Across Two Cohorts.* California State University, Los Angeles.
[2] *Child Maltreatment Prevention: Past, Present and Future.* Child Welfare Information Gateway. Available online at www.childwelfare.gov/pubs/issue_briefs/cm_prevention.cfm

What We Know

Research suggests that child welfare systems experience pressure because families are not getting the support they need early enough, and because some are referred back to the system over and over again.

- One-third of the children in Los Angeles County's Department of Children and Family Services system are age four and under. A recent national study estimates that 37.4 percent of all children will have a protective services investigation by age 18.[3]

- Of all the babies born in Los Angeles County during 2006 and 2007, 14.6 percent were reported to child protective services before age five, although the majority of these referrals were not serious enough to warrant opening a case. This suggests that people may not know what to do, whom to trust, or where to find help when they suspect a problem is developing.

- As a recent article noted, "The longer that instability lasts, the harder it is for a family to rise back up. At that point, placing children in foster care may be the only option available to us. But what these families really need is [earlier] intervention . . . when they are beginning to struggle but are still relatively stable, and when the intervention wouldn't involve breaking up families."[4]



[3] Kim, H., Wildeman, C., Johnson-Reid, M., & Drake, B. (2017). "Lifetime prevalence of investigating child maltreatment among U.S. children." *American Journal of Public Health*, 107 (2), pp. 274–280.
[4] McGrath Tierney, M. "From Family Data to Neighborhood Outcomes." *Stanford Social Innovation Review*, November 29, 2016.

Some key early intervention strategies have demonstrated success in improving child outcomes and reducing child maltreatment.

The **Strengthening Families Approach** works to increase family strengths, enhance child development, and effectively nurture young children, especially in times of stress. It is based on engaging families, programs, and communities in building five critical protective factors for families[5]—shown below—through community-based supports. It is the "most well-established and broadly used" approach for reducing the risk of child maltreatment.[6] See page 24 for further information.

The Five Protective Factors



Parental Resilience: the ability to manage and bounce back from all types of challenges that emerge in every family's life



Social Connections: connections to networks of support essential to parents



Concrete Support in Times of Need: connecting to services to meet basic needs, as well as to address crises that may emerge



Knowledge of Parenting and Child Development: accurate information about child development and appropriate expectations for children's behavior



Social and Emotional Competence of Children: a child's ability to interact positively with others, self-regulate, and communicate effectively

- **Home visitation programs** connect to families at the very earliest stages possible, offering critical support to expecting and new parents. With a combination of parenting information, coaching, and connections to key services, home visitation has been proven to increase parenting skills, enhance child health and development, raise high school graduation rates, lessen juvenile justice involvement, and reduce child maltreatment.[7]

- **High-quality early care and education programs** (child care or preschool) that include support for families can also help to prevent maltreatment. For example, participants in the Chicago Parent Child program, which includes a half-day preschool program for three- and four-year olds along with comprehensive family services, had significantly lower rates of substantiated abuse and neglect.[8]

- Some **community-level child abuse prevention strategies** also have promising results—highlighting the voices of parents, mobilizing volunteers, engaging a broad range of community residents, and improving connections among economic development, health care, and social service sectors.[9]

Ensuring that prevention-oriented services are available, culturally competent, and accessible in local communities can provide support for families before problems escalate. In turn, knowing that community-based agencies are ready and willing to help also bolsters the child welfare system—strengthening the families it serves, increasing opportunities for family economic development, assisting social workers in their search for appropriate service referrals, and helping parents navigate local health, education, and family service systems.

[5] "The Protective Factors Framework." Center for the Study of Social Policy. www.cssp.org.
[6] Child Welfare Information Gateway (2014). *Protective factors approaches in child welfare*. Washington, DC: U.S. Department of Health and Human Services.
[7] "Home Visiting." Children Now Issue Brief. On high-school graduation rates, see, for example, *Research Spotlight on Success: Healthy Families America Promotes Child Health and Development*, Healthy Families America, 2008, www.healthyfamiliesamerica.org.
[8] Reynolds, A.J., Mathieson, L.C., & Topitzes, J.W. (2009). "Do Early Childhood Interventions Prevent Child Maltreatment? A Review of Research." *Child Maltreatment*.
[9] Daro, D. & Dodge, K. (2009). "Creating community responsibility for child protection: possibilities and challenges." *Future of Children*, 19(2), 67–94.



Key Los Angeles County Prevention Investments

Prevention Initiative Demonstration Project (PIDP)

In 2006, the Los Angeles County Board of Supervisors directed the establishment of a comprehensive prevention system. This included developing a pilot for implementing the Strengthening Families Approach (page 24) through community-based networks.

As a result, the Department of Children and Family Services (DCFS) established PIDP in 2007. This project built upon existing community networks in each of the County's eight Service Planning Areas (SPAs), applying community-organizing approaches to strengthen families' protective factors and increase their economic stability. (Appendix A on page 22 presents more details on the PIDP program.)

Independent evaluations of PIDP conducted in 2009 and 2010 found a "strong and significant pattern of improvements for families in terms of social support (reported by parents in all eight SPAs), decreased re-referrals to [DCFS] (in one of the three areas tested), and more timely permanency for [system-involved children] (in all of the three areas tested)."[10] Evaluators also recommended that the County encourage cross-departmental efforts to share funding and support for prevention.

During the OCP's development of this plan, it became clear that a number of County departments support programs that align very well with PIDP prevention-related goals. They include community-based programs funded through County contracts and projects operated by County staff who partner informally with community-based service providers. Mapping the status of these programs would be a very helpful next step in building cross-departmental support for prevention.

Although PIDP was successfully implemented across the County, the establishment of an entity for coordinating additional prevention resources and efforts beyond the network funded by DCFS did not materialize.

Prevention and Aftercare Networks (P&As)

Because of PIDP's effectiveness in engaging and strengthening families, DCFS institutionalized its community-based networks in 2015 and established ten countywide Prevention and Aftercare networks (P&As).[11] These include a broad range of public, private, and faith-based member organizations—groups that bring resources to the shared goal of preventing child abuse and neglect, along with designated lead agencies responsible for convening, organizing, and leading local grassroots efforts.

The P&A organizations are part of a critical web of providers across the county that effectively reach out to and engage parents, assisting them as they navigate often-complex systems of services. In so doing, providers develop relationships with these parents, building upon their natural assets through the Strengthening Families Approach. Those relationships in turn create trusting environments that encourage parents to disclose family needs and access appropriate services earlier, as family stressors occur.





[10]McCroskey, J., Pecora, P.J., Franke, T., Christie, C.A., & Lorthridge, J. (2012). "Strengthening Families and Communities to Prevent Child Abuse and Neglect: Lessons from the Los Angeles Prevention Initiative Demonstration Project." *Child Welfare*, 91(2): 39–59.
[11]Eight of the P&As are based in SPAs and two serve countywide populations: Asian/Pacific Islander and American Indian families.

Best Start Community Partnerships

While not part of the P&A networks, another important parent-focused community-based network also exists across the county, known as the Best Start Community Partnerships. First 5 LA[12] has been investing resources in 14 communities, bringing together parents, caregivers, providers, and other stakeholders to improve child outcomes and to engage and mobilize residents around issues that positively affect child and family well-being.

A significant number of the providers involved in the Best Start efforts also participate in the P&A networks, and this plan presents a unique opportunity to build on these networks' effective parent engagement. Both have adopted the Strengthening Families Approach mentioned on page 6, which has shown tremendous success in improving outcomes for children and reducing child maltreatment.

IN PRACTICE: Jennifer's Story

Jennifer had a history of postpartum depression. After she had her third child, signs of depression showed up once again and verbal abuse became a factor in her parenting. But the children ran the house and they did what they pleased, causing Jennifer to become even more frustrated.

A parent educator conducted a visit and became concerned about her behavior and the risk of child neglect due to Jennifer's depression. The newborn cried for minutes and was not attended to by his mother, while the oldest daughter, who was 4 years old, grabbed a knife from the counter to open a treat. The parent educator had to remove the knife from the child because Jennifer showed no signs of responding to the situation. As a mandated reporter, the parent educator had to call DCFS, which opened a case and came to Jennifer's home. She was upset and wanted to quit the home visiting program, but the parent educator did not give up and soon Jennifer began to turn her parenting around.

Realizing that she needed help and that help was there for her, Jennifer allowed the parent educator to help safety-proof her home, teach her about boundaries and discipline, as well as support her during the open DCFS case. Now she is seeking a brighter future for her children, including going back to school and contacting other referrals provided by the parent educator, which Jennifer had previously refused to contact. Her depression has also decreased, making her parenting techniques even more successful. At this time, there are no longer any signs of neglect in the home and her parent educator continues to support her when needed. **–Richstone Family Center, Best Start Community Home Visiting provider**

American Job Centers of California (AJCCs)

The Workforce Development, Aging and Community Services (WDACS) department administers Los Angeles County's portion of the largest workforce development system in the state—American Job Centers of California (AJCCs). The AJCCs are a network of centers structured in alignment with economic development and regional planning efforts to coordinate and partner with workforce development stakeholders. The purpose of the system is to prepare an educated and skilled local workforce that supports the three policy objectives outlined in the California State Workforce Board's state plan for 2016–2020:

- Fostering demand-driven skills attainment
- Enabling upward mobility
- Aligning, coordinating, and integrating programs and services to economize limited resources

The AJCC network prioritizes services to target populations and individuals with significant barriers to employment, including those who are homeless, English language learners, veterans, public assistance recipients, current and former foster or probation youth, and re-entering the community from incarceration, as well as those with basic-skills deficiencies or disabilities. Services are provided through strategically located centers and partnerships that bring together resources from the business community, employers, educational institutions, the State of California's Employment Development Department and Department of Rehabilitation, other County departments, and six other Workforce Development Boards. Given the important role that economic stability plays in the well-being of children and families, it is critical that we find every opportunity to ensure that the AJCC network is strongly connected to the other community-based networks already established.

Health Neighborhoods

The County departments of Mental Health (DMH) and Public Health (DPH) have partnered with numerous community organizations to establish "Health Neighborhoods" to improve access to coordinated health and mental health care across Los Angeles County. Participants in this network have committed to work with local agencies to identify available services, make cross-agency referrals for families more seamless, share information as legally permissible, and coordinate services so that families needing care can easily and efficiently receive the support they need.

[12]First 5 LA is a leading public grant-making and child welfare advocacy organization.

Medical Hubs

Over the past several decades, the Department of Health Services (DHS) has established seven Medical Hubs across the County to provide high-quality coordinated health care for children who touch the child welfare system. Services have historically included medical assessments of suspected child abuse or neglect, comprehensive medical exams for children entering out-of-home care, ongoing well-child care and sick visits, and linkages to pediatric specialty care for children with complex medical needs. In coordination with DCFS and DMH, the County has recently brought additional support to the Hubs to ensure that any identified social, mental health, and/or developmental needs are also addressed. As the reach and impact of the Hubs is expanded through further interdepartmental collaboration, the County's health-related agencies and the Office of Child Protection are exploring opportunities to connect these Medical Hubs more significantly with other community-based prevention-oriented networks.

Los Angeles County Community Child Abuse Prevention Councils

In 1989, the California Legislature passed the Child Abuse Prevention Coordinating Act, requiring each county to create child abuse prevention councils to promote intervention and prevention activities. In Los Angeles, 12 community-based councils were formed. These, too, have adopted the Strengthening Families Approach and have been working within their communities to reduce child abuse and neglect and to educate the public about abuse and family violence issues.

Landscape Analyses

In 2015, the Advancement Project (a civil rights organization in Los Angeles) conducted a study that looked at referrals to the DCFS child protection hotline by ZIP Code, analyzed the availability of prevention supports in different ZIP Code areas, and identified "hot spots" of high-need communities that would benefit from additional network and community connections. Findings indicated that ZIP Codes 90044, 90003, and 93535 had the highest numbers of DCFS referrals coupled with the lowest number of available prevention supports (see Appendix C: Los Angeles County "Hot Spot" ZIP Codes on page 26). Casey Family Programs has also launched a landscape analysis to identify existing services and supports around six high-need DCFS regional offices.

The recently released child care needs assessment study, *The State of Early Care and Education in Los Angeles County*, also provides an up-to-date analysis of the landscape of early care and education (ECE) services in the county. Its recommendations raise important issues about the cost of child care and the quality of existing services, and also offer ideas on providing essential supports for the ECE workforce.

Together, these analyses will inform our efforts as we map existing networks and prevention resources and determine how best to enhance and connect them so families in our most vulnerable neighborhoods have timely access to the assistance they need.





What We Heard



Because the premise of this plan builds upon the considerable work of the P&A and Best Start providers in establishing their extensive community networks, we conducted a "listening tour" of six key providers in both networks to learn more about what is working well and what should be improved upon. Twelve consistent themes emerged:

- When we are building stronger families, it's important to understand that children exist within families, and families exist within communities.
- The "five protective factors" from the Strengthening Families Approach (see page 6) are extremely important to successful prevention efforts.
- Economic stability for families is critical, yet it is the most challenging element to achieve.
- Parents need help in connecting to and navigating systems or networks of support.
- Establishing trusted relationships with parents is essential to connecting them to the right services and supports.
- Building authentic partnerships—so that parents are equal participants in building community-based networks of support—is fundamental.
- Trusting relationships take time, and they are an essential precondition to families' accepting and participating in voluntary supportive services.
- While cost is not the main barrier to increasing prevention efforts, flexible funding and some specific additional resources are still needed (for example, mental health, economic stability, informal community events, child care, transportation).
- Connections for communities and community-based organizations to schools and County departments are necessary but inconsistent.
- Connecting existing networks greatly enhances the array of resources available to families, and should be more intentional.
- Categorical funding is often challenging, particularly when it leads to competing reporting requirements that create barriers to providing services.
- Though extensive data exists, a standardized, consistent way to measure and report prevention factors is critical and very much needed.

What We Want

Informed by research, experiences across the County, and best practices, we now have an important opportunity to leverage existing partnerships to prevent child maltreatment. This is not about creating a whole new system of supports, but rather about strategically connecting and leveraging what is known to have a positive effect on prevention that already exists in our communities.

Create a "Network of Networks"

As mentioned, Los Angeles County is home to a number of successful networks, including Prevention and Aftercare (P&As), Best Start Community Partnerships, the community child abuse prevention councils, Medical Hubs, Health Neighborhoods, and other established and emerging groups with a similar family-strengthening focus. Along with important relationships identified by community partners, these networks can be both expanded and more deliberately connected with each other to focus on prevention. By bringing these providers together with faith-based organizations, home visiting programs, early education services, school districts, and other community entities, County leadership can support shared planning with communities and provide more seamless ways for families to access services before their issues can escalate. Community-based organizations and partners can play a critical role in building trust so that families are comfortable reaching out to those supports.

This connected infrastructure of networks can and must be culturally competent and responsive and must support equitable access for families of color, immigrants, expecting or parenting youth, and others facing challenges that undermine child and family well-being. These networks, rooted within the communities where families reside, are responsive to on-the-ground community issues and needs. They can share promising practices, new and innovative ideas for serving families in the child welfare system—particularly those aimed at reducing the overrepresentation of African-American and American Indian families and of lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth—and pilot-test new partnerships between community groups and government, as well as innovative strategies for preventing child maltreatment. Community-based networks can identify holes in the local safety net, and providers can be held accountable for meeting family and community needs.

Support Earlier Access to a Range of Services and Supports

In addition to encouraging early access to services, these community networks also have a proven record of establishing trusting relationships and safe environments in which parents can establish social connections, build economic stability, identify family needs, access necessary services, and receive support in navigating complicated service systems. Networks have a unique role to play by serving families holistically across multiple disparate systems of supports.

Building upon those strengths, the County can partner with communities to create a system of SPA-level navigation hubs, particularly focused on high-need/low-resource "hot spots," so families can find the help they need and so County staff know where to refer them. To do this, we need to improve cross-agency information-sharing and bring best practices in family engagement to County and community partners alike. This includes ensuring that both County departments and their community-based partners are prepared to understand the effects of trauma on families and how to appropriately respond to signs of trauma—an approach known as Trauma-Informed Care.

The County can also more intentionally and effectively use existing resources by connecting the roll-out of any new funding for family-focused services to these existing networks, rather than adding separate systems unconnected to them. In addition, given the significance to prevention of home visitation and early care and education services, those programs should be strongly integrated into these networks.

Evaluate the Effectiveness of Our Prevention Efforts

As we intentionally connect and strengthen these community-based networks, we must find ways to measure our efforts. That ability is essential to knowing whether we are having the desired effect of preventing child maltreatment, and can also help us tell the story of how investments in prevention work most effectively. We need to incorporate the five protective factors that strengthen families (see page 6) into residents' experiences at the community level, as well as assess changes in family involvement with the child welfare system.



What We Will Do

Our Seven Strategies

1. Map out and then weave together existing prevention networks.

- We will undertake an inventory of the P&A networks (including lead agencies and providers), the First 5 LA Best Start communities, the emerging DMH/DPH Health Neighborhoods, Los Angeles County's Medical Hubs, and Workforce Development, Aging and Community Services' (WDACS') America's Job Centers of California (AJCCs) networks, as well as the aligned work being done by the 12 community child abuse prevention councils, the Inter-Agency Council on Child Abuse and Neglect, 211, and other identified city– or school-district–sponsored family-focused community-based networks. We will also assess ways to connect other civic or philanthropic efforts that support prevention for the same families and communities. This will give us an opportunity to see if there are gaps in service providers across the County, as well as to identify possible connecting points where we can be more deliberate in "networking the networks."

- We will map the array of prevention-oriented programs and services currently funded or organized by County government with three objectives in mind:

  - » Aligning the work of County departments with this plan
  - » Identifying key stakeholders to participate in governance and funding discussions
  - » Identifying services that should be better aligned with the P&A networks

- We will help community-focused networks link with each other and establish new connections among themselves. The goal is for these networks to weave together, making it easier for families to access services and supports that strengthen their protective factors, delivered by trusted providers, within their own communities.

2. Expand the capacity of the Prevention & Aftercare networks.

Because of the P&A networks' demonstrated efficacy in developing robust linkages and implementing key prevention strategies across the County, we will partner with them to implement this plan and rely on them to serve as the leads for expanding prevention efforts that support families and strengthen neighborhoods and communities.

- We will work to support the capacity of the P&A networks to serve families early on—particularly those at risk of entering the child welfare system. While many of these agencies already provide home visiting and early care and education services (or connect to agencies that do), we want to increase their capacity to connect interested families to these and other important services.

- We will explore avenues to expand the capacity of the P&A networks to connect families to a broader array of opportunities for workforce preparation, employment, and financial stabilization (community colleges, WorkSource Centers, etc.).

- We will build on the work of First 5 LA in developing trauma-informed care approaches and infusing them into our work with families, understanding the effect that environment has on a family's well-being and capacity to thrive.



3. Create a universal home visitation system.

In response to a motion from the Los Angeles County Board of Supervisors in December 2016, the Department of Public Health—in partnership with the OCP, First 5 LA, the Los Angeles County Perinatal and Early Childhood Home Visitation Consortium, the Children's Data Network (CDN), the Los Angeles County Office of Education (LACOE), and the departments of Mental Health, Public Social Services, Children and Family Services, Health Services, Public Library, and Probation—will develop a plan for creating a Countywide voluntary universal system of home visitation services so that all families who are interested can be connected to supports early on that strengthen their protective factors. Using various eligibility requirements and funding streams, this system will strategically expand capacity and improve integration across these critical programs, and help home visitation providers assist families in connecting to other services they need. More intentionally linking these programs to community-based networks will provide a proven prevention resource.

IN PRACTICE: Mary's Story

Mary has been in a home visiting program for two years. She's a full-time mom with two boys, ages 4 and 1. The older child has been diagnosed with autism and the other has language delays and possibly autism. Mary is grateful for the home visiting program because it allows her to learn more about her sons' development and to pursue personal and family goals that otherwise wouldn't have been established.

Most of all, parent educators have given her significant encouragement and hope. Mary now believes her children, and she, are capable of making their dreams a reality. She realizes that although her children may have a disability, they can still be successful in life and tries to teach them this every day through education and encouragement. She has learned that although she cannot be a perfect parent, she strives to better herself and is eager to learn different parenting practices so that she may be able to enhance the life of her family. Mary can truly see the positive outcomes, and feels she can now advocate for her children to receive the services they not only need, but deserve.

–Richstone Family Center

4. Improve access to early care and education (ECE) programs.

We will call on stakeholders to enhance partnerships among the County's Office for the Advancement of Early Care and Education, the Los Angeles County Education Coordinating Council, LACOE, school districts, First 5 LA, the Child Care Alliance of Los Angeles, and others to work on improving access to ECE for those families interested in participating. Many ECE programs have complicated enrollment processes with short and narrow enrollment windows that may not align with the child care needs of vulnerable biological families, resource families, or relatives who work or go to school. Immediate goals include mapping ECE resources, providing information on this complex system to County departments and their community partners, helping families served by County departments access and navigate the ECE system, linking entities specializing in ECE to P&A networks and family-serving County departments, and enhancing the ability of the Department of Children and Family Services to make referrals electronically and track whether or not services are received. Over the longer term, we hope to develop strategies for utilizing existing ECE resources more efficiently regardless of funding source, and for seizing opportunities to expand the quality and availability of ECE services in communities with the largest gaps between supply and demand. As with the approach to home visitation described in strategy 3 above, shared planning is needed to align and maximize resources, given varying funding streams and eligibility criteria.

5. Monitor the overall well-being of communities.

Building upon the landscape analyses conducted by the Advancement Project and Casey Family Programs (see Appendix C: Los Angeles County "Hot Spot" ZIP Codes, page 26), plus the child care needs assessment study discussed earlier, we will continue to look at the well-being of communities across Los Angeles with an eye toward elements that prevent child maltreatment—social connections, economic stability, access to behavioral health services, etc. Our review will include a "Portrait of Los Angeles" (made possible by a Productivity Investment Fund grant recently awarded to the OCP) that will systematically measure health and longevity, educational attainment, and economic stability in Los Angeles County neighborhoods. This will help us better understand how to more specifically target family-strengthening prevention efforts in different communities, as well as provide a consistent way of measuring economic stability, which the P&As identified as a need.

6. Develop standardized measures of prevention to evaluate our efforts.

We will establish a standard set of indicators to measure our investments in prevention and to assess individual, community, and population-level impacts. Because prevention providers routinely knit together multiple funding sources to support their work, we will also recommend ways to standardize and streamline the different reporting requirements of County departments and other funders. This includes building on other data-collection efforts like the "Portrait of Los Angeles" and work being done by the Children's Data Network.



As mentioned earlier, recent analyses from the CDN are beginning to describe the experiences of children and families with multiple systems over time, clarifying interactions and overlaps between services that may not be visible from the perspective of a single system at any one point in time. The CDN should also be able to help in evaluating this countywide prevention plan by tracking changes in child abuse reporting and involvement with the child welfare system, assessing the impact of preventive services on deeper system involvement, and analyzing the effect of pilot projects or planned changes in community-based service delivery designed to reduce continuing or recurrent involvement with deeper-end, more intensive public service systems. These data will inform both the further implementation and expansion of our prevention efforts and the most effective use of our resources moving forward.

7. Implement prevention strategies identified by County departments.

We will continue to work with County departmental leadership to identify and implement ways in which the County can show greater ownership over its role in prevention efforts by building upon family-focused community-based networks and connecting them to important County systems and services. Representatives of County departments on the OCP prevention workgroup have identified many such opportunities, a number of which are already moving forward (see below).



Los Angeles County Department Commitments to and Efforts in Prevention

Based on the work of the OCP prevention workgroup and recent meetings with County leaders, the rest of this section lists activities underway to advance our work on prevention.

Department of Public Health (DPH)

- The department will report back to the Board of Supervisors on ways to make voluntary home visiting services universally available across Los Angeles County.
- DPH will connect its SPA-based Area Health Officers to the P&A providers for each SPA to strengthen their relationships with these networks.
- It is connecting to the emerging consortia of the Department of Mental Health's Health Neighborhood networks.
- It will work with DMH to enhance access to postpartum depression services and supports.
- DPH will outstation public health nurses in two Department of Public Social Services (DPSS) offices serving low-income mothers enrolled in California Work Opportunity and Responsibility to Kids (CalWORKs) to help connect them to home visitation and other social services as needed.
- The department is coordinating its text-messaging campaign, *La Familia*, with First 5 LA's family-strengthening campaign and others to incorporate prevention efforts.
- DPH will partner with a Best Start community that has identified the issue of child welfare or prevention as its priority focus to find ways to support local efforts.

Department of Mental Health (DMH)

- DMH is working to coordinate the three-year cycle of its Mental Health Services Act planning for the use of Prevention and Early Intervention (PEI) funding with the larger prevention efforts being coordinated by the OCP.
- The department will maximize opportunities to connect its funding of mental health providers (through PEI or the Mental Health Services Act's Innovations funding) with existing P&A networks. If barriers exist to those providers being included in DMH funding, the department will work with others to provide assistance to those community-based organizations to enhance their ability to compete for DMH funding.

- It is mapping its constellation of providers and specialty services (such as birth to five, dual-diagnosis, early intervention, intensive services) across Los Angeles County to improve access for high-need populations and provide accurate information to its partnering agencies and community referral sources (DCFS, DHS Medical Hubs, DPH).

- DMH will support the development and implementation of the CalWORKs Family Stabilization pilot project being led by DPSS and help connect families who want them to mental health services.

- The department is expanding its System Leadership Team, which makes recommendations to the DMH director on the use of PEI dollars, to include entities focused on child welfare and prevention, including the OCP and First 5 LA.

Department of Children and Family Services (DCFS)

- DCFS identified the benefit of mapping its own categories of providers to ensure intradepartmental connections among those funded through different solicitations. Once this is complete, those providers will be mapped against other networks, including the First 5 LA Best Start community partnerships and the Health Neighborhood providers.

- The department will strengthen the relationships between DCFS regional offices and the lead P&A providers in each SPA. Once points of connection are identified, DCFS can incorporate the standardized reporting on prevention measures into its contracts.

- DCFS will conduct an evaluation of the effectiveness of prevention efforts provided through the P&As.

Department of Public Social Services (DPSS)

- Working with First 5 LA, the OCP, DCFS, and SHIELDS for Families, Inc., the department has begun to map how mothers served by DPSS' CalWORKs Family Stabilization program resources might be connected to SHIELDS for Families (the lead P&A network provider in SPA 6) to access needed supports not covered by DPSS' existing array of welfare-to-work services. The purpose of this pilot is to find ways to enhance DPSS connections to community-based P&A agencies to better serve low-income parents with barriers to employment. This effort will also connect to the local Best Start community partnership to further enhance parent connections to community-based supports.

- As the pilot demonstrates some success, DPSS will partner with First 5 LA, DCFS, and the OCP to consider approaching the California Department of Social Services, if necessary, for CalWORKs and child welfare waivers or other flexibility needed to enhance services to this population. The ultimate goal will be an effective, truly integrated support program for DPSS and DCFS (or pre-DCFS) families that can then be expanded to other communities.

- Given the high overlap of caseloads across these departments, the OCP will work with DPSS and DCFS to explore (with others) a research project to identify early indicators present in DPSS-involved families that could lead to possible DCFS involvement.

- As DPSS continues to implement the state-mandated online CalWORKs assessment tool, it will work with DCFS and the OCP to identify systemic barriers to employment that are also early indicators of potential DCFS involvement.

- The department has committed to attend meetings that bring together various County departments with network providers, thus strengthening connections between community-based providers and County services.

Workforce Development, Aging and Community Services (WDACS)

- WDACS will ensure that the prevention and aftercare networks (P&As) become an integral part of the countywide workforce system—the America's Job Centers of California (AJCCs)—to prioritize referrals for at-risk families, DCFS families, and youth.

- It will pursue collaborative partnerships with DCFS, Probation, DPH, and LACOE to use data to identify employment and education service gaps for youth, at-risk families, and DCFS families, and determine how to mobilize services to mitigate those gaps.

- Once this stage is complete, WDACS will partner with the Los Angeles Unified School District (LAUSD) to co-locate three Pupil Services Attendance counselors at select AJCCs to identify and connect opportunity youth from 17 LAUSD high schools to access workforce services. ("Opportunity youth" are defined as youth between the ages of 16 and 24 who are neither in school nor employed.) WDACS will work with LACOE and others to expand this re-engagement strategy to the other 80 school districts in Los Angeles County, prioritizing those with high concentrations of foster youth. It will also explore developing a Memorandum of Understanding with LACOE for data-sharing that will further support this effort.











- In September 2017, to further the Purposeful Aging Initiative, WDACS will launch (in partnership with the Public Library, Probation, and DCFS) a mentor-based tutoring pilot through which Title V–Senior Community Services Employment program participants will mentor youth who will then jointly provide tutoring to other youth.

- In partnership with various County departments and other external stakeholders, WDACS will establish a multidisciplinary approach to improve outcomes that promote economic stability and permanency for youth, at-risk families, and DCFS families.

  - It will work with DCFS, Probation, LACOE, and DPSS to align multiple case and service plans in the areas of employment and education. Currently, youth and certain families are required to have a case plan, a transitional independent living plan, a needs and services plan, a welfare-to-work plan, and an AJCC equivalent, but these plans are not jointly created or maintained (with the exception of shared DCFS and DPSS families).

  - In conjunction with DCFS, Probation, DPSS, and the Children's Law Center, it will initiate referrals to prioritize workforce services for AB 12 youth at age 19 (DCFS non-minor dependents, for instance), ensure that the court requires their participation in workforce services, and prioritize referrals for other family members in need of employment, in support of the DCFS case plan.

  - It will work with Probation and LACOE to formalize a process to enroll all youth at probation camps into AJCC services prior to their release. This will improve youths' overall outcomes through education, training, career planning, work experience, and job readiness, and also reduce the likelihood of recidivism.

- WDACS will incorporate a prevention strategy as a required approach in the Performance Partnership Pilot (P3) strategic plan. The P3 is a major multi-partner effort to increase countywide coordination and collaboration across a broad group of dense systems—education, workforce, social services, child welfare systems, local municipalities, and community-based organizations—to streamline access to services and improve outcomes that promote economic stability.

Child Support Services Department (CSSD)

- CSSD recognizes that economic stability and connections to resources are critical to strengthening families. The department will partner with the P&As to periodically co-locate volunteer staff at sites within each of the 10 networks, and also explore opportunities to co-locate volunteer staff at additional community-based organizations.

- The department will periodically co-locate volunteer staff at the DPSS CalWORKs Family Stabilization pilot's district office and explore partnerships to expand co-location to additional County offices to ensure that families are aware of services available to assist them with child support.

- CSSD will train its staff on connecting clients to preventive and supportive services within their communities.
- It will distribute information at all of its regional offices about supports available through the P&As.
- It will explore options to partner with the County Library to periodically co-locate volunteer staff at library facilities to expand its reach to families who may need CSSD services.

Public Library

- The Library will expand its Family Place programming so that, by the end of 2018, 86 libraries will host the program. Family Place builds strong bonds between children and their parents while promoting early literacy and connecting families to resources and services. All Family Place parent/child workshops feature a community resource specialist (nutritionist, pediatrician, behaviorist, etc.) who meets informally with parents to offer additional services and resources, as requested.
- Beginning in the fall of 2017, the Library will implement a new outreach program, The Reading Machine, in partnership with other County departments—DPSS, DCFS, DMH, the CSSD, the Natural History Museum of Los Angeles County, DPH, LACOE, Probation, and the OCP—to provide mobile early literacy and caregiver-support services. The program will deploy two vans to targeted sites within nine at-risk neighborhoods, and serve parents, home day care providers, and youth. Caregivers will learn how to engage in meaningful play activities that help them identify developmental issues with their young children, and will receive information on additional available County services.
- In 2017, with financial support from DMH, 10 Library staff will be trained in the evidence-based parent-support program Triple P—the Positive Parenting Program. One Triple P librarian will host multi-session parenting workshops at 52 libraries so that foster parents can satisfy their parenting class requirements. The remaining nine librarians will be trained to conduct one-to-one interactions with parents on developing simple strategies to address common childhood issues such as toilet training, tantrums, sleep problems, getting along with other children, and more.
- All library staff who interact with youth will be trained to use Touchpoints, a parent support model that builds parents' confidence in being their child's first teachers and also helps maintain parent-child relationships during periods of family stress.
- Library staff at Los Padrinos Juvenile Hall are implementing programs to help teen parents at the facility understand the importance of early literacy. Board and picture books are being purchased so that youth can take the books home to use with their children. These staff are also in the process of exploring an adapted version of the Family Place program at the Hall to facilitate parent-child bonding.
- This year, in partnership with the Department of Parks and Recreation, the Library will expand its *Lunch at the Library* summer program—which introduces parents to resources and materials that support caregiving and promote literacy—from 7 libraries to 13 libraries. It will also open its doors to children age 2 through 18 who are in need of a free meal (access to school lunch programs being limited in the summer). Three to five new lunch sites will be added each year thereafter to expand access to free meals for these children.
- The Library hosts bullying prevention and personal safety programs to help youth learn how to protect themselves and be more aware of their environment. The programs started at 10 libraries in 2014 and will expand to all 87 libraries by the fall of 2018, so that youth throughout the county can learn valuable safety and confidence-building skills.

Department of Parks and Recreation (DPR)

- DPR will work with area schools and community partners to expand parent educational opportunities that create networking opportunities for families and expose parents/caregivers to local resources that support healthy parenting via workshops, informational fairs, and educational classes.
- The department will collaborate with DMH to expand pilot park-therapy programs where families can access free mental health education and wellness programs at park facilities, with the goal of developing this model in other high-need areas.
- Parks and Recreation will partner with the P&As, providing a quarterly brochure of DPR programs—camps, teen clubs, lunch/snack programs, Tiny Tots, sports programs, and special events—while utilizing social-media tools and engaging area school districts to distribute information intended to bring the community together and promote child and family resiliency.





- DPR will build a robust youth council program that invests in youth leadership, creates a space for youth voices in governance by engaging youth in decision-making, and exposes teens to civic engagement and volunteer opportunities. Youth councils will host an annual Youth Summit to gather teen community leaders from throughout Los Angeles County to engage one another and strengthen their leadership skills.

- The department will expand programs such as Parks After Dark to build social cohesion, connect families to resources, lessen crime, and thereby build resilient communities. Programs that create opportunities for families to interact in healthy ways in home and community life will be offered by DPR's community partners.

- The department will partner with First 5 LA and the P&As to provide early-childhood and other parenting information at all park facility public counters.

- DPR will introduce and train staff in trauma-informed approaches to build resiliency in children through its Tiny Tots and after-school programs.

Department of Health Services (DHS)

- DHS Medical Hubs will work with the P&As to ensure that children and families in contact with DCFS are referred to services within those networks, as necessary, to address any needs identified during the on-site assessment process.

- The department's MAMA's Neighborhood program will partner with both DCFS and Probation to identify pregnant adolescents and facilitate direct referrals to prenatal care and other psychosocial services related to healthy outcomes.

- Through DHS' Whole Person Care pilot program, the department will partner with Probation and DMH to identify high-risk youth with medical, mental health, or substance-use disorders in juvenile camps or halls who would benefit from community-based re-entry support. The goal will be to improve these youth's access to and use of clinical and support services to reduce recidivism.

- The department's Women's Health Programs and Innovation unit will provide support and training to Medical Hub staff and to Probation, juvenile court health services, DCFS, and Sheriff's Department staff on issues related to adolescent sexual health, contraception, pregnancy-options counseling, prenatal care, terminations, and sexually transmitted infection prevention.

- DHS Medical Hubs will focus on providing teen-friendly services, including training nursing staff on non-directional contraception counseling and training clinicians on providing access to all FDA-approved contraception options during teen visits.

Probation Department

- Probation will partner with DPR and the Department of Health Services to expand opportunities that meet the needs of youth and families through a myriad of services (health, mental health, substance abuse, tutoring, legal clinics, etc.) offered in community-based neighborhood service hubs.

- It will partner with WDACS to fully implement a vocational/employment program for probation youth, with specific emphasis on youth transitioning back to the community.

- Over the next 180 days, Probation will create a family-finding unit able to locate family members early in the judicial process, both to increase support for youth and also to enhance the probability of youth being placed with a relative should the need for out-of-home care arise.

- Over the next 180 days, Probation will review current protocols/policies and develop more suitable community-based placement options for youth awaiting re-placement and/or a court hearing that might normally lead to detention in juvenile hall.

- Over the next 120 days, Probation will partner with LAUSD to expand educational opportunities for probation youth by offering credit-recovery services to credit-deficient youth in nontraditional community-based hubs. This effort will allow for youth to be dually enrolled, attending school during normal hours and accessing credit-recovery services after school to increase graduation rates and create post-graduation plans that include continued education/vocational opportunities.

- The department will expand partnerships with community-based organizations to provide traditional support services through the Juvenile Hall Family Resource Centers.

- It will work with faith-based organizations to expand opportunities for families to engage in pro-social networks and support groups, and will explore mentorship opportunities for youth transitioning from camp and from the Division of Juvenile Justice back into their communities.



Los Angeles County Office of Education

- A statewide initiative is currently being rolled out across Los Angeles County that engages school districts in a multi-tiered system of support (MTSS). The four pillars of this system address administrative leadership, an integrated educational framework, family and community engagement, and inclusive policy structure and practice. To support these four MTSS pillars, LACOE will work collaboratively and collectively across the county to strategically leverage already existing practices that are known to have a positive effect on prevention in our communities.

- LACOE will continue to partner with federal entities to increase the number of Early Head Start and other infant/toddler services available to children and families in Los Angeles County.

- LACOE will further provide early learning support by actively engaging various partners and networks throughout the county and by hosting the California Preschool Instructional Network and Early Childhood Education Professional Learning Community.

- LACOE's Division of Special Education (DSE) will be more aggressive in its approach to increase public awareness of important services that exist for children with special needs or suspected needs, through public service announcements, ads in print media, 211, and so on. In addition, DSE will strengthen its partnerships with school districts and Regional Centers to provide technical support for meeting the needs of children birth to age five in general-education settings who are suspected of having special needs. (Early intervention programs can prevent referrals to special education programs before age three.)

- LACOE will guide school districts in transitioning probation students with Individualized Education Programs (IEPs) to comprehensive school campuses by helping districts understand these students' unique challenges and the need to address them by the student's 30-day change-of-placement IEP meeting.

Through the Eyes of Community Residents

An essential attribute of using a network model to implement prevention is that activities take place in neighborhoods, often sponsored by grassroots organizations that are accepted as fellow community members, close to and trusted by local residents. Individuals may not even realize they are participating in a "prevention program," but might tell instead of their personal connection to a specific worker or team who partners with them to help meet challenges and recognize their own abilities. They are more likely to see the organization itself not as a place they come to for appointments, but as a safe space where they make social connections, have fun with other neighborhood folks, share a meal, share opinions, share information, and engage in activities with their families.

As the prevention elements called for by this plan come to scale, residents will experience trusted community members encouraging them to link with their neighbors to find and access beneficial resources and supports. The organizations making up the prevention networks will be seen as places for friends and families to gather—places that advocate for fairness and equity, where everyone is welcome.

Where Do We Go From Here?

Create a Governance Structure to Align Prevention Efforts

To maintain the momentum of the many efforts described in this document and to ensure appropriate focus and accountability, the OCP will institutionalize a formal governance structure for overseeing the implementation of this plan along with other prevention efforts. This structure will connect and coordinate existing networks and entities with important roles to play, and will include leaders from County departments and community partners, including service providers, community-based organizations, the faith-based community, education, law enforcement, resident and youth representatives, and those from the philanthropic sector who focus on prevention. We will also look to non-traditional external partners and find ways to ensure that parent voices continue to inform our work.

The purpose of this governance structure will be to better align and prioritize efforts, not to replicate or supersede existing frameworks.

Identify Ongoing Funding Streams

An ongoing funding stream for prevention implementation will be identified by more effectively using existing funding, leveraging resources, and exploring the possibilities for braiding and/or pinpointing new public and private funding opportunities.

Convene a Data Advisory Committee

We will assemble an advisory group of researchers and data experts to develop a standardized set of measures to capture our investments in prevention. This group should also recommend ways that the County can implement standardized reporting on prevention and make prevention data more publicly available. County departments can use these standards as they fund prevention efforts, so we have a comprehensive view of County investments.

Identify and Implement New, Innovative Approaches

We will continue to pursue opportunities with public, private, community, and philanthropic partners for expanding creative and effective models across the county. Most immediately, the emerging partnership of DPSS and First 5 LA's home visitation provider, SHIELDS for Families, Inc., is finding ways to serve a particularly vulnerable population whom we know disproportionately ends up in the child welfare system—families enrolled in CalWORKs. This work could inform practice at the state level as well. Other populations also tend to be overrepresented in the child welfare system, and we will identify additional innovations to address their unique issues and reduce their disproportional involvement.

Timeframe for Implementation

We aim to implement this plan over the next two to three years. While we feel an urgency to move forward, much of our progress will be dictated by the County's contracting process.

Conclusion

Sizable public and private investments have already been made throughout our region to establish networks of family-focused community- and faith-based organizations to meet the needs of the populations Los Angeles County and its partners are committed to serve. We now need to stabilize the pieces already in place, build and expand them, and deliberately weave them together to ensure a strong, coordinated, sustainable network.

This prevention plan is an important step toward achieving our shared vision—that every child is healthy, growing and thriving in a strong family, and supported by a safe and nurturing community. This vision goes hand in hand with our commitment to prevent children and families from coming into contact with the child welfare system, to minimize the duration of any contact that is necessary, and, over time, to limit their involvement with other intensive service systems.

All partners must "own" prevention and recognize their role in helping to achieve it. This includes working together in new ways to create a seamless framework of support for the children and families we jointly serve, identifying the governance structure and funding needed to sustain these efforts long term, and ensuring this plan's success.

We need to be proactive and forward-thinking to successfully produce the outcomes we all want. Each of us must take responsibility for being more resourceful in our approaches to supporting our children and families within their communities, so that their lives are enhanced in ways that are visible, powerful, and lasting.



List of Contributors

Advancement Project
Antelope Valley Partners for Health
Best Start El Monte
California State University, Los Angeles
California Youth Connection
Casey Family Programs
Center for Strategic Public-Private Partnerships
Children's Data Network
Children's Bureau
Children's Institute International, Inc.
Community Child Welfare Coalition
First 5 LA
Friends of the Family
Inter-Agency Council on Child Abuse and Neglect (ICAN)
Korean Youth and Community Center (KYCC)
Los Angeles County Chief Executive Office (CEO)
Los Angeles County Child Support Services Department (CSSD)
Los Angeles County Commission for Children and Families
Los Angeles County Department of Children and Family Services (DCFS)
Los Angeles County Department of Health Services (DHS)
Los Angeles County Department of Mental Health (DMH)
Los Angeles County Department of Parks and Recreation (DPR)
Los Angeles County Department of Public Health (DPH)
Los Angeles County Department of Public Social Services (DPSS)
Los Angeles County Department of Workforce Development, Aging and Community Services (WDACS)
Los Angeles County Education Coordinating Council
Los Angeles County Office for the Advancement of Early Care and Education
Los Angeles County Office of Education (LACOE)
Los Angeles County Probation Department
Los Angeles County Public Library
Los Angeles Unified School District (LAUSD)
Neighborhood Legal Services of Los Angeles
Prototypes
SHIELDS for Families, Inc.
South Bay Center for Counseling (SBCC)
Special Services for Groups
SPIRITT Family Services
United American Indian Involvement
Westside Children's Center

Definitions of Acronyms and Initialisms

AJCC	America's Job Centers of California
CalWORKs	California Work Opportunity and Responsibility to Kids
CDN	Children's Data Network
CSSD	Child Support Services Department
DCFS	Department of Children and Family Services
DMH	Department of Mental Health
DHS	Department of Health Services
DPH	Department of Public Health
DPR	Department of Parks and Recreation
DPSS	Department of Public Social Services
DSE	Division of Special Education
ECE	Early Care and Education
LACOE	Los Angeles County Office of Education
LAUSD	Los Angeles Unified School District
LGBTQ	Lesbian, gay, bisexual, transgender, and questioning
OCP	Office of Child Protection
P3	Performance Partnership Pilot
P&As	Prevention and Aftercare Networks
PEI	Prevention and Early Intervention
PIDP	Prevention Intervention Demonstration Project
SPA	Service Planning Area
WDACS	Workforce Development, Aging and Community Services



Appendix A: Some of Los Angeles County's Prevention History

Los Angeles County has a long record of efforts to enhance child protection and prevent child abuse and neglect. Entities such as the Los Angeles County Commission for Children and Families and the Inter-Agency Council on Child Abuse and Neglect (ICAN), along with the First 5 LA Commission, County departments, academic institutions, partners from the philanthropic community, and others have worked for years to prevent child maltreatment. In 2002, the County Board of Supervisors directed the Children's Planning Council, the Commission for Children and Families, the Department of Children and Family Services, ICAN, and other leaders in child and family services to develop a Countywide prevention plan. A 2005 report titled "Preventing Child Maltreatment: A Comprehensive Plan for a Continuum of Family-Centered Community-Based Prevention and Intervention Services for Children, Youth and Families in Los Angeles County" was issued.[13] Many entities and organizations were consulted. Scores of recommendations were put forth.

That report—like others—found that the lack of a coordinated, effective strategy for prevention was compromising child safety. It noted the existence of many County and community programs, but also recognized the absence of any structure or mechanism through which these programs were coordinated and held accountable to ensure the effective implementation of prevention strategies in communities or across the county.

In an effort to coordinate the systems and resources affecting the prevention of child maltreatment, the County Board of Supervisors in 2014 established the Office of Child Protection (OCP). The OCP became operational in February 2015, and released its countywide Strategic Plan in October 2016. The OCP Strategic Plan has a focus on prevention, with the stated goal of providing "children and families with the upfront supports and services they need to prevent them from entering the child welfare system and/or limit their involvement with the system once they are known to it."

These and other investments by County and non-County entities over the past five to ten years are now in place across the region. These resources are an integral component to creating an infrastructure of prevention, as well as a wealth of knowledge that can inform the County's commitment to prevention and our prevention plan.

Prevention Initiative Demonstration Project (PIDP)

In 2006, the Los Angeles County Board of Supervisors passed a motion directing the establishment of a comprehensive prevention system. This motion called for promoting family-strengthening efforts in safe and stable communities, and further recommended that:

- The Department of Children and Family Services establish a pilot project designed to show how community-based networks could reduce social isolation, improve economic resources for families, and increase access to existing services, supports, and activities
- The Chief Administrative Office (now the Chief Executive Office), in partnership with others, facilitate community meetings and planning workgroups, develop outcomes and indicators, analyze successful models, and develop recommendations for the County

Responding to the first directive, DCFS established PIDP in 2007. This project built on three integrated or "braided" strategies implemented by networks of PIDP providers in the eight geographic Service Planning Areas (SPAs): (a) building social connections by using community organizing approaches; (b) increasing economic opportunities and development; and (c) increasing access to and utilization of beneficial services, activities, and resources. PIDP continued as a demonstration project for several years and was independently evaluated in 2009 and 2010. Evaluators concluded:

> "... PIDP findings show a strong and significant pattern of improvements for families in terms of social support (reported by parents in all eight SPAs), decreased re-referrals (in one of the three areas tested), and more timely permanency (in all of the three areas tested). The fact that results were found across levels of prevention underlines the fact that PIDP accomplished just what it was designed to do in only two years. It pilot-tested locally relevant approaches to strengthening families, and demonstrated the potential for significant improvements in child safety and well-being as a result of well-designed prevention services that braid three core elements to create accessible and welcoming webs of community support, activities, and services for families."

[13] Prevention Workgroup (2005). "Preventing Child Maltreatment: A Comprehensive Plan for a Continuum of Family-Centered Community-Based Prevention and Intervention Services for Children, Youth and Families in Los Angeles County."

Evaluators also recommended that the County work to encourage cross-departmental efforts to share funding and support for prevention. During the process of creating the current prevention plan, it became clear that a number of departments already support programs that align very well with the goals of this plan. These include both community-based programs funded through County contracts and those operated by County staff who partner informally with community-based service providers.

Although the original DCFS pilot project called for in the Board of Supervisors' 2006 motion was created and successfully implemented (as mentioned on page 7), an entity for coordinating additional prevention resources and efforts beyond the network funded by DCFS was never established.

Inter-Agency Council on Child Abuse and Neglect (ICAN)

The Inter-Agency Council on Child Abuse and Neglect (ICAN) was established in 1977 by the Los Angeles County Board of Supervisors. ICAN serves as the official County agent to coordinate the development of services for the prevention, identification, and treatment of child abuse and neglect. It is the largest county-based child abuse and neglect network in the nation, and is co-chaired by the Los Angeles County Sheriff and the Los Angeles County District Attorney. ICAN staff are housed within the Executive Office of the Department of Children and Family Services (DCFS). ICAN was designated as a local child death review team for the National Center for Fatality Review and Prevention in 1996.

ICAN consists of 32 county, city, state, and federal agencies represented at the department-head and professional/line levels, along with 12 community-based interdisciplinary child abuse councils. In addition, ICAN's nonprofit partner, ICAN Associates, is composed of volunteer business and community members who raise funds and public awareness for programs and issues identified by ICAN. ICAN's activities are carried out through committees of public sector and private sector professionals with expertise in child abuse/neglect. These groups address critical issues affecting the well-being of the most vulnerable children in the County, and include committees on policy, operations, victim services for commercially sexually exploited children (CSEC), cyber-crime prevention, child death review, child and adolescent suicide review, pregnant and parenting teens, child abduction and reunification, the Family and Children's Index, AB 1733/AB 2994 planning and funding recommendations, a safe sleep for infants campaign, the safely surrendered baby law, data/information-sharing, child abuse/domestic violence protocol development, child abuse protocol development, infants at risk due to prenatal substance abuse, and the California Hospital Network.

ICAN provides advice and guidance on public policy development and program implementation to improve the community's collective capacity to meet the needs of abused and at-risk children. ICAN has a unique ability to bring both department-head–level and line-level professional staff together to work collaboratively, holding forums where staff from different agencies share information and learn about the roles each agency plays in the prevention of child abuse/neglect. As a result of these forums, staff from multiple agencies develop a much deeper understanding of the broad system that is required to most effectively combat child abuse and family violence.

ICAN regularly releases three major reports—*The State of Child Abuse in Los Angeles County, the Report of the Child Death Review Team*, and the report on *Safely Surrendered and Abandoned Infants*—and also produces five major training events: the NEXUS Conference, the Children's Traumatic Grief and Loss Conference, cyber-crime prevention symposia, child sexual exploitation trainings, and child and adolescent suicide prevention trainings.

ICAN's work has resulted in many positive outcomes, including:

- The successful sponsorship and passage of legislation that has brought millions of dollars into Los Angeles County for child abuse prevention programs, created the Family and Children's Index, allowed for a greater sharing of health information between medical professionals and case workers for children in the child protection and juvenile justice systems, permitted the secure electronic sharing of information by two-person multidisciplinary teams, and enacted drowning prevention ordinances and child product safety measures
- The development of protocols for the countywide response to reports of child abuse and neglect, guidelines for an effective response to domestic abuse and inter-disciplinary protocols for severe non-fatal child injuries; and guidelines for the mentoring of foster youth
- The development of a countywide public awareness campaign for infant safe sleeping

In addition, the ICAN Hospital Network was created to support child abuse screening, reporting, evaluation, and management in all hospitals serving Los Angeles County residents. This privately funded project will build a data-tracking program and connect hospitals to the child protection system and to each other with regard to births and children under age three served by a hospital, emergency department, or inpatient services.



Appendix B: Research on Effective Prevention Strategies

The urgent need to connect parents early on to available resources is highlighted in a recent study from the University of Southern California Suzanne Dworak-Peck School of Social Work's Children's Data Network that examines the cumulative risk of becoming involved with the child welfare system for our youngest children. The study found that 14.6 percent of all babies born in Los Angeles County in 2006 and 2007 were reported to child protective services before age five. Of those reported, allegations of maltreatment were substantiated for only about one-third (5.2 percent of those reported) and only 2.4 percent were removed from their families and placed in out-of-home care.[14] Such high rates of reporting, accompanied by much lower rates of substantiation and removal, suggest that many people may not know where to go when family problems begin to develop, and that communities may not have access to the broad range of supports and services needed.

Calls for help may go unanswered because of pressures on the system, and family problems may not be addressed in a timely way. Too often, a cycle of repeated referrals occurs before DCFS eventually becomes actively involved with these families. By that time, their problems may have already escalated.

As another study finds, the longer these instances of seeking services go unaddressed, the more significant the costs are to the child, the family, and society.[15]

> "The longer that instability lasts, the harder it is for a family to rise back up. At that point, placing children in foster care may be the only option available to us. But what these families really need is [earlier] intervention . . . when they are beginning to struggle but are still relatively stable, and when the intervention wouldn't involve breaking up families."[16]

By intervening with families earlier, we are able to enhance positive child outcomes. Building stronger families prevents child maltreatment.

The Strengthening Families Approach

Based in part on experience in Illinois and elsewhere, along with research conducted by the Center for the Study of Social Policy (CSSP), various jurisdictions around the country have begun implementing the Strengthening Families Approach. Within a community-based context, this approach centers on ways to connect parents to ensure that the five positive attributes that research has linked to a lower incidence of child abuse and neglect—"protective factors"—are present for families.[17] One of these protective factors is connecting parents to services in times of need. These factors have been adopted by many jurisdictions with the goal of preventing child abuse and neglect.

The Five Protective Factors



Parental Resilience: the ability to manage and bounce back from all types of challenges that emerge in every family's life



Social Connections: connections to networks of support essential to parents



Concrete Support in Times of Need: connecting to services to meet basic needs, as well as to address crises that may emerge



Knowledge of Parenting and Child Development: accurate information about child development and appropriate expectations for children's behavior



Social and Emotional Competence of Children: a child's ability to interact positively with others, self-regulate, and communicate effectively

[14] "Cumulative Risk of Child Protective Service Involvement Before Age 5: A Population Based Examination." See *Interactive Cumulative Risk Report*, www.datanetwork.org.
[15] In addition to the individual toll, one recent study by the UC Berkeley Haas School of Business found that for every incident of child abuse, there was a public cost of $400,533 over the lifetime of the victim. "How Much Does Child Abuse Cost?" chronicleofsocialchange.org, 1/13/17.
[16] McGrath Tierney, M. (2016). "From Family Data to Neighborhood Outcomes." *Stanford Social Innovation Review*, November 29, 2016.
[17] "The Protective Factors Framework," Center for the Study of Social Policy, www.cssp.org.

Research on Best Practices

Ample research exists on services that are particularly effective in improving child outcomes and decreasing child maltreatment. Both home visitation and early care and education services have been shown to significantly decrease instances of child maltreatment, as well as to enhance parents' protective factors.[18]







Home Visitation

Home visitation connects to parents at the very earliest stages possible, providing critical support to expecting and new parents. Through parenting information and coaching, as well as connections to key supports and services, home visitation has been proven to increase parenting skills, enhance child health and development, raise high school graduation rates, lessen juvenile justice involvement, and reduce child maltreatment.[19]

In Los Angeles, we are fortunate to have a network of at least six federally and locally funded home visiting programs across the county. For the past few years, First 5 LA, the Partnership on Early Childhood Investment, the Department of Public Health, and others have funded and supported the Los Angeles County Perinatal and Early Childhood Home Visitation Consortium in an effort to coordinate this network and develop a shared reporting and accountability system.

Early Care and Education

Evidence also shows that high-quality early care and education (ECE) programs that include support for families can help prevent maltreatment. For example, results from the Chicago Parent Child program, which includes a half-day preschool program for three- and four-year olds along with comprehensive family services, have demonstrated markedly lower rates of substantiated (verified) abuse and neglect.[20] Over the last 15 years, the Los Angeles County Office for the Advancement of Early Care and Education, along with the Child Care Planning Committee and the Policy Roundtable for Child Care and Development, have been working on strategically aligning County services with the early childhood education and child development programs that are supported by federal, state, local, and philanthropic resources. Their goal is not to create a new system, but to strategically connect effective programs into a countywide network dedicated to strengthening families, enhancing child development, and preventing child maltreatment.

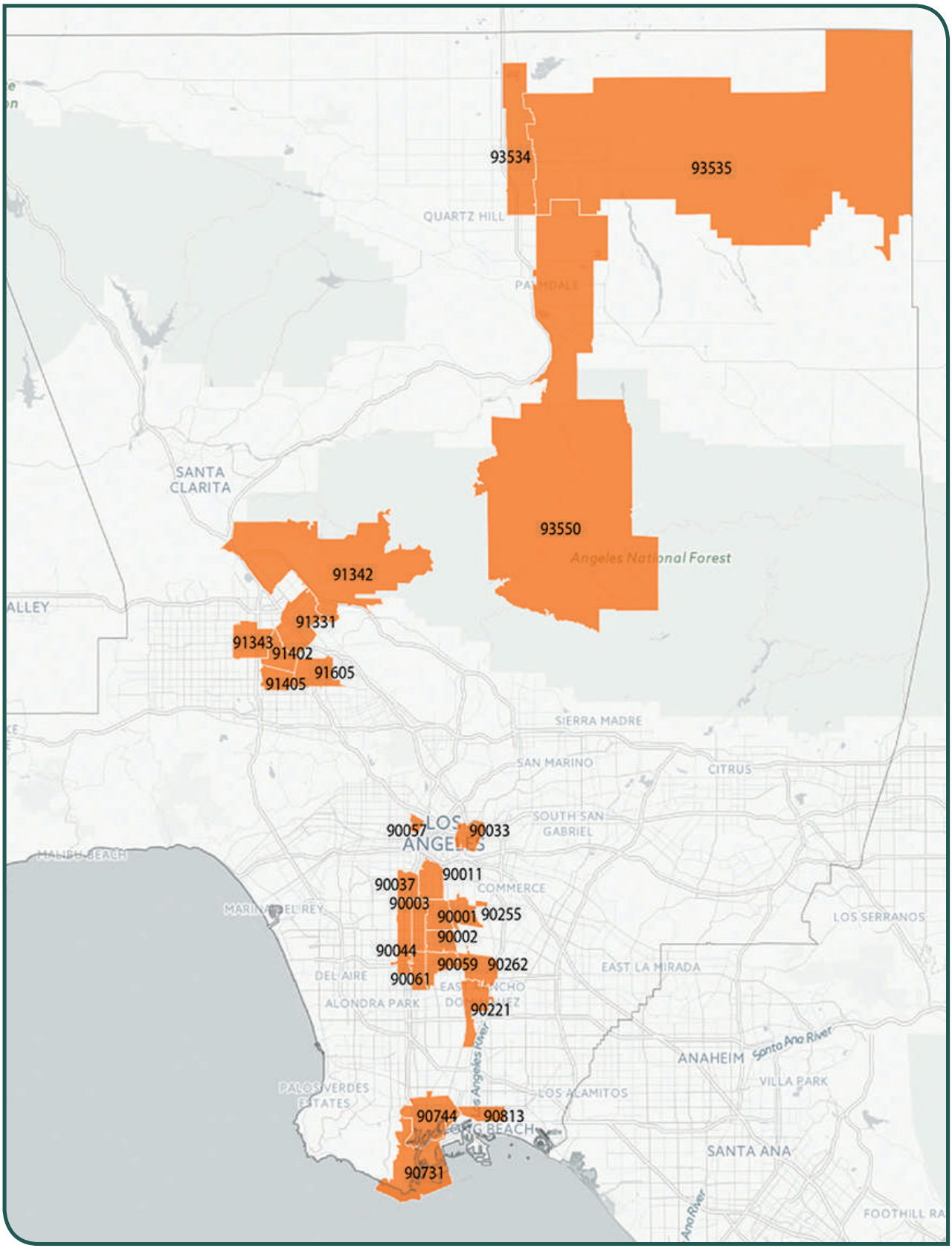
This work includes an ongoing partnership with First 5 LA, the Child Care Alliance of Los Angeles, Los Angeles Universal Preschool, the Los Angeles County Office of Education's Head Start Division, and others to coordinate a countywide approach to improving ECE quality.

[18] For the effects of home visitation, see "Long-term Effects of Home Visitation on Maternal Life Course and Child Abuse and Neglect: Fifteen Year Follow-up of a Randomized Control Trial," *Journal of the American Medical Association*, 1997, as cited by the Los Angeles County Board of Supervisors' motion on home visitation, December 20, 2016.

[19] "Home Visiting," Children Now Issue Brief. On high-school graduation rates, see, for example, *Research Spotlight on Success: Healthy Families America Promotes Child Health and Development*. Healthy Families America (2008). www.healthyfamiliesamerica.org.

[20] Reynolds, A.J., Mathieson, L.C., & Topitzes, J.W. (2009), "Do Early Childhood Interventions Prevent Child Maltreatment? A Review of Research." *Child Maltreatment*.

Appendix C: Los Angeles County "Hot Spot" ZIP Codes



Top 25 Los Angeles County Prevention Need and Maltreatment ZIP Codes

ZIP Code	Neighborhood	Prevention Need Rank	Maltreatment Rank	Average Rank
90003	South L.A.	2	1	1.5
90044	Athens	5	2	3.5
90002	Watts	6	4	5
91402	Panorama City	4	7	5.5
93550	Palmdale/Lake Los Angeles	1	12	6.5
90059	Watts/Willowbrook	7	10	8.5
90011	South L.A.	18	5	11.5
90037	South L.A.	21	3	12
91405	Van Nuys	8	22	15
90057	Westlake	9	23	16
90001	Florence/South L.A.	20	15	17.5
91331	Arleta/Pacoima	25	11	18
90061	South L.A.	19	18	18.5
90033	Boyle Heights	40	6	23
90221	East Rancho Dominguez	26	21	23.5
91342	Lake View Terrace/Sylmar	29	20	24.5
90731	San Pedro/Terminal Island	37	13	25
91605	North Hollywood	27	24	25.5
93535	Hi Vista	43	9	26
91343	North Hills	45	8	26.5
90255	Huntington Park/Walnut Park	16	41	28.5
90744	Wilmington	46	16	31
93534	Lancaster	49	17	33
90813	Long Beach	3	63	33
90262	Lynwood	33	34	33.5



Appendix D: The Prevention and Aftercare Networks/Best Start Listening Tour

In addition to studying the research on effective approaches and services and documenting our experience with various prevention efforts, we also went straight to the source. To learn more about what works and what can be improved upon, the OCP, the Los Angeles County Commission for Children and Families, and First 5 LA undertook a "listening tour" of Prevention and Aftercare network (P&A) and Best Start providers. These community meetings identified 12 themes that were consistently articulated across these networks:

- **It's important to focus on the child/family/community levels.** The goal is to build stronger families; children exist within families, and families within communities.

- **The critical strategies connected to "protective factors" are consistently recognized.** Much similarity exists in how the DCFS prevention networks and the Best Start communities approach child well-being, strengthening families and communities through: (1) increasing social connections (decreasing isolation) of parents and families; (2) improving the economic opportunities and conditions of families; and (3) enhancing a family's ability to access appropriate and responsive supports or services in times of need. Several entities referred to these critical three elements as the "braided strategies." Some P&A providers add two additional factors: the social/emotional competence of adults, and a family's increased economic opportunity, stability, and security. There is an overall recognition of the important impact protective factors have on prevention.

- **There is also recognition of the vital yet challenging role of economic stability.** Many conveyed that of all the factors embedded in the three strategies, "economic opportunity and stability" was the most difficult to address and to achieve. Interestingly, the Los Angeles County Department of Social Services (DPSS)—which manages many streams of income support for families—was not often cited as a department with which the networks had a strong connection. Navigating mainstream systems such as Supplemental Security Income (SSI), the Earned Income Tax Credit, CalFresh, and others was also cited as a challenge.



- **P&As and Best Start communities have a critical role in helping parents connect to and navigate systems or networks of support.** All discussed the difficulties parents have in finding their way among networks and separate systems of services; organizations often play an essential role with navigation assistance. One theme expressed was the importance of looking at what is already in communities and finding ways to connect resources so support is more effective and integrated—it's about connecting to what already exists.

- **Beyond navigation, it's also about establishing trusted relationships between parents and providers.** In addition to the themes of navigation and access, the importance of trust came up consistently. A relationship with a trusted individual or organization is crucial in a couple of ways. First, parents need a trusting relationship with someone they can have an honest conversation with ("letting their guard down") about barriers or issues being faced by their families, especially when those issues include immigration status, substance abuse, domestic violence, mental illness, the clearing of criminal records, etc. The second element is a trusted network of services—appropriate, beneficial, and responsive (including culturally) to the needs of the adult or family. This theme is much less about parents' need for "information and referral" than it is about building trusting relationships, helping parents connect to appropriate services, and keeping tabs to make sure services are provided. Many mentioned needing to actually go with parents—occasionally providing the transportation—to connect to services (sometimes referred to as a "warm hand-off") and to following up with parents to ensure they are accessing the services and supports needed.

- **Building authentic partnerships with parents is key.** Trusting relationships require authentic partnerships with parents, where they are seen both as equal to and as potential resources for others at the table—community-based organizations and providers, department representatives, etc. Oftentimes the parent voice is not as well incorporated as it should be.

- **Developing trusting relationships takes time.** Given the importance of trust and families' feeling they are in a trusting environment, this work takes time. Examples of uncovering "deeper" issues in families only after working with them for a period of time surfaced in many conversations. Some entities referenced four to six months for those relationships to be developed.



- **Though they are not the main barrier to enhancing prevention, some specific additional resources are needed.** Overall, issues of helping parents access services and supports centered around the need to develop trusting relationships and trusted navigators, but specific service gaps were also identified in several conversations. Those most often cited were in children's mental health and postpartum depression treatment, as well as resources to enhance economic stability. In addition, many expressed a need for flexible funding to engage parents via informal community events while also supporting logistics like child care, event venue fees, and transportation.

- **County department connections to communities are vitally important . . . and remain inconsistent.** Relationships with the regional/local offices of various County departments affect local networks and communities. Many providers serve several jurisdictions and could compare areas in which those relationships helped or hindered a network's ability to engage parents and families. For prevention, relationships with regional DCFS offices are key, and those depend greatly on the individual regional administrators. Many participants also cited connections to schools as important, but often missing, because access depends on one-on-one relationships with the principal.

- **Connecting networks greatly enhances the array of resources available to families, and should be more intentional.** Family-serving networks are innovative and nimble, and have found effective ways to connect to other supports. Significant differences exist in how networks are structured and operationalized, but what they have in common is providing an environment that engages parents and connects them to resources and services that are funded by a broad variety of entities. Various network meetings, community workgroups, Best Start community partnerships, and other forums bring together parents and needed resources. Some are formal (getting into a program, for example), and many are informal (a plumber who is able to help out a neighbor at a lower price than if the neighbor had to call a business). Many networks are able to set up workgroups when gaps in necessary services and supports are identified, and find ways to connect to others providing them. As important as this is, several entities mentioned that this could be much more intentional (some suggested it be mandated and measured for accountability).

- **Categorical funding and reporting requirements are often challenging.** From a provider perspective, the categorical nature of funding complicates the goal of connecting families to critical services, requiring navigators to piece together multiple requirements and funding streams that can be flexibly used to meet family needs. Providers also pointed to the different reporting requirements for each funding stream as a barrier contributing to a disjointed system. They further noted that funding is generally for direct services, making it difficult to fund community support/trust-building strategies.

- **Though a lot of data exist, there is no standardized, consistent way to measure and report on prevention.** This is critical and needed. Related to the focused strategies and related outcomes ("the protective factors"), participants sent a consistent message that we need to do more to measure prevention in a standardized, consistent way. This would enable us to better measure progress and consistently tell the story of the importance of investing in prevention. Although each P&A provider collects data uniquely, there is no common framework, without which it's hard to demonstrate a direct impact on prevention.

APPENDIX

Los Angeles County Perinatal and Early Childhood Home Visitation Consortium Data Workgroup

Home Visiting Program Outcome Indicators

These indicators are intended to measure short term outcomes for clients of all major LA County home visiting programs. They are based on the intended outcomes of the programs, national data collection efforts such as MIECHV and the Pew Home Visiting Project, and health care quality measures such as HEDIS.

Mission:
To coordinate, measure and advocate for high quality home-based support to strengthen all expectant and parenting families so that the children of Los Angeles County are healthy, safe and ready to learn.

1. **Breastfeeding**
    a. **Any breastfeeding and exclusive breastfeeding**
    b. **Initiation and three-, six-, and twelve-month intervals**
2. **Depression Screening**
    a. **Positive screens for depression**
3. **Well-Child Care Visits**
4. **Timely Postpartum Follow-up Visits**
5. **Mother's Insurance Status**
6. **Child ED/ER Visits**
7. **Child Maltreatment**
8. **Child Development**
    a. **Screening, referral, and Regional Center assessment**
9. **Adequate Prenatal Care**
10. **Postpartum Family Planning**

APPENDIX

Executive Summary
Home Visiting in Los Angeles County: Current State, Gaps & Opportunities

Home visiting[1] is a form of family support that includes parent coaching and comprehensive resource referrals provided by trained professionals in the home and community environment. It has been proven through research to be effective in reducing child abuse and neglect, improving child development, reducing preterm births, improving maternal and child health, increasing school readiness, reducing reliance on public financial benefits, and reducing crime. It is an invaluable model for improving family outcomes, preventing expensive crisis-based intervention, and triaging families to appropriate and needed services.

The Los Angeles Partnership for Early Childhood Investment and First 5 Los Angeles engaged Big Orange Splot, LLC, on behalf of the Los Angeles Perinatal and Early Childhood Home Visitation Consortium ("LACPECHVC"), to perform a deep analysis of the current home visiting landscape in Los Angeles, including current models, capacity, gaps and maximization opportunities. The purpose of this analysis was to provide a solid foundation of data with which to ground future planning and advocacy. This executive summary provides an overview of the key findings from that research.

Acknowledgments

Many thanks to our funders, LA Partnership for Early Childhood Investment and First 5 LA, without whom this research would not have been possible, as well as to Michaela Ferrari (LACPECHVC Coordinator); LACPECHVC Data, Referrals and Advocacy Workgroups; LA Department of Public Health MCAH; Gina Airey Consulting; and LA Best Babies Network, for their respective data and design contributions.

What home visiting models do we have here in LA?

Los Angeles County has both "universal" & intensive home visiting models. ***Universal home visiting models*** are shorter-term, less frequent models that focus on perinatal well-being, including preventing adverse health, parenting, and developmental outcomes, and screening to identify individuals in need of more intensive support. They are offered to all expectant and new parents in a community, regardless of family risk attributes. In Los Angeles County, one "universal" program —Welcome Baby—is active, but it is currently only available to mothers delivering at 14 of the County's hospitals.

Intensive models are longer term and more frequent. While the specific focus varies by program, intensive models typically include an emphasis on healthy child development, the prevention of child abuse or neglect, mental health, maternal health, and self-sufficiency. Intensive models are only available to parents who meet specific risk, income, geographic, and/or age criteria. The various intensive models have different curricula/methodology, staff requirements, frequency of client contact, length of services, entry requirements, intended outcomes, and actual outcomes as demonstrated through research. The LACPECHVC document "Program Details for LA County Home Visitation Programs" summarizes many of these differences.

[1] We define home visiting as follows: "Perinatal and early childhood home visiting is a multi-disciplinary, family-centered support and prevention strategy with services delivered by trained professionals in the home that: (1) is offered on a voluntary basis to pregnant women and/or families with children through the age of 5; (2) provides a comprehensive array of holistic, strength-based services that promote parent and child physical and mental health, bonding and attachment, confidence and self-sufficiency, and optimizes infant/child development by building positive, empathetic, and supportive relationships with families and reinforcing nurturing relationships between parents and children; and (3) is designed to empower parent(s) to achieve specific outcomes which may include: healthy pregnancy, birth and infancy; optimal infant/child development; school readiness; and prevention of adverse childhood and life experiences."

What outcomes have the models available in LA been proven to achieve?



Volumes of research illustrate the impact that different home visiting models have achieved in

- improving family safety and parenting,
- decreasing criminal activity,
- increasing child and maternal health,
- improving mental health outcomes,
- improving child cognitive and social development, and
- decreasing reliance on public assistance.

The table below provides an overview of the impact of home visiting models on specific outcome areas, based on existing research, by each model type currently in operation in Los Angeles: Early Head Start ("EHS"), Nurse-Family Partnership ("NFP"), Healthy Family America ("HFA"), Parents as Teachers ("PAT"), Welcome Baby ("WB"), Partnerships for Families ("PFF") and Healthy Start ("HS"). The accompanying report "What Research Proves about the Impact of Home Visiting Models Used In Los Angeles" provides an in-depth review of each program's impacts.

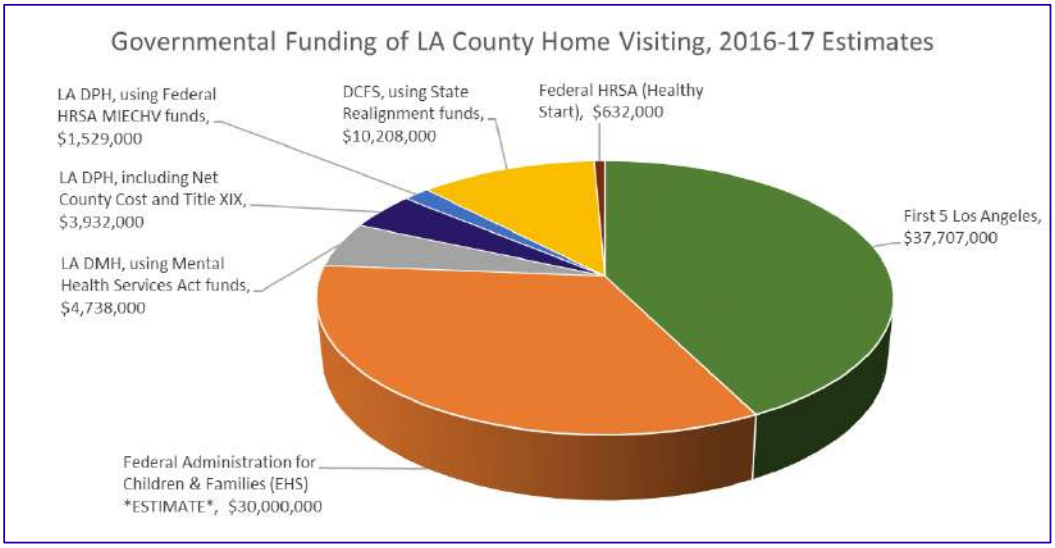
	EHS	NFP	HFA	PAT	WB	PFF	HS
Increases Cognitive & Social Development	✔	✔	✔	✔	✔		
Improves School Performance		✔	✔	✔			
Improves Maternal Health		✔	✔	✔	✔		
Improves Child Health	✔	✔	✔	✔	✔		
Improves Mental Health	✔	✔			✔	✔	
Improves Family Safety & Parenting	✔	✔	✔	✔	✔	✔	
Increases Self-Sufficiency (Decreases use of Public Assistance; Increases Training or Employment)	✔	✔	✔				
Decreases Crime		✔					

What is the current capacity of home visiting in Los Angeles?

Analysis of current home visiting capacity and gaps revealed that we have a strong base of quality home visiting programs established in Los Angeles. Current publicly-funded[2] home visiting programs in Los Angeles are funded through the contributions of five local governmental entities, plus numerous contracts awarded by the federal government to local non-profit organizations.

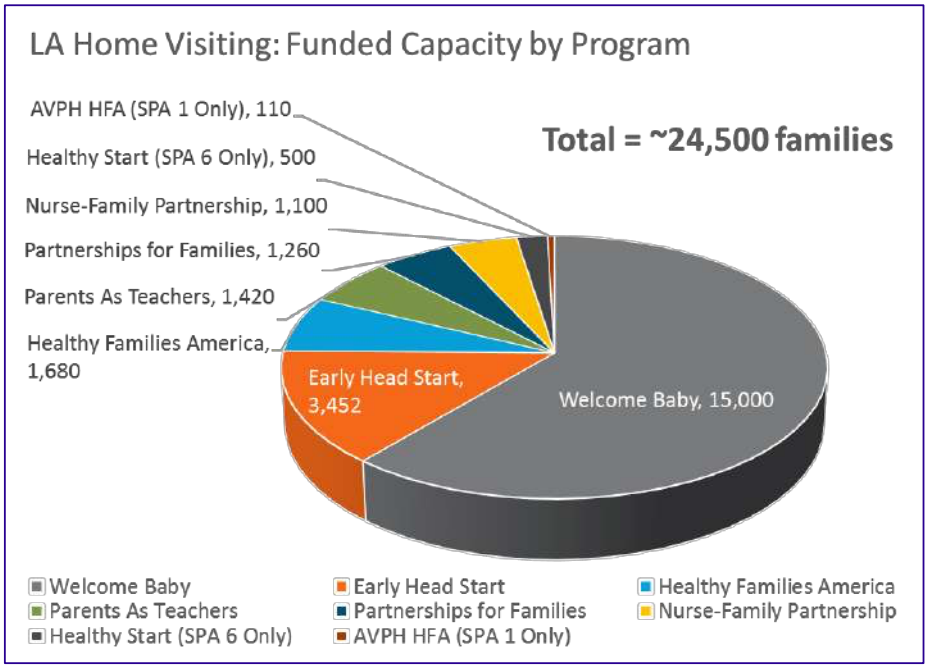
[2] While the majority of home visiting programs in Los Angeles utilize public funding, it is worth noting that there are additional smaller home visiting programs run by non-profit agencies utilizing philanthropic or grant dollars that are not included in the numbers herein. There are also additional family services provided in the home (such as home-based therapeutic interventions) that are not reflected here because they are either not preventative or not comprehensive.

Funding Source	Models	Families/Year
First 5 LA	Healthy Families America & Parents as Teachers; Welcome Baby	3,100 High-Risk 15,000 General
DPH (MIECHV, TCM, MAA) **Dept. of Mental Health (MHSA, PEI)**	Nurse-Family Partnership Healthy Families America	1,210 High-Risk
Dept. of Children & Family Services (State Realignment $)	Partnerships for Families	1,260 High- Risk
Federal Contracts (HRSA Healthy Start, Head Start)	Early Head Start Healthy Start	3,950 High-Risk



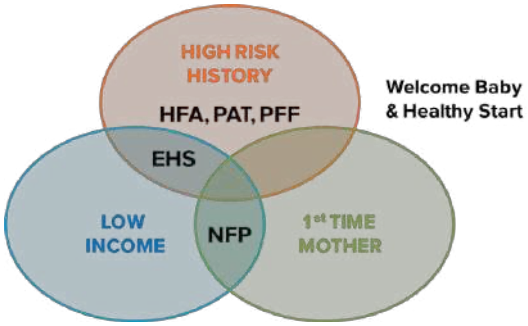
* Note: Federal ACF (EHS) funding is estimated based on comparative volume and intensity of services. Obtaining exact EHS home-base funding for LA County is not possible due to EHS contract structures.

Collectively, these funding streams enable 55 local non-profit organizations to provide home visiting services to LA families, with the collective total capacity to help approximately 24,500 families per year, including approximately 15,000 families from the general population and 9,500 high-risk families, who receive intensive services, per year. The accompanying report to this Executive Summary, "Home Visiting Providers in Los Angeles County, By Program Model," lists these local non-profit organizations and indicates the models each offers.



What eligibility restrictions currently limit access to home visiting?

Each Los Angeles-based home visiting model has different eligibility requirements including geography, age, income, and risk profile.



Geographic Restrictions: The programs that are restricted to a particular Service Planning Area ("SPA") include Healthy Start and Antelope Valley Partners for Health's Healthy Families America. Early Head Start is restricted by zip code. The programs restricted to Best Start Neighborhoods include Welcome Baby, Healthy Families America, and Parents as Teachers. Nurse-Family Partnership and Partnerships for Families are available to families who reside throughout Los Angeles.

Age Restrictions: Most intensive programs in Los Angeles require entry at or prior to birth. Nurse-Family Partnership is available for families entering before 28 weeks postpartum. Welcome Baby is available to families entering at or prior to birth. Healthy Family America and Parents as Teachers are only available to families entering at birth. Partnership for Families is available to general community members entering prenatally up to the child's first year. Entry into Healthy Start extends from the prenatal period through age 2. Early Head Start is available from the prenatal period to age 3.

Income and Risk Profile: Welcome Baby and Healthy Start programs are available to families of all incomes and risk profiles. Healthy Families America, Parents as Teachers, and Partnerships for Families are available only to families that have a history of high risk. Early Head Start is available to families that have a high risk history and who are low income. Nurse-Family Partnership is available to low-income, first-time mothers.

It is worth noting that, because of the combination of these factors, no home visiting resources are currently available for families with children ages one to three outside of the zip codes served by EHS or for those families who do not meet the EHS need-based criteria. Below is a table that crosswalks all of the eligibility requirements by model.

Model	Age Restrictions for Enrollment	Geographic Restrictions	Risk-based Restrictions
Welcome Baby	Prenatal or at birth	Best Start Communities	N/A
Welcome Baby "Light"	At birth	Non-Best Start Communities	Assessed as high-risk via hospital screening
HFA & PAT	Entry at birth	Best Start Communities	Assessed as high-risk via hospital screening
Early Head Start (EHS)	0-3; some prenatal	By zip code	At risk or in poverty (100%FPL)
Nurse-Family Partnership	By 28 weeks pregnant	N/A	1st time mom, 200% FPL or WIC/Medi-Cal eligible
Partnerships for Families	Prenatal to 12 mo., or referred by DCFS	N/A	History of domestic violence, mental health challenges, substance abuse, or an unsubstantiated closed DCFS referral
Healthy Start	Prenatal to 24 mo.	SPA 6 only	N/A
Antelope Valley HFA	Prenatal to 3 months	SPA 1 only	At risk

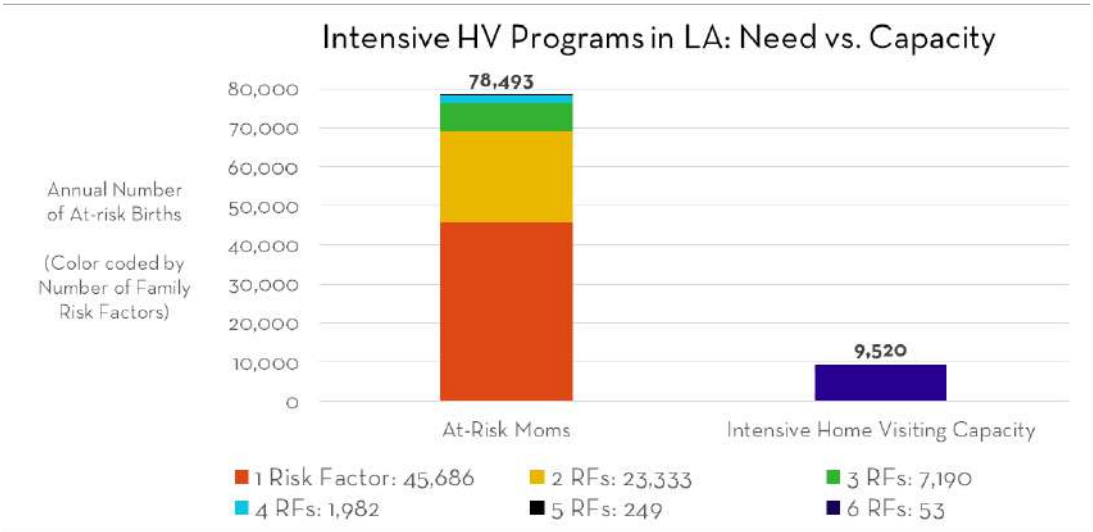
Are we currently maximizing our existing funded capacity?

Data, research, and interviews with home visiting providers revealed that we are very close to maximizing our current capacity. EHS, PFF and Antelope Valley HFA are generally operating at capacity, although recent changes in funding allocations may temporarily open up new capacity in some SPAs for PFF. Most of the models with unfilled capacity require prenatal or birth enrollment; these models include: Welcome Baby, HFA, PAT, and NFP. Healthy Start also has some unfilled capacity, but is only available in SPA 6. Efforts to increase coordination around prenatal recruitment might be the most helpful way to realize the full impact of Welcome Baby, HFA, PAT, NFP, and Healthy Start.

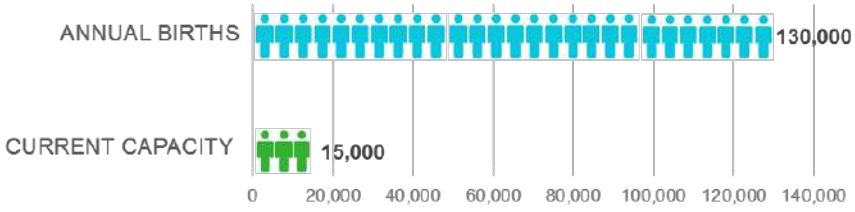
How does our current capacity relate to full community need?

Comparing current home visiting capacity to the full community need for family support reveals a substantial gap in services for both high-risk populations and the general LA population.

The 2014 Department of Public Health LAMB data reveals an estimated 78,500 families giving birth in LA County each year exhibit at least one high-risk factor;[3] an estimated 33,000 families exhibited two or more risk factors. Comparing this community need to the 9,500 spots currently available for at-risk families in Los Angeles documented above points to a current rate of only 12-29% of high-risk families accessing home-based family support in Los Angeles. The graph to the right demonstrates the gap between the need for intensive services in Los Angeles County and the number of families who receive intensive services on an annual basis.

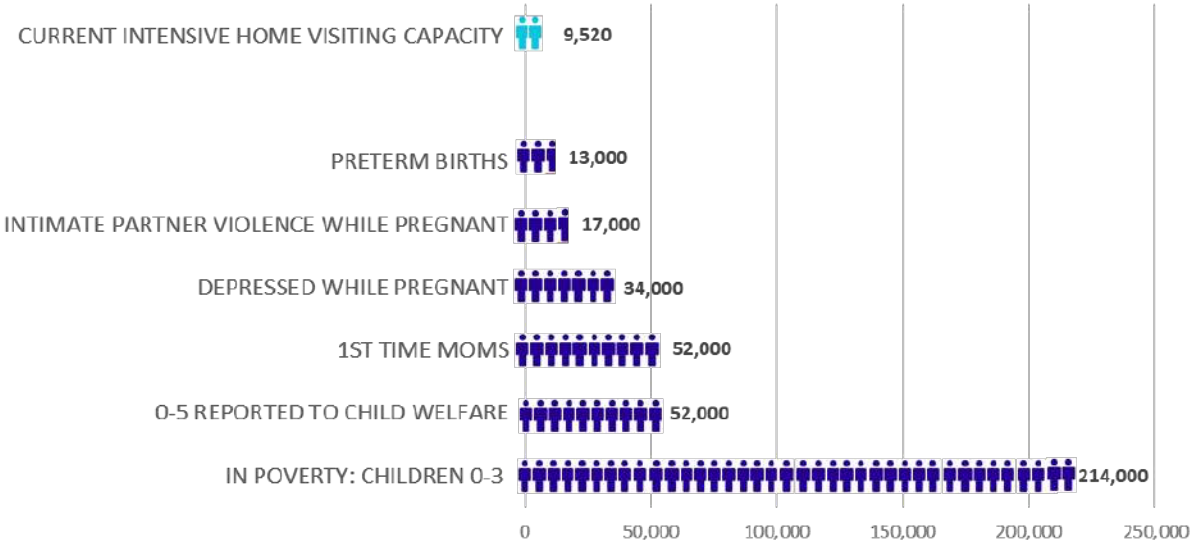


A comparison of the 15,000 families who receive "universal" preventative home visiting services with the 130,000 births annually in LA County reveals a similar need to improve our system of supports by expanding funding. Current funding provides sufficient capacity to serve 12% of the general population.



[3] Risk factors included in our analysis were as follows: depressed while pregnant, teen mom, used illicit drugs while pregnant, physically abused while pregnant, entered prenatal care after 3 months, less than a high school education, and homeless while pregnant. Risk factors were chosen based on a combination of Children's Data Network research regarding child abuse risk factors and the expertise of the LACPECHVC Data Workgroup. Findings from the LAMB survey were extrapolated to the number of women who give birth annually in LA for a population estimate.

The current capacity also falls short of the need for specific at-risk populations of interest. The current intensive home visiting capacity in Los Angeles County, as previously mentioned, is approximately 9,500 families per year, yet, each year in Los Angeles County there are 13,000 pre-term births, 17,000 mothers who experience intimate partner violence while pregnant, 34,000 mothers who are depressed while pregnant, 52,000 first time moms, 52,000 mothers who are reported to child welfare, and 214,000 children ages zero to three that are living in poverty. These figures show a stark contrast between need and capacity for the specific at-risk populations that LA home visiting programs seek to serve.



How well do our current programs meet the needs of our diverse LA community?

Research regarding cultural competency reaffirmed the value of already existing LA models. Some models operating in LA have research demonstrating their effectiveness with specific minority populations; the accompanying report "What Research Proves about the Impact of Home Visiting Models Used in Los Angeles" provides a summary of research relating to each program's impacts on specific subpopulations. More importantly, research underscored that the most important consideration in achieving cultural competency within programs is not the structural model, but rather the integration of reflective practices into program implementation, training, and ongoing staff support. These revelations underscore the value of existing reflective practices and community feedback loops that current home visiting programs pursue, and point to the value of ensuring that we support these practices in our Countywide workforce efforts.

What are our best opportunities for system improvement in Los Angeles?

One of the most prominent opportunities to improve the system of home visiting in Los Angeles is the identification of new funding streams to expand capacity for both at-risk and general populations. With the looming threat of reduced MIECHV and First 5 funds on the horizon, identification of long-term, sustainable funding streams will be essential. In addition, our analysis revealed the need to strive for increased funding *flexibility*. All general population services and most high-risk, high-intensity services are geographically restricted. The vast majority of high-need services also have restrictions based on child age and family income/risk criteria that further restrict access. There are vast numbers of families who are therefore not able to access home visiting services simply due to geographic and other eligibility requirements currently in place in LA.

The gap analysis also revealed opportunities to improve family impact through increased coordination around prenatal referrals. Due to restrictions on current funding that require families to enroll in many existing programs at-birth or prenatally, building additional prenatal referral pathways from medical providers and County departments into home visiting programs would enable us to better leverage existing funding streams.

EXHIBIT C

PROJECT H.O.P.E.

Help for homeless pregnant & parenting families
Opportunities for a better tomorrow
Peace of mind
Early intervention and enrichment

Serving San Fernando Valley and South Los Angeles



SERVICES OFFERED

PREGNANCY & PARENTING SUPPORT
Judgement-free physical, mental, and social support

REFERRALS
Connections to resources to help clients and their families achieve their goals

SCHOOL READINESS
Childcare and school enrollment assistance.

CARE TEAM
Consultation and collaboration with expert clinician and peer support.

CONTACT US TO ENROLL

(213) 639-6434

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DR. BARBARA FERRER and LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH

UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA, WESTERN DIVISION

ERICA JIMENEZ, individually and on behalf of a class of similarly situated individuals,

Plaintiff,

v.

DR. ERICA PAN, in her official capacity as Director of the California Department of Public Health; DR. BARBARA FERRER, in her official capacity as Director of the Los Angeles County Department of Public Health; MANUEL CARMONA, in his official capacity as the Director of Public Health for the Pasadena Public Health Department; LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH; and PASADENA PUBLIC HEALTH DEPARTMENT,

Defendants.

CASE NO. 2:26-cv-03500

DECLARATION OF AMNON Z. SIEGEL IN SUPPORT OF COUNTY DEFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PRELIMINARY INJUNCTION

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DECLARATION OF AMNON Z. SIEGEL

I, Amnon Z. Siegel, declare as follows:

1. I am a partner at the law firm of Miller Barondess, LLP, counsel of record for Defendants Dr. Barbara Ferrer (in her official capacity as Director of the Los Angeles County Department of Public Health) and the Los Angeles County Department of Public Health (collectively, the "County Defendants"). I have personal knowledge of the facts set forth herein. If called as a witness, I could and would competently testify to the matters stated herein. I make this declaration in support of County Defendants' Opposition To Plaintiff's Motion For Preliminary Injunction.

Request for Judicial Notice

2. In connection with its Opposition, the County Defendants are submitting a Request for Judicial Notice of the certain legislative and government materials. Those materials are described below, and represent true and correct copies that were obtained from publicly available locations for use in this lawsuit.

3. Attached hereto as **Exhibit D** is a true and correct copy of Chapter 93 of the Statutes of California, 1988–1989 Regular Session: 1989 Chapters.

4. Attached hereto as **Exhibit E** is a true and correct copy of California Bill Analysis, Assembly Committee on Health, A.B. 1701, April 11, 2023.

5. Attached hereto as **Exhibit F** is a true and correct copy of Senate Rules Committee, Third Reading of A.B. 1701, June 8, 2023.

6. Attached hereto as **Exhibit G** is a true and correct copy of the World Health Organization's Infant Mortality Rate Indicator Metadata, available at https://www.who.int/data/gho/indicator-metadata-registry/imr-details/1.

7. Attached hereto as **Exhibit H** is a true and correct copy of statistics regarding infant mortality from the Center for Disease Control and Prevention, available at https://www.cdc.gov/maternal-infant-health/infant-mortality/index.html.

8. Attached hereto as **Exhibit I** is a true and correct copy of a 2003

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National Institute of Health Study by D.D. Reidpath & P. Allotey titled *Infant Mortality Rate as an Indicator of Population Health*, available at https://pmc.ncbi.nlm.nih.gov/articles/PMC1732453/.

9. Attached hereto as **Exhibit J** is a true and correct copy of a discussion paper from the National Academy of Medicine titled *Vital Signs for Pediatric Health: Infant Mortality*, available at https://nam.edu/perspectives/vital-signs-for-pediatric-health-infant-mortality/.

10. Attached hereto as **Exhibit K** is a true and correct copy of a 2023 study by D.M. Ely & A.K. Driscoll in the National Vital Statistics Report titled *Infant Mortality in the United States*, available at https://www.cdc.gov/nchs/data/nvsr/nvsr74/nvsr74-07.pdf.

11. Attached hereto as **Exhibit L** is a true and correct copy of the a description of the Office of Minority Health from that office's official website, available at https://minorityhealth.hhs.gov/about-office-minority-health.

12. Attached hereto as **Exhibit M** is a true and correct copy of publicly available resources offered through the BIH Program, which are available at https://blackinfanthealth.org/resources/ and which are also discussed in the concurrently-filed Declaration of Melissa Franklin ("Franklin Decl.") at ¶ 35.

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13. Attached hereto as **Exhibits N to Q** are true and correct copies of relevant excerpts from the Department of Health and Human Services' *Report of the Secretary's Task Force on Black & Minority Health* (i.e. the "Heckler Report") which are also discussed in the Franklin Declaration at ¶ 22. The complete Heckler Report spans thousands of pages and is too voluminous to file, but is available at https://collections.nlm.nih.gov/catalog/nlm:nlmuid-8602912-mvset.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on this 6th day of May, 2026, at Los Angeles, California.

Amnon Z. Siegel

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INDEX OF EXHIBITS TO THE DECLARATION OF AMNON Z. SIEGEL

Exhibit No.	Description	Pg. No.
D.	Chapter 93 of the Statutes of California, 1988-1989 Regular Session: 1989 Chapters	5-18
E.	California Bill Analysis, Assembly Committee on Health, A.B. 1701, April 11, 2023	19-24
F.	Senate Rules Committee, Third Reading of A.B. 1701, June 8, 2023	25-30
G.	World Health Organization, Infant Mortality Rate Indicator Metadata	31-35
H.	Centers for Disease Control and Prevention, Infant Mortality (Sept. 16, 2024)	36-39
I.	D.D. Reidpath & P. Allotey, Infant Mortality Rate as an Indicator of Population Health, 57 J. Epidemiol. Community Health 344, 344–46 (2003)	40-43
J.	National Academy of Medicine, Vital Signs for Pediatric Health: Infant Mortality	44-63
K.	D.M. Ely & A.K. Driscoll, Infant Mortality in the United States, 2023, 74 Nat'l Vital Statistics Reports No. 7 at 3 (2025)	64-84
L.	U.S. Dep't of Health & Human Services, Office of Minority Health, About the Office of Minority Health	85-90
M.	Black Infant Health Program, Resources	91-126
N.	Relevant excerpts from the Department of Health and Human Services' *Report of the Secretary's Task Force on Black & Minority Health* (i.e. the "Heckler Report")	127-141
O.	Additional excerpts from the Heckler Report	142-163
P.	Additional excerpts from the Heckler Report	164-185
Q.	Additional excerpts from the Heckler Report	186-200

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EXHIBIT D

STATUTES OF CALIFORNIA

1988–89

REGULAR SESSION

1989 CHAPTERS

I am deleting Provision 4(g) to conform to this action.

Item 4260-113-890—For local assistance, Department of Health Services I am deleting Provisions 1(b), 1(j), and 1(n) and revising Provisions 1(a), 1(c), 1(g), 1(h), 1(m) and 1(o)

Provision 1(b) would have provided $1,000,000 for the provision of information, education, and referral services about sexually transmitted diseases to individuals seeking services through programs administered by the Maternal and Child Health (MCH) Branch I am deleting this provision to make funds available to support existing base MCH programs which the Legislature funded instead from the General Fund I have reduced $3,200,000 in Item 4260-111-001 to conform to this action

Provision 1(j) would have provided for a study to determine outcome measures suitable to evaluate pediatric critical care systems I am deleting this provision to make funds available to support existing base MCH programs

Provision 1(n) would have provided $90,000 to develop a brochure on the risks and benefits of a caesarean delivery versus a vaginal delivery I am deleting this provision to make funds available for base MCH programs

I am revising the language in Provision 1(a) to reduce the amount for various Sudden Infant Death Syndrome (SIDS) projects to $800,000, which the Department of Health Services advises me is sufficient for the purposes of this provision

"a ~~$1,000,000~~ *$800,000* for various Sudden Infant Death Syndrome projects including development of a SIDS autopsy protocol, support services and training for county health officials, public health nurses and law enforcement, family intervention services, parent advisory groups and data assessment."

I am revising the language in Provision 1(c) to provide funds for new and innovative projects to reduce the rate of black infant mortality which the language would have otherwise restricted.

"c $1,440,000 for new and innovative projects to reduce the rate of black infant mortality in California Of this amount, $140,000 may be used to establish one position and support a Black Infant Mortality Committee; ~~and $650,000 shall be used for outreach in Los Angeles housing projects~~."

I am revising the language in Provision 1(g) to reduce the amount for expansion of the High-Risk Infant Followup program to $1,161,000, which the Department of Health Services advises me is sufficient for the purposes of this provision

"g ~~$1,500,000~~ *$1,161,000* to expand the High-Risk Infant Followup program."

I am revising the language in Provision 1(h) This provision would have provided $740,000 for the Diabetes in Pregnancy Program I am reducing the amount provided for in this provision to $221,000 thereby making $519,000 available to support the existing base MCH program

"h ~~$740,000~~ *$221,000* for the Diabetes in Pregnancy Program, of which ~~$360,000~~ *$105,000* shall be used ~~to establish three new regions, with priority given to those targeting black infant mortality; $185,000~~ to replace SPRANS funds for program evaluation, $100,000 to fund growth in the existing eight regional programs, ~~$35,000 for program education materials; $10,000 for California Diabetes and Pregnancy Program state liaison activities; $80,000 for affiliate development materials and training;~~ and ~~$50,000~~ *$16,000* for ~~affiliate~~ administrative support."

I am revising the language in Provision 1(m) which would have required the implementation of nine perinatal substance abuse pilot projects While I am supportive of efforts in this area, I believe the five pilot projects in four counties I proposed in the Budget will give us an opportunity to identify the most effective and cost efficient means of addressing this critical concern This action conforms to the actions taken in the Departments of Alcohol and Drug Programs and Social Services My revision will provide for a four county perinatal substance abuse pilot program as originally proposed and make available funds to support existing base MCH programs

"m ~~$2,760,000~~ *$1,843,000* for implementation of ~~nine~~ *five* perinatal substance abuse pilot projects in Los Angeles, ~~San Francisco, Kern~~, Sacramento, ~~Orange~~, San Diego, *and* Alameda ; ~~and Santa Clara~~ counties "

I am revising the language in Provision 1(o) which would have required the establishment of a Black Infant Mortality Leadership Committee with members appointed by myself, the Speaker of the Assembly and the Senate Rules Committee This language is unnecessary because the Department of Health Services is currently in the process of administratively establishing a Black Infant Mortality Leadership Committee Furthermore, this language unnecessarily interferes with the responsibility of the Director of the Department of Health Services in organizing the Department, including the establishment of advisory committees, as he deems appropriate

I am sustaining that portion of the provision which identifies $140,000 for support of the Black Infant Mortality Leadership Committee, as requested in a Department of Finance Letter

"o ~~It is the intent of the Legislature that additional activities be undertaken by the department to reduce the abnormally high mortality rate among black infants.~~

~~There shall be established in the department a Black Infant Mortality Leadership Committee. The following members shall be appointed by and serve at the pleasure of the Governor the Director of Health Services (or designee); the Director of Maternal and Child Health; the Director of Alcohol and Drug Abuse (or designee); the Director of Social Services (or designee); a California County Supervisor (or designee); two local public health officers (or their designees); and a health care professional. The following members shall be appointed by and serve at the pleasure of the Speaker of the Assembly: a member of the State Assembly (or designee); two members of the Black Community Coalition; a consumer or member of a consumer advisory group; a member of the religious community; a health care professional; a pediatrician; and an obstetrician\gynecologist. The following members shall be appointed by and serve at the pleasure of the Senate Rules Committee: a member of the State Senate (or designee); two members of the Black Community Coalition; a consumer or member of a consumer advisory group; a member of the religious community; a health care professional; a pediatrician; and an obstetrician\gynecologist. The Superintendent of Public Instruction (or designee) shall also be a member of the committee.~~

~~The Black Infant Mortality Leadership Committee shall meet as frequently as necessary but no less than six times a year in order to conduct its business. It shall provide advice to and shall be consulted by the department on the establishment of policies, procedures, and programs designed to eliminate the disparity between the black and non/black populations in infant mortality. On or before January 1, 1991, the committee shall develop and present to the Legislature and Governor information which evaluates current programs; assesses current and ongoing needs; contains legislative, programmatic, and funding strategies; and make specific program recommendations regarding the elimination of the disparity between the black and non/black populations in infant mortality.~~

Of the funds appropriated in this item, $140,000 shall be used to support a Black Infant Mortality Leadership Committee ~~and its efforts in producing the information~~ "

Item 4260-121-001—For local assistance, Department of Health Services, Chronic Diseases (Alzheimer's Program). I reduce this item from $8,564,000 to $3,564,000, and delete Provisions 1 and 2

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from the director.

9. If any provision of this item or the application thereof to any person or circumstances is held invalid, this invalidity shall not affect other provisions or applications of this act which can be given effect without the invalid provision or application, and to this end the provisions of this act are severable.

4260-106-001—For local assistance, Department of Health Services, for cost-of-living increases to be transferred to, and in augmentation of, the respective appropriations by the State Controller upon enactment in accordance with the following schedule:

Schedule:

(a) 50.11-Benefits (Medi-Cal Care and Services), for transfer to Item 4260-101-001 123,555,000

4260-106-890—For local assistance, Department of Health Services, for cost-of-living increases to be transferred to, and in augmentation of the respective appropriations by the State Controller upon enactment in accordance with the following schedule. 123,021,000

Schedule:

(a) 50.11-Benefits (Medical Care and Services) (for transfer to Item 4260-101-890) 123,021,000

4260-111-001—For local assistance, Department of Health Services 1,291,314,354

Schedule:

(a) 11-Preventive Medical Services ... 9,454,000
(b) 15-AIDS 107,287,000
(c) 20-Family Health Services 150,590,000
(d) 40-Rural and Community Health 1,023,983,354

Provisions:

1. Program 11-Preventive Medical Services: Of the funds appropriated in this item, $330,000 shall be available as a cost-of-living adjustment for the Dental Disease Prevention Program.
2. Program 15-AIDS:
   (a) The Office of AIDS, in allocating and processing contracts and grants, shall comply with the same requirements as are established for contracts and grants for other public health programs. Specifically: (1) the

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office shall develop request-for-proposals which include the standards pursuant to which the proposals will be evaluated; (2) the office shall use an evaluation and selection committee consisting of persons with expertise in reviewing proposals; (3) it may negotiate the terms and conditions of the contracts and grants; (4) it may reject any and all contracts or grants; and (5) it shall publish a timetable and develop appropriate outreach efforts to assure that the request for a proposal reaches appropriate recipients of funds. The contracts or grants administered by the Office of AIDS shall be exempt from the Public Contract Code and shall be exempt from approval by the Department of Finance and the State Department of General Services prior to their execution.

(b) During hearings on the 1990–91 fiscal year Budget, the department shall present an analysis of the advantages and disadvantages of incorporating the treatment program for HIV infected children into the California Children's Services Program.

By January 1, 1990, the department shall project the costs of treating HIV infected children. To the extent that costs are less than the $1,100,000 budgeted for that purpose, the department shall reallocate the funds for noninstitutionalized treatment services for persons with AIDS or ARC.

(c) The Department of Health Services shall permit the San Francisco Health Department to consolidate state grants into a Consolidated AIDS Fund for the provision of AIDS services in San Francisco. The Consolidated AIDS Fund shall base grants on a state approved local plan developed with the participation of the community. The department shall not deny community-based agencies who wish to participate in the Consolidated AIDS Fund from applying for other AIDS funds from the department.

(d) Of the amount appropriated in this item, $40,000,000 shall be allocated for early AIDS intervention including AZT, aerosol penta-

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midine, and other medications approved for treatment of HIV, and medical, behavioral, and psychosocial services.

(e) Of the amount appropriated in this item, $10,000,000 shall be allocated for AIDS testing, counseling, and street-outreach in communities with high IV drug use.

(f) Of the amount appropriated in this item, $200,000 shall be expended for operating expenses of the AIDS hospice facility in South Central Los Angeles.

(g) Of the funds appropriated in this item, $111,000 shall be allocated to the Prevention and Education Grant Program in Sonoma County in addition to expected 1989–90 awards.

(h) Of the amount appropriated in this item for the Alternative Test Site Program, $13,800 is redirected for an AIDS Pilot Care Project located in Mendocino County. This funding is in addition to any contract approved by the Office of AIDS for an AIDS Pilot Care Project in Mendocino County in the 1989–90 fiscal year.

(i) Of the funds appropriated in this item, $250,000 shall be available for an operating grant for an AIDS hospice on the grounds of Metropolitan State Hospital.

(j) The department shall develop and distribute, by March 31, 1990, a brochure for providers which outlines the alternatives available for HIV testing, including instructions on how to order and interpret tests.

(k) Of the amount appropriated in this item, $12,000,000 shall be allocated for targeted case management, home health, hospice, and residential care.

(*l*) The department shall expand outreach and testing to high-risk populations and encourage counties to expand testing in Sexually Transmitted Disease clinics, drug treatment centers, primary care and family planning clinics, and through street outreach programs.

3. Program 20-Family Health Services:

(a) Funds appropriated in this item for services to physically handicapped children shall be

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used in accordance with provisions of Article 2 (commencing with Section 248) of Chapter 2 of Division 1 of the Health and Safety Code, provided that any person who is eligible for and is receiving services under the program funded by this item shall not be denied services or suffer an interruption of services because of any relocation within this state.

(b) Collections of family repayments by CCS and GHPP in excess of the appropriation for family repayments shall be used to offset the General Fund appropriation to those programs.

(c) The CCS Program shall require all CCS applicants who are potentially eligible for cash grant public assistance to apply for Medi-Cal eligibility prior to becoming eligible for CCS funded services, unless the individual declines to apply on the basis of known ineligibility under state law and the regulations promulgated thereunder

(d) As a condition of receiving General Fund support from the Maternal and Child Health program, contractors shall bill the Medi-Cal program for services provided to Medi-Cal eligibles.

(e) The department shall revise its regulations governing the Child Health and Disability Program in order to begin serving low-income children up to age six to the extent funds are available.

(g) Of the funds appropriated in this item, the department shall use the following amounts for the purposes specified:

(1) $274,000 for transfer to, and augmentation of, Item 4260-001-001 for evaluation of perinatal substance abuse pilot projects.

(2) $200,000 for transfer to, and augmentation of, Item 4260-001-001 for a contract for the development of a statewide perinatal plan to meet the Surgeon General's Objectives for the Year 2000 on Infant Mortality. The plan shall be submitted to the fiscal committees of the Legislature and the Joint Legisla-

Item		Amount
	tive Budget Committee by June 30, 1990.	
	(h) The department, in conjunction with submission of the Governor's Budget, shall report to the Joint Legislative Budget Committee and the fiscal committees of the Legislature on the level of federal Maternal and Child Health funds and funds allocated for the community-based perinatal services program available for expenditure for the remainder of the fiscal year. To the extent the amount available exceeds expenditure levels for the year, the department shall submit an expenditure plan no later than 30 days after submission of the Governor's Budget for those funds available for expenditure during both the current and budget years. The Department of Finance shall submit a letter pursuant to Section 28.00 of this act to provide for the purposes in the expenditure plan for the current year no sooner than 30 days and no later than 60 days after submission of the plan to the Legislature.	
	(i) The augmentation for the Adolescent Family Life Program shall be used as follows: the first priority shall be to ensure a maintenance of effort for existing programs; the second priority shall be to increase services addressing black infant mortality and other high-risk infant populations.	
	4. Program 40-Rural and Community Health:	
	(a) The reimbursement rate for any procedure or service shall not be increased to exceed the Medicare rate for a comparable procedure or service, nor shall the reimbursement rate for any procedure or service which is currently above the Medicare rate be increased above its current level.	
	(b) Amounts identified as abatements to the county medical services program for claims for retroactive aid to the totally disabled shall be transferred from the Health Care Deposit Fund to the county medical services program without regard to fiscal year.	
	(c) Funds appropriated for medically indigent services in independent counties shall be	

Item		Amount

spent to preserve or provide reasonable access to both inpatient hospital care and outpatient care.

Outpatient care includes reasonable access, as determined by the State Department of Health Services, to physician's services through county outpatient clinics, nonprofit community outpatient clinics, or other arrangements, the Medi-Cal formulary of prescription drugs, and acute dental care. The department may withhold this funding for any county for which it makes a finding that the funding is not necessary to preserve or provide reasonable access to both inpatient hospital care and outpatient care. The department shall withhold approval if it makes a finding that the county will not be in compliance with state statutory requirements governing eligibility, advance payment of patient liability, or notices.

(d) To the extent savings are available from the County Health Services Fund, the director shall allocate the funds according to the following priorities:

(1)	Public Health Emergencies.....	315,000
(2)	Distressed County Facilities, as defined in Section 16715 of the Welfare and Institutions Code.	470,000
(3)	Refugee Health Programs	245,000
(4)	Computerization of County Information.....	535,000
(5)	County-Clinic Linkages	130,000
(6)	Elder Care Projects.....	505,000
(7)	Medication Education Program for Seniors	250,000

If the funding applications of local jurisdictions request fewer funds from one category than the amounts set forth above, the director may reallocate funds from one category to another. However, in reallocating funds, the director shall first consider the need for additional funds in the categories in the order of priorities listed above. If there are insufficient savings to fully fund the categories, the director shall make pro-

Item	Amount
portionate reductions to each category. (e) Of the funds appropriated in this item, $50,000 shall be available for a management assistance grant to the Hupa Health Association to conduct a health care needs assessment. (f) Of the amount appropriated in this item, $500,000 shall be made available as a one-time grant to Alameda County to compensate for major health care service disruptions due to the closure of Maxicare clinics. (g) Of the funds appropriated in this item, $200,000 is appropriated to provide startup funding for a nonprofit organization to develop a Medi-Cal primary care case management plan to be operated in the City of Fresno.	
4260-111-137—For local assistance, Department of Health Services, payable from the Vital Records Improvement Project Fund.....	600,000
4260-111-890—For local assistance, Department of Health Services, payable from the Federal Trust Fund.....	25,872,000
Schedule: (a) 20-Family Health Services ..... 25,287,000 (b) 40-Rural and Community Health. 585,000	
Provisions: 1. Subdivisions (a) and (c) of Provision 3 of Item 4260-111-001 are also applicable to this item.	
4260-113-890—For local assistance, Department of Health Services payable from the Federal Trust Fund.....	10,806,000
Provisions: 1. Of the amount appropriated in this item, the department shall use the following amount for the following purposes: a. $1,000,000 for various Sudden Infant Death Syndrome projects including development of a SIDS autopsy protocol, support services and training for county health officials, public health nurses and law enforcement, family intervention services, parent advisory groups and data assessment. b. $1,000,000 for the provision of information, education, and referral services about sexually transmitted diseases to individuals seeking services through programs administered by the	

Item		Amount
	Maternal and Child Health Branch.	
	c. $1,440,000 for new and innovative projects to reduce the rate of black infant mortality in California. Of this amount, $140,000 may be used to establish one position and support a Black Infant Mortality Committee, and $650,000 shall be used for outreach in Los Angeles housing projects.	
	e. $1,800,000 to expand the Adolescent Family Life Program, with priority given to projects targeting black infant mortality. Of this amount, $150,000 may be used to establish three positions to administer the program.	
	f. $200,000 for the expansion of the Childhood Injury Prevention and Control Program. From this amount, the department may establish one support position.	
	g. $1,500,000 to expand the High-Risk Infant Followup program.	
	h. $740,000 for the Diabetes in Pregnancy Program, of which $360,000 shall be used to establish three new regions, with priority given to those targeting black infant mortality, $105,000 to replace SPRANS funds for program evaluation; $100,000 to fund growth in the existing eight regional programs; $35,000 for program education materials; $10,000 for California Diabetes and Pregnancy Program state liaison activities; $80,000 for affiliate development materials and training; and $50,000 for affiliate administrative support.	
	i. $141,000 to establish three positions to support the Comprehensive Perinatal Services Program.	
	j. $135,000 for transfer to, and augmentation of, Item 4260-001-890 to fund a study to determine outcome measures suitable to evaluate pediatric critical care systems and improving medical care for children.	
	m. $2,760,000 for implementation of nine perinatal substance abuse pilot projects in Los Angeles, San Francisco, Kern, Sacramento, Orange, San Diego, Alameda, and Santa Clara counties.	
	n. $90,000 shall be transferred to, and is in augmentation of, Item 4260-001-890 to develop a brochure on the risks and benefits of a Caesarean delivery versus a vaginal delivery. This brochure shall be available for distribution to all pregnant women.	

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o. It is the intent of the Legislature that additional activities be undertaken by the department to reduce the abnormally high mortality rate among black infants.

There shall be established in the department a Black Infant Mortality Leadership Committee. The following members shall be appointed by and serve at the pleasure of the Governor: the Director of Health Services (or designee); the Director of Maternal and Child Health; the Director of Alcohol and Drug Abuse (or designee); the Director of Social Services (or designee); a California County Supervisor (or designee); two local public health officers (or their designees); and a health care professional. The following members shall be appointed by and serve at the pleasure of the Speaker of the Assembly: a member of the State Assembly (or designee); two members of the Black Community Coalition; a consumer or member of a consumer advisory group; a member of the religious community, a health care professional; a pediatrician; and an obstetrician/gynecologist. The following members shall be appointed by and serve at the pleasure of the Senate Rules Committee: a member of the State Senate (or designee); two members of the Black Community Coalition; a consumer or member of a consumer advisory group, a member of the religious community; a health care professional; a pediatrician; and an obstetrician/gynecologist. The Superintendent of Public Instruction (or designee) shall also be a member of the committee.

The Black Infant Mortality Leadership Committee shall meet as frequently as necessary but no less than six times a year in order to conduct its business. It shall provide advice to and shall be consulted by the department on the establishment of policies, procedures, and programs designed to eliminate the disparity between the black and non-black populations in infant mortality. On or before January 1, 1991, the committee shall develop and present to the Legislature and Governor information which evaluates current programs; assesses current and ongoing needs; contains legislative, programmatic, and

Item		Amount

funding strategies; and make specific program recommendations regarding the elimination of the disparity between the black and non-black populations in infant mortality.

Of the funds appropriated in this item, $140,000 shall be used to support a Black Infant Mortality Leadership Committee and its efforts in producing the information.

2. Subject to approval by the lead department, the departments of Social Services, Health Services, and Alcohol and Drug Programs may award funds to local pilot projects for local planning and program startup. In order to receive continued funds, the lead department shall require local lead agencies, with the review and comment of the local perinatal substance abuse coordinating councils, to submit a plan for providing comprehensive service to program participants. The department shall allow local areas at least six weeks to develop this plan in response to the department's guidelines. The departments, through the Interagency Task Force on Perinatal Substance Abuse, shall complete their review and provide their assessment of each local area's plan within 45 days from the date when a plan is received. In order to be approved by the participating departments, the plan shall include, but not limited to, the following:
   (a) How the local area proposes to address the guidelines developed by the department.
   (b) Letters from all agencies providing services to eligible program participants indicating their approval of the plan and stating their intent to develop interagency agreements.
   (c) The program's budget, delineating planning, startup, and service costs.
3. To the extent that funds allocated under particular category in this item are in excess of the need in that category, the department may transfer funds to another category in this item no sooner than 30 days after written notification is provided to the Joint Legislative Budget Committee.

Upon approval of the Department of Finance, the department may transfer funds to Item 4260-001-890 for staff and related costs needed to support the augmentations contained in this item.

EXHIBIT E

Date of Hearing: April 11, 2023

1) ASSEMBLY COMMITTEE ON HEALTH

Jim Wood , Chair

2) AB 1701

(Weber) – As Introduced February 17, 2023

SUBJECT: Black infant health: California Perinatal Equity Initiative.

SUMMARY: Expands the definition of local health jurisdictions eligible to apply for the California Perinatal Equity Initiative (PEI) to include a city or city and county.

EXISTING LAW:

1) Establishes the Department of Public Health (DPH), directed by a state Public Health Officer (PHO), to be vested with all the duties, powers, purposes, functions, responsibilities, and jurisdiction as they relate to public health and licensing of health facilities, as specified. Gives the PHO, broad authority to detect, monitor, and prevent the spread of communicable disease in the state. [Health & Safety Code (HSC) §131050 and §120130, *et seq* .]

2) Requires each county board of supervisors to appoint a local health officer (LHO). Requires LHOs to enforce and observe orders and ordinances of the board of supervisors, pertaining to the public health and sanitary matters, orders, including quarantine and other regulations, prescribed by DPH, and statutes relating to public health. [HSC §101000 and §101030]

3) Establishes the Maternal, Child and Adolescent Health program within DPH to improve the health and well-being of women, infants, children and adolescents throughout the state. [HSC §123225- 12360]

4) Finds and declares that the rate of mortality among black infants continues to be two to four times higher than the rates for other groups statewide. States that the social support, stress management, and empowerment model of the Black Infant Health (BIH) program is an evidence- informed intervention program designed to reduce black infant mortality. [HSC §123259]

5) Requires DPH, subject to an appropriation in the annual Budget Act, to establish the PEI to expand the scope of interventions provided under the BIH program. [HSC §123260]

6) Requires the PEI to foster Community Centers of Excellence in perinatal health and promote the use of interventions designed to fill gaps in current programming offered through the BIH program. [*Id*.]

7) Requires DPH, as part of PEI, to develop a process to allocate funds to up to 15 county health departments, to work collaboratively with state and local BIH programs, to improve black infant birth outcomes and reducing infant mortality. [*Id.*]

FISCAL EFFECT: None.

COMMENTS:

1) **PURPOSE OF THIS BILL.** According to the author, this bill will provide equity within the distribution of funds already allocated to DPH for the BIH program by allowing both counties and cities with their own health departments to apply for the funds. The author concludes this will result in more equitable distribution of funds and increase the opportunity for more Black mothers and babies to have access to the funding within the program.

2) **BACKGROUND.** According to an issue brief published by the Kaiser Family Foundation in 2022 entitled "Racial Disparities in Maternal and Infant Health: Current Status and Efforts to Address Them," Black and American Indian and Alaska Native (AIAN) women have higher rates of pregnancy-related death compared to White women. Pregnancy-related mortality rates among Black and AIAN women are over three and two times higher, respectively, compared to the rate for White women (41.4 and 26.2 vs. 13.7 per 100,000). Black, AIAN, and Native Hawaiian and Other Pacific Islander (NHOPI) women also have higher shares preterm births, low birthweight births, or births for which they received late or no prenatal care compared to White women. Infants born to Black, AIAN, and NHOPI people have markedly higher mortality rates than those born to White women. Maternal death rates increased during the COVID-19 pandemic and racial disparities widened for Black women.

   Maternal and infant health disparities are symptoms of broader underlying social and economic inequities that are rooted in racism and discrimination. Differences in health insurance coverage and access to care play a role in driving worse maternal and infant health outcomes for people of color. However, inequities in broader social and economic factors and structural and systemic racism and discrimination are primary drivers for maternal and infant health. Notably, disparities in maternal and infant health persist even when controlling for certain underlying social and economic factors, such as education and income, pointing to the roles racism and discrimination play in driving disparities.

   The increased awareness and attention to maternal and infant health have contributed to a rise in efforts and resources focused on improving health outcomes in these areas and reducing disparities. These include

efforts to expand access to coverage and care, increase access to a broader array of services and providers that support maternal and infant health, diversity the health care workforce, and enhance data collection and reporting. However, addressing social and economic factors that contribute to poorer health outcomes and disparities will also be important. Moreover, the persistence of disparities in maternal health across income and education levels, points to the importance of addressing the roles of racism and discrimination within the health care system as part of efforts to improve health and advance equity.

a) **California Data** . According to the March of Dimes, infant mortality refers to death that occurs during the first year of life. Infant deaths can be further classified into neonatal (zero to 27 days) and postneonatal (28 days-under one year) periods. Neonatal mortality is typically associated with events surrounding the prenatal period and the delivery, whereas postneonatal deaths are more likely to be associated with conditions or events that arise after the delivery and may reflect environmental factors.

   In 2019, 1,889 infants died before reaching their first birthday, an infant mortality rate of 4.2 per 1,000 live births. Between 2009 and 2019, the infant mortality rate in California declined more than 14%. In 2019, 69.7% of infant deaths occurred in the neonatal period, and 30.2% occurred in the postneonal period. Some of the leading causes of infant death in the United States include: birth defects, prematurity/low birth weight, sudden infant death syndrome, maternal complications of pregnancy, and respiratory distress syndrome. The rate of perinatal mortality (fetal deaths of 28 or more weeks gestation and infant deaths in the first seven days of life) in 2019 was 4.7% live births and fetal deaths.

b) **Health Disparities** . According to the BIH program, health disparities affecting Black women and babies appear to be less dependent on age, economic status or education. Poor birth outcomes persist even when Black women have a pregnancy at an optimal age, have high income or are well educated. Black women are four to six times more likely to die from pregnancy-related causes than Asian/Pacific Islander, Hispanic/Latina and White women. Black babies are twice as likely to be born with a low birth weight (less than five lbs., eight oz.) than infants of other racial or ethnic groups.

   The March of Dimes states that during 2017-2019 (average), the infant mortality rate per 1,000 live births in California was highest for Black infants (8.3), followed by AIAN (6.3), Hispanics (4.4), White (3.2) and Asian/Pacific Islanders (API) (2.9). Black infants were about three times as likely as API infants to die during the first year of life during 2017-2019.

c) **BIH Program and PEI**. The Budget Act of 2018 established the PEI within DPH to expand the scope of interventions provided under the BIH program, established through the Budget Act of 1989. PEI funding is intended to enhance the efforts of existing BIH program with the goal of providing a culturally supportive environment to help women have healthy babies. Existing law specifies that DPH allocate funding to up to 15 county health departments with BIH programs.

BIH funding is currently provided to city and county health departments. However, several BIH programs are not eligible to apply for the complimentary PEI funding as existing statute limits the funding to county health departments, limiting the reach of PEI. According to the author, to provide complementary services to BIH programs, PEI funding eligibility should be expanded to local health jurisdictions which encompasses both city and county health departments with a BIH.

The 2022 Budget Act provides $12.5 million ongoing augmentation to the BIH program. Of this amount, $11.25 million will be awarded to county/city health departments and $1.25 million will be retained by DPH for state operations.

d) **Local Health Departments** . California's local health departments, led by LHOs, play a vital role in preparing for and responding to public health emergencies. There are 58 county local health departments and three city (Berkeley, Long Beach and Pasadena) local health departments in the state. LHOs have a broad mandate to take measures necessary to preserve and protect public health. While LHOs administer many of the programs identified under DPH, LHOs have a fundamental role as the front line for delivery of public health services to California's communities. The structure and size of LHOs vary by jurisdiction, and some include operations such as public hospitals, primary care clinics, and animal control services. Select core functions include:

d.i) **Infectious disease control** . LHOs prevent and control the spread of infectious diseases through immunizations, epidemiologic surveillance, disease investigation, laboratory testing and response activities;

d.ii) **Emergency preparedness and response** . LHOs work to ensure communities are informed, supplies and medications are accessible, and that there is capacity to expand medical services in large events. In addition, LHOs utilize public health labs to investigate and identify potential bioterrorism threats. In the event of a disaster, LHOs may staff shelters and screen for infectious diseases and address the needs of medically fragile residents; and,

d.iii) **Maternal, child, and adolescent health** . LHOs work to identify, disseminate, and promote emerging and evidence-based information about early interventions in prenatal and early childhood periods that promote lifelong health, positive social-emotional development, and reduce health disparities.

3) **SUPPORT.** The California Nurse-Midwives Association and Children Now write in support that this bill will help address critical gaps in maternal healthcare, especially in vulnerable communities.

REGISTERED SUPPORT / OPPOSITION :

Support

California Nurse-Midwives Association
Children Now

Opposition

None on file.

Analysis Prepared by: Rosielyn Pulmano / HEALTH / (916) 319-2097

EXHIBIT F

SENATE RULES COMMITTEE AB 1701
Office of Senate Floor Analyses
(916) 651-1520 Fax: (916) 327-4478

THIRD READING

Bill No: AB 1701
Author: Weber (D)
Amended: 6/8/23
Vote: 21

SUBJECT: Black infant health: California Perinatal Equity Initiative

SOURCE: Author

DIGEST:

This bill expands the entities eligible to apply for funding through the California Perinatal Equity Initiative to include city health departments, in addition to county health departments.

ANALYSIS:

Existing law:

1) Establishes the California Department of Public Health (CDPH), directed by a state Public Health Officer (PHO), to be vested with all the duties, powers, purposes, functions, responsibilities, and jurisdiction as they relate to public health and licensing of health facilities, as specified. Includes the Maternal, Child, and Adolescent Health program within this jurisdiction. [HSC §131050, §131051]

2) Establishes the Maternal, Child and Adolescent Health program within CDPH to improve the health and well-being of women, infants, children and adolescents throughout the state. [HSC §123225-12360]

3) Finds and declares that the rate of mortality among black infants continues to be two to four times higher than the rates for other groups

statewide. States that the social support, stress management, and empowerment model of the Black Infant Health (BIH) program is an evidence-informed intervention program designed to reduce black infant mortality. [HSC §123259]

4) Requires CDPH, subject to an appropriation in the annual Budget Act, to establish the Perinatal Equity Initiative (PEI) to expand the scope of interventions provided under the BIH program. [HSC §123260]

5) Requires the PEI to foster Community Centers of Excellence in perinatal health and promote the use of interventions designed to fill gaps in current programming offered through the BIH program. [HSC §123260]

6) Requires CDPH, as part of PEI, to develop a process to allocate funds to up to 15 county health departments, to work collaboratively with state and local BIH programs, to improve black infant birth outcomes and reducing infant mortality. [HSC §123260]

This bill:

1) Requires CDPH, as part of PEI, to allocate funds to up to 15 “local health jurisdictions,” rather than to “county health departments.”

2) Defines “local health jurisdiction” as a county, city, or city and county health department that meets the requirements to otherwise receive state financial assistance.

Comments

1) Author’s statement. According to the author, this bill will provide equity within the distribution of funds already allocated to CDPH for the BIH program by allowing both counties and cities with their own health departments to apply for the funds. The author concludes this will result in more equitable distribution of funds and increase the opportunity for more Black mothers and babies to have access to the funding within the program.

2) BIH program. BIH is one of the programs within CDPH’s Division of Maternal, Child, and Adolescent Health. The goal of the BIH program is to improve African-American infant and maternal health, as well as decrease black-white health inequities and social inequities for women and infants. The BIH program serves African-American women who are 18 years or older and up to 30 weeks pregnant at the time of enrollment.

18 years or older and up to 30 weeks pregnant at the time of enrollment. According to the CDPH's BIH website, within a culturally affirming environment and honoring the unique history of African-American women, the BIH program aims to help women have healthy babies. Participants learn proven strategies to reduce stress and develop life skills. This is accomplished through a group-based approach with complementary case management. BIH services are provided by family health advocates, group facilitators, public health nurses, and social workers. BIH participants report stronger positive connections to their heritage and the African-American community, increased empowerment to make behavior changes that lead to living a healthier life, and better understanding of effective stress-reduction strategies.

3) *California Perinatal Equity Initiative.* AB 1810 (Committee on Budget, Chapter 34, Statutes of 2018), the health trailer bill, established the PEI at CDPH and appropriated $8 million from the General Fund to expand the scope of interventions provided under the BIH program. The PEI is intended to foster Community Centers of Excellence in perinatal health and promote the use of interventions designed to fill gaps in current programming offered through BIH. According to the CDPH PEI website, while declines in infant mortality have been achieved, the statewide mortality rate for black infants continues to be two to four times higher than rates for other groups. The PEI aims to address the causes of persistent inequality and identify best practices to eliminate disparities in infant mortality.

Under the PEI, CDPH is required to allocate funds to up to 15 county health departments, to work collaboratively with state and local BIH programs, for the purposes of improving back infant birth outcomes and reducing infant mortality. The county health departments are required to use the funds to develop local Community Centers of Excellence at hospitals, federal qualified health centers, clinics, or community-based organizations that have demonstrated capacity to work with public health and health care systems as well as within the Black community. Recipients of local grants are required to implement or expand two of five types programs: evidence-based group prenatal care that has shown promise in reducing the incidence of adverse birth outcomes; pregnancy intentionality and preconception programs; fatherhood or partnership initiatives; evidence-based home visiting programs inclusive of case management to increase advocacy and empowerment for black women and to ensure linkages to prenatal care; or, a different strategy that is justified based on local needs and resources, if a county

determines that the strategy is evidence-based in related to reducing adverse birth outcomes. Currently 11 counties receive funding under PEI. This bill adds three additional city health departments that would be eligible for the funds: Berkeley, Long Beach, and Pasadena.

Related/Prior Legislation

AB 1810 (Committee on Budget, Chapter 34, Statutes of 2018) established the PEI at CDPH and appropriated $8 million from the General Fund to expand the scope of interventions provided under the BIH program, among other things.

FISCAL EFFECT: Appropriation: No Fiscal Com.: No Local:No

SUPPORT: (Verified 6/8/23)

American College of Obstetricians and Gynecologists District IX
California Nurse Midwives Association
Children Now
City of Long Beach
City of Pasadena
County Health Executives Association of California
Junior Leagues of California State Public Affairs Committee

OPPOSITION: (Verified 6/8/23)

Californians for Equal Rights Foundation

ARGUMENTS IN SUPPORT: The City of Long Beach, one of the cities with a public health department, writes that PEI funds will enable its health department to strengthen and fortify a comprehensive perinatal system of care for pregnant and parenting Black women. The City of Pasadena and the County Health Executives Association of California also write in support of adding the three city health departments as eligible entities for this funding, as do Children Now and the California Nurse Midwives Association.

ARGUMENTS IN OPPOSITION: The Californians for Equal Rights Foundation writes in opposition to the PEI in general, stating that the racial disparities in maternal and infant are more readily explained by lifestyle choices and underlying chronic conditions, and that the overwhelming majority of women survive motherhood.

majority of women survive motherhood.

Prepared by:Jen Flory / HEALTH / (916) 651-4111
6/9/23 9:49:13

****** END ******

EXHIBIT G

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THE GLOBAL HEALTH OBSERVATORY

Explore a world of health data

Indicators Countries

GLOBAL HEALTH OBSERVATORY

Infant mortality rate (between birth and 11 months per 1000 live births)

Associated Indicators

Child deaths in infants, infant mortality rate (between birth and 11 months per 1000 live births)

Infant mortality rate (per 1000 live births)

Short name:

Infant mortality rate (IMR)

Topic:

Mortality and burden of disease

Rationale:

Infant mortality represents an important component of under-five mortality. Like under-five mortality, infant mortality rates measure child survival. They also reflect the social, economic and environmental conditions in which children (and others in society) live, including their health care. Since data on the incidence and prevalence of diseases (morbidity data) frequently are unavailable, mortality rates are often used to identify vulnerable populations. Infant mortality rate is an MDG indicator.

Definition:

Infant mortality rate is the probability of a child born in a specific year or period dying before reaching the age of one, if subject to age-specific mortality rates of that period. Infant mortality rate is strictly speaking not a rate (i.e. the number of deaths divided by the number of population at risk during a certain period of time) but a probability of death derived from a life table and expressed as rate per 1000 live births.

Disaggregation:

Age : 0-27 days, Age : 28 days - <1 year

Method of measurement

Most frequently used methods using the above-mentioned data sources are as follows: • Civil registration: Number of deaths at age 0 and population for the same age are used to calculate death rate which are then converted into age-specific probability of dying. • Census and surveys: An indirect method is used based on questions to each woman of reproductive age as to how many children she has ever born and how many are still alive. The Brass method and model life tables are then used to obtain an estimate of infant mortality. • Surveys: A direct method is used based on birth history - a series of detailed questions on each child a woman has given birth to during her lifetime. To reduce sampling errors, the estimates are generally presented as period rates, for five or 10 years preceding the survey.

Method of estimation:

The Inter-agency Group for Child Mortality of Estimation (UN IGME) which includes representatives from UNICEF, WHO, the World Bank and the United Nations Population Division, produces trends of infant mortality rates with standardized methodology by group of countries depending on the type and quality of source of data available. For countries with adequate trend of data from civil registration, the calculations of under-five and infant mortality rates are derived from a standard period abridged life table. For countries with survey data, since infant mortality rates from birth histories of surveys are exposed to recall biases, infant mortality is derived from the projection of under-five mortality rates converted into infant mortality rates using the Bayesian B-splines bias-adjusted model. These infant mortality rates have been estimated by applying methods to all Member States to the available data from Member States, that aim to ensure comparability of across countries and time; hence they are not necessarily the same as the official national data. Predominant type of statistics: adjusted and predicted.

Method of estimation of global and regional aggregates:

Global and regional estimates are derived from numbers of estimated deaths and population for age groups 0 year, aggregated by relevant region.

Preferred data sources:

Civil registration with complete coverage

Unit of Measure:

Deaths per 1000 live births

Unit Multiplier:

3

Expected frequency of data dissemination:

Annual

Expected frequency of data collection:

Annual

Comments:

Even though many countries have collected information on child mortality in recent years, the high demand for very recent child mortality trend information is difficult to meet through household surveys. High quality of civil registration systems (completeness of registration) and high quality of survey or census data collection are crucial - WHO does estimate the level of underestimation of civil registration systems and there clearly is substantial variation in data quality and consistency across countries. Censuses and surveys can provide detailed disaggregation. Often disaggregated under-five mortality rates from household surveys are presented for 10-year periods because of the rapid increase in sampling error if multiple categories are used. Civil registration data usually does not include socio-economic variables but can provide the other disaggregation. Even though many countries have collected information on child mortality in recent years, the high demand for very recent child mortality trend information is difficult to meet through household surveys. High quality of civil registration systems (completeness of registration) and high quality of survey or census data collection are crucial - WHO does estimate the level of underestimation of civil registration systems and there clearly is substantial variation in data quality and consistency across countries. These infant mortality rate have been estimated by applying methods to all Member States to the available data from Member States, that aim to ensure comparability of across countries and time; hence they are not necessarily the same as the official national data.

Contact person email:

strongk@who.int

Name:

Kate Strong

IMRID:

1

Links:

UNICEF, WHO, World Bank, UN DESA/Population Division. Child Mortality Estimates Info database |_|. http://www.childmortality.org/

Demographic and Health Surveys (DHS) |_| https://www.dhsprogram.com/

World Population Prospects. United Nations, Department of Economic and Social Affairs, Population Division |_| http://esa.un.org/unpd/wpp/

WHO Mortality database |_| http://www.who.int/healthinfo/mortality_data/en/

Estimation methods for child mortality |_|. http://www.who.int/gho/child_health/mortality/ChildCME_method.pdf

Levels and trends in Child mortality, report 2020 |_| https://childmortality.org/wp-content/uploads/2020/09/UNICEF-2020-Child-Mortality-Report.pdf

If you have any feedback, you are welcome to write it here.
If you need to access the old Global Health Observatory data, you can do it here. But before you leave, please provide us your feedback about our new data portal.

EXHIBIT H

Maternal Infant Health

Infant Mortality

SEPTEMBER 16, 2024

For Everyone

AT A GLANCE

Infant mortality is the death of an infant before his or her first birthday. The infant mortality rate is an important marker of the overall health of a society. In 2022, the infant mortality rate in the United States was 5.6 deaths per 1,000 live births.

Causes of infant mortality

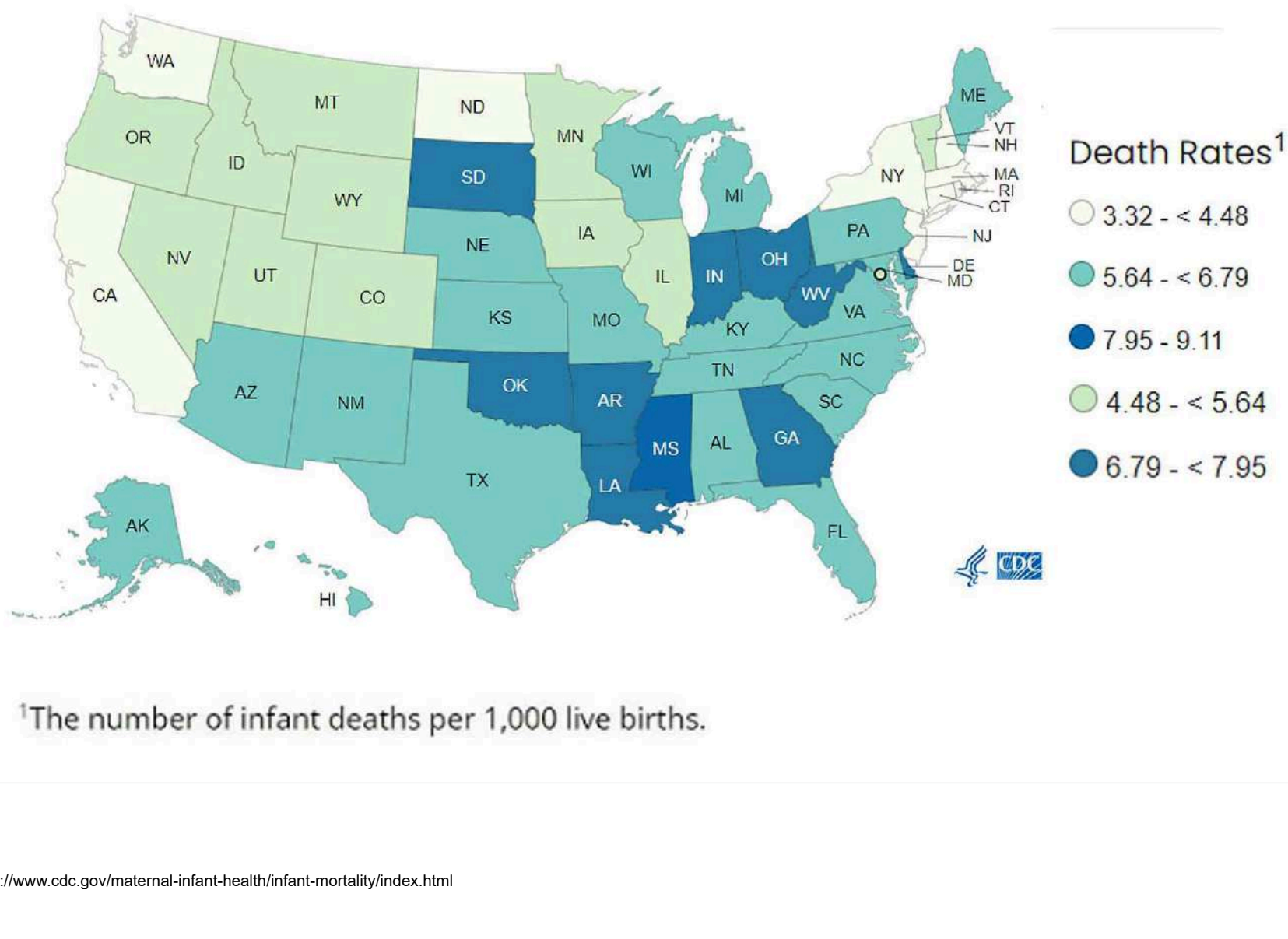
More than 20,500 infants died in the United States in 2022. The five leading causes of infant death in 2022 were:

1. Birth defects.
2. Preterm birth and low birth weight.
3. Sudden infant death syndrome.
4. Unintentional injuries (e.g., car crashes).
5. Maternal pregnancy complications.

Visit Mortality in the United States, 2022 for more information.

Infant mortality rates by state, 2022

View the Infant Mortality Rates by State Map from the National Center for Health Statistics.

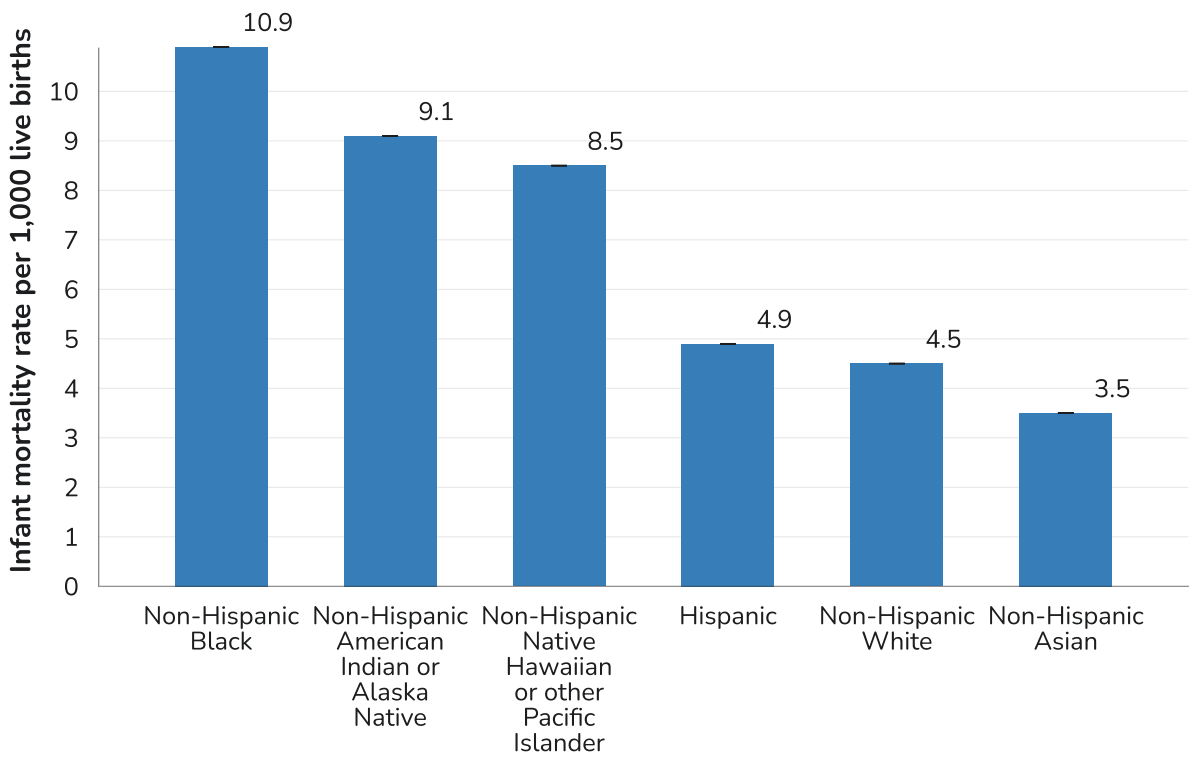


[1]The number of infant deaths per 1,000 live births.

In 2022, 19 states met the Healthy People 2030 target.

Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. One of the Healthy People objectives is to reduce the rate of all infant deaths. In 2022, 15 states met the Healthy People 2030 target of 5.0 infant deaths or less per 1,000 live births. Geographically, infant mortality rates in 2022 were highest among states in the South and in the Midwest.

Infant mortality rates by race and ethnicity, 2022



Data Table +

Download Data (CSV)

In 2022, infant mortality rates (per 1,000 live births) by race and ethnicity PDF were as follows:

- Non-Hispanic Black: 10.9
- Non-Hispanic American Indian and Alaska Native: 9.1
- Non-Hispanic Native Hawaiian or other Pacific Islander: 8.5
- Hispanic: 4.9
- Non-Hispanic white: 4.5
- Non-Hispanic Asian: 3.5

For brevity, text does not include the term "single-race."

All records that indicated Hispanic ethnicity are classified as Hispanic regardless of race.

CDC activities

CDC is committed to improving infant outcomes. CDC and other public health agencies work with health care providers, communities, and other partners to reduce infant mortality. This joint approach can help address social, behavioral, and health risk factors that contribute to infant mortality.

Expand All

Improvements in perinatal care

CDC provides support to 36 Perinatal Quality Collaboratives (PQCs). PQCs are state or multistate networks of multidisciplinary teams working to improve the quality of care for mothers and babies.

Building capacity to improve maternal and child health

The Maternal and Child Health Epidemiology Program (MCHEP) assigns epidemiologists and fellows to states, localities, and tribes. These assignees support epidemiologic research and provide scientific information to improve maternal and child health programs and policies.

Improving our understanding of sudden unexpected infant death (SUID)

Through the SUID and Sudden Death in the Young (SDY) Case Registry, CDC supports monitoring programs in 32 sites. Participating sites can use data about SUID trends and circumstances to develop strategies to reduce future deaths.

Using data to reduce infant mortality

The Pregnancy Risk Assessment Monitoring System (PRAMS) collects data on attitudes and experiences before, during, and after pregnancy. PRAMS data can be used to measure progress toward goals in improving the health of mothers and infants.

Strengthening systems of risk-appropriate care

CDC provides technical support to states to implement the CDC Levels of Care Assessment Tool℠ (CDC LOCATe℠) This helps states to map and strengthen systems of risk-appropriate care to make sure moms and babies get the right care, in the right place, at the right time.

Grief resources

- First Candle
- The Compassionate Friends
- March of Dimes

Related links

CDC's National Center on Birth Defects and Developmental Disabilities

To find provisional and final data, see Linked Birth and Infant Death Data from CDC's National Center for Health Statistics

Drowning prevention information and child passenger safety resources from CDC's National Center for Injury Prevention and Control

SOURCES

CONTENT SOURCE:

National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP); Division of Reproductive Health

EXHIBIT I

THEORY AND METHODS

Infant mortality rate as an indicator of population health

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J Epidemiol Community Health 2003;**57**:344–346

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Background: The infant mortality rate (IMR) has been criticised as a measure of population health because it is narrowly based and likely to focus the attention of health policy on a small part of the population to the exclusion of the rest. More comprehensive measures such as disability adjusted life expectancy (DALE) have come into favour as alternatives. These more comprehensive measures of population health, however, are more complex, and for resource poor countries, this added burden could mean diverting funds from much needed programmes. Unfortunately, the conjecture, that DALE is a better measure of population health than IMR, has not been empirically tested.
Methods: IMR and DALE data for 1997 were obtained from the World Bank and the World Health Organisation, respectively, for 180 countries.
Findings: There is a strong (generally) linear association between DALE and IMR (r=0.91). Countries with low DALE tend to have a high IMR. The countries with the lowest IMRs had DALEs above that predicted by the regression line.
Interpretation: There is little evidence that the use of IMR as a measure of population health has a negative impact on older groups in the population. IMR remains an important indicator of health for whole populations, reflecting the intuition that structural factors affecting the health of entire populations have an impact on the mortality rate of infants. For countries with limited resources that require an easily calculated, pithy measure of population health, IMR may remain a suitable choice.

A general measure of population health is useful for comparing the health status of a population over time, or between populations at a single point in time. It permits comparisons of health systems and programmes, and may highlight populations in need of particular attention from health services.[1]

The infant mortality rate (IMR), defined as the number of deaths in children under 1 year of age per 1000 live births in the same year, has in the past been regarded as a highly sensitive (proxy) measure of population health.[2] This reflects the apparent association between the causes of infant mortality and other factors that are likely to influence the health status of whole populations such as their economic development, general living conditions, social well being, rates of illness, and the quality of the environment.

More recently it has been argued that proxy measures of population health like IMR are problematic[3]; and the past decade has seen IMR fall out of favour. *The World Health Report 2000*,[4] for example, makes no reference to the measure.

Despite starting as indicators of a whole population's health, measures like IMR often, it is reasoned, become the principal focus of health policy such that health strategies and health priorities are formulated with the proxy outcome measure in mind.[3] As a consequence, health policies begin to target the chosen outcome measure, while ignoring the rest of the population for which the outcome measure was supposed to be an indicator. Thus, IMR may decrease, as infant mortality becomes the principal focus of health policy, but the whole population's health may, unknown to the ministries of health, remain static or even degrade.

This view has lead to the development of more comprehensive measures of population health; for example, the disability adjusted life expectancy (DALE).[5] Such measures are intended to (a) be sensitive to changes of health in the whole population, and (b) account for the morbidity associated with non-fatal health outcomes as well as mortality.[1]

The argument about the dangers of using IMR as a measure of population health has intuitive appeal, highlighting the fact that it derives from a small, non-representative portion of the population and excludes any consideration of non-fatal health outcomes. In contrast, the DALE combines information about life expectancy with information about the prevalence of disabling sequelae at different ages, with a severity weight that reflects the impact of the disability.[5]

If, however, ministries of health accept the argument against the use of IMR and choose to pursue an alternative measure of population health such as the DALE, they are faced with additional costs and complexity. In developed countries, the collection of the additional data may not be particularly onerous, and in some cases may already be collected. In those countries that are poorest, however, and have the worst population health, the cost of a more "comprehensive" measure may be prohibitive. Even if the cost were not prohibitive, the benefits of adopting a new measure would have to be significant.

In the absence of data, the argument that IMR is a poor proxy measure of population health is mere conjecture. The aim of this study was to examine the relation between IMR and DALE to ascertain the robustness or otherwise of IMR as a measure of population health.

METHODS

The relation between IMR and DALE was examined in all 180 countries for which data were available.

The DALE data for 1997/1999 for the total population at birth in each country were obtained from *The World Health Report 2000* (annex table 5).[4] The IMR data for 1997 were obtained from the World Bank's *Development Indicators*.[6]

RESULTS

The distribution of IMRs for the 180 countries was skewed with a long right tail. The median IMR was 29 (Vietnam) and

Abbreviations: DALE, disability adjusted life expectancy; IMR, infant mortality rate

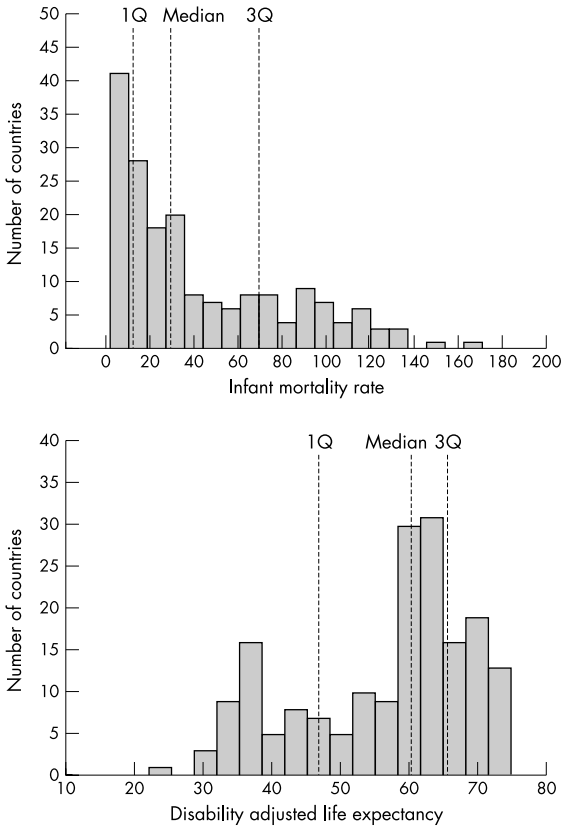


Figure 1 Distributions of IMR and DALE with the median, first, and third quartiles shown.

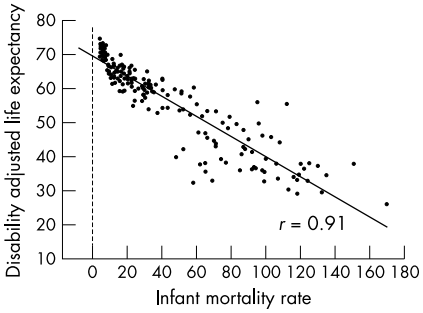


Figure 2 Relation between IMR and DALE with the ordinary least squares regression line shown.

the interquartile range lay between 12 (Costa Rica) and 70 (Senegal) (see fig 1). The country with the lowest IMR was Japan (3.7) and Sierra Leone had the highest IMR (170).

Similarly, the distribution of DALEs was skewed, although, in this case the distribution had a long left tail. The median DALE was 60.5 (Grenada) and the interquartile range lay between 46.9 (Papua New Guinea) and 65.7 (Antigua) (see fig 1). The country with the highest DALE was Japan (74.5) and the country with the lowest was Sierra Leone (25.9).

Figure 2 shows a scatter plot with the regression line of the relation between IMR and DALE.

There are a number of striking features about the plot. Firstly, there is a strong (generally) linear relation between IMR and DALE (r=0.91). As IMRs rise, DALEs fall. Secondly, there are a group of countries with very low IMRs for which the linear relation no longer seems to hold. Indeed, as the DALE rises beyond about 69 years the IMR seems to asymptote, suggesting a lower limit to the IMR around Japan's rate of 3.7. Finally, the countries with low IMRs and high DALEs tend to fall tightly around the regression line, whereas the countries with high IMRs and low DALEs are more dispersed around the line (an example of heteroscedasticity). The standard deviation of the DALE for those countries with an IMR less than the median (29) was 4.5 while for those with an IMR greater than the median it was 10.6. A similar pattern was observable in the variability of the IMR data. The countries with an IMR greater than 29 showed the greatest variability in DALE, and they were without exception developing countries.

Each of these observations has significant implications for health planners choosing a measure of population health.

Key points

- Infant mortality rate (IMR) had been criticised as a measure of population health because it could skew health resource allocation.
- The disability adjusted life expectancy (DALE) was adopted in World Health Report 2000 as the preferred measure of population health.
- The correlation between IMR and DALE is very high (r=0.91).
- For many countries IMR may remain an effective and cheaper alternative to the theoretically more appealing DALE.
- We should not throw the baby out with the bath water.

DISCUSSION

The strong linear relation between IMR and DALE means that IMR accounts for more than 80% of the variance of the DALE. It suggests that, in general, one measure could stand as a proxy for the other, and either could stand as a proxy for the measurement of population health. Indeed, there is little evidence that IMR is any worse than the DALE as a measure of population health.

The fact that there is greater dispersion around the regression line for the developing countries with IMRs greater than 29 suggests measurement error. The poorest countries with the least developed infrastructure are least able to collect accurate data for the calculation of the IMR or DALE. Furthermore, given that the calculation of the DALE requires the collection of more data than is required for the calculation of IMR, one might speculate that the DALE has more opportunity for measurement error to creep in and is, therefore, likely to be a less reliable measure.

If health policy were, as conjectured, going to be unduly influenced by IMR, then one would expect to have observed the effects most in those countries with the lowest IMRs. It is after all those countries with the lowest IMRs that are most likely to have concentrated their efforts on lowering infant mortality to the exclusion of the rest of the population. This should result in an uncharacteristically low DALE inconsistent with the regression line. The presence of the "asymptotic countries" with very low IMRs that sit above the regression line suggests that quite the contrary has occurred and governments have not had their health policies shackled by the use of IMR as an indicator of population health. Between these asymptotic countries however, there is little variation in either their DALE or their IMR, and this suggests that, for them, more sensitive measures of population health may be required.

The fact that the IMR and the DALE are so highly correlated merely goes to reinforce the intuition that the causes of infant mortality are strongly related to those structural factors like economic development, general living conditions, social well

being, and the quality of the environment, that affect the health of entire populations. This also goes some way to answer why it is that a measure of pure mortality in infants could be so highly correlated with a measure of mixed mortality and morbidity over an entire population that includes dimensions of disability and severity.

Furthermore, because IMR is sensitive to structural changes as well as disease epidemics, it becomes an important indicator of "here and now" effects. Rapid changes in the determinants of population health captured by changes in IMR may be slow to be reflected in DALE, which is influenced by factors such as long term survival and morbidity—mirrored in features like birth cohort effects.

CONCLUSION

The IMR remains a useful and comparatively inexpensive indicator of population health. Its explanatory power is very similar to that of the DALE.

That is not to say that the collection of additional epidemiological data about the health of a population would not be advantageous. Multiple measures, particularly measures that can be disaggregated by age, gender, health condition, socioeconomic status, etc, will always be important for planning. However, if resources are limited, and a pithy, uncomplicated measure of population health is required, then countries with IMRs greater than 10 would seem to be safe using IMR as the indicator.

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EXHIBIT J

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Discussion Paper

Vital Signs for Pediatric Health: Infant Mortality

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(https://nam.edu/wp-content/uploads/2023/06/Pediatric-Vital-Signs-Series-2.png)

Introduction

In 2015, the Institute of Medicine (now the National Academy of Medicine) released the report *Vital Signs: Core Metrics for Health and Health Care Progress* as a "basic, minimum slate of core metrics for use as sentinel indices of performance at various levels with respect to the key elements of health and health care progress" (IOM, 2015). Although indicators of pediatric health were included in that report as key elements of healthy behaviors, healthy communities, and preventive services, the core measures in the report emphasized indicators of adult health. This series of papers, "Vital Signs for Pediatric Health", describes four metrics across the pediatric life course, each measuring how well the health care system is building the physical, cognitive, and socio-emotional health of the pediatric population, thereby laying the foundation for life-long health and well-being. The metrics—infant mortality, school readiness, chronic absenteeism, and high school graduation—were selected to focus on four different developmental stages of growth. A

standardized set of core metrics to assess pediatric health could provide data to support health systems in identifying important areas for attention among their pediatric population and enable them to respond in a timely way. This rapid response is especially important in pediatric health systems as children undergo rapid development within a short time span.

This paper discusses one of those four measures—infant mortality rate (IMR)—as a measure of the early period of life. IMR is used globally as a key indicator of child survival. As a measure, it is sensitive to improvements in care for both women and children, is associated with other well-being indicators in communities, and reflects health inequities in the community (ChildStats, 2021; Ely et al., 2017).

This paper defines IMR and describes why it is a critical pediatric vital sign, then articulates the value of reducing disparities in IMR. Finally, the paper lays out the challenges to using IMR as an indicator for health system accountability.

Defining Infant Mortality

IMR is the number of live-born infants that die before their first birthday per 1,000 live births in a population and is typically calculated from birth and death certificates. Although IMR is expressed as a ratio, it is commonly referred to as a rate. The classification of fetal deaths versus live births may vary somewhat by facility across jurisdictions and can impact the IMR (Woods et al., 2014). However, to the extent that the method of calculation is consistent within a defined geographic area, observed reductions or increases in IMR over time could function well as indicators of change in infant mortality.

Each state in the U.S. shares birth and death records for their state and local areas to the Centers for Disease Control and Prevention (CDC) annually and provisional IMR quarterly, but these reports lag since CDC publishes data only after all states have reported (Driscoll and Ely, 2023; Ely and Driscoll, 2021). Other organizations, such as the March of Dimes (2021), issue annual "report cards" on state indicators, including IMR. IMR is also a core indicator in maps of well-being and population health such as those calculated by the University of Wisconsin's County Health Rankings and Roadmaps projects and is used by every state to track progress for the Title V maternal and child health block grants (University of Wisconsin Population Health Institute, 2023; Kogan et al., 2015). Finally, IMR is used as an indicator by the World Health Organization's Global Health Observatory and is one of the 23 Leading Health Indicators for the Healthy People 2030 outcomes measures (Healthy People 2030, n.d.; WHO, n.d.). In short, the authors believe that IMR may be the most widely used measure of overall child health and well-being and therefore is an obvious choice as a pediatric vital sign.

Influences on IMR

No single cause of mortality accounted for even a quarter of infant deaths in the U.S. in 2019 (Ely and Driscoll, 2021). Congenital malformations and disorders related to short gestation and low birthweight accounted for the largest portion of deaths, but maternal complications, sudden infant death syndrome, and unintentional injuries were other leading causes (Ely and Driscoll, 2021). Among the most prominent potential contributing factors to IMR are access to and quality of care for women of reproductive age and for the infant and mother after birth, maternal education and poverty, and structural and individual racism (Dagher and Linares, 2022).

Efforts to improve IMR span health care and other sectors in communities and involve public education; community development; expansion of policies that promote the health, education, and career opportunities of women of reproductive age; and efforts to reduce health disparities (NICHQ, 2017; NIHCM, 2012; Peck et al., 2010). Nationally, diverse players from state and city health departments to hospitals to politicians and women's rights activists have championed efforts to reduce infant mortality. Most improvements come from a systemic, multisector population-based approach, which uses data to inform decisions and accountability. Components of these approaches have included safe sleep campaigns; home visiting programs for high-risk, primiparous women; efforts to reduce teenage pregnancies; and regionalization of perinatal services to provide more appropriate levels of neonatal medical care for high-risk infants (Taylor et al., 2019; Ghandour et al., 2017; Barfield et al., 2013; Lasswell et al., 2010).

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Selecting Infant Mortality as a Pediatric Vital Sign

IMR is one of the most widely recognized and employed public health measures. While the 2015 *Vital Signs* report identified life expectancy at birth as the first-choice indicator for a population mortality measure, this measure is affected by many factors other than young children's health and is not specific to a pediatric population. As described below, the authors of this paper selected IMR as the preferred indicator of population health for early childhood because it is a significant public health issue in the U.S., it reflects disparities in access to services and resources in communities, it is directly related to child health, and it can be improved through health system and community partnerships.

Recent Data and Trends in Infant Mortality

IMR in the U.S. in 2020 was 5.4 deaths per 1,000 live births (Murphy et al., 2021). Although this rate has improved dramatically over the past 60 years (see Figure 1) and by roughly 20% over the past two decades, it is higher than in almost every other developed country (Ely and Driscoll, 2020; Kamal et al., 2019; Mathews and Driscoll, 2017). While there are different hypotheses on why the U.S. has an elevated IMR, prematurity-related mortality in the U.S. is higher than most other developed countries (Chen et al., 2016; MacDorman et al., 2014). One possible reason for elevated prematurity-related mortality in the U.S. is a lack of policies that support families of lower socioeconomic status (Chen et al., 2016).

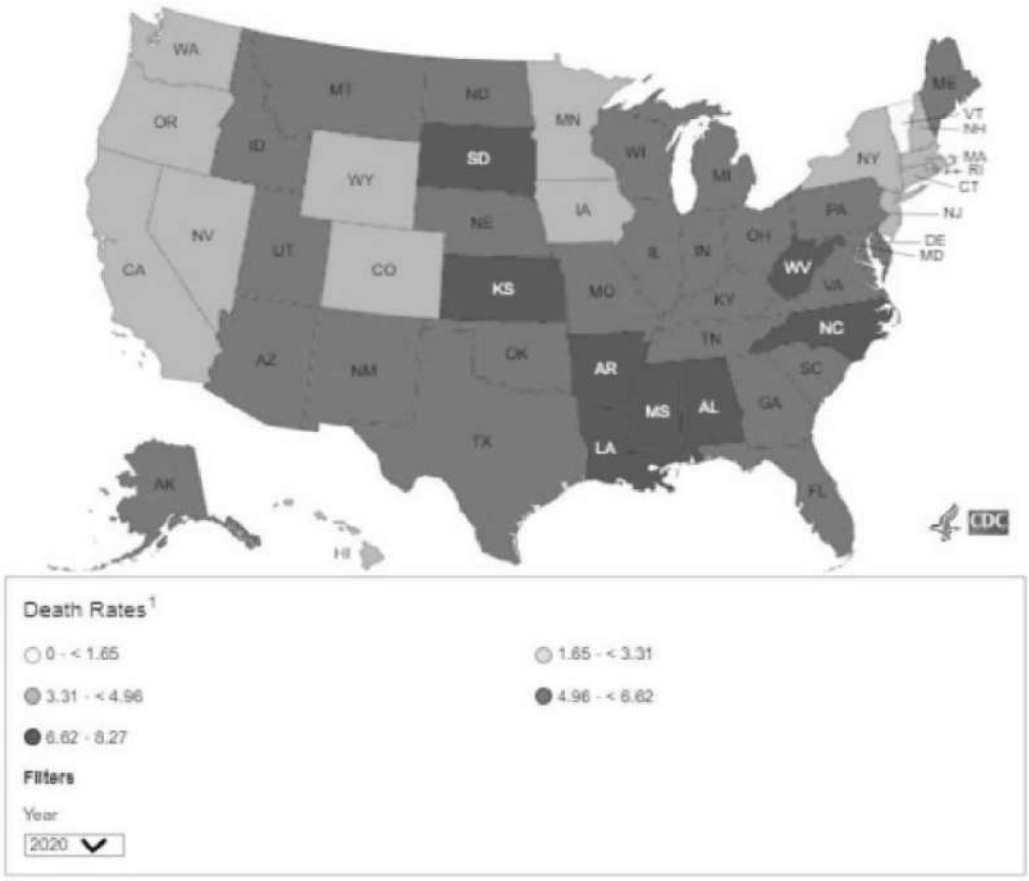
Disparities

IMR can vary by location, level of poverty, and race/ethnicity. IMR differences related to race and ethnicity are not reflective of biological differences, but rather of social constructs that systematically disadvantage and reduce the health status of people of color, as described in previous sections of this paper. For example, *Figure 2* shows that in 2018 and 2019, the highest IMR was for babies born to non-Hispanic Black women, followed by American Indian/Alaska Native women and Native Hawaiian or other Pacific Islander women; and that rates among Asian women were the lowest, below those of Hispanic and White women (Ely and Driscoll, 2021).

(https://nam.edu/wp-content/uploads/2023/06/Figure-2.jpg)

Figure 3 shows that in 2020, U.S. states with the highest IMR had rates that were more than twice those of the lowest states, with the geographically southernmost states showing the highest rates. Although IMRs have been declining in recent years for both Black and White infants, the ratio of Black to White IMR has increased over time (Matoba and Collins, Jr., 2017; Riddell et al., 2017). Between 1950 and 2007, Black infants died at over two times the rate of White infants (Singh and van Dyck, 2010). These differences may be partly attributable to unequal access to high-quality care and the accrual of lifetime risk and allostatic load (e.g., hormonal and biological changes) from social, psychological, and environmental stressors, suggesting a "weathering effect" as described by Matoba and Collins, Jr. (2017) and Geronimus (1992) (Hill et al., 2022; Pabayo et al., 2019). Weathering in this case refers to early biological aging manifested in shortened telomeres or epigenetic changes that occur from chronic stressors like exposure to racism (Geronimus et al., 2010).

FIGURE 3 | Infant Mortality Rates by State, 2020



SOURCE: National Center for Health Statistics. n.d. *Infant Mortality Rates by State*. Available at: https://www.cdc.gov/nchs/pressroom/sos-map/infant_mortality_rates/infant_mortality.htm (accessed March 4, 2022).

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Challenges in Measuring Infant Mortality

IMR could serve as a valuable child health and health care system performance metric, but challenges to its use exist. The quality of data provided on birth and death certificates and the erroneous filing of fetal death certificates can vary across jurisdictions (Gonzalez and Gilleskie, 2017). Furthermore, states may use different definitions of "live birth" (CDC, 1997). State health departments might also not share their data until complete certification of all birth and death certificates has occurred, which may delay the release of the IMR up to a year or two due to cases awaiting forensic autopsies (Mathews et al., 2015).

Similarly, even when health systems or agencies and their partners employ IMR as an indicator of child health and wellbeing, data are usually released by geographic areas, defined by county and city boundaries and zip codes (University of Wisconsin Population Health Institute, 2023; Salahuddin et al., 2022; Ely and Driscoll, 2021). This is problematic because areas with high IMR may not fit precise civic boundaries. Modern geocoding software can enable communities to map these problems with greater precision if analysts

can obtain access to microdata with accurate addresses. However, reporting standards often prevent sharing that level of detail to protect individual privacy by assuring de-identification in the reporting of child deaths.

Choosing a geographic area that is too small for adequate and significant data collection could also be problematic. Infant deaths are currently relatively rare events, and various factors can influence changes from year to year so that population-level shifts in the overall IMR may take time to manifest. Another potential pitfall in the broad use of IMR as a health services indicator is the possibility that higher reported IMR will be interpreted as poorer performance, even where health systems are attempting to improve care in communities with elevated mortality. Since most communities are served by more than one health care provider, data and accountability for a geographic area are shared by several key health stakeholders (IOM, 1997). While it is currently unclear how to best build consensus about the accountability of a health system or group of health systems for IMR across geographic boundaries, several metropolitan areas—including New York City—have been successful in such efforts (Hall and Bayne-Smith, 2011). Risk adjustment methods to control for the effects of different patient characteristics within health system accountability models have been suggested to minimize incentives for health systems to avoid the populations with the poorest health (e.g., the highest IMR) (Pearson and Stecher, 2004).

Importance of Measuring Infant Mortality to Understand Children's Health

IMR and Overall Societal Health

IMR is strongly correlated with child developmental outcomes, school readiness, and early medical and other health-related costs (Owusu et al., 2021; Lejarraga et al., 2018; Gortmaker and Wise, 1997; Lee et al., 1997). IMR is chosen in many communities, states, and countries as a population health indicator because of its simplicity, availability, and, most importantly, utility in describing the performance of the public health system in serving pregnant women (Gonzalez and Gilleskie, 2017). IMR may serve as a proxy indicator of overall societal health because it is strongly associated with fundamental causes of poor maternal health, such as limited resources, structural racism, the social determinants of health, and gaps in care systems in a community (Bishop-Royse et al., 2021; Owusu et al., 2021). High IMR in a community also correlates strongly with socioeconomic disadvantage and concentrated poverty (Bishop-Royse et al., 2021).

Potential Health Systems Benefits

There are several secondary benefits that come with the use of IMR as a community health indicator. First, its use necessitates the incorporation of high-quality health care system data into state or county vital statistics for sharing and analysis. Many communities that have successfully reduced IMR have also developed multisector collaborations of social service agencies, health care systems, and government departments (Gülmezoglu et al., 2016). These collaborations involve intensive data sharing, frequent and effective handoffs of patients among systems, and culturally competent outreach and education involving community partners. Persistent leadership of health care organizations has been critical in seeing these efforts through to completion (NICHQ, 2021).

Similarly, using IMR as an accountability measure in health systems could promote the integration of services for women and children. Coordinated care of mothers and newborns is facilitated by the cooperation of pediatric and obstetric services, along with other health and community services. For example, two essential strategies for reducing preterm births and IMR—safe sleep campaigns and stop smoking campaigns—are primarily conducted as community outreach and education campaigns targeted at the health of both mothers and babies (Gülmezoglu et al., 2016). These initiatives are possible through coordination of common community messaging, cultural adaptations, trusted resident leaders, and continuous engagement of partners to maintain effectiveness over time (de Luca and Hinde, 2016).

IMR improvement work often leads to an increasing focus on the social determinants of health (NICHQ, 2021; Taylor et al., 2019; Reno and Hyder, 2018). Two policies intended to address poverty—increased minimum wage and earned income tax credits—and the receipt of Special Supplemental Nutrition Program for Women, Infants, and Children benefits during pregnancy display evidence of also being associated with lower IMR (Soneji and Beltrán-Sánchez, 2019; Komro et al., 2016; Arno et al., 2009). Although there have been few prospective studies of whether health care organizations can reduce infant mortality through housing, food, transportation, or related interventions, there are some notable examples of success in these efforts, including the Baltimore City Health Department and Family League of Baltimore partnership on the B'more for Healthy Babies initiative to reduce infant mortality in Baltimore County, Maryland. The initiative includes programs that provide health education to Baltimore men and women, a coalition of communities that focus on improving health equity, and home visiting support from a nurse or social worker through the child's third birthday (Baltimore City Health Department, 2021). After the launch of B'more for Healthy Babies, infant mortality decreased 28% from 13.5% in 2009 to 9.7% in 2012. During the same period, the disparity between White and Black infant mortality decreased by almost 40% (Baltimore City Health Department, 2021).

A similar collaborative effort is building connections between parents, community members, and health care professionals in Hamilton County, Ohio to address infant mortality in the community (Cradle Cincinnati, 2021). Other such efforts exist across the country and can serve as examples for other communities.

Furthermore, Healthy Start, a national program of the Health Resources and Services Administration, funds 101 projects that aim to improve health outcomes before, during, and after pregnancy and reduce racial and ethnic differences in rates of infant deaths and negative maternal health outcomes. Each of these projects has a Community Action Network composed of neighborhood residents, community leaders, medical and social service providers, faith-based leaders, and business representatives. Healthy Start projects collaborate with their Community Action Network to address fragmented delivery of services and create culturally and linguistically appropriate services for members of their communities (MCHB, n.d.). Though promising, additional research could provide evidence to guide such interventions.

From a health expenditures perspective, deceased infants have no later life outcomes, so a high IMR does not increase the financial burden of disability on society or a specific health care system. Nonetheless, IMR is highly correlated with disability-adjusted measures of life expectancy and therefore can have value as a proxy for later life population health outcomes (Reidpath and Allotey, 2003).

Conclusion

In summary, IMR could be a valuable foundational measure for health system accountability and population health. IMR may be one of the easiest measures for health systems to adopt, given its widespread use and endorsement as a valuable and reliable indicator of health. IMR reflects health inequities in a community, is associated with other well-being indicators, and is sensitive to improvements in care for both women and children. Additional research and piloting to determine the level of geographic accountability to be assumed by health systems and how inequities in IMR are most accurately represented would allow for data to be comparable across jurisdictions and over time.

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EXHIBIT K

National Vital Statistics Reports

NVSS National Vital Statistics System

Volume 74, Number 7 June 12, 2025

Infant Mortality in the United States, 2023: Data From the Period Linked Birth/Infant Death File

by Danielle M. Ely, Ph.D., and Anne K. Driscoll, Ph.D.

Abstract

Objectives—This report presents final 2023 infant mortality statistics by age at death, maternal race and Hispanic origin, maternal age, gestational age, leading causes of death, and maternal state of residence. Trends in infant mortality are also examined.

Methods—Descriptive tabulations of data are presented and interpreted for infant deaths and infant mortality rates using the 2023 period linked birth/infant death file. The linked birth/infant death file is based on birth and death certificates registered in all 50 states and the District of Columbia.

Results—A total of 20,162 infant deaths were reported in the United States in 2023, down 2% from 2022. The U.S. infant mortality rate was 5.61 infant deaths per 1,000 live births, unchanged from the rate in 2022. Changes in the neonatal mortality rate from 3.59 in 2022 to 3.65 in 2023, and in the postneonatal mortality rate from 2.02 to 1.96, were not significant. Changes in mortality rates for infants by maternal race and Hispanic-origin group were not significant; among Hispanic-origin subgroups, rates increased for infants of Mexican women in 2023 compared with 2022. Infants of Black non-Hispanic women had the highest mortality rate (10.93) in 2023, followed by infants of American Indian and Alaska Native non-Hispanic (9.20) and Native Hawaiian or Other Pacific Islander non-Hispanic (8.21), Hispanic (5.03), White non-Hispanic (4.48), and Asian non-Hispanic (3.44) women. The mortality rate decreased from 2022 to 2023 for infants born at 41 weeks of gestation (1.73 to 1.46) but were essentially unchanged for other gestational age categories. The five leading causes of infant death in 2023 were the same as in 2022. Infant mortality rates by state for 2023 ranged from a low of 2.93 in New Hampshire to a high of 8.94 in Mississippi.

Keywords: maternal and infant characteristics • vital statistics • National Vital Statistics System

Introduction

This report presents infant mortality statistics based on data from the 2023 period linked birth/infant death file. Infant mortality and mortality rates are described by age at death, maternal race and Hispanic origin, maternal age, gestational age, leading causes of death, and maternal state of residence. Infant mortality trends are also presented by selected characteristics. In the linked file, information from the death certificate is linked to information from the birth certificate for each infant younger than age 1 year who died in the 50 states, the District of Columbia, Puerto Rico, or Guam during 2023 (1). The purpose of the linkage is to use variables available from the birth certificate to conduct more detailed analyses of infant mortality patterns (2,3). The linked birth/infant death data set also is the preferred source for examining infant mortality by race and Hispanic origin. Infant mortality rates by race and Hispanic origin, based on maternal race and Hispanic origin, are more accurately measured from the birth certificate compared with the death certificate.

For 2023, linked birth/infant death data are not available for American Samoa, Commonwealth of the Northern Marianas, and U.S. Virgin Islands. Some rates calculated from the mortality file differ from those published using the linked file. More details can be found elsewhere (1).

Methods

Data shown in this report are based on birth and infant death certificates registered in all states, the District of Columbia, Puerto Rico, and Guam. As part of the Vital Statistics Cooperative Program, each state provides matching birth and death certificate numbers for each infant younger than age 1 year who died during 2023 to the National Center for Health Statistics. Further discussion of the process of linking births and deaths occurring in different states and file production can be found in the Methodology section of the "User Guide to the 2023

Period/2022 Cohort Linked Birth/Infant Death Public Use File" (1).

The period linked file for 2017 marked the first data year for which the linked birth data for infant deaths for all 50 states and the District of Columbia were based on the 2003 revision of the U.S. Standard Certificate of Live Birth (4) and, also, the first year for which national data on race and Hispanic-origin categories based on 1997 Office of Management and Budget standards became available (5).

In 2023, 98.8% of all infant death records were successfully linked to their corresponding birth records. These records were weighted to adjust for the 1.2% of infant death records that were not linked to their corresponding birth certificates (1) (Technical Notes).

Information for age and race of mother is imputed if it is not reported on the birth certificate. In 2023, race of mother was imputed for 8.1% of births; mother's age was imputed for 0.02% of births (2,3).

All race and Hispanic-origin data are based on single-race reporting and are consistent with the 1997 Office of Management and Budget standards and differ from the bridged-race categories shown in previous reports (5). Maternal race and Hispanic-origin categories presented are American Indian and Alaska Native non-Hispanic (subsequently, American Indian and Alaska Native), Asian non-Hispanic (subsequently, Asian), Black non-Hispanic (subsequently, Black), Native Hawaiian or Other Pacific Islander non-Hispanic (subsequently, Native Hawaiian or Other Pacific Islander), White non-Hispanic (subsequently, White), and Hispanic. Race and Hispanic origin are reported separately on the birth certificate. Data are shown in most cases for five specified Hispanic groups: Central and South American, Cuban, Dominican, Mexican, and Puerto Rican. Additional details on Hispanic origin are available elsewhere (3). Comparisons between 2023 and 2022 by race and Hispanic origin are made in this report. The 2003 revision of the U.S. Standard Certificate of Live Birth allows the reporting of five race categories for each parent (6)—either alone, as in single race, or in combination, as in more than one race or multiple races—in accordance with the 1997 revised Office of Management and Budget standards (5). Further details on race reporting are available elsewhere (3).

Cause-of-death statistics are classified in accordance with the *International Statistical Classification of Diseases and Related Health Problems, 10th Revision* (ICD–10) (7) (Technical Notes).

Data by maternal and infant characteristics

This report presents descriptive tabulations of infant mortality data by a variety of maternal and infant characteristics. These tabulations are useful for understanding the basic relationships between risk factors and infant mortality, unadjusted for the possible effects of other variables. This report also presents several key risk factors for infant mortality: age at death, maternal race and Hispanic origin, maternal age, gestational age, leading causes of infant death, and maternal state of residence. For brevity, additional selected risk factors (sex, birthweight, plurality, and nativity [mother's place of birth]) are presented in tables but not discussed in this report.

Race and Hispanic origin—Infant mortality rates are presented by race and Hispanic origin of the mother. The linked file is useful for computing accurate infant mortality rates by these characteristics because the race and Hispanic origin of the mother from the birth certificate are used in both the numerator and denominator of the infant mortality rate. In contrast, for rates based on the vital statistics mortality file, race information for the denominator is the race of the mother as reported on the birth certificate, while race information for the numerator is the race of the decedent as reported on the death certificate (2,3,8). More detail on the reliability of race and Hispanic-origin data from the linked file compared with the mortality file is available elsewhere (8).

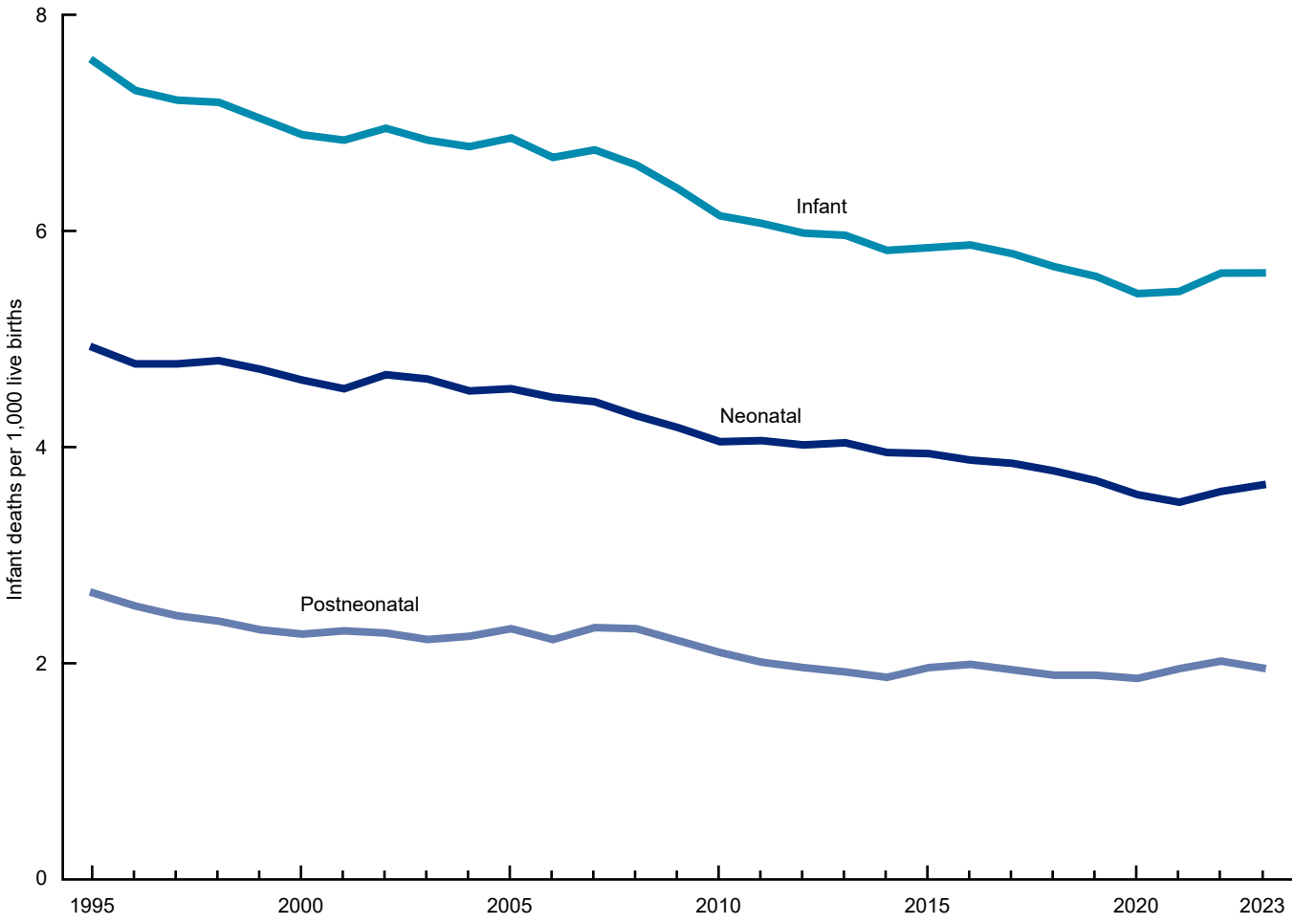
Statistical significance—Statements in the text have been tested for statistical significance, and a statement that a given infant mortality rate is higher or lower than another rate indicates that the rates are significantly different using a two-tailed *z* test at the alpha level of 0.05. Comparisons between state rates and the U.S. rate take into account each state's contribution to the U.S. rate. As a result, each state rate is compared with a unique U.S. rate independent of the state's contribution to the total U.S. rate. Information on the methods used to test for statistical significance and suppression standards, as well as information on differences between period and cohort data, the weighting of the linked file, maternal age, period of gestation, birthweight, and cause-of-death classification is also available (1) (Technical Notes).

Results

Trends in infant mortality and infant age at death

- In 2023, 20,162 infant deaths were reported in the United States, a decrease of 2% from 2022 (20,577) (Figure 1, Table 1). The infant mortality rate was 5.61 deaths per 1,000 live births in 2023, unchanged from the 2022 rate; the increase in the rate from 2021 (5.44) to 2022 was the first since the increase from 2001 (6.84) to 2002 (6.95).
- The U.S. infant mortality rate has generally trended downward since 1995 (the first year that the period linked birth/infant death file was available) and is down 19% since 2002.
- The 2023 neonatal mortality rate (infant deaths at less than 28 days) of 3.65 was not significantly different than the rate in 2022 (3.59); the increase in the rate from 2021 (3.49) to 2022 was the first since the increase from 2001 (4.54) to 2002 (4.67). The neonatal mortality rate has generally declined since 1995 and decreased 22% since the last increase in 2002.
- The 2023 postneonatal mortality rate (infant deaths at 28 days or more) of 1.96 was essentially unchanged from the rate in 2022 (2.02). The rate increased from 2021 (1.95) to 2022. The postneonatal mortality rate has also generally declined since 1995 and decreased 14% since 2002 (2.28).

Figure 1. Infant, neonatal, and postneonatal mortality rates: United States, 1995–2023



SOURCE: National Center for Health Statistics, National Vital Statistics System, linked birth/infant death file.

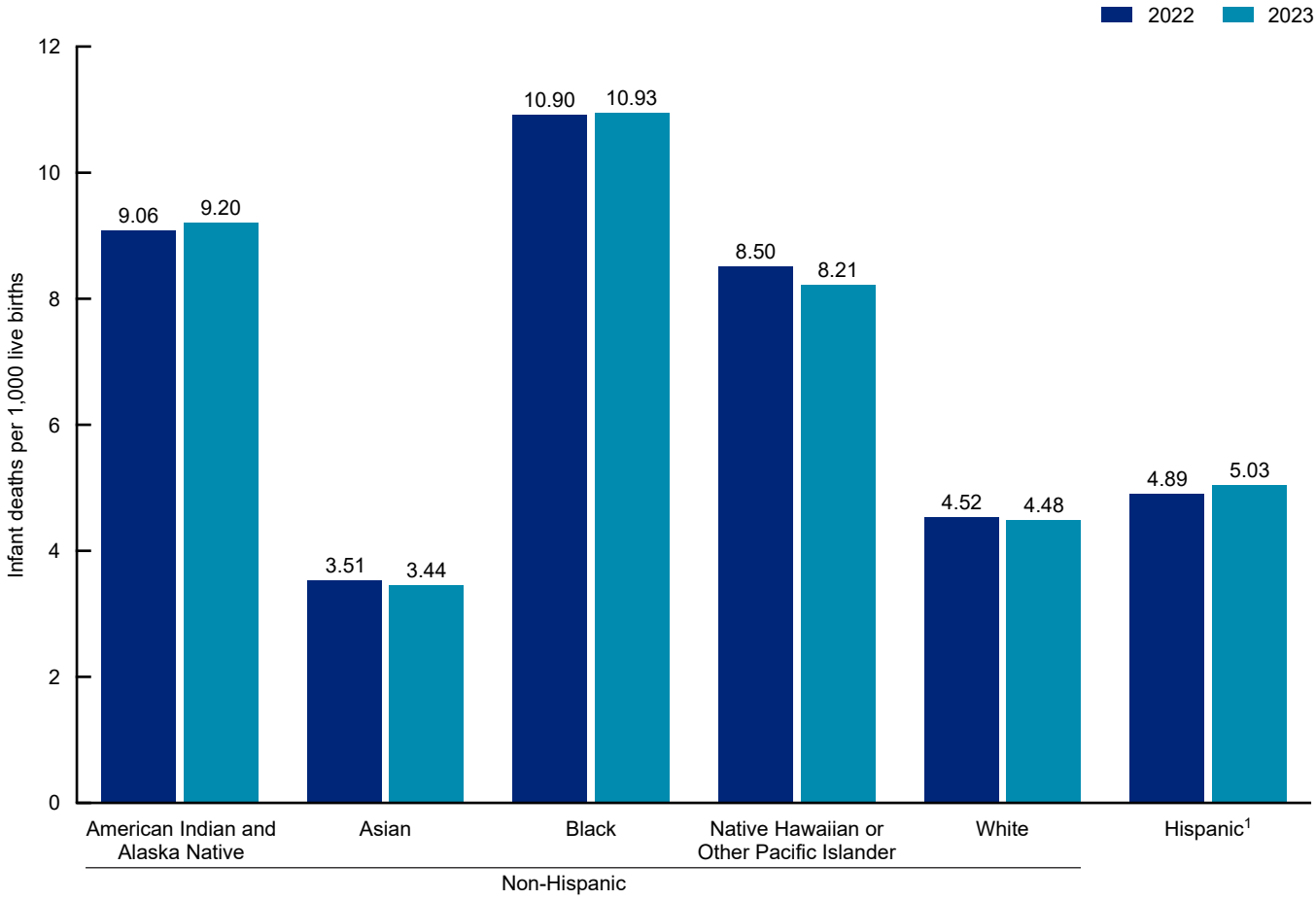
Race and Hispanic origin

- Mortality rates did not change significantly from 2022 to 2023 for infants of women of any of the race and Hispanic-origin groups: American Indian and Alaska Native (9.06 infant deaths per 1,000 live births in 2022 to 9.20 in 2023), Asian (3.51 to 3.44), Black (10.90 to 10.93), Native Hawaiian and Other Pacific Islander (8.50 to 8.21), White (4.52 to 4.48), and Hispanic (4.89 to 5.03) (Tables 1 and 2, Figure 2).
- Among Hispanic-origin subgroups, the mortality rate for infants of Mexican women increased from 4.79 to 5.12 from 2022 to 2023; increases in mortality rates for infants of Central and South American (4.36 to 4.59) and Puerto Rican (6.32 to 6.43) women were not significant. Declines in mortality rates for infants of Cuban (3.94 to 3.77) and Dominican (4.74 to 4.59) women from 2022 to 2023 were not significant.
- In 2023, infant mortality continued to vary by race: infants of Black women had the highest mortality rate (10.93), followed by infants of American Indian and Alaska Native and Native Hawaiian or Other Pacific Islander (9.20 and 8.21, respectively), Hispanic (5.03), White (4.48), and Asian (3.44) women.
- Infants of Black women also had the highest neonatal mortality rate in 2023 (6.63) compared with infants of the other race and Hispanic-origin groups; the lowest mortality rate was for infants of Asian women (2.51) (Table 2).
- In 2023, postneonatal mortality rates were higher for infants of American Indian and Alaska Native (4.40), Black (4.30), and Native Hawaiian or Other Pacific Islander (3.26) women than for infants of White (1.61), Hispanic (1.47), and Asian (0.92) women.
- Among Hispanic-origin subgroups in 2023, the mortality rate for infants of Puerto Rican women (6.43) was higher than that of infants of Mexican (5.12), Dominican (4.59), Central and South American (4.59), and Cuban (3.77) women.

Maternal age

- From 2022 to 2023, no significant changes in mortality rates for infants of women of any age group were seen (Figure 3, Table 2).

Figure 2. Infant mortality rate, by maternal race and Hispanic origin: United States, 2022 and 2023



[1]People of Hispanic origin may be of any race.
NOTE: There were no significant differences in rates between 2022 and 2023.
SOURCE: National Center for Health Statistics, National Vital Statistics System, linked birth/infant death file.

- Nonsignificant increases in mortality rates were seen for infants of females younger than age 15 (14.25 infant deaths per 1,000 live births to 20.95) and ages 15–19 (9.86 to 10.44), and for infants of women ages 20–24 (7.13 to 7.23) and 40 and older (6.73 to 6.77).
- Decreases in mortality rates for infants of women ages 25–29 (5.37 to 5.24) and 35–39 (4.99 to 4.94) were not significant. The rate for infants of women ages 30–34 was unchanged from 2022 to 2023 at 4.59.
- In 2023, mortality rates were highest for infants of females younger than 15 (20.95), decreased to a low of 4.59 for infants of women ages 30–34, and then increased to 6.77 for infants of women age 40 and older.

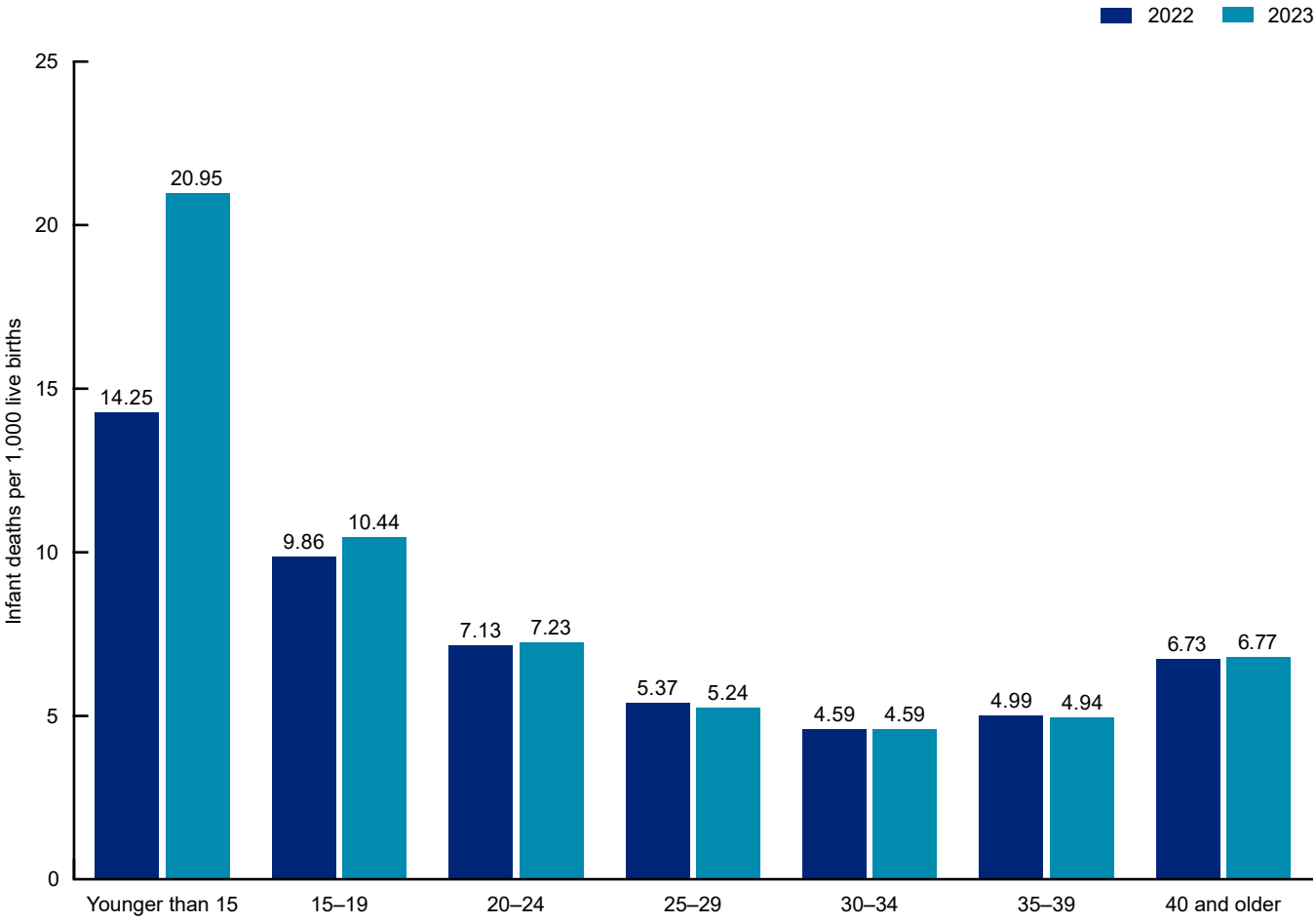
Gestational age

- The mortality rate declined for infants born at 41 weeks (1.73 infant deaths per 1,000 live births to 1.46) but did not change significantly for the other gestational age categories from 2022 to 2023: preterm (less than 37 weeks of gestation) (34.78 to 34.74), early preterm (less than 34 weeks) (107.94 to 107.87), late preterm (34–36 weeks) (8.29 to 8.31), term (37–41 weeks) (2.18 to 2.16), and post-term (42 weeks or more) (4.23 to 3.66) (9) (Table, Table 2).
- In 2023, almost two-thirds of all infant deaths (65%) occurred among infants born preterm (less than 37 weeks of gestation), which was unchanged from 2022 (9).

Leading causes of infant death

- In 2023, the five leading causes of all infant deaths were the same as those in 2022: congenital malformations (20.0% of infant deaths), disorders related to short gestation and low birth weight (14.5%), sudden infant death syndrome (SIDS) (7.2%), unintentional injuries (6.4%), and maternal complications (5.7%) (Table 3).
- From 2022 to 2023, no significant changes in infant mortality rates were seen for the five leading causes of death: congenital malformations (from 109.2 infant deaths per 100,000 live births to 112.1), disorders related to short gestation and low birth weight (78.6 to 81.4), SIDS (41.7 to 40.2), unintentional injuries (36.8 to 35.8), and maternal complications (33.1 to 31.9).

Figure 3. Infant mortality rate, by maternal age: United States, 2022 and 2023



NOTE: There were no significant differences in rates between 2022 and 2023.
SOURCE: National Center for Health Statistics, National Vital Statistics System, linked birth/infant death file.

Table. Infant mortality rate, by gestational age: United States, 2015–2023

Year	Less than 32 weeks	32–33 weeks	34–36 weeks	37–41 weeks	42 weeks or more
	Deaths per 1,000 live births				
2023	174.28	21.04	8.31	2.16	3.66
2022	175.18	21.05	8.29	2.18	4.23
2021	167.39	19.35	8.11	2.08	3.79
2020	175.88	20.11	7.92	2.04	4.17
2019	180.40	19.21	8.21	2.03	5.72
2018	185.79	21.95	8.21	2.05	5.39
2017	187.56	20.50	8.50	2.10	3.98
2016	190.15	20.12	8.65	2.19	4.31
2015	193.54	20.79	8.76	2.17	4.20

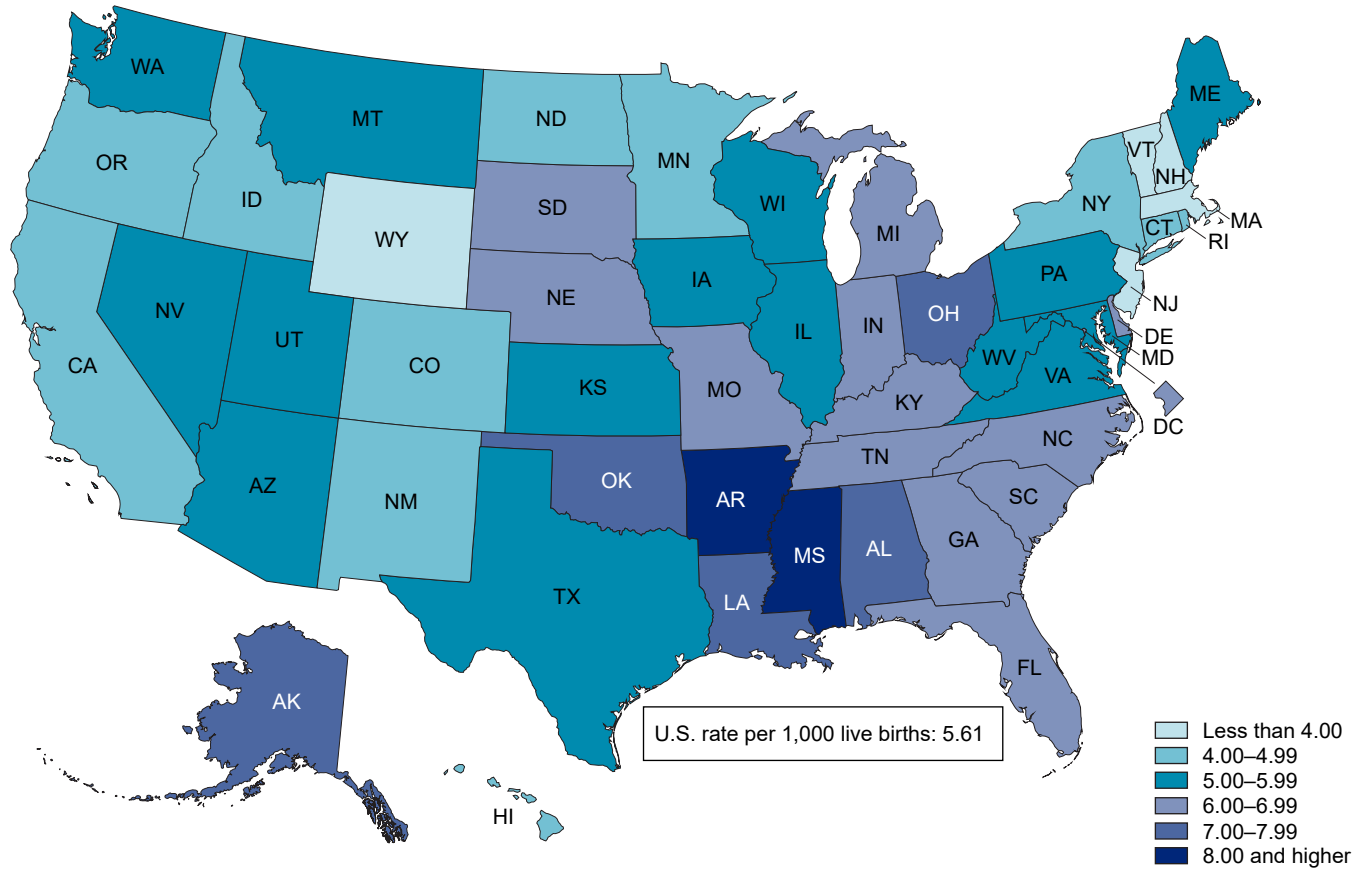
SOURCE: National Center for Health Statistics, National Vital Statistics System, linked birth/infant death file.

- Congenital malformations was the leading cause of death for infants of women for most race and Hispanic-origin groups: American Indian and Alaska Native (134.3), Asian (69.1), Native Hawaiian and Other Pacific Islander (148.3), White (102.2), and Hispanic (119.6) in 2023 (Table 4).
- In 2023, disorders related to short gestation and low birth weight was the leading cause of death for infants of Black women (201.0).

Infant mortality by state

- By state, infant mortality ranged from a low of 2.93 infant deaths per 1,000 births in New Hampshire to a high of 8.94 in Mississippi (Figure 4, Table 5).
- Thirteen states had infant mortality rates significantly lower than the national infant mortality rate: California, Colorado, Connecticut, Idaho, Massachusetts, Minnesota, New Hampshire, New Jersey, New Mexico, New York, Oregon, Vermont, and Washington.
- Fourteen states had infant mortality rates significantly higher than the U.S. infant mortality rate: Alabama, Arkansas, Florida, Georgia, Indiana, Kentucky, Louisiana, Michigan, Mississippi, North Carolina, Ohio, Oklahoma, South Carolina, and Tennessee.

Figure 4. Infant mortality rate, by state: United States, 2023



SOURCE: National Center for Health Statistics, National Vital Statistics System, linked birth/infant death file.

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List of Detailed Tables

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Table 1. Live births; infant, neonatal, and postneonatal deaths; and mortality rate: United States, 1995–2023, and by maternal race and Hispanic origin, 2017–2023

Race and Hispanic origin and year	Number				Deaths per 1,000 live births		
	Live births	Infant deaths	Neonatal deaths	Postneonatal deaths	Infant	Neonatal	Postneonatal
All race and Hispanic-origin groups							
2023	3,596,017	20,162	13,113	7,049	5.61	3.65	1.96
2022	3,667,758	20,577	13,158	7,419	5.61	3.59	2.02
2021	3,664,292	19,928	12,797	7,131	5.44	3.49	1.95
2020	3,613,647	19,578	12,866	6,712	5.42	3.56	1.86
2019	3,747,540	20,927	13,834	7,093	5.58	3.69	1.89
2018	3,791,712	21,498	14,329	7,169	5.67	3.78	1.89
2017	3,855,500	22,341	14,844	7,497	5.79	3.85	1.94
2016	3,945,875	23,157	15,303	7,854	5.87	3.88	1.99
2015	3,978,497	23,458	15,672	7,786	5.90	3.94	1.96
2014	3,988,076	23,211	15,737	7,474	5.82	3.95	1.87
2013	3,932,181	23,446	15,893	7,553	5.96	4.04	1.92
2012	3,952,841	23,654	15,887	7,767	5.98	4.02	1.96
2011	3,953,590	24,001	16,065	7,936	6.07	4.06	2.01
2010	3,999,386	24,572	16,193	8,379	6.14	4.05	2.10
2009	4,130,665	26,408	17,261	9,148	6.39	4.18	2.21
2008	4,247,726	28,075	18,238	9,837	6.61	4.29	2.32
2007	4,316,233	29,153	19,094	10,059	6.75	4.42	2.33
2006	4,265,593	28,509	19,041	9,468	6.68	4.46	2.22
2005	4,138,573	28,384	18,782	9,602	6.86	4.54	2.32
2004	4,112,055	27,860	18,602	9,258	6.78	4.52	2.25
2003	4,090,007	27,995	18,935	9,060	6.84	4.63	2.22
2002	4,021,825	27,970	18,791	9,179	6.95	4.67	2.28
2001	4,026,036	27,523	18,275	9,248	6.84	4.54	2.30
2000	4,058,882	27,961	18,733	9,227	6.89	4.62	2.27
1999	3,959,417	27,865	18,701	9,164	7.04	4.72	2.31
1998	3,941,553	28,325	18,915	9,410	7.19	4.80	2.39
1997	3,880,894	27,968	18,507	9,461	7.21	4.77	2.44
1996	3,891,494	28,419	18,556	9,863	7.30	4.77	2.53
1995	3,899,589	29,505	19,186	10,319	7.57	4.92	2.65
Non-Hispanic, single race							
American Indian and Alaska Native:							
2023	24,571	226	117	108	9.20	4.76	4.40
2022	25,721	233	135	98	9.06	5.25	3.81
2021	26,124	195	100	96	7.46	3.83	3.67
2020	26,813	206	102	104	7.68	3.80	3.88
2019	28,450	224	114	110	7.87	4.01	3.87
2018	29,092	237	120	117	8.15	4.12	4.02
2017	29,957	276	143	132	9.21	4.77	4.41
Asian:							
2023	215,738	742	542	199	3.44	2.51	0.92
2022	218,994	768	542	225	3.51	2.47	1.03
2021	213,813	788	594	193	3.69	2.78	0.90
2020	219,068	688	503	185	3.14	2.30	0.84
2019	238,769	806	602	204	3.38	2.52	0.85
2018	240,798	874	643	231	3.63	2.67	0.96
2017	249,250	943	675	268	3.78	2.71	1.08
Black:							
2023	491,494	5,374	3,260	2,114	10.93	6.63	4.30
2022	511,439	5,573	3,296	2,277	10.90	6.44	4.45
2021	517,889	5,463	3,291	2,172	10.55	6.35	4.19
2020	529,811	5,501	3,472	2,028	10.38	6.55	3.83
2019	548,075	5,821	3,754	2,067	10.62	6.85	3.77
2018	552,029	5,933	3,897	2,037	10.75	7.06	3.69
2017	560,715	6,152	4,012	2,140	10.97	7.16	3.82

See footnotes at end of table.

Table 1. Live births; infant, neonatal, and postneonatal deaths; and mortality rate: United States, 1995–2023, and by maternal race and Hispanic origin, 2017–2023—Con.

Race and Hispanic origin and year	Number				Deaths per 1,000 live births		
	Live births	Infant deaths	Neonatal deaths	Postneonatal deaths	Infant	Neonatal	Postneonatal
Non-Hispanic, single race—Con.							
Native Hawaiian or Other Pacific Islander:							
2023	10,115	83	50	33	8.21	4.94	3.26
2022	10,122	86	48	38	8.50	4.74	3.75
2021	9,531	74	41	32	7.76	4.30	3.36
2020	9,626	69	41	27	7.17	4.26	2.80
2019	9,770	80	49	31	8.19	5.02	3.17
2018	9,476	89	51	38	9.39	5.38	4.01
2017	9,426	72	36	36	7.64	3.82	3.82
White:							
2023	1,787,051	8,008	5,127	2,881	4.48	2.87	1.61
2022	1,840,739	8,324	5,318	3,006	4.52	2.89	1.63
2021	1,887,656	8,236	5,251	2,984	4.36	2.78	1.58
2020	1,843,432	8,115	5,290	2,825	4.40	2.87	1.53
2019	1,915,912	8,603	5,589	3,014	4.49	2.92	1.57
2018	1,956,413	9,059	5,873	3,186	4.63	3.00	1.63
2017	1,992,461	9,306	6,061	3,246	4.67	3.04	1.63
Hispanic							
2023	945,200	4,750	3,356	1,394	5.03	3.55	1.47
2022	937,421	4,581	3,138	1,442	4.89	3.35	1.54
2021	885,916	4,246	2,899	1,347	4.79	3.27	1.52
2020	866,713	4,063	2,828	1,235	4.69	3.26	1.42
2019	886,467	4,462	3,091	1,371	5.03	3.49	1.55
2018	886,210	4,303	3,036	1,267	4.86	3.43	1.43
2017	898,764	4,583	3,198	1,383	5.10	3.56	1.54
Central and South American:							
2023	208,618	958	697	261	4.59	3.34	1.25
2022	207,843	907	652	255	4.36	3.14	1.23
2021	178,067	748	521	227	4.20	2.93	1.27
2020	169,811	659	470	189	3.88	2.77	1.11
2019	165,229	749	535	214	4.53	3.24	1.30
2018	147,430	592	438	154	4.02	2.97	1.04
2017	145,614	653	465	188	4.48	3.19	1.29
Cuban:							
2023	30,001	113	86	27	3.77	2.87	0.90
2022	26,390	104	65	39	3.94	2.46	1.48
2021	24,437	87	68	19	3.56	2.78	*
2020	23,188	98	63	34	4.23	2.72	1.47
2019	23,668	98	65	33	4.14	2.75	1.39
2018	23,471	90	64	26	3.83	2.73	1.11
2017	23,362	93	69	24	3.98	2.95	1.03
Dominican:							
2023	33,575	154	106	48	4.59	3.16	1.43
2022	33,531	159	112	46	4.74	3.34	1.37
2021	33,373	109	68	41	3.27	2.04	1.23
2020	31,596	143	101	42	4.53	3.20	1.33
2019	32,483	153	111	42	4.71	3.42	1.29
Mexican:							
2023	508,127	2,601	1,845	757	5.12	3.63	1.49
2022	510,194	2,442	1,688	754	4.79	3.31	1.48
2021	485,127	2,380	1,633	747	4.91	3.37	1.54
2020	480,531	2,264	1,586	678	4.71	3.30	1.41
2019	496,716	2,462	1,693	769	4.96	3.41	1.55
2018	495,831	2,426	1,690	736	4.89	3.41	1.48
2017	512,126	2,588	1,795	792	5.05	3.50	1.55

See footnotes at end of table.

Table 1. Live births; infant, neonatal, and postneonatal deaths; and mortality rate: United States, 1995–2023, and by maternal race and Hispanic origin, 2017–2023—Con.

Race and Hispanic origin and year	Number				Deaths per 1,000 live births		
	Live births	Infant deaths	Neonatal deaths	Postneonatal deaths	Infant	Neonatal	Postneonatal
Hispanic—Con.							
Puerto Rican:							
2023	66,203	426	282	144	6.43	4.26	2.18
2022	69,266	438	267	171	6.32	3.85	2.47
2021	70,729	428	278	151	6.05	3.93	2.13
2020	69,763	437	308	129	6.26	4.41	1.85
2019	70,950	438	294	144	6.17	4.14	2.03
2018	71,614	402	290	112	5.61	4.05	1.56
2017	70,813	459	307	151	6.48	4.34	2.13

* Estimate does not meet National Center for Health Statistics standards of reliability.

NOTES: People of Hispanic origin may be of any race. Infant deaths are weighted to adjust for the 1.1% of infant death records not linked to their corresponding birth certificates. The neonatal and postneonatal mortality rates combined may not exactly add to totals due to rounding. Data for infants of Dominican women are available starting with the 2019 period linked birth/infant death data files.

SOURCE: National Center for Health Statistics, National Vital Statistics System, linked birth/infant death file.

Table 2. Infant mortality rate, live births, and infant deaths, by selected characteristics and maternal race and Hispanic origin: United States, 2023

Characteristic	Total	Non-Hispanic					Hispanic					
		American Indian and Alaska Native[1]	Asian	Black	Native Hawaiian or Other Pacific Islander	White	Total[2]	Central and South American	Cuban	Dominican	Mexican	Puerto Rican
	Infant deaths per 1,000 live births in specified group											
Total	5.61	9.20	3.44	10.93	8.21	4.48	5.03	4.59	3.77	4.59	5.12	6.43
Age at death (days)												
Total neonatal	3.65	4.76	2.51	6.63	4.94	2.87	3.55	3.34	2.87	3.16	3.63	4.26
Early neonatal (less than 7)	2.84	3.78	1.90	5.14	3.95	2.22	2.83	2.73	2.17	2.38	2.88	3.26
Late neonatal (7–27)	0.80	0.98	0.61	1.49	0.99	0.65	0.72	0.61	0.70	0.77	0.76	1.00
Postneonatal (28–364)	1.96	4.40	0.92	4.30	3.26	1.61	1.47	1.25	0.90	1.43	1.49	2.18
Sex												
Male	6.04	10.32	3.77	11.56	7.67	4.89	5.40	5.01	4.29	5.26	5.46	6.80
Female	5.15	7.96	3.08	10.28	8.75	4.05	4.64	4.15	3.28	3.93	4.76	6.06
Period of gestation (weeks)												
Less than 37	34.74	39.67	25.68	51.16	34.02	28.38	33.89	33.03	28.68	32.29	34.81	36.09
Less than 34	107.87	125.51	89.71	130.35	110.09	92.96	110.29	115.83	98.70	101.43	111.54	107.32
Less than 28	362.14	410.40	332.10	360.63	333.33	364.49	355.51	369.96	315.27	334.66	358.19	359.17
28–31	43.40	*	26.91	45.26	*	41.85	46.33	58.94	42.02	37.27	43.39	37.88
32–33	21.04	40.88	18.31	23.75	*	19.67	21.12	19.60	*	*	24.13	20.97
34–36	8.31	11.51	4.10	11.87	*	7.81	7.28	6.18	*	4.87	8.17	7.52
37–41	2.16	4.80	1.20	3.87	4.20	1.95	1.73	1.53	1.07	1.43	1.77	2.42
37–38	3.22	5.87	1.74	5.02	6.96	3.13	2.42	2.15	2.02	2.01	2.53	3.11
39–40	1.64	4.36	0.91	3.19	2.69	1.41	1.40	1.21	0.57	1.17	1.41	2.08
41	1.46	*	*	2.32	*	1.43	1.11	1.40	*	*	0.95	*
42 or more	3.66	*	*	*	*	3.47	*	*	*	*	*	*
Birthweight (grams)												
Less than 2,500	42.33	53.50	25.72	51.35	48.63	37.77	43.83	44.69	39.22	36.48	46.00	40.29
Less than 1,500	196.71	234.10	162.63	203.80	208.86	186.60	203.73	222.55	180.66	169.74	208.61	188.25
1,500–2,499	12.72	18.49	6.43	14.03	15.23	12.61	12.94	12.79	7.89	7.60	14.47	10.09
2,500 or more	2.10	4.86	1.09	3.78	4.04	1.93	1.64	1.35	1.01	1.41	1.68	2.45
2,500–4,499	2.10	4.89	1.08	3.75	4.11	1.93	1.64	1.35	1.02	1.42	1.67	2.45
4,500 or more	2.46	*	*	7.84	*	1.77	2.14	*	*	*	*	*
Plurality												
Single births	5.09	8.75	3.23	9.83	7.93	4.09	4.57	4.16	3.02	4.15	4.67	6.06
Twin births	20.78	23.95	11.13	34.50	*	15.45	22.13	24.06	29.31	17.47	22.34	15.41
Triplet and higher-order births	52.39	*	*	85.98	*	41.91	52.34	*	*	*	53.85	*

See footnotes at end of table.

Table 2. Infant mortality rate, live births, and infant deaths, by selected characteristics and maternal race and Hispanic origin: United States, 2023—Con.

Characteristic	Total	Non-Hispanic					Hispanic					
		American Indian and Alaska Native[1]	Asian	Black	Native Hawaiian or Other Pacific Islander	White	Total[2]	Central and South American	Cuban	Dominican	Mexican	Puerto Rican
Age of mother					Infant deaths per 1,000 live births in specified group—Con.							
Younger than 15	20.95	*	*	30.86	*	*	12.50	*	*	*	*	*
15–19	10.44	11.95	*	15.87	*	10.86	7.15	5.93	*	*	6.81	11.58
20–24	7.23	10.98	5.94	12.82	8.66	6.18	5.53	4.41	4.98	4.91	5.65	7.01
25–29	5.24	7.89	3.99	10.18	5.61	4.23	4.44	4.14	3.25	5.27	4.48	5.60
30–34	4.59	8.54	2.97	9.70	7.06	3.58	4.47	4.46	4.24	3.99	4.42	6.04
35–39	4.94	6.80	3.14	9.60	11.42	3.98	5.10	4.70	2.75	3.90	5.51	6.02
40–54	6.77	*	4.26	11.73	*	5.73	6.38	6.05	*	*	7.23	5.19
Mother's place of birth												
50 states or District of Columbia	5.80	9.10	3.48	11.54	8.68	4.54	5.11	4.46	4.06	3.85	5.00	6.21
Elsewhere	4.76	*	3.43	7.91	7.67	3.31	4.90	4.62	3.61	4.89	5.30	6.82
						Live births						
Total	3,596,017	24,571	215,738	491,494	10,115	1,787,051	945,200	208,618	30,001	33,575	508,127	66,203
Sex												
Male	1,839,794	12,505	111,542	249,931	5,087	916,170	482,254	106,726	15,378	17,309	258,596	33,848
Female	1,756,223	12,066	104,196	241,563	5,028	870,881	462,946	101,892	14,623	16,266	249,531	32,355
Period of gestation (weeks)												
Less than 37	373,902	3,000	19,587	71,956	1,264	168,654	95,755	19,922	2,929	3,438	51,134	7,814
Less than 34	99,255	741	4,938	23,859	327	40,736	24,735	4,869	770	976	13,179	2,227
Less than 28	23,096	173	1,081	7,046	84	7,789	5,966	1,165	203	251	3,191	529
28–31	33,153	250	1,672	7,887	100	13,523	8,354	1,561	238	322	4,517	792
32–33	43,006	318	2,185	8,926	143	19,424	10,415	2,143	329	403	5,471	906
34–36	274,647	2,259	14,649	48,097	937	127,918	71,020	15,053	2,159	2,462	37,955	5,587
37–41	3,210,174	21,474	195,957	418,212	8,807	1,611,436	847,391	188,191	27,024	30,108	455,922	58,289
37–38	1,072,092	8,181	68,461	164,390	3,162	505,444	287,252	61,968	8,414	9,926	155,613	20,598
39–40	1,974,300	12,372	120,557	237,042	5,213	1,013,077	520,655	116,923	17,459	18,836	279,216	35,085
41	163,782	921	6,939	16,780	432	92,915	39,484	9,300	1,151	1,346	21,093	2,606
42 or more	9,299	49	140	1,028	27	6,050	1,607	389	43	26	873	87
Not stated	2,642	48	54	298	17	911	447	116	*	*	198	13
Birthweight (grams)												
Less than 2,500	309,391	2,131	20,414	73,007	946	126,063	75,133	15,395	2,167	3,043	39,194	6,925
Less than 1,500	49,799	346	2,521	14,357	158	18,226	12,163	2,341	393	542	6,366	1,174
1,500–2,499	259,592	1,785	17,893	58,650	788	107,837	62,970	13,054	1,774	2,501	32,828	5,751
2,500 or more	3,285,678	22,434	195,312	418,407	9,167	1,660,812	870,006	193,202	27,834	30,532	468,904	59,276
2,500–4,499	3,253,557	22,076	194,495	415,983	8,999	1,640,988	862,531	191,758	27,539	30,329	464,565	58,810
4,500 or more	32,121	358	817	2,424	168	19,824	7,475	1,444	295	203	4,339	466
Not stated	948	*	12	80	*	176	61	21	*	*	29	*

See footnotes at end of table.

Table 2. Infant mortality rate, live births, and infant deaths, by selected characteristics and maternal race and Hispanic origin: United States, 2023—Con.

Characteristic	Total	Non-Hispanic					Hispanic					
		American Indian and Alaska Native[1]	Asian	Black	Native Hawaiian or Other Pacific Islander	White	Total[2]	Central and South American	Cuban	Dominican	Mexican	Puerto Rican
Plurality						Live births—Con.						
Single births	3,482,971	23,899	210,328	470,612	9,842	1,729,043	921,711	204,219	29,129	32,555	495,738	64,045
Twin births	110,393	668	5,300	20,347	270	56,648	22,954	4,323	853	973	12,129	2,076
Triplet and higher-order births	2,653	*	110	535	*	1,360	535	76	19	47	260	82
Age of mother												
Younger than 15	1,766	23	*	486	*	351	800	304	*	12	356	30
15–19	140,977	1,841	925	28,414	459	44,922	57,914	14,324	639	1,198	31,865	3,800
20–24	616,970	6,285	9,420	103,077	2,424	263,760	207,702	42,377	4,816	6,116	117,437	15,415
25–29	986,567	6,843	40,837	131,705	3,031	500,910	270,317	56,021	8,314	9,301	149,457	19,476
30–34	1,098,052	5,970	88,489	131,500	2,409	595,741	240,489	52,706	9,659	10,013	125,796	16,884
35–39	604,631	2,942	60,802	74,492	1,401	314,198	131,623	32,976	5,447	5,388	65,363	8,477
40–54	147,054	667	15,258	21,820	389	67,169	36,355	9,910	1,122	1,547	17,853	2,121
Mother's place of birth												
50 states or District of Columbia	2,744,794	24,183	51,139	396,282	3,458	1,662,528	503,410	34,084	10,583	10,386	329,614	47,987
Elsewhere	843,233	349	164,063	93,217	6,521	121,879	440,349	174,323	19,401	23,092	178,031	17,880
Not stated	7,990	39	536	1,995	136	2,644	1,441	211	17	97	482	336
						Infant deaths						
Total	20,162	226	742	5,374	83	8,008	4,750	958	113	154	2,601	426
Age at death												
Total neonatal	13,113	117	542	3,260	50	5,127	3,356	697	86	106	1,845	282
Early neonatal (less than 7 days)	10,226	93	410	2,526	40	3,961	2,672	569	65	80	1,461	216
Late neonatal (7–27 days)	2,887	24	132	734	10	1,166	683	128	21	26	384	66
Postneonatal	7,049	108	199	2,114	33	2,881	1,394	261	27	48	757	144
Sex												
Male	11,118	129	421	2,890	39	4,482	2,604	535	66	91	1,412	230
Female	9,044	96	321	2,484	44	3,526	2,146	423	48	64	1,189	196
Period of gestation (weeks)												
Less than 37	12,990	119	503	3,681	43	4,786	3,245	658	84	111	1,780	282
Less than 34	10,707	93	443	3,110	36	3,787	2,728	564	76	99	1,470	239
Less than 28	8,364	71	359	2,541	28	2,839	2,121	431	64	84	1,143	190
28–31	1,439	*	45	357	*	566	387	92	10	12	196	30
32–33	905	13	40	212	*	382	220	42	*	*	132	19
34–36	2,282	26	60	571	*	999	517	93	*	12	310	42
37–41	6,932	103	235	1,619	37	3,140	1,468	287	29	43	807	141
37–38	3,450	48	119	825	22	1,582	695	133	17	20	393	64
39–40	3,242	54	110	755	14	1,424	729	141	10	22	394	73
41	239	*	*	39	*	133	44	13	*	*	20	*
42 or more	34	–	–	*	–	21	*	–	–	–	*	*
Not stated	206	*	*	68	*	62	33	13	–	–	13	*

See footnotes at end of table.

Table 2. Infant mortality rate, live births, and infant deaths, by selected characteristics and maternal race and Hispanic origin: United States, 2023—Con.

Characteristic	Total	Non-Hispanic					Hispanic					
		American Indian and Alaska Native[1]	Asian	Black	Native Hawaiian or Other Pacific Islander	White	Total[2]	Central and South American	Cuban	Dominican	Mexican	Puerto Rican
Birthweight (grams)						Infant deaths—Con.						
Less than 2,500	13,098	114	525	3,749	46	4,761	3,293	688	85	111	1,803	279
Less than 1,500	9,796	81	410	2,926	33	3,401	2,478	521	71	92	1,328	221
1,500–2,499	3,301	33	115	823	12	1,360	815	167	14	19	475	58
2,500 or more	6,916	109	213	1,582	37	3,200	1,431	261	28	43	787	145
2,500–4,499	6,837	108	210	1,562	37	3,165	1,415	259	28	43	778	144
4,500 or more	79	*	*	19	–	35	16	*	–	–	*	*
Not stated	148	*	*	43	–	46	25	*	–	–	11	*
Plurality												
Single births	17,728	209	679	4,626	78	7,076	4,214	849	88	135	2,315	388
Twin births	2,294	16	59	702	*	875	508	104	25	17	271	32
Triplet and higher-order births	139	-	*	46	-	57	28	*	-	*	14	*
Age of mother												
Younger than 15	37	*	–	15	–	*	10	*	–	–	*	–
15–19	1,472	22	*	451	*	488	414	85	–	*	217	44
20–24	4,459	69	56	1,321	21	1,629	1,148	187	24	30	663	108
25–29	5,170	54	163	1,341	17	2,118	1,201	232	27	49	670	109
30–34	5,040	51	263	1,275	17	2,133	1,074	235	41	40	556	102
35–39	2,988	20	191	715	16	1,250	671	155	15	21	360	51
40–54	996	*	65	256	*	385	232	60	*	*	129	11
Mother's place of birth												
50 states or District of Columbia	15,914	220	178	4,575	30	7,545	2,572	152	43	40	1,649	298
Elsewhere	4,018	*	562	737	50	404	2,156	805	70	113	944	122
Not stated	229	*	*	63	*	59	22	*	-	*	*	*

* Figure does not meet National Center for Health Statistics standards of reliability.
– Quantity zero.
[1]Includes Aleut and Eskimo people.
[2]Includes other and unknown Hispanic origin not stated and not shown separately.

NOTES: Infant deaths are weighted so numbers may not exactly add to totals due to rounding. Not stated responses were included in totals but not distributed among groups for rate computations. Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1997 Office of Management and Budget standards. People of Hispanic origin may be of any race.

SOURCE: National Center for Health Statistics, National Vital Statistics System, linked birth/infant death file.

Table 3. Infant deaths, percentage of deaths, and infant mortality rate, by five leading causes of infant death: United States, 2010–2023

	Congenital malformations (Q00–Q99)			Short gestation and low birthweight, not elsewhere classified (P07)			Sudden infant death syndrome (R95)			Accidents (unintentional injuries) (V01–X59)			Maternal complications of pregnancy (P01)		
Year	Number	Percent	Rate (deaths per 100,000 live births)	Number	Percent	Rate (deaths per 100,000 live births)	Number	Percent	Rate (deaths per 100,000 live births)	Number	Percent	Rate (deaths per 100,000 live births)	Number	Percent	Rate (deaths per 100,000 live births)
2023	4,030	20.0	112.1	2,927	14.5	81.4	1,446	7.2	40.2	1,288	6.4	35.8	1,146	5.7	31.9
2022	4,004	19.5	109.2	2,884	14.0	78.6	1,531	7.4	41.7	1,351	6.6	36.8	1,213	5.9	33.1
2021	3,990	20.0	108.9	2,957	14.8	80.7	1,458	7.3	39.8	1,300	6.5	35.5	1,113	5.6	30.4
2020	4,047	20.7	112.0	3,152	16.1	87.2	1,386	7.1	38.4	1,192	6.1	33.0	1,115	5.7	30.9
2019	4,313	20.6	115.1	3,460	16.5	92.3	1,251	6.0	33.4	1,264	6.0	33.7	1,250	6.0	33.4
2018	4,501	20.9	118.7	3,683	17.1	97.1	1,331	6.2	35.1	1,169	5.4	30.8	1,371	6.4	36.2
2017	4,596	20.6	119.2	3,757	16.8	97.4	1,360	6.1	35.3	1,313	5.9	34.1	1,436	6.4	37.2
2016	4,823	20.8	122.2	3,926	17.0	99.5	1,498	6.5	38.0	1,217	5.3	30.8	1,407	6.1	35.7
2015	4,847	20.7	121.8	4,087	17.4	102.7	1,567	6.7	39.4	1,289	5.5	32.4	1,527	6.5	38.4
2014	4,754	20.5	119.2	4,172	18.0	104.6	1,541	6.6	38.6	1,163	5.0	29.2	1,580	6.8	39.6
2013	4,778	20.4	121.5	4,213	18.0	107.1	1,561	6.7	39.7	1,150	4.9	29.2	1,597	6.8	40.6
2012	4,967	21.0	125.7	4,214	17.8	106.6	1,676	7.1	42.4	1,163	4.9	29.4	1,518	6.4	38.4
2011	5,016	20.9	126.9	4,115	17.1	104.1	1,905	7.9	48.2	1,167	4.9	29.5	1,598	6.7	40.4
2010	5,115	20.8	127.9	4,151	16.9	103.8	2,058	8.4	51.5	1,107	4.5	27.7	1,563	6.4	39.1

NOTE: The five leading causes of death (based on *International Classification of Diseases, 10th Revision*, 1992) were the same for 2010–2023, but ranking changed in 2020 and later years compared with previous years.

SOURCE: National Center for Health Statistics, National Vital Statistics System, linked birth/infant death file.

Table 4. Infant deaths and mortality rate for the five leading causes of infant death, by maternal race and Hispanic origin: United States, 2023

[Rates are per 100,000 live births in specified group]

Cause of death (based on *International Classification of Diseases, 10th Revision*, 1992)	All races			Non-Hispanic													
				American Indian and Alaska Native			Asian[1]			Black			Native Hawaiian or Other Pacific Islander			White		
	Rank	Number	Rate	Rank	Number	Rate	Rank	Number	Rate	Rank	Number	Rate	Rank	Number	Rate	Rank	Number	Rate
All causes	…	20,162	560.7	…	226	919.8	…	742	343.9	…	5,374	1,093.4	…	83	820.6	…	8,008	448.1
Congenital malformations, deformations, and chromosomal abnormalities (Q00–Q99)	1	4,030	112.1	1	33	134.3	1	149	69.1	2	720	146.5	1	15	148.3	1	1,827	102.2
Disorders related to short gestation and low birth weight, not elsewhere classified (P07)	2	2,927	81.4	3	23	93.6	2	116	53.8	1	988	201.0	…	*	*	2	873	48.9
Sudden infant death syndrome (R95)	3	1,446	40.2	2	24	97.7	6	21	9.7	3	464	94.4	2	13	128.5	3	609	34.1
Accidents (unintentional injuries) (V01–X59)	4	1,288	35.8	4	21	85.5	7	18	8.3	4	393	80.0	…	*	*	4	572	32.0
Newborn affected by maternal complications of pregnancy (P01)	5	1,146	31.9	5	13	52.9	3	55	25.5	5	306	62.3	…	*	*	5	383	21.4

Cause of death (based on *International Classification of Diseases, 10th Revision*, 1992)	Total Hispanic			Central and South American[2]			Cuban			Dominican[3]			Mexican			Puerto Rican		
	Rank	Number	Rate	Rank	Number	Rate	Rank	Number	Rate	Rank	Number	Rate	Rank	Number	Rate	Rank	Number	Rate
All causes	…	4,750	502.5	…	958	459.2	…	113	376.7	…	154	458.7	…	2,601	511.9	…	426	643.5
Congenital malformations, deformations, and chromosomal abnormalities (Q00–Q99)	1	1,130	119.6	1	268	128.5	2	20	66.7	2	22	65.5	1	644	126.7	2	67	101.2
Disorders related to short gestation and low birth weight, not elsewhere classified (P07)	2	755	79.9	2	171	82.0	1	29	96.7	1	28	83.4	2	381	75.0	1	73	110.3
Sudden infant death syndrome (R95)	4	223	23.6	4	37	17.7	…	*	*	3	13	38.7	5	114	22.4	4	28	42.3
Accidents (unintentional injuries) (V01–X59)	5	208	22.0	7	30	14.4	…	*	*	…	*	*	4	123	24.2	5	26	39.3
Newborn affected by maternal complications of pregnancy (P01)	3	310	32.8	3	53	25.4	…	*	*	4	11	32.8	3	167	32.9	3	34	51.4

… Category not applicable.
* Figure does not meet National Center for Health Statistics standards of reliability.
[1]For infants born to Asian non-Hispanic women, Complications of placenta, cord and membranes (P02) was the fourth leading cause of death, with 36 deaths and a rate of 16.7. Bacterial sepsis (P36.9) was the fifth leading cause of death, with 26 deaths and a rate of 12.1.
[2]For infants born to Central and South American women, Bacterial sepsis (P36.9) was the fifth leading cause of death, with 33 deaths and a rate of 15.8.
[3]For infants born to Dominican women, Bacterial sepsis (P36.9) was tied for fourth leading cause of death, with 11 deaths and a rate of 32.8.

NOTES: Certain cause-specific infant mortality rates and rankings cannot be shown for infants of Native Hawaiian or Other Pacific Islander non-Hispanic, Cuban, or Dominican women because of the small number of infant deaths. Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1997 Office of Management and Budget standards. People of Hispanic origin may be of any race.

SOURCE: National Center for Health Statistics, National Vital Statistics System, linked birth/infant death file.

Table 5. Infant mortality rate: United States and each state, 2023

[By place of residence]

Area	Rate (deaths per 1,000 births)	Infant deaths	Live births
United States[1]	5.61	20,162	3,596,017
Alabama	7.64	442	57,858
Alaska	7.21	65	9,015
Arizona	5.54	433	78,096
Arkansas	8.22	290	35,264
California	4.10	1,642	400,108
Colorado	4.55	280	61,494
Connecticut	4.49	155	34,559
Delaware	6.14	64	10,427
District of Columbia	6.97	55	7,896
Florida	6.10	1,351	221,410
Georgia	6.99	874	125,120
Hawaii	4.86	72	14,808
Idaho	4.38	98	22,397
Illinois	5.91	738	124,820
Indiana	6.51	514	79,000
Iowa	5.10	184	36,052
Kansas	5.23	178	34,065
Kentucky	6.58	342	51,984
Louisiana	7.14	392	54,927
Maine	5.68	66	11,627
Maryland	5.61	368	65,594
Massachusetts	3.28	220	67,093
Michigan	6.09	604	99,124
Minnesota	4.73	292	61,715
Mississippi	8.94	308	34,459
Missouri	6.12	411	67,123
Montana	5.51	61	11,078
Nebraska	6.39	154	24,111
Nevada	5.88	187	31,794
New Hampshire	2.93	35	11,936
New Jersey	3.69	373	101,001
New Mexico	4.39	92	20,951
New York	4.03	821	203,612
North Carolina	6.95	834	120,082
North Dakota	4.87	47	9,647
Ohio	7.16	909	126,896
Oklahoma	7.12	341	47,909
Oregon	4.62	177	38,298
Pennsylvania	5.57	707	126,951
Rhode Island	4.79	47	9,805
South Carolina	6.96	402	57,729
South Dakota	6.34	71	11,201
Tennessee	6.48	538	83,021
Texas	5.83	2,263	387,945
Utah	5.22	235	45,019
Vermont	3.16	16	5,065
Virginia	5.87	544	92,649
Washington	5.04	408	80,932
West Virginia	5.60	93	16,606
Wisconsin	5.77	345	59,754
Wyoming	3.84	23	5,990
Puerto Rico	7.10	132	18,601
Guam	15.30	36	2,353

[1]Does not include Puerto Rico or Guam.

SOURCE: National Center for Health Statistics, National Vital Statistics System, linked birth/infant death file.

Technical Notes

Data source and 2003 revision

Information on the data source for the linked birth/infant death file is available elsewhere (1). Additionally, further information on the 2003 revision of the birth certificate is available (3); see also the U.S. Standard Certificate of Live Birth (10).

Weighting

In 2023, a record weight was added to the U.S. linked file to compensate for the 1.2% of infant death records that could not be linked to their corresponding birth certificates. The percentage of records linked varied by registration area, ranging from 93.8% through 100.0% (Table I). The number of infant deaths in the linked file for the 50 states and the District of Columbia was weighted to equal the sum of the linked plus unlinked infant deaths by state of occurrence of birth and age at death (younger than 7 days, 7–27 days, and 28 days to younger than 1 year). The addition of the weight reduced the potential for bias in comparing infant mortality rates by maternal and infant characteristics.

The 2023 linked file initially included 20,192 infant death records. Of these records, 19,947 were linked; 245 were unlinked because corresponding birth certificates could not be identified. The 20,192 linked and unlinked records contained 28 records of infants whose mothers' usual place of residence was outside of the United States; these records were excluded from linked file analyses for a weighted total of 20,162 infant deaths by place of residence for 2023.

Comparison of infant mortality data between linked file and vital statistics mortality file

The overall infant mortality rate of 5.61 from the 2023 period linked file is statistically the same as that from the 2023 vital statistics mortality file (5.60) (11). The number of infant deaths in the linked file (19,947) differs slightly from the number in the mortality file (20,145) (11). Differences in numbers of infant deaths between the two data sources are primarily due to geographic coverage differences. For the vital statistics mortality file, all deaths occurring in the 50 states and the District of Columbia are included regardless of the place of birth of the infant. In contrast, to be included in the U.S. linked file, both the birth and death must occur in the 50 states or the District of Columbia (the territory linked file is a separate file). Weighting of the linked file also may contribute to small differences in numbers and rates by specific variables between these two data sets.

Period of gestation

Beginning with the 2014 data year, the National Center for Health Statistics (NCHS) transitioned to a new standard for estimating the gestational age of the newborn. The new measure—the obstetric estimate of gestation at delivery—replaces the measure based on the date of the last normal menses

Table I. Percentage of infant deaths linked to their corresponding birth records, by state of occurrence of death: United States and each state, 2023

Area	Percent linked by state of occurrence of death
United States	98.8
Alabama	100.0
Alaska	96.7
Arizona	98.6
Arkansas	100.0
California	98.2
Colorado	100.0
Connecticut	100.0
Delaware	100.0
District of Columbia	99.2
Florida	100.0
Georgia	99.4
Hawaii	98.5
Idaho	100.0
Illinois	99.6
Indiana	99.8
Iowa	100.0
Kansas	100.0
Kentucky	98.4
Louisiana	97.2
Maine	100.0
Maryland	99.4
Massachusetts	100.0
Michigan	99.3
Minnesota	100.0
Mississippi	99.6
Missouri	99.8
Montana	100.0
Nebraska	98.1
Nevada	99.5
New Hampshire	100.0
New Jersey	97.4
New Mexico	93.8
New York	97.6
New York City	99.5
North Carolina	98.0
North Dakota	100.0
Ohio	99.7
Oklahoma	99.7
Oregon	99.5
Pennsylvania	99.2
Rhode Island	100.0
South Carolina	100.0
South Dakota	100.0
Tennessee	100.0
Texas	95.4
Utah	100.0
Vermont	100.0
Virginia	98.6
Washington	100.0
West Virginia	97.8
Wisconsin	99.4
Wyoming	100.0

SOURCE: National Center for Health Statistics, National Vital Statistics System, linked birth/infant death file.

(12). Accordingly, gestational age data shown in this report are based on the obstetric estimate of gestation at delivery. National data based on obstetric estimate of gestation at delivery data are available only from data year 2007 forward. Information on and discussion of the reasons for the change, as well as a detailed comparison of the two measures, are presented elsewhere (12).

Sex, birthweight, plurality, and nativity

Detailed definitions and more information on sex, birthweight, plurality, and nativity are available elsewhere (1,3).

Cause-of-death classification

The mortality statistics presented in this report were compiled in accordance with the current revision of the *International Statistical Classification of Diseases* (ICD). ICD provides the basic guidance to code and classify causes of death, details disease classification, and supplies definitions, tabulation lists, the format of the death certificate, and the rules for coding cause of death. Cause-of-death data presented in this report were coded by procedures outlined in annual issues of the *NCHS Instruction Manual* (13,14).

In this report, tabulations of cause-of-death statistics are based solely on the underlying cause of death. Generally, more medical information is reported on death certificates than is directly reflected in the underlying cause of death. This is captured in NCHS multiple cause-of-death statistics (15,16).

Tabulation lists and cause-of-death ranking

The cause-of-death rankings for ICD–10 are based on the "List of 130 Selected Causes of Infant Death." The tabulation lists and rules for ranking leading causes of death are published in the *NCHS Instruction Manual*, Part 9: *"ICD–10 Cause-of-death Lists for Tabulating Mortality Statistics"* (17).

Computation of rates

Information on and discussion of computation of rates (1) is also available from the "User Guide to the 2010 Natality Public Use File" at: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/DVS/natality/UserGuide2010.pdf.

Presentation of counts, rates, and percentages

An asterisk (*) in the tables indicates that a count, rate, or percentage does not meet NCHS standards of reliability (18,19). Three separate criteria are used to determine if a count (number of events), rate, or proportion meets these suppression standards (3).

Presentation of counts and rates

New criteria for showing counts and rates were adopted by NCHS beginning with 2023 data (18). For counts, the number of deaths is shown depending on the count of deaths and on the relative width of the confidence interval of the count, based on a gamma distribution. Before the 2023 data year, the number of deaths was shown regardless of the count. For rates, if a rate is shown depends on the count for the numerator and on the relative width of the confidence interval of the rate based on a Student's *t* confidence interval for the logarithm of the rate. Rates published for data years before 2023 were represented by an asterisk when the numerator was fewer than 20 deaths. For detailed information on the new criteria, see "National Center for Health Statistics Data Presentation Standards for Rates and Counts" (18).

Presentation of percentages

For proportions (or percentages) for linked birth/infant deaths, new criteria adopted by NCHS were implemented starting with the 2023 data year (19). For 2023 and later, a proportion (percentage) was shown based on the denominator size and on the absolute or relative widths of the confidence interval of the proportion or percentage calculated using the Clopper–Pearson method. For the presentation criterion used before the 2023 data year, see the 2023 Natality User Guide (3). Starting in 2023, proportions or percentages based on fewer than 10 infant deaths are represented with an asterisk. For detailed information on these criteria, see "National Center for Health Statistics Data Presentation Standards for Proportions" (19).

Random variation in infant mortality rates

For information and discussion on random variation and significance testing for linked data (1), see also the "User Guide to the 2010 Natality Public Use File" at: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/DVS/natality/UserGuide2010.pdf.

Availability of linked file

Linked file data are available for download from the Vital Statistics Online Data Portal: https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm. Linked period file data may also be accessed via the Centers for Disease Control and Prevention's WONDER database, available from: https://wonder.cdc.gov/lbd.html. Beginning with 2005, the public-use file no longer includes geographic detail; such files are available upon special request (see the NCHS Division of Vital Statistics data release policy at: https://www.cdc.gov/nchs/nvss/nvss-restricted-data.htm). Data are also available in issues of Vital and Health Statistics, Series 20; National Vital Statistics Reports; and NCHS Data Briefs from the NCHS website: https://www.cdc.gov/nchs/products/index.htm.

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National Vital Statistics Reports, Vol. 74, No. 7, June 12, 2025

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National Center for Health Statistics

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About the Office of Minority Health

Mission

To provide national leadership, resources, and coordination to improve the health of racial and ethnic minority populations and American Indians and Alaska Natives and eliminate health disparities.

Vision

All individuals, families, and communities are healthy and thriving.

Our History

The Office of Minority Health (OMH) within the U.S. Department of Health and Human Services (HHS) was established in 1986 as a key outcome of the landmark 1985 Secretary's Task Force Report on Black and Minority Health, commonly known as the Heckler Report. This report set “the framework for improving the health of minorities,” and marked “the beginning of the end of the health disparity that has, for so long, cast a shadow on the otherwise splendid American track record of ever improving health.”

The HHS OMH was officially authorized by Congress in 1990 through the Disadvantaged Minority Health Improvement Act of 1990 (Public Law No: 101-527). The Office is currently authorized under Section 1707 of the Public Health Service Act (42 U.S.C. § 300u–6).

What We Do: Our Priorities

HHS OMH accomplishes its mission and goals through a range of programs, initiatives, and services to support OASH priorities:

Chronic Disease Initiatives
Addressing chronic diseases through innovative and community-based grants and initiatives focused on prevention and improving health outcomes.

Knowledge, Resource, and Data Dissemination
Disseminating minority health information to share best practices, health related data, up-to-date resources and news, and policy updates.
Provider Education & Training
Training healthcare professionals to provide culturally and linguistically appropriate information on nutrition, physical activity, and healthy lifestyles.
Strategic Partnerships
Establishing and leveraging strategic partnerships to reverse chronic diseases and improve health outcomes.
Community Engagement
Engaging the voices of those we serve to guide programmatic development.

OMH Resource Center and Knowledge Center

Launched in 1987, the OMH Resource Center and Knowledge Center (OMHRC) have served as nationwide resources providing a variety of evidence-based information resources, including access to online document collections, database and funding searches, and customized responses to requests for information for more than 30 years. OMHRC is a part of the HHS Office of Minority Health's statutory mandate to

facilitate the exchange of information related to health information and promotion, preventive health services, and education in the appropriate use of health care.

Think Cultural Health

In 2004, HHS OMH launched Think Cultural Health (TCH), a website featuring information, continuing education opportunities, resources, and more for health and health care professionals to learn about culturally and linguistically appropriate services. TCH supports the HHS Office of Minority Health's statutory mandate to build the capacity of health professionals in addressing cultural and linguistic barriers to care; improve access to health care for individuals with limited English proficiency; and advise in matters related to the development, implementation, and evaluation of health professionals' education in improving health care outcomes.

Date Last Reviewed: November 2025

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Office of Minority Health

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The mission of the Office of Minority Health is to provide national leadership, resources, and coordination to improve the health of racial and ethnic minority populations and American Indians and Alaska Natives and eliminate health disparities.

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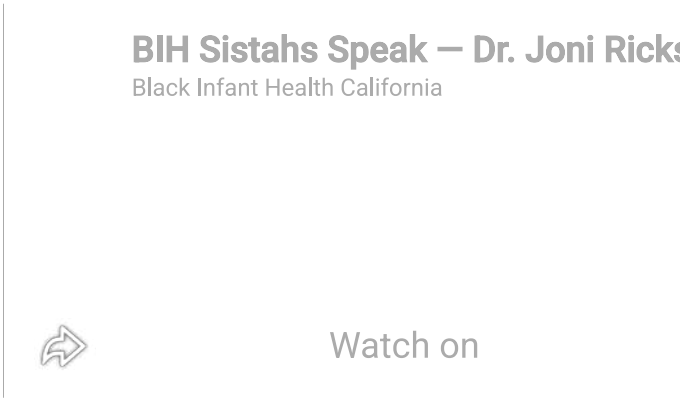
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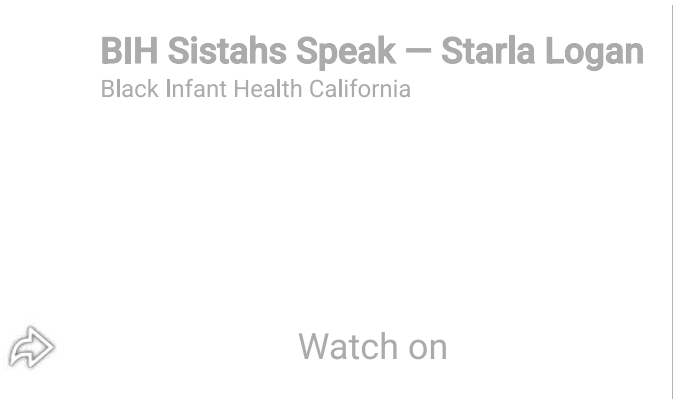
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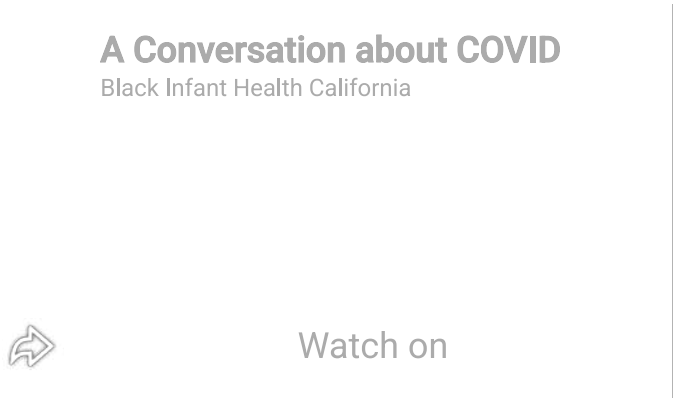
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39:22

RACISM AND ITS IMPACT

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28:06

IN A PERFECT WORLD

30:42

SOCIOECONOMICS DON’T MATTER

29:48

BLACK MATERNAL MENTAL HEALTH MATTERS

Guides

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Recognizing Signs of Preterm Labor

WHAT IS PRETERM LABOR?

Preterm labor happens when labor begins **before 37 weeks of pregnancy**. It can lead to preterm birth, which may increase health risks for babies, especially if they are born very early.

According to the CDC, about **1 in 10 babies in the U.S. is born preterm**, and Black women are at higher risk of preterm birth compared to other groups. Recognizing warning signs early and getting medical care right away can make a real difference.



WHY IT MATTERS

Preterm birth can affect a baby's breathing, feeding, temperature regulation, and development. The earlier a baby is born, the higher the risk for complications. Early recognition and treatment of preterm labor may:

- Delay birth
- Allow time for medications that support baby's lung development
- Improve health outcomes for both parent and baby

WARNING SIGNS OF PRETERM LABOR

Call or visit your provider **right away** if you have any of the following before 37 weeks:

- **Regular or frequent contractions** (tightening or hardening of the belly every10 minutes or more often)
- **Lower back pain** that is dull, constant, or comes and goes
- **Pelvic pressure** (feels like the baby is pushing down)
- **Menstrual-like cramps**
- **Change in vaginal discharge** (watery, mucus-like, or bloody)
- **Fluid leaking from the vagina** (could mean your water has broken)
- **Abdominal cramps** with or without diarrhea

Trust your instincts. If something doesn't feel right, it's always okay to call.

RECOGNIZING SIGNS OF PRETERM LABOR

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Managing Stress & Anxiety During Pregnancy

WHAT IS STRESS AND ANXIETY IN PREGNANCY?

Pregnancy brings big changes, and sometimes big feelings. Stress refers to the pressures or worries of everyday life (job, finances, family), while anxiety includes persistent worry, fear, or nervousness that may interfere with daily life. During pregnancy, these feelings are common and deserve attention.

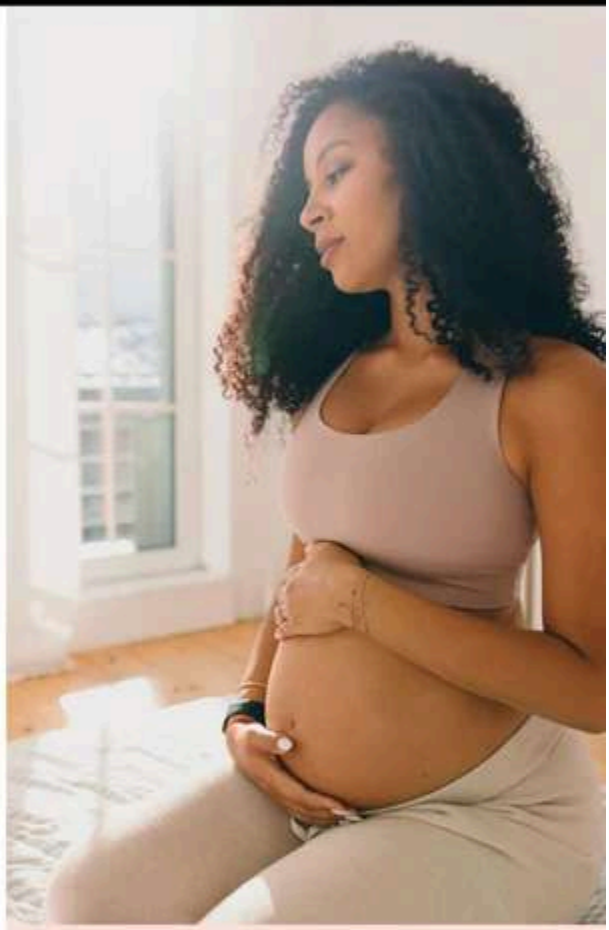
The CDC notes that anxiety disorders are common before, during, and after pregnancy.

WHY IT MATTERS

Untreated stress and anxiety during pregnancy are linked to risks such as preterm birth and low birth weight. Also, anxiety during pregnancy may lead to mood or anxiety disorders after birth. Recognizing and managing these feelings early helps both you and your baby.

SIGNS TO LOOK OUT FOR

- Worry or fear that won't go away
- Trouble sleeping or staying asleep
- Feeling on edge, restless, or irritable
- Difficulty concentrating or making decisions
- Physical symptoms (racing heart, shortness of breath, headaches)



If you notice these and they're affecting your daily life, speak with your prenatal provider—they can help.

MANAGING STRESS & ANXIETY DURING PREGNANCY

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Gestational Diabetes & Nutrition

WHAT IS GESTATIONAL DIABETES?

Gestational diabetes (GDM) happens when your body can't make enough insulin during pregnancy. This causes higher blood sugar levels, which can affect you and your baby's health.

- Usually diagnosed between 24–28 weeks of pregnancy.
- More common in women of color, those with a family history of diabetes, or those who've had GDM before.

THE GOOD NEWS

With healthy eating, activity, and medical support, most people manage GDM safely and have healthy pregnancies.

WHY NUTRITION MATTERS

Food directly affects blood sugar. The goal is to keep your blood sugar steady throughout the day — protecting your baby's growth and your own health.

KEYS TO SUCCESS

- Balance carbs with protein and healthy fats.
- Choose high-fiber carbs (whole grains, beans, fruits, veggies).
- Eat smaller, balanced meals and snacks regularly.
- Stay hydrated — water is best.



GESTATIONAL DIABETES AND NUTRITION

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Asthma During Pregnancy

WHAT YOU NEED TO KNOW WHEN YOU'RE EXPECTING

Pregnancy is such an exciting and special time for parents-to-be. But people with asthma may worry about how their disease may affect their pregnancy and babies.

Asthma is one of the most common medical concerns that occurs during pregnancy. Complications from asthma may include:

- **A small increased risk of preterm (early) labor and delivery**
- **High blood pressure and a related condition known as pre-eclampsia**
- **Low birth weight (babies born weighing less than 5 pounds, 8 ounces)**

It is not known if asthma is the direct cause of these problems or if other reasons are to blame. Keeping asthma well-controlled may help reduce the chance of complications.

KEEP YOUR ASTHMA WELL-CONTROLLED

Uncontrolled asthma can decrease oxygen to the fetus. Avoid or reduce asthma triggers like dust mites and secondhand smoke. Get the flu and COVID-19 vaccines (safe during pregnancy) to cut your chance of getting a serious respiratory infection.

During pregnancy, doctors may consider some asthma medicines to be safer than others, so your medicines may change. Work with your doctors to find the best treatment for you.



UPDATE YOUR ASTHMA ACTION PLAN

Asthma symptoms may get worse, stay the same or get better during pregnancy. Talk with your health care provider to make sure the medicines you are taking are still the right choice. Ask them about a pregnancy Asthma Action Plan.

RESOURCES

Visit **aafa.org/asthma-triggers-causes** for more information on asthma triggers.

Visit **aafa.org/actionplan** to download an Asthma Action Plan.

Visit **aafa.org/pregnancy** for more information on asthma and pregnancy.

ASTHMA AND PREGNANCY

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Hot Weather Safety for You and Baby

Being outside can be good for your health, but for pregnant women, heat can increase health risks. Use these tips and action items, when possible, to stay safe on hot days.



STAY COOL

Check your local HeatRisk by entering your zip code on the CDC *HeatRisk* Dashboard: cdc.gov/HeatRisk

On Red & Magenta days, limit your time outside & check the **CDC *HeatRisk* Dashboard** for more actions.

Most pregnant women are sensitive to heat on **Orange** heat risk days, but some are sensitive on **Yellow** days. Work with your doctor to know when to take action. Actions include:

- If you are outside, especially for a long time:
  - Stay in the shade as much as possible; take breaks when you can.
  - Check the local weather forecast & do outdoor activities during the coolest parts of the day or evening, if possible.
- When you are indoors:
  - Use air conditioning, if available, or find and go to a location with one.
  - Use a fan to cool your body off, when indoor temperatures are less than 90°F.



If I need to stay cool, I can go here: _____

Here's who can check on me on hot days: _____

I need to start taking action to stay safe (circle):
Yellow *HeatRisk* **Orange *HeatRisk***

STAY HYDRATED

- Carry a water bottle. Drink and refill the water bottle throughout the day.
- Limit beverages high in sugars, sodium, and caffeine, if possible.
- Check your urine color. When it's light yellow or clear, it usually means you are drinking enough water.
- Talk to your doctor about how to manage fluids given your pregnancy.



HOT WEATHER SAFETY FOR YOU AND BABY

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STIs and Pregnancy

Pregnancy does not provide women or their babies protection against sexually transmitted infections (STIs). Therefore, pregnant women should ask their doctors to test for STIs, as part of their routine care. This is important to prevent serious health complications.



SIGNS & SYMPTOMS

Most STIs have no signs or symptoms.

You or your partner could be positive and not know it. The only way to know your status is to get tested.

RISK FACTORS

STIs can harm you and the baby.

They can be more serious, even life-threatening, if you come in contact with a STI while pregnant. If you are diagnosed with an STI while pregnant, your sex partner(s) should be tested and treated.

HOW IT SPREADS

Pregnancy does not provide protection against STIs.

STIs pass from one person to another through oral, anal, and vaginal sex, as well as genital skin-to-skin contact.

STIS AND PREGNANCY

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Talking to Your Provider: Questions to Ask During Prenatal Visits

EMPOWER YOUR VOICE. PROTECT YOUR HEALTH.

You deserve respectful, quality care throughout your pregnancy. Asking questions during prenatal visits helps you understand what's happening with your body, make informed decisions, and advocate for yourself and your baby.

WHY IT MATTERS

Black women and birthing people are more likely to experience complications during pregnancy—not because of biology, but because of systemic bias and unequal care. Feeling heard and respected by your provider is not a luxury. It's your right.

QUESTIONS TO ASK AT YOUR APPOINTMENTS

Use this list as a guide for each visit. Write down answers or bring someone with you to help take notes.

About Your Pregnancy

- How is my baby growing?
- Is everything looking healthy so far?
- Are there any signs of complications I should be aware of?

About Tests and Procedures

- What tests are being done today? Why?
- What do the results mean for me and my baby?
- Do I have options or can I decline a test?



TALKING TO YOUR PROVIDER

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Caffeine and Pregnancy: What You Need to Know



We don't know a lot about the effects of caffeine during pregnancy on you and your baby. So it's best to limit the amount you get each day.

If you're pregnant, limit caffeine to 200 milligrams each day. This is about the amount in 12 ounces or one and a half cups of coffee.

If you're breastfeeding, limit caffeine to no more than two cups of coffee a day.

WHAT CONTAINS CAFFEINE?

- Coffee
- Tea
- Soda
- Chocolate
- Some energy drinks
- Some medicines

Be cautious of energy drinks, as they may contain harmful ingredients for your baby.

HOW DOES CAFFEINE AFFECT YOUR BABY?

When you consume caffeine during pregnancy, it passes through the placenta to your baby. Your baby's body isn't fully equipped to process caffeine the way yours is, so it can linger in their system longer.

Excessive caffeine intake has been linked to:

- Miscarriage
- Preterm birth
- Low birth weight

WHAT ABOUT MEDICINES AND HERBAL PRODUCTS?

Some medicines and herbal products contain caffeine, like:

- Guarana
- Yerba Mate
- Kola Nut
- Green Tea Extract

The FDA requires medicine labels to list caffeine content, but herbal products often do not. Talk to your health care provider before taking any medications or herbal supplements during pregnancy.

CAFFEINE AND PREGNANCY

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Tips for Identifying Support for Postpartum Depression

If you are feeling overwhelmed or want support now, call or text the National Maternal Mental Health Hotline at 1-833-TLC-MAMA (1-833-852-6262). TTY users can use a preferred relay service or dial 711 and then 1-833-852-6262.

If you are in mental health distress or a suicidal crisis, call or text the Suicide and Crisis Lifeline at 988 for free and confidential support.

Postpartum Depression (PPD) is a common mental health condition. About 1 in 8 women report symptoms of postpartum depression in the year after giving birth. Feeling sad, anxious, or overwhelmed during pregnancy or in the months following birth are some common signs of PPD. You might not feel connected to your baby, or you might not feel love or care for the baby. You might even feel like harming yourself or your child. These symptoms are real, and reaching out for help is important.



ASK FOR SUPPORT

Reach out to your partner, a parent, a sibling, or a trusted friend to share how you're feeling and ask for support.

- Be specific. Do you need a ride to appointments, help with groceries or childcare, or someone to listen?
- If you don't know where to start, ask for help figuring out what you need, and create a support plan together.

FIND A COMMUNITY

If you don't have support from family or friends, you can get help in your community from:

- Social service agencies
- Family resource centers
- Faith-based groups
- Virtual or in-person support groups
- Breastfeeding groups

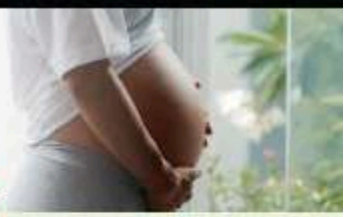


TIPS FOR IDENTIFYING SUPPORT FOR POSTPARTUM DEPRESSION

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Prepare for Wildfire Season: A Guide for Pregnant Women



Pregnancy is a time to take extra care to protect yourself against wildfire smoke.

PROTECTING YOURSELF DURING WILDFIRE SEASON

When you're pregnant, it's important to take extra precautions during wildfire season. Here's how to stay prepared:

- **Talk to Your Healthcare Provider:** Discuss where you'll get prenatal care or deliver your baby if your doctor's office or hospital is closed.
- **Know the Signs of Labor:** Be familiar with both labor and early labor signs, so you're ready when the time comes.
- **Stock Up on Medicine:** Keep a 7 to 10-day supply of prescription meds and prenatal vitamins in a waterproof, childproof container in case of evacuation.
- **Pack a Go-Bag:** Include essentials for both mom and baby—clothing, medical records, and insurance information.
- **Choose No-Cook Groceries:** Frying or grilling indoors can worsen air quality. Eat foods that don't need cooking.

DURING A WILDFIRE SMOKE EVENT

- **Monitor Air Quality:** Pay attention to air quality reports and follow guidelines for "sensitive individuals."
- **Stay Indoors:** Keep windows and doors closed. Use an HVAC system with a filter or a portable air purifier if available.
- **Check the CDC's Heatrisk Dashboard:** If it's hot and your HeatRisk level is orange or higher, find a cooling center by calling 2-1-1 or contacting your local health department. Click here to check your HeatRisk.
- **Evacuate if Needed:** If you experience breathing issues that don't improve, consider evacuation.
- **In Case of Labor:** Know the signs of labor. If it happens, contact your healthcare provider or 9-1-1 and head to the hospital if it's safe.
- **At Shelters:** Inform officials if you're pregnant and wear a mask over your nose and throat if going outside during wildfire smoke events.

AFTER A WILDFIRE

- **Wait for the All-Clear:** Don't return home until local authorities confirm it's safe.
- **Be Cautious of Lingering Smoke:** Smoke can stay in the air for days after wildfires. Continue to monitor air quality.
- **Avoid Ash:** Protect yourself by avoiding direct contact with ash and wash it off your skin and out of your eyes as soon as possible.

For more information, visit https://www.cdc.gov/wildfires/risk-factors/wildfire-smoke-and-pregnancy.html

WILDFIRE SEASON AND PREGNANCY

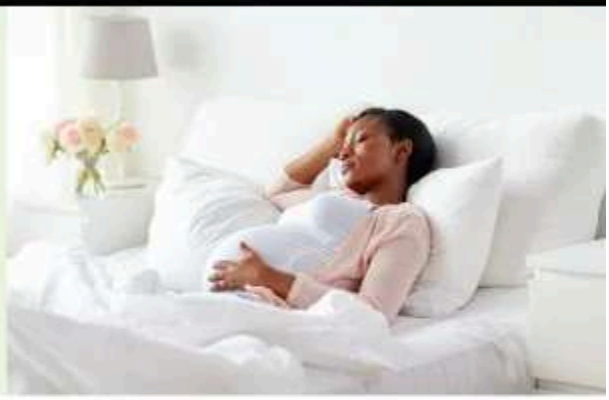
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Flu and Cold While Pregnant: Symptoms & Safe Treatments

When you're pregnant, dealing with the flu or a cold can feel a bit more stressful, but with the right info, you can easily take care of yourself and your baby.

Here's a handy guide to help you manage these common illnesses during pregnancy.



COLD SYMPTOMS

- Runny or stuffy nose
- Sore Throat
- Mild cough
- Sneezing
- Generally mild & develop gradually

FLU SYMPTOMS

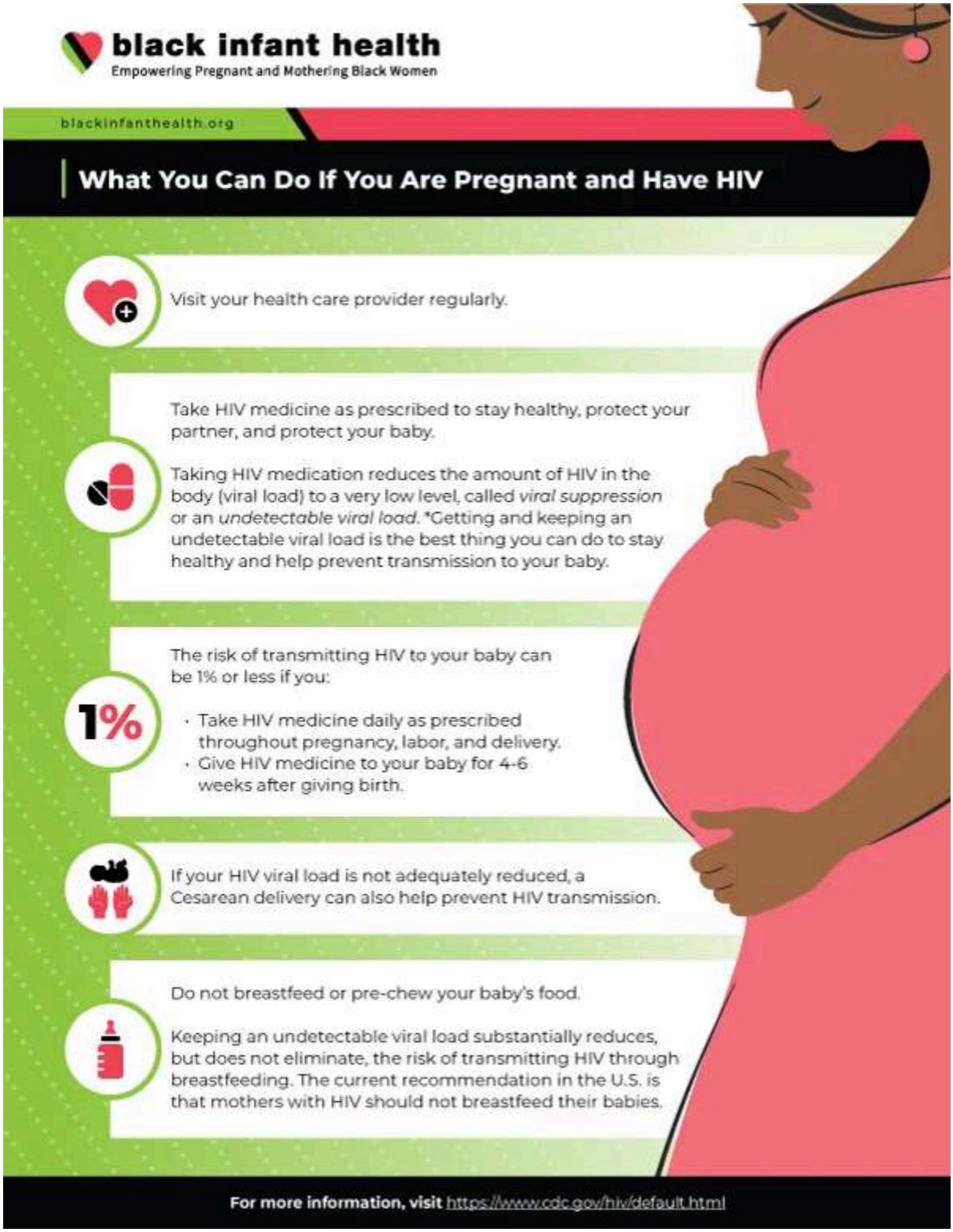
- High fever (often over 100.4)
- Severe body aches
- Fatigue and weakness
- Chills and Sweats
- Headache
- Dry, persistent cough
- Symptoms often come on suddenly

Signs to be aware of:

- Difficulty breathing or shortness of breath
- Persistent chest or abdominal pain
- Sudden dizziness or confusion
- Severe or persistent vomiting
- High fever that doesn't respond to acetaminophen (Tylenol)
- Decreased fetal movement

If you experience any of these symptoms, contact your healthcare provider immediately or go to the nearest emergency room.

FLU & COLD WHILE PREGNANT



HIV AND PREGNANCY

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Safe and Healthy Diaper Changing Steps

Protect yourself and your child from germs by following these diapering steps.

1 CLEAN CHILD

Keep hand on child at all times for safety!
- Place the child on diapering surface and unfasten diaper.
- Clean the child's diaper area with fresh baby wipes, wiping from front to back.
- Keep dirty diaper/clothing away from any surface that cannot be easily cleaned.

2 REMOVE DIRTY DIAPER

If child is using cloth diapers:
- Place used disposable baby wipes in a plastic-lined, lidded trash can or place cloth wipes in a cloth diaper pail.
- If child has pooped, fold diaper closed and set aside, out of child's reach.
- If child has not pooped, place the dirty diaper in a cloth diaper pail.

If child is using disposable diapers:
- Set the used baby wipes in the dirty diaper.
- Place the dirty diaper and used baby wipes in a plastic-lined, lidded trash can.

3 REPLACE DIAPER

- Slide a fresh diaper under the child.
- Apply diaper cream, if needed.
- Fasten the diaper and dress the child.

4 WASH CHILD'S HANDS

- Wash child's hands with soap and water and place him or her in a safe, supervised area.

5 CLEAN DIAPERING SURFACE

Clean surface especially if there were any spills or leaks of diaper contents
- If diapering surface is waterproof, wipe up any visible soil with damp paper towels or a baby wipe.
- If diapering surface has a fabric cover, remove the soiled cover and replace it with a fresh one.

6 FLUSH POOP

Flush poop if using cloth diapers
- If the child had pooped into the diaper, discard poop in toilet. Take care not to touch any other surfaces.
- Place the dirty diaper in the trash can or cloth diaper pail.

7 WASH YOUR HANDS

- Wash your hands thoroughly with soap and water.

For more information, visit https://www.cdc.gov/hygiene/childcare/diapering.html

SAFE AND HEALTHY DIAPER CHANGING STEPS

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Stop Germs! Wash Your Hands.

Keeping hands clean is one of the most important things we can do to stop the spread of germs and stay healthy.



WHEN?

- After using the bathroom
- Before, during, and after preparing food
- Before eating food
- Before and after caring for someone at home who is sick with vomiting or diarrhea
- After changing diapers or cleaning up a child who has used the toilet
- After changing diapers or cleaning up a child who has used the toilet
- After blowing your nose, coughing, or sneezing
- After touching an animal, animal feed, or animal waste
- After handling pet food or pet treats
- After touching garbage

HOW?



WET your hands with clean, running water (warm or cold), turn off the tap, and apply soap.



LATHER your hands by rubbing them together with the soap. Be sure to lather the backs of your hands, between your fingers, and under your nails.



SCRUB your hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.



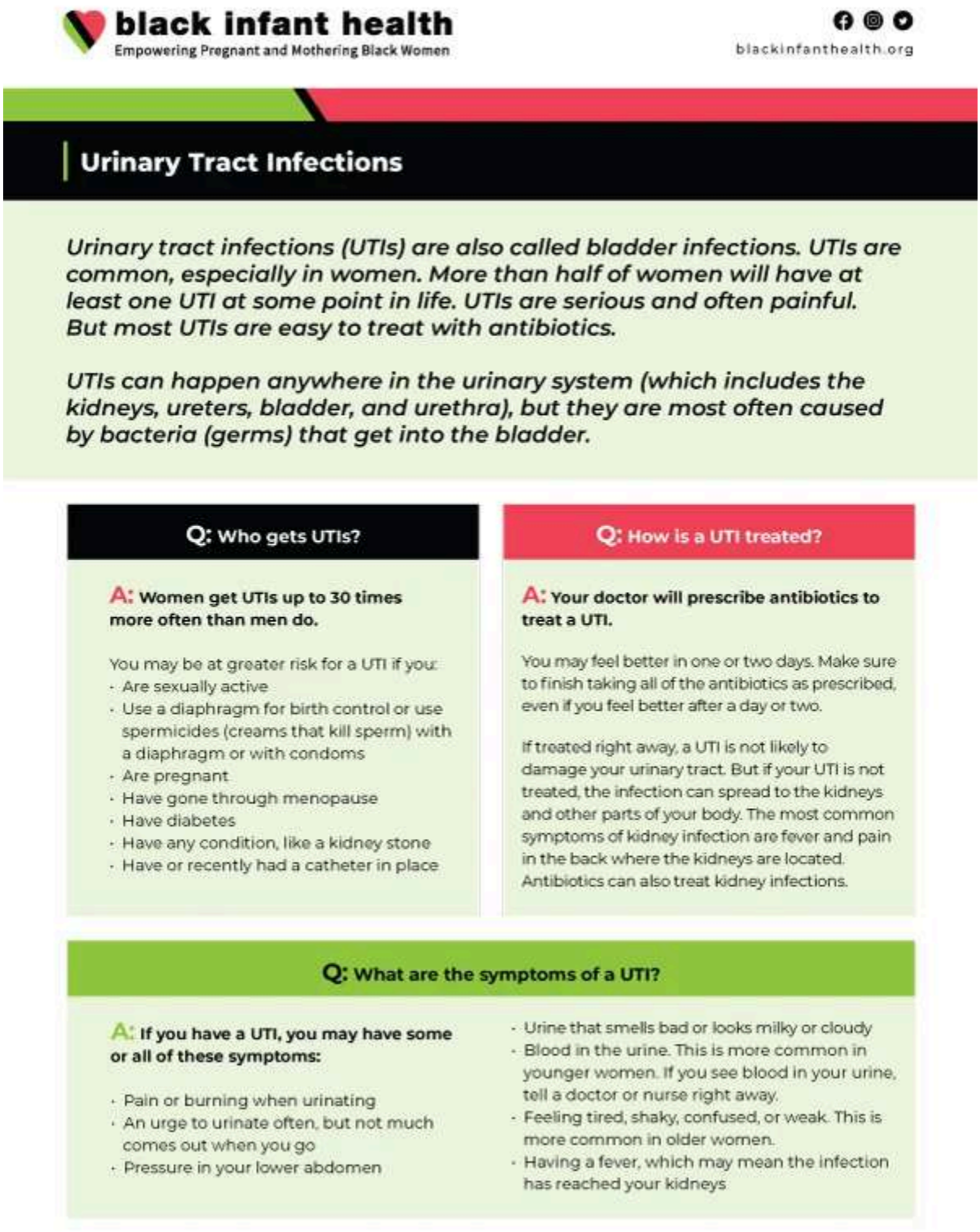
RINSE hands well under clean, running water.



DRY hands using a clean towel or air dry them.

For more information, visit www.cdc.gov/handwashing

HANDWASHING GUIDE



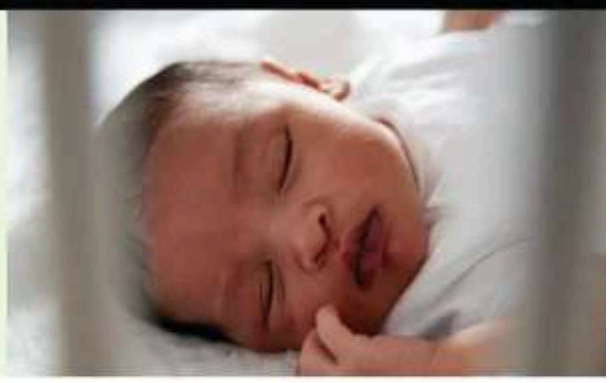
URINARY TRACT INFECTIONS

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What Is SIDS?

Sudden Infant Death Syndrome (SIDS) is the sudden, unexplained death of a baby younger than 1 year of age that doesn't have a known cause even after a complete investigation.



Even though we don't know the exact cause of SIDS, we do know that some things can increase a baby's risk for SIDS and other sleep-related causes of infant death. The good news is that there are ways to reduce the risk.

Learning about SIDS and safe sleep for babies is important for all caregivers, not just for parents. Grandparents, aunts, uncles, babysitters, childcare providers, and anyone else who might care for babies should learn more. Simple actions can make a big difference.

The ABCs of Safe Sleep

*Keeping babies safe while sleeping is easy with the **ABC**s!*
*Babies should always sleep **A**lone on their **B**ack in a **C**rib.*



PREVENT SIDS AND ENCOURAGE SAFE SLEEP

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Stay Active During Pregnancy

Physical activity is important for everyone, including people who are pregnant. Staying active during pregnancy can help you feel better right away — and it can even make your labor shorter and recovery faster.



Being active can...



Boost your mood



Sharpen your focus



Reduce your stress



Improve your sleep

Getting active during pregnancy may also make it less likely you'll have complications like:

- **Gestational diabetes** (a type of diabetes that happens during pregnancy)
- **Preeclampsia** (a condition that causes high blood pressure and other problems)
- **Postpartum depression**

If you were already physically active before your pregnancy, it's healthy to keep it up. Even if you were doing more vigorous activities — like running — it's safe to keep doing them while you're pregnant.

And if you weren't active before your pregnancy, it's not too late to start!

Listen to your body.
Remember that lots of things count as physical activity — so listen to your body, and find what works for you at each stage of your pregnancy. And keep in mind that physical activity may feel different when you're pregnant. If an activity doesn't feel right, try something else instead.

STAY ACTIVE DURING PREGNANCY

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The Benefits of Breastfeeding



Breastfeeding gives your baby the nutrition they need from their very first moments. Even though it's a natural activity, it can be challenging at first, with many ups and downs. Breastfeeding takes practice and it may take some time to get the hang of it, which is common for many moms.

Breastfeeding gives babies a healthy start in life. But it's not just good for babies — it's good for moms too.



Health Benefits

Research shows that breastfeeding lowers your baby's risk of certain infections and diseases, including these:

- Asthma
- Type 1 diabetes
- Ear infections
- Lower respiratory infections
- Diarrhea and vomiting
- Childhood obesity
- Sudden infant death syndrome (SIDS)

For moms, breastfeeding can help you recover faster from childbirth. It can also reduce your risk of high blood pressure, certain breast and ovarian cancers and type 2 diabetes. Breastfeeding may also help you lose weight after childbirth.

Bonding with Baby

Physical contact is very important for your baby. It helps your baby feel safe, warm, secure and loved. The skin-to-skin contact from breastfeeding also boosts your levels of oxytocin, a hormone that helps breast milk flow and helps you feel calm.





Nutrients

Breast milk is one of the best things that your baby needs to grow and develop. It even changes to meet your baby's needs as they get older. Breast milk is rich in vitamins, minerals, and nutrients as well as other ingredients that help your baby grow healthy and strong.

BENEFITS OF BREASTFEEDING

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How Dads Can Support Their Breastfeeding Partner

Breastfeeding is a family affair. It takes time, practice, patience, and teamwork. As a dad, you may feel left out if your partner breastfeeds your new baby. But you play an important role.

Here are ways you can offer support and encouragement, and be involved every step of the breastfeeding journey.





Before Baby Arrives

- **Learn the breastfeeding basics,** including what to expect during your baby's first days.
- **Set goals.** Work with your partner to come up with a birth plan and breastfeeding goals. This will help you get on the same page about what breastfeeding success looks like.
- **Join her for a breastfeeding class.** The more you know about breastfeeding, the more you can support your partner.
- **Get to know your delivery hospital or birthing center.** If possible, take a tour or class at your hospital or birthing center with your partner. Ask about its breastfeeding practices to ensure your delivery team can help you meet your breastfeeding goals.

At the Hospital or Birthing Center

- **Share your breastfeeding plan.** Let your hospital staff know that your partner wants to breastfeed.
- **Focus on skin-to-skin time.** Hold your baby skin to skin between feedings.
- **Ask for help.** If your partner is having trouble with breastfeeding, ask hospital staff for help. Or encourage your partner to contact her healthcare team for support.



HOW DADS CAN SUPPORT THEIR BREASTFEEDING PARTNER

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Healthy Eating for Women Who Are Pregnant or Breastfeeding

Healthy eating is important at every age. Eat a variety of fruits, vegetables, grains, protein foods, and dairy or fortified soy alternatives. When deciding what to eat or drink, choose options that are full of nutrients and limited in added sugars, saturated fat, and sodium. Start with these tips:



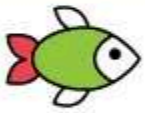
For more information, visit
https://www.myplate.gov/life-stages/pregnancy-and-breastfeeding



Eat a Variety of Healthy Foods. It's important to eat a variety of fruits, vegetables, grains, protein foods, and dairy or fortified soy alternatives. Choose options for meals, beverages, and snacks that have limited added sugars, saturated fat, and sodium (salt).

Get Your Plan. Calorie and nutrient needs are different during pregnancy and when you are breastfeeding. Get your MyPlate Plan to learn your estimated calorie needs and how to meet your food group goals.





Make Safe Seafood Choices. Eating seafood during pregnancy may benefit your baby's growth and is a healthy protein source for you during both pregnancy and breastfeeding. Choose options lower in methylmercury, like cod, salmon, or tilapia. Learn more at FDA's Advice About Eating Fish webpage.

Ask About Supplements. In addition to a healthy diet, your doctor may recommend a prenatal vitamin and mineral supplement to help you meet your needs. After pregnancy, your doctor may recommend switching from a prenatal to a multivitamin supplement during breastfeeding.





Keep Food Safe. You and your baby are at higher risk for foodborne illness. Only eat foods that have been cooked to the proper temperature and avoid unpasteurized (raw) milk or juice, raw sprouts, unwashed produce, cold deli meats, or soft cheese made from unpasteurized milk. See FoodSafety.gov for more information.

Avoid All Alcohol. Pregnant women and women who may become pregnant should not drink any alcohol. Talk with your doctor before considering drinking alcohol while you are breastfeeding.



MAKING HEALTHY FOOD CHOICES FOR YOU AND YOUR BABY

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High Blood Pressure and Pregnancy



Some women have high blood pressure during pregnancy. This can put the mother and her baby at risk for problems during the pregnancy. High blood pressure can also cause problems during and after delivery. The good news is that high blood pressure is preventable and treatable.



What is blood pressure? Blood pressure is the pressure of blood pushing against the walls of your arteries. Arteries carry blood from your heart to other parts of your body. Your blood pressure normally rises and falls throughout the day based on your activities.

Why is high blood pressure a problem during pregnancy? High blood pressure (also called hypertension) can lead to health problems at any time in life. High blood pressure usually does not cause symptoms. During pregnancy, severe or uncontrolled high blood pressure can cause problems for you and your fetus.

Some women have high blood pressure before they get pregnant. Others develop it for the first time during pregnancy. A serious high blood pressure disorder called preeclampsia can also happen during pregnancy or soon after childbirth.





How often should blood pressure be checked during pregnancy? Your obstetrician-gynecologist (ob-gyn) should check your blood pressure at each prenatal care visit. Blood pressure changes often during the day. If you have one high reading, another reading may be taken later during your office visit.

What is preeclampsia? Preeclampsia happens when a woman who previously had normal blood pressure suddenly develops high blood pressure and protein in her urine or other problems after 20 weeks of pregnancy. Women who have consistent high blood pressure can also get preeclampsia.

In rare cases, preeclampsia can happen after you have given birth. This is a serious medical condition known as postpartum preeclampsia. It can happen in women without any history of preeclampsia during pregnancy. The symptoms for postpartum preeclampsia are similar to the symptoms of preeclampsia. Postpartum preeclampsia is typically diagnosed within 48 hours after delivery but can happen up to 6 weeks later.



HIGH BLOOD PRESSURE AND PREGNANCY

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Protect Mom and Baby with Vaccines



Did you know a baby gets disease immunity (protection) from mom during pregnancy? This immunity can protect baby from some diseases during the first few months of life, but immunity decreases over time.



Get a whooping cough vaccine and a flu vaccine during each pregnancy. Moms, get a whooping cough vaccine (also called Tdap) and a flu shot during each pregnancy. Use our Adult Vaccine Self-Assessment Tool to get a customized printout of recommended vaccines to take to the next medical appointment.

Whooping cough, known as pertussis, can be serious for anyone, but for a newborn, it can be life-threatening.

- About 7 in 10 deaths from whooping cough are among babies younger than 2 months old. These babies are too young to receive a Tdap vaccine. The younger the baby is when they get whooping cough, the more likely they will need to be treated in a hospital.
- It may be hard to know if a baby has whooping cough because many babies with this disease don't cough at all. Instead, it can cause them to stop breathing and turn blue.



When a pregnant person gets a whooping cough vaccine during pregnancy, her body will create protective antibodies and pass some of them to the baby before birth. These antibodies will provide the baby some short-term, early protection against whooping cough. CDC recommends getting a whooping cough vaccine during the 27th through 36th week of each pregnancy, preferably during the earlier part of this time period.



Flu. Pregnant people are more likely to have severe illness from flu, possibly due to changes in immune, heart, and lung functions during pregnancy.

Make sure to receive your yearly flu vaccine—it's the best way for a pregnant woman to protect against the flu and protect the baby for several months after birth from flu-related complications.

CDC recommends **getting a flu vaccine by the end of October** despite flu seasons varying in their timing from season to season. This timing helps protect a pregnant woman before flu activity begins to increase.

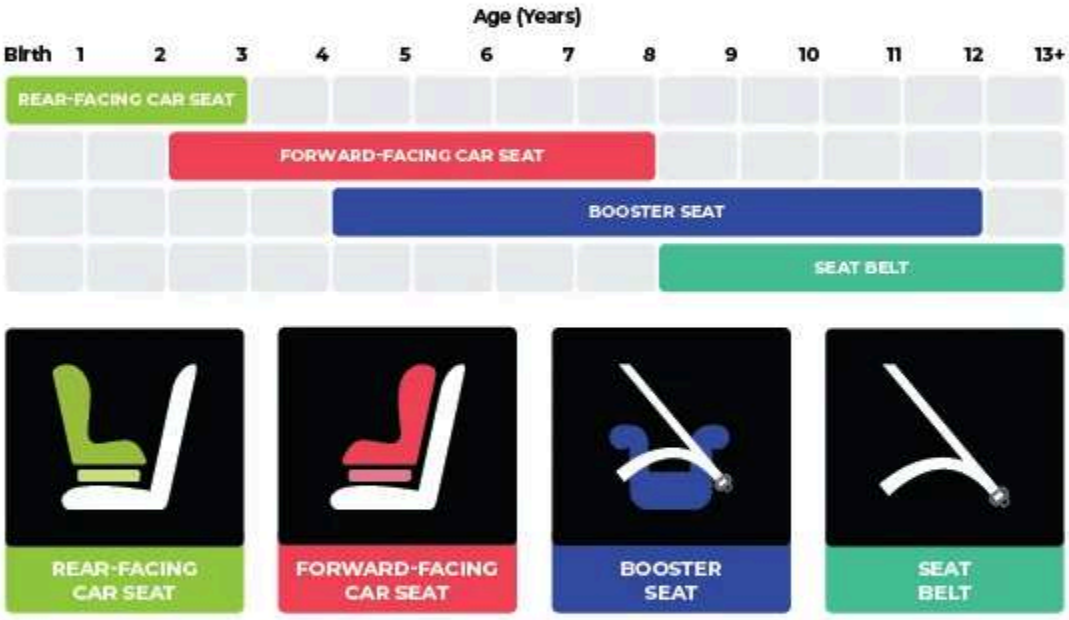
PROTECT MOM AND BABY WITH VACCINES

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California Car Seat Laws and Safety Tips

As your child grows, the way they sit in your car will change. To provide a secure and comfortable fit, make sure your child's car seat size corresponds to their age, as well as the weight and height limits of the car seat.



Car Seat Safety Tips

- Select a car seat based on your child's age and size, choose a seat that fits in your vehicle, and use it every time.
- It is safest for your child to stay in a car seat for as long as possible and until they reach the top height or weight limit allowed by the manufacturer.
- Always refer to your specific car seat manufacturer's instructions (check height and weight limits) and read the vehicle owner's manual on how to install the car seat using the seat belt or lower anchors and a tether, if available.

CAR SEAT LAWS AND SAFETY TIPS

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Awareness of Birth Defects



Birth defects can happen for many reasons. Although not all birth defects can be prevented, people can increase their chances of having a healthy baby by managing health conditions and adopting healthy behaviors before becoming pregnant. Here are steps you can take to get ready for pregnancy, stay healthy during pregnancy, and give your baby a healthy start in life:



Get 400 micrograms (mcg) of folic acid every day. Folic acid is a B vitamin. If a woman has enough folic acid in her body at least 1 month before and during pregnancy, it can help prevent major birth defects of the developing baby's brain and spine. Women can get folic acid from fortified foods or supplements, or a combination of the two, in addition to a varied diet rich in folate. Learn more about folic acid.

Prevent infections. Some infections that a woman might get during pregnancy can be harmful to the developing baby and can even cause birth defects. Check out our 10 tips for preventing infections before and during pregnancy.





See a healthcare professional regularly. Be sure to see a doctor when planning a pregnancy and start prenatal care as soon as possible. It is important to see your physician throughout your pregnancy. Keeping all prenatal care appointments, even telehealth appointments, should be a priority.

Keep diabetes under control. Unmanaged diabetes can increase the chance for birth defects and other problems during pregnancy. To manage your diabetes, see your healthcare provider as recommended before and during pregnancy. Also monitor your blood sugar levels, follow a healthy eating plan developed with your healthcare provider or dietician, be physically active, and take insulin as directed. Learn more about how to manage type 1 or type 2 diabetes during pregnancy and gestational diabetes.



HEALTHY CHOICES TO HELP PREVENT BIRTH DEFECTS

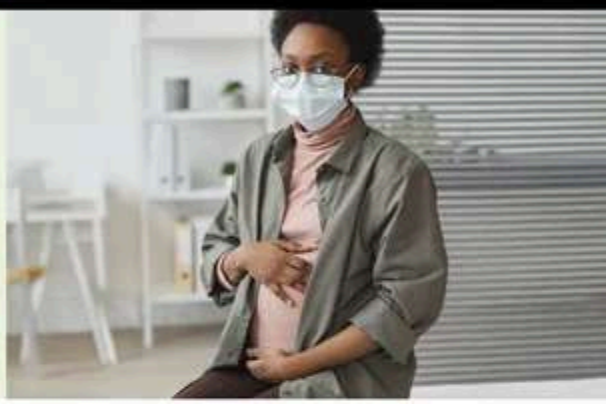
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COVID-19 Vaccines and Pregnancy

If you're pregnant, it is recommended to stay up to date with your COVID-19 vaccine and boosters.

Getting the COVID-19 vaccine while pregnant will help protect your baby as soon as they are born.



Vaccines are safe during pregnancy.
Research shows that COVID-19 vaccines are safe for pregnant people and can help protect both the parent and the baby. The vaccine can be given before, during, or after pregnancy.

Breastfeeding people can get vaccinated.
People who are breastfeeding can receive any of the COVID-19 vaccines available in the United States.

If you have COVID-19, you can still breastfeed.
Health experts say that people with COVID-19 can continue breastfeeding. If you are sick, take precautions to reduce the chance of passing the virus to your baby.

Vaccination may help protect your baby.
Studies show that people who receive COVID-19 mRNA vaccines (such as Pfizer or Moderna) can pass protective antibodies through breast milk, which may help protect their babies.

Please visit: cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Breastfeeding-Guidance

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COVID-19 AND PREGNANCY



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Marijuana Use and Pregnancy

What are the potential health effects of using marijuana during my pregnancy?

Marijuana use during pregnancy can be harmful to your baby's health. The chemicals in marijuana (in particular, tetrahydrocannabinol or THC) pass through your system to your baby and may harm your baby's development.

Although more research is needed to better understand how marijuana may affect you and your baby during pregnancy, it is recommended that pregnant persons do not use marijuana.

- Some research shows that using marijuana while you are pregnant can cause health problems in newborns, including lower birth weight and abnormal neurological development.
- Breathing marijuana smoke can also be bad for you and your baby. Secondhand marijuana smoke contains many of the same toxic and cancer-causing chemicals found in tobacco smoke. THC, the psychoactive or mind-altering compound in marijuana, may also be passed to infants through secondhand smoke.

Can using marijuana during my pregnancy affect my baby's development after birth?

Although scientists are still learning about the effects of marijuana on developing brains, studies suggest that marijuana use by persons during pregnancy could be linked to problems with attention, memory, problem-solving skills, and behavior in their children later in life.

Does using marijuana affect breastfeeding?

The health effects of a breastfeeding person's use of marijuana on their infant or baby are not yet fully known. We do know that chemicals from marijuana can be passed to a baby through breast milk. THC is stored in body fat and is slowly released over time, meaning a baby could still be exposed even after a person has stopped using marijuana. Persons who are breastfeeding are encouraged to avoid all marijuana use.

FAST FACTS

- Using marijuana during pregnancy may affect your baby's development and put you at risk of pregnancy complications.
- Between 2016–2017 in the United States, 7% of pregnant persons reported using marijuana in the past month.
- Marijuana may be bad for your baby no matter how you use it—this includes smoking, vaping, dabbing, eating or drinking, and applying creams or lotions to the skin.
- The potential health effects of using cannabidiol (CBD) products during pregnancy are currently unknown.
- If you are using marijuana and are pregnant, planning to become pregnant, or are breastfeeding, talk to your doctor.

For more information, visit
https://www.cdc.gov/marijuana/health-effects/pregnancy.html

WHAT YOU NEED TO KNOW ABOUT MARIJUANA USE AND PREGNANCY

IMPROVING BLACK MATERNAL HEALTH THROUGH PERSON-CENTERED CARE

The experience of pregnancy and childbirth should be joyous and safe for all people giving birth in California. Black leaders have called for improvements in health care systems to ensure that Black women receive maternity care that is supportive, respectful, and responsive to their needs and values. New findings from the Maternal and Infant Health Assessment (MIHA) illustrate the importance of person-centered maternity care.

Too few California Black women experience optimal person-centered maternity care

In 2023, over half of Black women and birthing people in California experienced optimal person-centered care during delivery, meaning that they experienced supportive communication, autonomy in decision-making, dignity, and respect from health care providers most or all of the time. The percentage of women who had optimal care remains much too low, and Black women **(54.6%)** were less likely than Californians as a whole **(63.2%)** to experience optimal care. Our health care system can, and must, do better for California's Black families.

Percent with optimal person-centered maternity care at delivery





PERSON-CENTERED MATERNITY CARE IS ESSENTIAL

One way structural racism harms Black maternal health is through poor-quality health care (California Department of Public Health, 2023). Person-centered care, in contrast, takes a holistic approach that values and respects the whole individual, physically, mentally, and spiritually. Person-centered care is an essential element of high-quality health care with the potential to improve outcomes and reduce costs within health care systems (Miller et al., 2016).

Center for Health Equity
UCSF
University of California San Francisco

IMPROVING BLACK MATERNAL HEALTH THROUGH PERSON-CENTERED CARE

Learn More and Enroll

Services are provided in communities where over 90% of Black births occur. Locate your nearest BIH program to learn more or enroll today!

Enroll **Learn More**

BIH is funded by the California Department of Public Health's Maternal, Child, and Adolescent Health Program with support from local health jurisdictions administering the programs as well as other public and private agencies.

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EXHIBIT N

Volume I:
Executive Summary

Report of the Secretary's Task Force on Black & Minority Health

Margaret M. Heckler
Secretary

U.S. Department of Health and Human Services

August 1985

INTRODUCTION AND OVERVIEW OF THE TASK FORCE ON BLACK AND MINORITY HEALTH

Perspective of the Task Force Study

Despite the unprecedented explosion in scientific knowledge and the phenomenal capacity of medicine to diagnose, treat, and cure disease, Blacks, Hispanics, Native Americans, and those of Asian/Pacific Islander heritage have not benefited fully or equitably from the fruits of science or from those systems responsible for translating and using health sciences technology. With full cognizance of this tragic dilemma in the United States, the Secretary of Health and Human Services, Margaret Heckler, established the Task Force on Black and Minority Health.

Since the turn of the century, the overall health status of all Americans has improved greatly. In 1900, the life expectancy for the United States population at birth was 47.3 years; for Blacks it was much lower--33 years. In little more than three generations, remarkable changes have occurred in health care and biomedical research. As pointed out by the Surgeon General in the 1979 report, Healthy People, the leading causes of death in 1900 were influenza, pneumonia, diphtheria, tuberculosis, and gastrointestinal infections. In the first half of the century, improved sanitation, better nutrition, and immunizations brought a drastic decline in infectious diseases. Today, these diseases cause a relatively small percentage of deaths compared to 1900.

Knowledge about life processes in health and disease is being acquired at an incredible pace. Because of one spectacular achievement after another, it is predicted that many of the diseases not now curable, will be controlled by the year 2000. This "biological revolution" has placed into the hands of health professionals effective medications, new and complex diagnostic instruments, and treatment modalities not dreamed of in 1900.

Since 1960, the United States population has experienced a steady decline in the overall death rate from all causes. Remarkable progress in understanding the causes and risks for developing diseases such as heart disease and cancer have important implications for the health of all Americans. The decline in cardiovascular disease mortality from 1968 to 1978 alone improved overall life expectancy by 1.6 years. Advances in the long-term management of chronic diseases mean that conditions such as hypertension and diabetes no longer necessarily lead to premature death and disability.

Concomitantly, advances in social and behavioral sciences research and methodology have elucidated relationships among biological, behavioral, and social factors that affect health and illness. The link among these factors is critical to understanding

the behavioral underpinnings of health, identifying effective strategies for disease prevention, maintaining treatment regimens, and suggesting ways to change behavior for more healthful living habits.

Although tremendous strides have been made in improving the health and longevity of the American people, statistical trends show a persistent, distressing disparity in key health indicators among certain subgroups of the population. In 1983, life expectancy reached a new high of 75.2 years for Whites and 69.6 years for Blacks, a gap of 5.6 years. Nevertheless, Blacks today have a life expectancy already reached by Whites in the early 1950s, or a lag of about 30 years. Infant mortality rates have fallen steadily for several decades for both Blacks and Whites. In 1960, Blacks suffered 44.3 infant deaths for every 1,000 live births, roughly twice the rate for Whites, 22.9. Moreover, in 1981, Blacks suffered 20 infant deaths per 1,000 live births, still twice the White level of 10.5, but similar to the White rate of 1960.

The Task Force on Black and Minority Health was thus conceived in response to a national paradox of phenomenal scientific achievement and steady improvement in overall health status, while at the same time, persistent, significant health inequities exist for minority Americans. As the Task Force came into being in April 1984, it was evident that to bring the health of minorities to the level of all Americans, efforts of monumental proportions were needed.

Task Force Activities

Secretary Heckler appointed Dr. Thomas E. Malone, Deputy Director of the National Institutes of Health, the Government's chief agency for supporting biomedical research, as Chairperson of the Task Force. After careful review of programs and staff of the Department, 18 senior scientists and officials were selected as primary members of the Task Force. These individuals not only had expertise and experience in the areas proposed for study, but had the programmatic authority affording direct possibilities for implementing recommendations of the Task Force. The Task Force members and alternates are listed in the appendix to this volume. The Task Force was assured the necessary resources to carry out its mandate and was supported by a staff that included a wide range of health professionals and technical staff from throughout the Department of Health and Human Services (DHHS).

The Task Force on Black and Minority Health was a unique and historic assemblage in its own right. While DHHS has many programs that have significant impact on improving the health status of minorities, this was the first time that representatives of these programs were joined in a common effort to carry out a comprehensive and coordinated study to investigate the longstanding disparity in the health status of Blacks, Hispanics, Asian/Pacific Islanders, and Native Americans compared to the nonminority population.

The Task Force members developed a broad, multidimensional approach to characterizing the health problems of minority Americans. The approach was based on analyses of mortality data to define the extent of the health disparity, intense examination of the major health issues found in the analyses to explore why the disparity persists, and consultations with experts in minority health issues from the non-Federal community.

The findings and recommendations generated by the Task Force within the confines of a little more than a year's time are summarized in this volume. More detailed information supporting the findings will appear in subsequent volumes.

Data Review and Analysis

In its initial meetings, the Task Force carefully reviewed existing health status information for minority and nonminority populations available in Health, United States, 1983 and other supplementary data sources. After analyzing national mortality data for more than 40 disease categories, the approach adopted by the Task Force that best defined the disparity was the statistical technique of "excess deaths"; that is, the difference between the number of deaths observed in minority populations and the number of deaths which would have been expected if the minority population had the same age and sex-specific death rate as the nonminority population. This method quantified the number of deaths that would not have occurred had mortality rates for minorities equalled those of nonminorities.

Because of the paucity of data relating to the health needs and mortality of Asian/Pacific Islanders and Hispanics in the United States, the Task Force assembled an Asian/Pacific Islander advisory group and an Hispanic advisory group. Each group provided the Task Force with data and other information on health problems within the diverse ethnic groups that make up the aggregate population and initiated special data reviews to supplement inadequate national information.

Native Americans include American Indians, Alaska Natives, and Native Hawaiians. Most statistics cited in this report, however, refer specifically to American Indians and Alaska Natives. Where data on Native Hawaiians are available, they are treated separately.

Identifying the Major Contributors to the Disparity

In analyzing mortality data from 1979 to 1981, the Task Force identified six causes of death that together account for more than 80 percent of the mortality observed among Blacks and other minority groups in excess of that in the White population. Although the ranking of health problems according to excess deaths differs for each minority population, the six health problems became priority issue areas for Task Force study. Listed in alphabetical order, they are:

- Cancer
- Cardiovascular disease and stroke
- Chemical dependency, measured by deaths due to cirrhosis
- Diabetes
- Homicide and accidents (unintentional injuries)
- Infant mortality

Table 1 presents the leading causes of excess mortality and the percentage that each cause contributed to the total excess deaths in Blacks for the years 1979 to 1981. For Black males and females combined, excess deaths accounted for 47 percent of the total annual deaths in those 45 years old or less, and for 42 percent of deaths in those aged 70 years or less. More detailed analyses of excess mortality appear in the section "Mortality and Morbidity Indicators."

In addition to measures of excess deaths, special analyses of morbidity and health status indicators for minorities were developed by the Task Force. These indices included prevalence rates of selected chronic and infectious diseases, hospital admissions, physician visits, limitation of activity, and self-assessed health status. Prevalence of arthritis, digestive diseases, dental problems, and respiratory disease among minorities is poorly documented and data were virtually unavailable. Additional mortality indices included person-years of life lost, life expectancy, and relative risk of death by cause. A summary of these findings is included in the section entitled "Mortality and Morbidity Indicators."

Some factors contributing to minority health status are not disease-specific but have bearing on the overall health needs of each minority group. Among those that the Task Force reviewed are demographic data characterizing the four minority groups, minority needs in health education, health professionals, and health care services and financing. A summary of issues that cut across health problem areas appears in the sections of this report entitled "Social Characteristics of Minority Populations" and "Health Services and Resources for Minorities."

Subcommittee Activity

For each of the six causes of death identified as a priority area, a Subcommittee was formed to explore why and to what extent the disparity exists and what DHHS can do to reduce it. The Subcommittees were charged with investigating the physiological, cultural, and societal factors that, in combination, perpetuate health inequities for minorities. They sought to understand the etiology of selected conditions for different minority groups, explore potential means for improving the effectiveness of treatment, and identify possible intervention strategies to prevent excess death and injury in minority groups. Because of the differences among minority groups, the Subcommittees addressed each issue with special attention to the cultural milieu of that population group.

Table 1

Average Annual Total and Excess Deaths in Blacks Selected Causes of Mortality, United States, 1979-1981

	Excess Deaths Males and Females Cumulative to Age 45		Excess Deaths Males and Females Cumulative to Age 70	
	Number	Percent	Number	Percent
Causes of Excess Death				
Heart Disease and Stroke	3,312	14.4	18,181	30.8
Homicide and Accidents	8,041	35.1	10,909	18.5
Cancer	874	3.8	8,118	13.8
Infant Mortality	6,178	26.9	6,178	10.5
Cirrhosis	1,121	4.9	2,154	3.7
Diabetes	223	1.0	1,850	3.1
Subtotal	19,749	86.1	47,390	80.4
All Other Causes	3,187	13.9	11,552	19.6
Total Excess Deaths	22,936	100.0	58,942	100.0
Total Deaths, All Causes	48,323		138,635	
Ratio of Excess Deaths to Total Deaths	47.4%		42.5%	
Percent Contribution of Six Causes to Excess Death	86.1%		80.4%	

The Subcommittees reviewed existing data and literature and consulted with experts and organizations within and outside the Federal government. When scientific information for a particular issue was not readily available, research papers were commissioned to review recent data in each Subcommittee's area. Material from most of the commissioned papers was incorporated into the Subcommittee reports. Many of the authors contributed new analyses that augmented national information already available to the Task Force.

Interaction With the Non-Federal Community

In order to supplement its knowledge of minority health issues, the Task Force had extensive interaction with individuals and organizations outside the Federal system.

Presentations. The Task Force and its Subcommittees heard presentations by experts in several issue areas. Presentations included public health aspects of homicide and homicide prevention; special problems concerning the health status of Asian/Pacific Islanders, and American Indians and Alaska Natives; the political history, demography, and health-related conditions of Hispanics; and the use of traditional folk medicine and healers by various minority groups.

Outreach. Task Force members and staff attended national meetings of non-Federal professional organizations to inform their membership of the work of the Task Force and to solicit their views on health priorities and model intervention programs.

Non-Federal community survey. The Task Force surveyed more than 350 non-Federal organizations and individuals concerned with minority health issues. The survey requested opinions about critical factors affecting the health status of minorities, and requested examples of successful programs and suggestions for ways that DHHS might better address minority health needs. This survey may help to initiate cooperative efforts between the Federal and private sectors for improving minority health. A summary of the survey results appears in the section of this report entitled "Survey of Non-Federal Organizations."

Program Inventory

The Task Force conducted an inventory of health care, research, and prevention programs sponsored by DHHS that specifically affect minority populations. The inventory of DHHS programs and projects is the first such compilation describing existing programs oriented toward minority health in DHHS. An index to the inventory is found in the section "Inventory of DHHS Program Efforts in Minority Health."

Task Force Report

The first volume of the Task Force Report summarizes the information and data compiled on specific minority health problems, special reports developed on cross-cutting minority health issues, and recommendations proposing activities for a coordinated effort by which DHHS may redirect its resources to address the demonstrated disparity in health status between minority and nonminority populations. For greater understanding of the urgency and complexity of the issues around which the recommendations were developed, all sections of the report should be examined.

Subsequent volumes of the report contain the complete text prepared by the Subcommittees that support their findings and proposed intervention strategies. They are excellent reviews of research and should be regarded as state-of-the-art information on specific problem areas in minority health. Subsequent volumes also contain the complete inventory of DHHS programs and projects that benefit minorities, and an annotated bibliography listing selected topics related to Hispanic health issues.

The report of the Task Force looks to the future. It concentrates on specialized activities that should have a direct and timely impact on the problems of minority health. Apart from the descriptions of DHHS programs referenced in the program inventory, the report does not analyze or examine the many departmental activities and services that benefit all Americans, including minorities, such as the extraordinary advances in biotechnology and molecular biology.

In compiling its data, the Task Force tapped a broad range of sources. Much information is based on the data systems of the National Center for Health Statistics. Some data resulted from special analyses conducted for the Task Force or studies from other sources. Data comparisons are generally made between minority and nonminority groups except in those situations where study data specified White populations or aggregate (all races) populations. Because the report was assembled during a year's time, more recent data on some topics may now be available.

Context for the Task Force Recommendations

The Task Force acknowledged that the factors responsible for the health disparity are complex and defy simplistic solutions. Health status is influenced by the interaction of physiological, cultural, psychological, and societal factors that are poorly understood for the general population and even less so for minorities.

Even though the shared characteristic of economic disadvantage among minorities suggests the possibilities of common approaches for achieving improved health, diversity within and among minorities necessitates activities, programs, and data collection tailored to

meet their health needs. The Task Force further observed that since minorities are underrepresented as beneficiaries of the predominantly nonminority health care establishment, efforts by all sectors must proceed vigorously in areas in which current knowledge can suggest action.

Recommendations were developed to emphasize the following principles: incorporate minority health initiatives into existing DHHS program areas in order to address health conditions amenable to immediate improvement, press for greater public and private involvement in a common effort to eliminate the health disparity, resolve unanswered questions through a concerted program of research and data collection, and seek new strategies to ameliorate health inequities between minorities and nonminorities.

In the context of these general observations and with information obtained from a broad range of experts in the field and its own deliberations, the Task Force began the long and arduous recommendation development process.

Early in the process, the Task Force recognized that many activities of major importance to minority groups were already in progress within DHHS. Therefore, the Task Force decided to emphasize new directions for departmental activities in its efforts to reduce the minority health disparity. Many of these activities are indicated within the recommendations that follow. The Subcommittees, however, proposed many other opportunities that relate more specifically to the health priority areas. They appear in the Subcommittee reports as "Opportunities for Progress." The reader is urged to consider them as extensions of the recommendations.

The recommendations are organized into six categories. They emphasize areas in which the Task Force members believe further improvements were urgently needed. The categories are:

- Health information and education
- Delivering and financing health services
- Health professions' development
- Cooperative efforts with the non-Federal sector
- Data development
- Research agenda

The Task Force joins with all concerned citizens in acknowledging the stark reality of the continuing, significant differences between the health of racial/ethnic minorities in the United States and the general population and proposes recommendations for DHHS and others in the public health community to address these problems.

DELIVERING AND FINANCING HEALTH SERVICES

Introduction

The Task Force has reviewed data that indicate low income and lack of health insurance coverage are among the most serious barriers to seeking health care. Minorities are disproportionately represented among impoverished Americans. The Department can serve as a catalyst to promote action by private and public entities to address these problem areas more effectively.

RECOMMENDATION 3: DELIVERY AND FINANCING OF HEALTH SERVICES

The Department should continue to investigate, develop, and implement innovative models for delivery and financing of health services, based on current departmental authorizations. The major objectives of the models should be to increase flexibility of health care delivery, facilitate access to services by minority populations, improve efficiency of service and payment systems, and modify services to be more culturally acceptable.

Traditional Measures of Health Care Services

The most commonly used indicators of the adequacy of health services for a population include distribution of physicians, percentage of a specified population who did *not* see a physician during the past year, and average number of visits to a physician. For these gross indicators, data are lacking for some minority groups.

These data do suggest that, in general, availability of health care professionals and utilization of health services for all Americans have increased:

- The rate of increase in the number of physicians in the United States has more than kept pace with the growth of the American population. During the period from 1970 to 1982, the American population grew by 11 percent, while the number of physicians grew by 51 percent. With the exception of Native Americans, most minority populations live in geographic areas where physicians are present. Little is known, however, about the practice patterns of medical specialists and the extent to which they treat minorities.

- In 1970, the percentage of people who had not seen a physician in the past 12 months was 30 percent for Whites and 42 percent for non-Whites (*). During the period from 1978 to

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* The Census definitions of White and non-White were used in 1970. People of Mexican or Spanish descent were coded "White," and Native Americans, Asian/Pacific Islanders, and Blacks were coded "non-White."

1980, these percentages were 23 percent for Whites, 24 percent for Blacks, 33 percent for Mexican Americans, and 20 to 24 percent for other Hispanic groups.

- In 1970, the average annual number of visits to a physician per year was 4.1 for Whites and 3.6 for non-Whites. During the period from 1978 to 1980, the average number of physician visits rose to 4.8 for Whites, 4.8 for Blacks, 4.3 for Mexican Americans, and from 5.1 to 6.1 for other Hispanic groups.

No absolute standards are available for measuring adequacy of health services. Data for nonminorities, however, provide a base against which to compare the use of health services by minorities. In sum, gross indicators of access to and utilization of health services show improvement for the Nation as a whole and for those minorities for whom data are available.

Traditional Measures Are Incomplete

The narrowing of the disparity in reported use of health services between minorities and nonminorities is an encouraging trend. The data, however, are lacking for many of the minorities. Moreover, the indicators themselves do not reflect delays between the onset of problems and the seeking of medical attention, severity of the problem when care is sought, quality of the care received, and whether appropriate referrals are made to specialists.

Information provided to the Task Force from a variety of non-Federal sources, including health professional and minority organizations, and the Tasks Force's professional judgment indicate problems relating to health services persist for minorities. The following exemplify such problems:

- The disparities in death rates between minorities and nonminorities remain despite overall increases in access and utilization that have been noted.

- Language problems hamper refugees and immigrants when they seek medical care and try to explain their symptoms to providers.

- Blacks with cancer tend to postpone seeking diagnosis of their symptoms longer than do nonminorities, and delay initiation of treatment once diagnosed.

- A smaller proportion of Black women than White women begin prenatal care in the first trimester of pregnancy (63 percent versus 76 percent in 1980), a factor related to the high Black infant mortality rate. The 1990 health objective for prenatal care states that a minimum of 90 percent of mothers in any racial or ethnic group should begin care in the first trimester of pregnancy.

- The postneonatal death rate, which constitutes the bulk of infant mortality for American Indians and Alaska Natives, remains high. Postneonatal mortality implies an adverse milieu for the infant and is thought to result from such problems as infectious diseases, unintentional injuries, and a lower use of health care for these acute problems.

Continuity of Care

Continuity of care is associated with improved health outcomes and is presumably greater when a patient is able to establish an ongoing relationship with a particular provider. The issue is central because many of the major killers of minorities, such as cancer, cardiovascular disease, and diabetes, are chronic rather than acute problems and require repeated visits and extended treatment regimens.

- A higher percentage of Blacks and Hispanics than Whites report that they they have no usual source of medical care (20 and 19 percent versus 13 percent).

- Proportionately fewer Blacks and Hispanics than Whites report that they use a physician's office as their usual source of care (46 and 54 percent versus 70 percent).

- Proportionately twice as many Blacks and Hispanics than Whites report they use hospitals and health clinics as their usual source of medical care. In 1980, more than 25 percent of all visits to physicians made by Blacks occurred in hospital clinics or emergency rooms compared to 11 percent by Whites.

- Refugees are eligible for special refugee medical assistance during their first 18 months in this country. After this, however, refugees who cannot afford private health insurance and who are ineligible for Medicaid or state medical assistance may become medically indigent.

- Many American Indians and Alaska Natives live in areas where the availability of physicians is half the national average, and the Indian Health Service may not be able to provide coverage.

Financing Problems

Many of the minorities tend to rely on Medicaid and charity care for their medical treatment because they have no other sources of care or ways to finance that care. Elderly minority people are less likely than Whites to supplement Medicare with additional private insurance.

- Proportionately three times as many Native Americans, Blacks, Hispanics, and certain Asian/Pacific Islander groups as nonminorities are impoverished (29 percent to 35 percent versus 11 percent).

- Proportionately twice as many Blacks and three times as many Hispanics as nonminorities have no medical insurance whatsoever (18 percent and 26 percent versus 9 percent).

- Of those who had no insurance, 35 percent did not see a physician during the past 12 months compared to 22 percent for those who did have insurance.

The problem of how to apportion fairly the costs associated with uncompensated hospital care is a major concern. The traditional practice of paying for this care through increased charges to other individuals and third party payers has become increasingly unacceptable as price competition among hospitals has heightened.

Public and private, not-for-profit, inner city hospitals bear the greatest share of the uncompensated care burden and are not likely to offset these expenses by attracting more paying patients. Unless solutions to the uncompensated care problem are found, the financial viability of these institutions may be in doubt. Access to health care is predicated upon the ability of both individual providers and institutions to meet the needs of the populations they serve.

Many States are now exploring the issue of uncompensated care through task forces or commissioned studies.

The composition of each State's medically indigent population varies according to its employment patterns, degree of unionization, structure of its Medicaid program, and other factors which differ among States. It is important, therefore, to encourage the States to undertake their own data collection efforts to define their medically indigent populations and devise policy initiatives that meet their particular needs. The DHHS can provide a clearinghouse function in these endeavors by providing baseline information, making available the results of other States' inquiries and initiatives, and providing technical assistance on questions of methodology.

Implications of Diversity

America is rich in the diversity of its minorities. There are more than 500 federally recognized American Indian tribes, 23 different countries of origin for Asian/Pacific Islanders, and three major places of origin for Hispanics. This diversity among populations is reflected in language difficulties, in cultural practices and beliefs with respect to illness and health, in

differences in their birth rates, in differences in the afflictions which kill them, and in differences in their needs for types of services and the duration of health care.

DEPARTMENTAL ACTIVITIES

The following activities should be pursued by the Department in the area of delivering and financing health services.

- Serve as a resource to States as they study the problem of health care for the medically indigent. Encourage States to include consideration of minority subgroups in their research. Place a particular focus on the employed uninsured.

- Evaluate the changes taking place in the health care environment to assess their effect on uncompensated care and, in particular, on public hospitals. Resulting actions could lead, for example, to the formation of risk or revenue pools by the States.

- Emphasize prevention and primary care and promote, through existing program authorities, the concept of community-oriented primary care in those areas where problems of access appear to predominate.

- Target Federal categorical initiatives to trouble spots identified through the mid-course review of progress toward the 1990 Health Promotion/Disease Prevention objectives.

- Continue and expand the Department's participation in the Healthy Mothers/Healthy Babies Coalition, which has proven successful in addressing the issue of prenatal and perinatal care for low income women.

- Expand prenatal care Medicaid benefits, within existing program authorities, for high-risk pregnant women to include: nutrition supplements, psychosocial and health education classes, birth education classes, prenatal vitamins, and other health care upon authorization by the woman's physician.

- Use the established communication networks of organizations within minority communities as conduits for the dissemination of information about health promotion, disease prevention, and the use of health services.

EXHIBIT O

MORTALITY AND MORBIDITY INDICATORS

Introduction

Differences in life expectancy between minorities and nonminorities strongly suggest the existence of health problems among certain segments of the population. Although life expectancy dramatically summarizes the overall differences in specific causes of death and illness among various groups in the United States, Secretary Heckler asked the Task Force to go beyond life expectancy data and investigate more fully the magnitude of the disparity in health status of minority groups compared with nonminorities, and its causes. Consequently, the Task Force examined and identified appropriate indices to measure the various disparities, identified the leading causes of death and their ramifications within each minority, examined other indicators of health status and morbidity for minority groups, and reviewed the socioeconomic correlates of these factors. Based on this investigation, the Task Force was to suggest approaches for reducing the identified disparities.

Measures of Mortality

In addition to life expectancy, two other indices were used by the Task Force to summarize mortality differentials: 1) excess deaths, and 2) relative risk of death.

"EXCESS DEATHS" expresses the difference between the number of deaths actually observed in a minority group and the number of deaths that would have occurred in that group if it experienced the same death rates for each age and sex as the White population (1). "Excess deaths" are sometimes referred to as "observed minus expected deaths" (when expected deaths are based on the death rate of the White population). Excess deaths can be calculated for each age and sex group as well as for specific causes of death. When minority death rates are higher than those of Whites, excess deaths will be a positive number greater than zero; it will be zero when the rates are the same as for Whites; and it will be a negative number when the death rates for minorities are lower than for Whites.

The measure of excess deaths depends on differences in death rates between the minority and nonminority populations and specifies the actual deaths in a minority group attributable to these mortality rate differences. The number of observed excess deaths also depends on the size of the minority population and the number of total deaths. Further analysis with this measure can identify excess deaths due to a specific cause such as heart disease, affecting the greatest number of people in a particular group.

To account for the differences in size of the population, the "relative risk" of death is used. "RELATIVE RISK" is the ratio of the minority death rate to the White death rate. Relative risk also can be calculated for specific causes of death and for each age and sex group. When the relative risk of death is greater than 1.0, it indicates that the death rate is proportionally higher in the minority group than in Whites; a value of 1.0 or less than 1.0 indicates that the minority group has the same or lower death rate as Whites. A high relative risk for a specific cause of death may be misleading if a disease is rare and affects a small number of people. The relative risk for a rare condition may appear to indicate a disproportionally high risk for a problem that may not be serious in terms of excess deaths because so few individuals are affected.

The Task Force used excess death as the primary indicator of the disparity and used measures of relative risk to confirm and extend findings of the excess deaths' index. Both excess deaths and relative risk as applied by the Task Force are statistics which present death rates for minority groups only as compared to the White population.

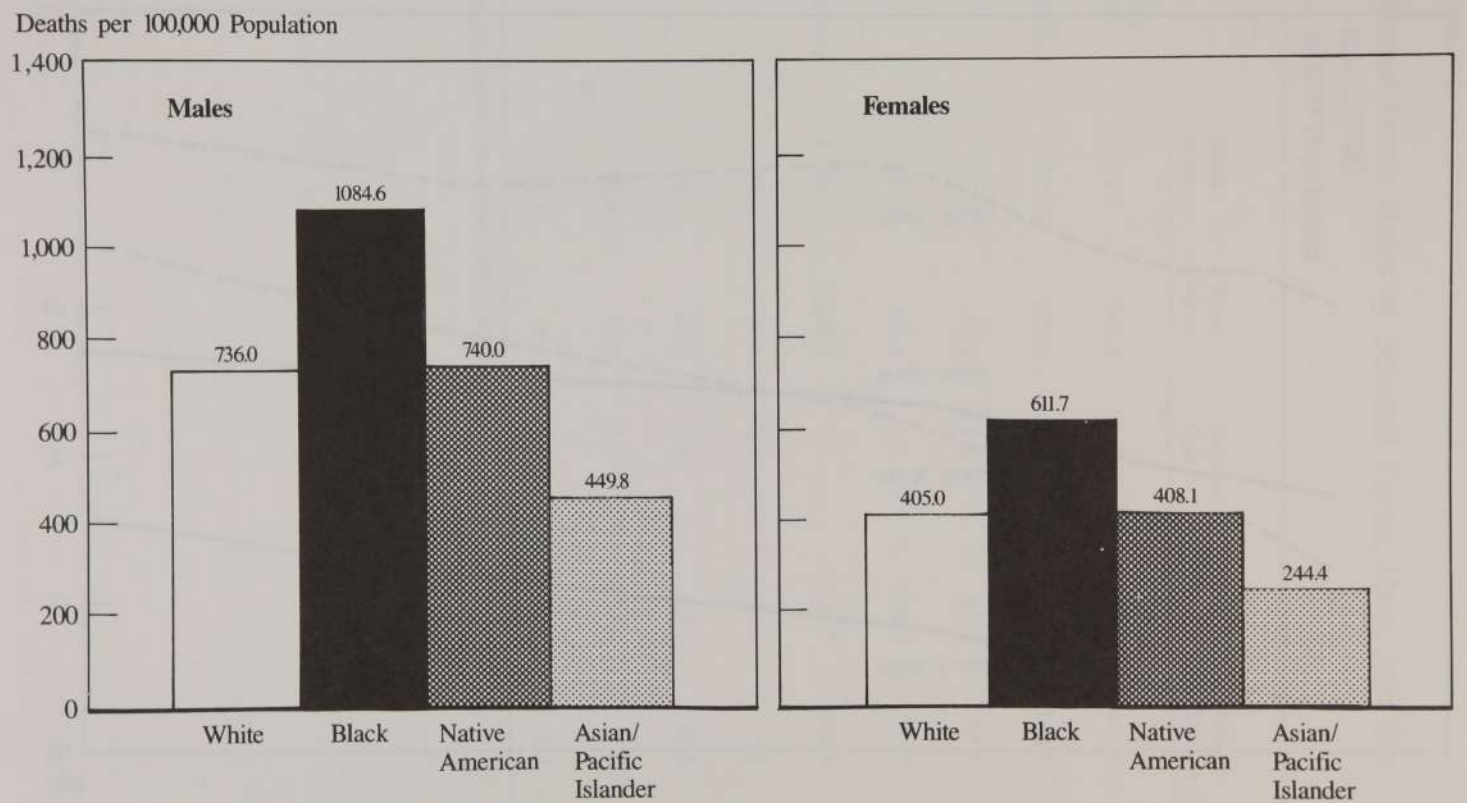
The age-adjusted death rate for the United States, which takes into account the age structure of different population groups, was 553.8 deaths per 100,000 population, and is estimated to be 549.6 for 1983 (2). Figure 1 shows the average annual age-adjusted death rate for several racial groups. Life expectancy at birth has been rising, increasing from 74.6 years in 1982, to 74.7 years in 1983.

Despite these encouraging overall trends, differences in health status indicators remain between minority groups and Whites, as seen in Figure 2. Life expectancy at birth for White males in 1982 was 71.5 years; for Black males, it was 64.9 years. Since life expectancy is not routinely available for other minority groups, special calculations were commissioned by the Task Force. These data indicate that life expectancy for Native American males was 70.4 years in 1979-81, and life expectancy for Asian males was about seven years greater than that of Whites. Data on Hispanics are not available to estimate comparable life expectancy. Minority and nonminority women have a longer life expectancy than men; minority women, however, experience similar disparities in health status compared to nonminority women. Asian females have the highest life expectancy of any group (3).

The Task Force explored the disparity in death rates between minorities and Whites by disease category, by analyses of relative risk of death for the different disease categories (shown for Blacks in Table 5) and by analyses of excess deaths. Based on these analyses, the Task Force observed that four of every five excess deaths among minorities result from six causes: cancer, heart disease and stroke, infant mortality, diabetes, homicide and unintentional injuries, and chemical dependency (primarily alcohol abuse as revealed by

Figure 1

Average Annual Age-Adjusted Death Rates for All Causes, 1979-1981



NOTE: Death rates for Hispanics are not available. Death rates for Native Americans and Asian/Pacific Islanders are probably underestimated due to less frequent reporting of these races on death certificates as compared with the Census.

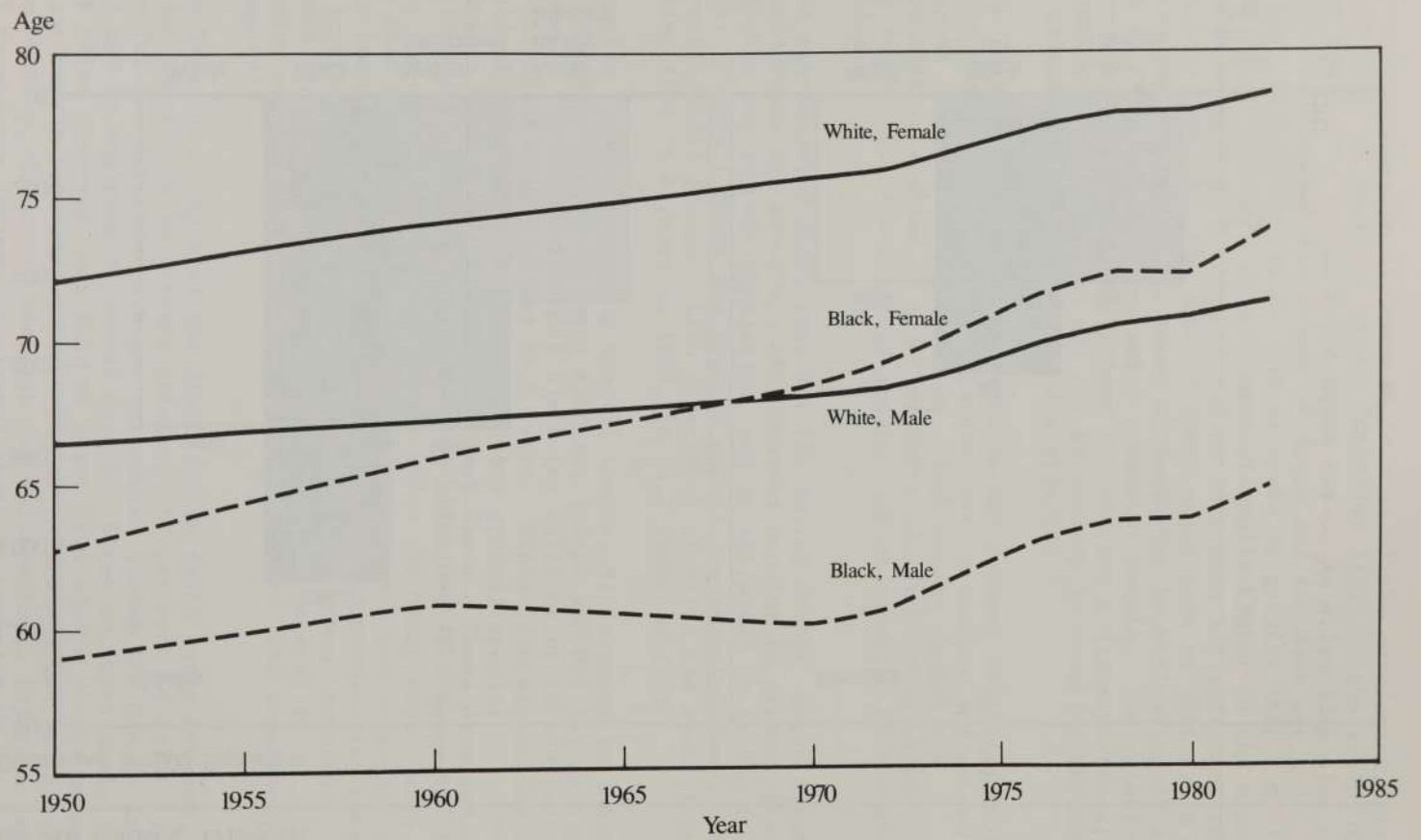
SOURCE: National Center for Health Statistics, Bureau of the Census, and Task Force on Black and Minority Health.

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Figure 2

Life Expectancy at Birth, According to Race and Sex: United States, 1950-1983



SOURCE: National Center for Health Statistics.

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Table 5

Age-Adjusted Death Rates by Selected Cause, Race, and Sex United States, 1980

(Rate per 100,000 Population)

	Black Male	White Male	Relative Risk	Black Female	White Female	Relative Risk
Total Deaths (All Causes)	1,112.8	745.3	1.5	631.1	411.1	1.5
Heart Disease	327.3	277.5	1.2	201.1	134.6	1.5
Stroke	77.5	41.9	1.9	61.7	35.2	1.8
Cancer	229.9	160.5	1.4	129.7	107.7	1.2
Infant Mortality	2,586.7	1,230.3	2.1	2,123.7	962.5	2.2
Homicide	71.9	10.9	6.6	13.7	3.2	4.3
Accidents	82.0	62.3	1.3	25.1	21.4	1.2
Cirrhosis	30.6	15.7	2.0	14.4	7.0	2.1
Diabetes	17.7	9.5	1.9	22.1	8.7	2.5

SOURCE: NCHS, Health: United States, 1983, Tables 9 and 15.

cirrhosis). Figure 3 illustrates the major contributors to excess death for Blacks, in 1980, for those who died before age 45 or before age 70. The data clearly depict that the bulk of excess deaths in each age bracket are attributable to the six causes cited. Homicide and accidents, infant mortality, and heart disease and stroke contribute the greatest number of excess deaths before age 45 in Blacks. Heart disease and stroke, and cancer increasingly contribute to excess deaths in Blacks when deaths up to age 70 are examined. The same six causes of excess death also apply to Hispanics, Asian/Pacific Islanders, and Native Americans, although the ranking may vary.

Subcommittees were formed to investigate the reasons for disparities due to these six causes of death. Suicide among minorities was added to the charge to the Subcommittee on Homicide and Unintentional Injuries based on the contribution of suicide to the excess deaths of Native Americans. Detailed results are found in the Subcommittee summary reports and in later volumes of this Task Force report.

Other Health Status Measures

Morbidity and health status measures were also examined as indicators of the disparities in health between nonminorities and minorities in the United States. These measures were taken largely from the NCHS National Health Interview Survey (NHIS), an annual survey sampling 40,000 households nationally. Morbidity estimates are based on prevalence rates from self-reports of the sample population for a selected list of diseases. Health status measures include self-assessed health, number of physician and dentist visits, and number of hospital admissions. An analysis also was commissioned to determine differences in ambulatory care use among minorities (4).

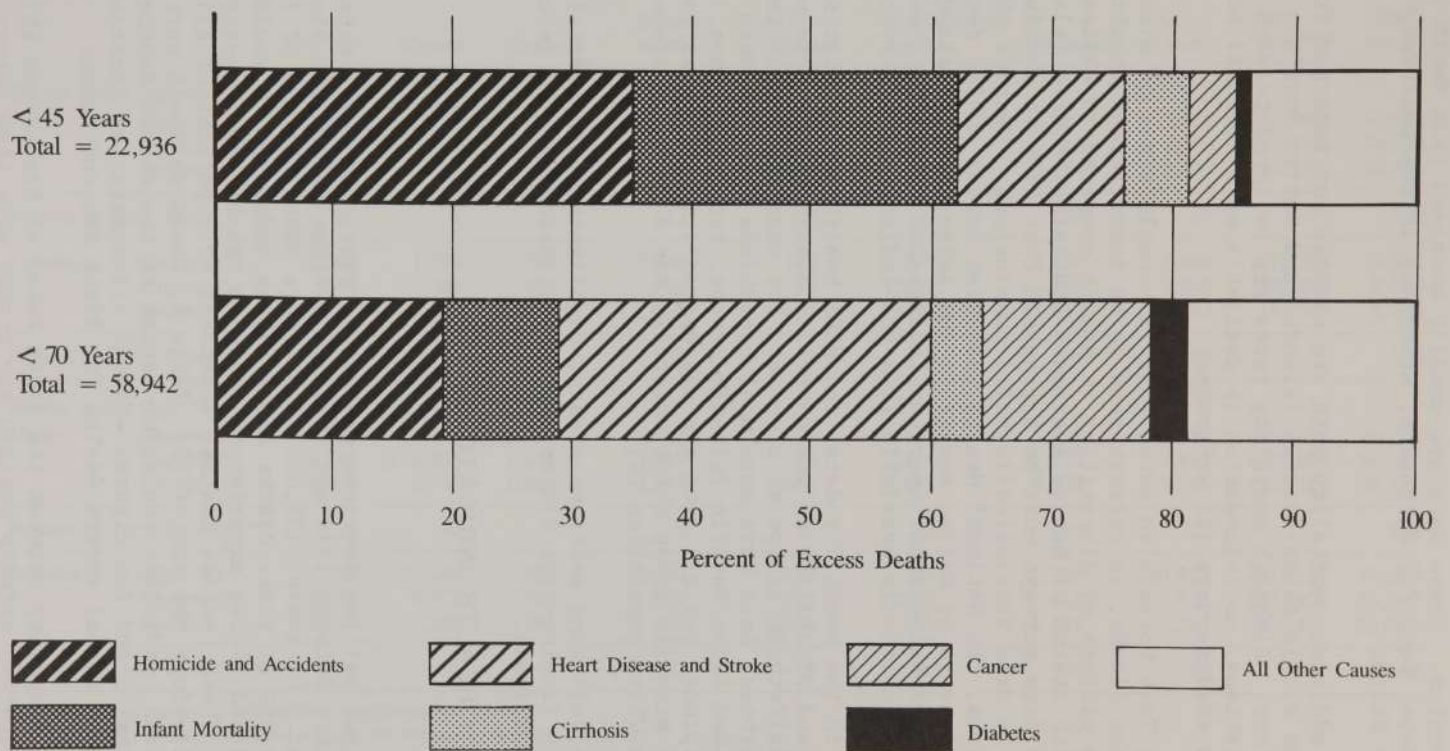
The 1976 Survey of Income and Education (SIE) provided measures of social characteristics related to self-assessed health status for minorities. Additional information from the Health Care Financing Administration End-Stage Renal Disease Program and from the DHHS Office for Civil Rights reports of hospital admissions and emergency room visits was examined. These sources proved to be severely limited for the needs of the Task Force because of difficulty in identifying minorities by age-sex group and health problem for comparison to Whites.

Limitations of Data

A variety of measures of health status are needed to draw conclusions about diferences in health status among minority populations; single measures such as national mortality summaries may not provide a complete enough picture. Although mortality data are available by age, sex, and race for Blacks, Asian/Pacific Islanders, Native Americans, and Whites, the Task Force noted that one of the most serious data deficiencies is the lack of national mortality data

Figure 3

Average Annual Excess Deaths for Blacks, 1979-1981



*The base of "zero" is equal to the mortality rate for Whites. "Excess deaths" indicate those observed in excess of the White rate.
SOURCE: Duke University Analysis Commissioned by HHS Task Force on Black and Minority Health, 1984-1985.

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for Hispanics. These data are usually obtained from death certificates but, for Hispanics, ethnicity is not uniformly recorded in every State.

In addition, mortality data are usually not recorded for subgroups within Asian/Pacific Islander and Native American populations. Although mortality rates are believed to vary among subpopulations, no information is available on a national basis from which to analyze data for subgroups.

The Task Force also noted that the sample sizes of minorities, other than Blacks, in surveys tend to be insufficient to obtain an accurate picture of disparities in health compared to Whites. Data on the health status of Native Americans and Asian/Pacific Islanders compiled from surveys must be aggregated over time to obtain adequate numbers to draw statistically valid conclusions. Despite these limitations, the National Health Interview Survey (NHIS) does provide sample coverage of Native Americans and Asian/Pacific Islanders. Health information about American Indians and Alaska Natives on or near reservations is available from the Indian Health Service.

As in the mortality data, the NCHS health survey statistics on illness and disability do not generally distinguish subgroups within the racial/ethnic groups as a whole. For example, recent immigrants from Southeast Asia have more health problems than the more established Asian/Pacific Islander groups, such as Chinese, Japanese, and Filipinos, yet all data are aggregated into the Asian/Pacific Islander minority group which, overall, has a greater life expectancy than the White population (5).

The following sections present highlights of the mortality and morbidity findings for Blacks, Hispanics, Asian/Pacific Islanders, and Native Americans.

MINORITY HEALTH INDICATORS

Blacks

Of two million American deaths per year, roughly twelve percent are Black. Between 1979 and 1981, an average of 227,000 Blacks died each year. Of these, 139,000 Blacks were under the age of 70 years. About 59,000 of these deaths among Blacks under age 70 would not have occurred had Blacks experienced the same age-sex death rates as Whites. These "excess deaths" represent 42.3 percent of all Blacks who died before the age of 70. Table 6, based on death certificate information, indicates the major causes of the excess deaths in Blacks under ages 45 and 70; Figures 4 and 5 illustrate the contributors to the average annual excess deaths for Black men and women.

The disparity between the death rates of Blacks and Whites (excess deaths) affects certain age groups more than others. Compared to Whites, Blacks have twice the rate of infant mortality. The

Table 6

BLACKS
Average Annual Number of Deaths by Disease Category, United States, 1979-1981

		CVD*	Cancer	Cirrhosis	Infant Mortality	Diabetes	Unintentional Injuries	Homicide	All Other	Sub-Total***	Total Deaths
Blacks under Age 45											
Males	Observed	3,236	1,587	961	6,782	201	5,940	6,487	5,900	(31,094)	31,094
	Expected**	1,340	1,204	259	3,465	86	6,000	1,019	3,203	(16,576)	16,576
	Excess	1,896	383	702	3,317	115	−60	5,468	2,697	(14,518)	14,578
Percent of Total Excess****		13	3	5	23	1	0	38	19		100
Females	Observed	2,090	1,790	549	5,540	184	1,905	1,488	3,686	(17,232)	17,232
	Expected**	674	1,366	130	2,679	77	1,991	343	1,838	(9,098)	9,098
	Excess	1,416	424	419	2,861	107	−86	1,145	1,848	(8,134)	8,220
Percent of Total Excess****		17	5	5	35	1	0	14	22		100
Blacks under Age 70											
Males	Observed	24,913	16,117	2,706	6,782	1,190	8,429	7,935	16,629	(84,701)	84,701
	Expected**	16,444	10,335	1,344	3,465	544	7,316	1,227	8,914	(49,589)	49,589
	Excess	8,469	5,782	1,362	3,317	646	1,113	6,708	7,715	(35,112)	35,112
Percent of Total Excess****		24	16	4	9	2	3	19	22		100
Females	Observed	17,788	11,946	1,525	5,540	1,786	2,739	1,796	10,817	(53,937)	53,937
	Expected**	8,076	9,677	743	2,679	583	2,605	415	5,614	(30,392)	30,392
	Excess	9,712	2,269	782	2,861	1,203	134	1,381	5,203	(23,545)	23,545
Percent of Total Excess****		41	10	3	12	5	1	6	22		100

*Cardiovascular disease (CVD) combines heart disease and stroke.

**The expected number is calculated from the rate observed in the White population.

***Sub-total is the sum of negative and positive excess deaths. Total deaths sums positive excess deaths only.

****Percentages based on total deaths.

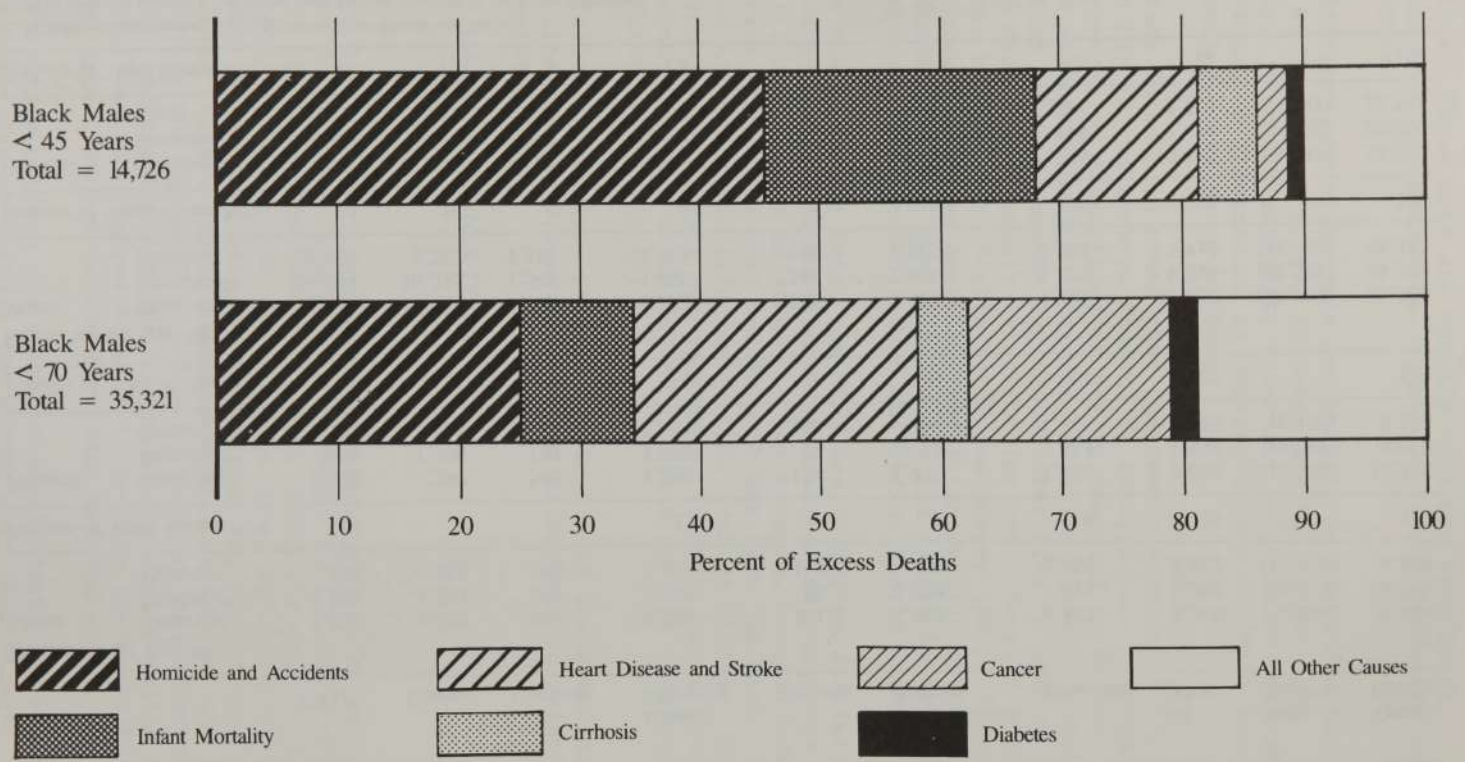
SOURCE: Duke University, analysis commissioned by the Task Force on Black and Minority Health, 1984-1985.

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Figure 4

Average Annual Excess Deaths for Black Males, 1979-1981

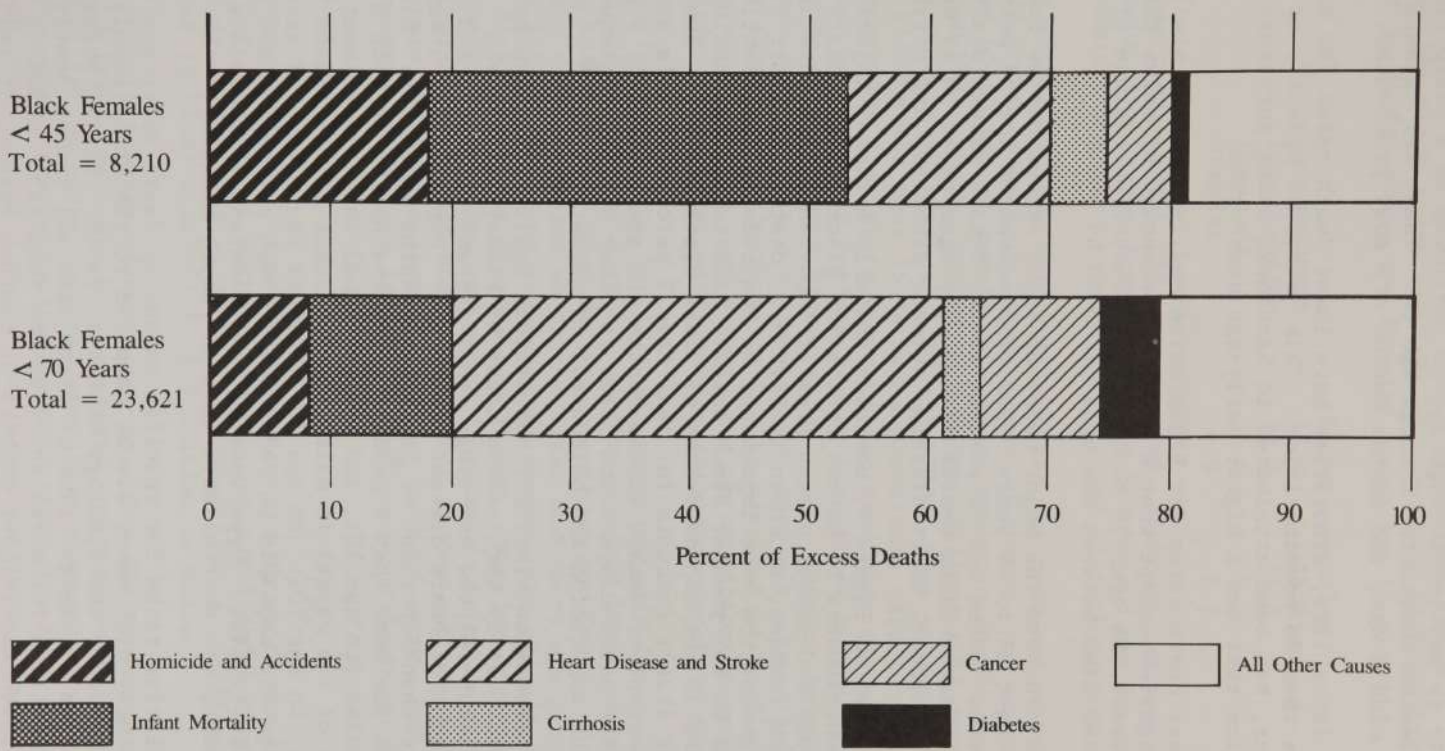


*The base of "zero" is equal to the mortality rate for Whites. "Excess deaths" indicate those observed in excess of the White rate.
SOURCE: Duke University Analysis Commissioned by HHS Task Force on Black and Minority Health, 1984-1985.

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Figure 5

Average Annual Excess Deaths for Black Females, 1979-1981



*The base of "zero" is equal to the mortality rate for Whites. "Excess deaths" indicate those observed in excess of the White rate.
SOURCE: Duke University Analysis Commissioned by HHS Task Force on Black and Minority Health, 1984-1985.

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disparity is smaller through age 24, followed by a sharp rise in excess deaths thereafter through age 64. Thus, for infants and adults through middle age, the excess deaths are most pronounced.

In later life, minorities have lower death rates for many diseases than do nonminorities. This "survivor effect", or mortality crossover, has been attributed to hardiness among survivors in a population that has a higher early-age death rate.

The excess death rates for Black males and females are similar across age categories except that a greater percentage of males than females died between the ages 25 to 44, but a greater percentage of females than males died between the ages of 45 to 69.

Homicide was the major cause of these excess deaths occurring in Blacks, aged 25 to 44 years. Homicide accounted for 38 percent of the male excess deaths and 14 percent of the female excess deaths below age 45. Excess Black deaths between the ages of 45 to 69 were due mainly to cancer, heart disease, stroke, diabetes, and cirrhosis.

As seen in Figure 4, homicide and unintentional injuries are the major contributors to excess deaths for Black males. Heart disease and stroke and cancer assume greater importance with advanced age. For Black females, as shown in Figure 5, death from heart disease and stroke assume the same importance as homicide and unintentional injuries do for younger Black males. Diabetes is increasingly important in the excess deaths of older Black females. Though diabetes itself accounts for less than 2 percent of male excess deaths and 5 percent of female excess deaths (to age 70), it is a major risk factor for heart disease and leads to other serious consequences, including amputation and blindness, if uncontrolled.

Hypertension similarly has serious health consequences if left untreated. It is the leading cause of kidney failure and hypertension-related end-stage renal disease in Blacks and is a major concomitant of heart disease and stroke. Hypertension itself accounts for more than 5 percent of the excess deaths in Blacks. Cirrhosis accounts for more than 3 percent of excess deaths in both Black males and females (to age 70), and unintentional injuries account for 6 percent of the excess in males and 2 percent of the excess in Black females (to age 70). to age 70. Many of the causes of excess deaths in Blacks are amenable to reduction through preventive and public health activities. Hypertension and diabetes, which relate to other conditions, are controllable through proper treatment.

Relative risks for specific causes of death under age 45 are disturbingly high among Blacks compared to the White population, and further support the findings of excess death. Blacks under 45 years of age have a relative risk of death from all causes nearly twice that of Whites (1.96 for males and 1.93 for females). Relative risk does not indicate the largest numbers of deaths; rather, it reflects the

comparative likelihood of dying from a particular cause. The conditions for which relative risks of death are highest for Black (compared to White) males and females under age 45 are:

	Males	Females
Tuberculosis	17.4	15.6
Hypertension	10.2	13.4
Homicide	6.6	4.3
Anemias	6.0	5.2

Deaths from tuberculosis (TB) and anemias, although not major causes of death, occur at a higher frequency among Blacks and may be related to socioeconomic conditions commonly associated with these diseases.

Morbidity data from NHIS substantiate the problems Blacks, especially women, face with hypertension, diabetes, and anemia. Black women ages 45-64 had a prevalence rate of hypertension 85 percent higher than White women, with hypertension afflicting 43 percent of the Black women sampled in the 1979-81 NHIS. More striking data also appear. Black women ages 25-44 had a prevalence rate for hypertension 2.6 times greater than White women of the same age; diabetes rates in Black women 45-64 were 2.7 times higher than those in Whites, and anemia rates reported were higher at all ages, ranging from 6.7 times in children ages 1-14 to 2.6 times higher in Black women 15-44. These morbidity figures clearly show the health disparities in Blacks surfacing early in life, and several health conditions responsible for the disparities are known risk factors for cardiovascular disease.

Disability data from the 1976 SIE provides additional information on health differences in Blacks. Blacks reported lower rates of disabling heart disease than Whites at each income level. However, because the rates decrease as income rises and there are proportionally more Blacks among the lower income strata, the overall Black rates of disabling heart disease are higher. Similar correlations can be found between education and other diseases reported in SIE. The main conclusion from this analysis is that income and education are major factors influencing health status. Lack of income and education must be recognized as risk factors for disease and death in Blacks.

Hispanics

Hispanics are the second largest minority group in the United States. For many data collection purposes (e.g., birth and death certification), Hispanics are classified as an ethnic rather than a racial minority and are often noted in vital statistics' information as White.

The primary sources of mortality data for all racial groups are death certificates recorded by the states and used by Federal agencies such as NCHS in computing national mortality statistics. Because uniform procedures for reporting Hispanic ethnicity have not been adopted nationwide, such information is not captured on many documents including death certificates.

SUBCOMMITTEE ON INFANT MORTALITY AND LOW BIRTHWEIGHT

EXECUTIVE SUMMARY

Introduction

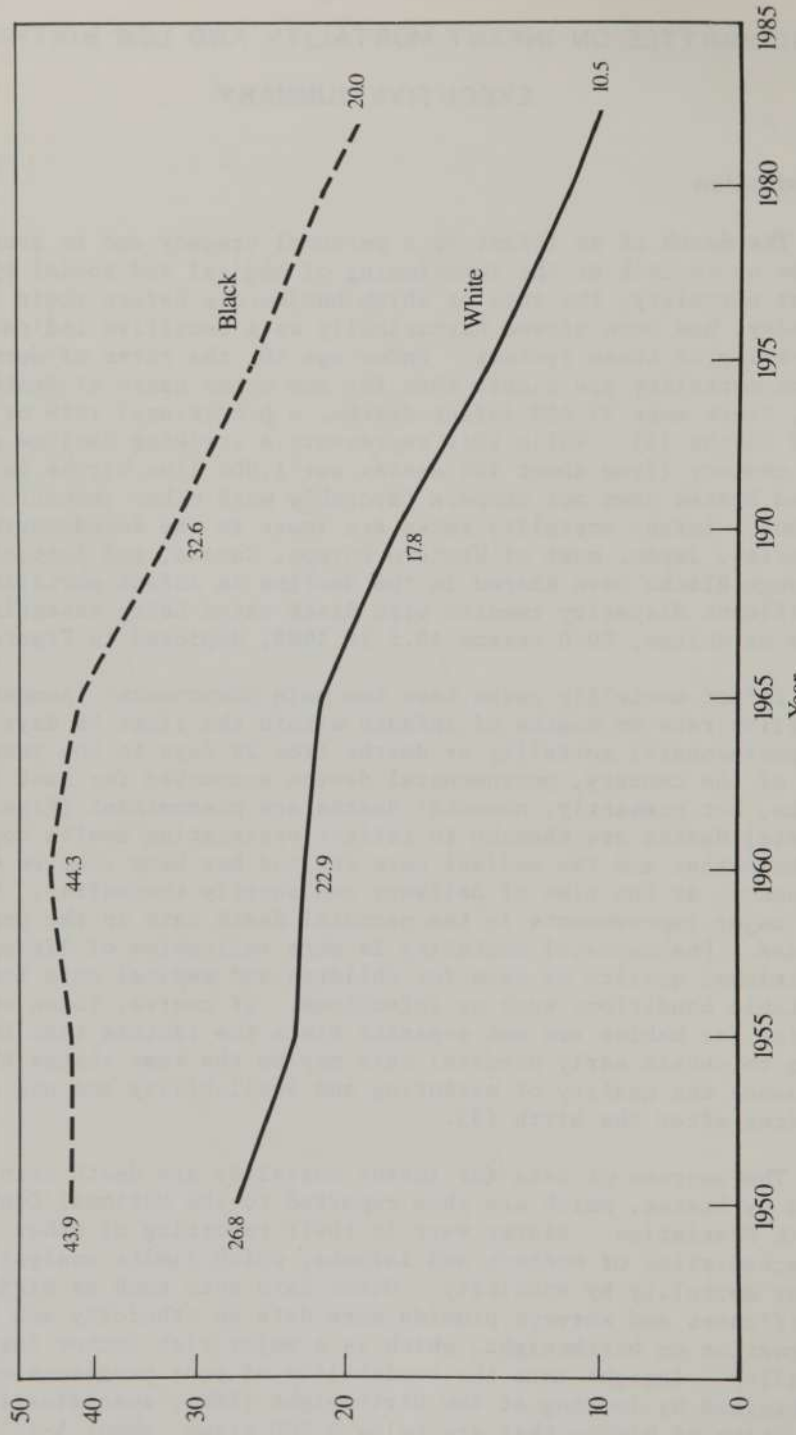
The death of an infant is a personal tragedy and an event that causes us to look at the functioning of medical and social systems. Infant mortality, the rate at which babies die before their first birthday, has been viewed historically as a sensitive indicator of the well-being of these systems. Under age 60, the rates of death from infant mortality are higher than for any other cause of death. In 1983, there were 39,400 infant deaths, a provisional rate of 10.9 per 1,000 births (1). While this represents a striking decline during the 20th century (from about 100 deaths per 1,000 live births in 1900) the United States does not compare favorably with other industrialized nations. Infant mortality rates are lower in the Scandanavian countries, Japan, most of Western Europe, Canada, and Australia (2). Although Blacks have shared in the decline in infant mortality, a significant disparity remains with Black rates being essentially twice those of Whites, 20.0 versus 10.5 in 1983, depicted in Figure 14.

Infant mortality rates have two main components: neonatal mortality rate or deaths of infants within the first 28 days of life, and postneonatal mortality or deaths from 28 days to one year. At the turn of the century, postneonatal deaths accounted for most infant deaths, but presently, neonatal deaths are predominant (Figure 15). Neonatal deaths are thought to reflect preexisting health conditions of the mother and the medical care she and her baby receive during pregnancy, at the time of delivery and shortly thereafter. There have been major improvements in the neonatal death rate in the past two decades. Postneonatal mortality is more reflective of living conditions, quality of care for children and medical care for treatable conditions such as infections. Of course, these two sources of risk for babies are not separate since the factors that influence a woman to obtain early prenatal care may be the same things that influence the quality of parenting and availability and use of services after the birth (3).

The sources of data for infant mortality are death certificates filed by States, which are then reported to the National Center for Health Statistics. States vary in their reporting of other characteristics of mothers and infants, which limits analysis of infant mortality by ethnicity. Other data sets such as birth certificates and surveys provide more data on ethnicity and include information on birthweight, which is a major risk factor for infant mortality. Insight into the variability of poor pregnancy outcome can be obtained by looking at low birthweight (LBW), specifically, the proportion of births that are below 2,500 grams, about 5-1/2 pounds.

Figure 14

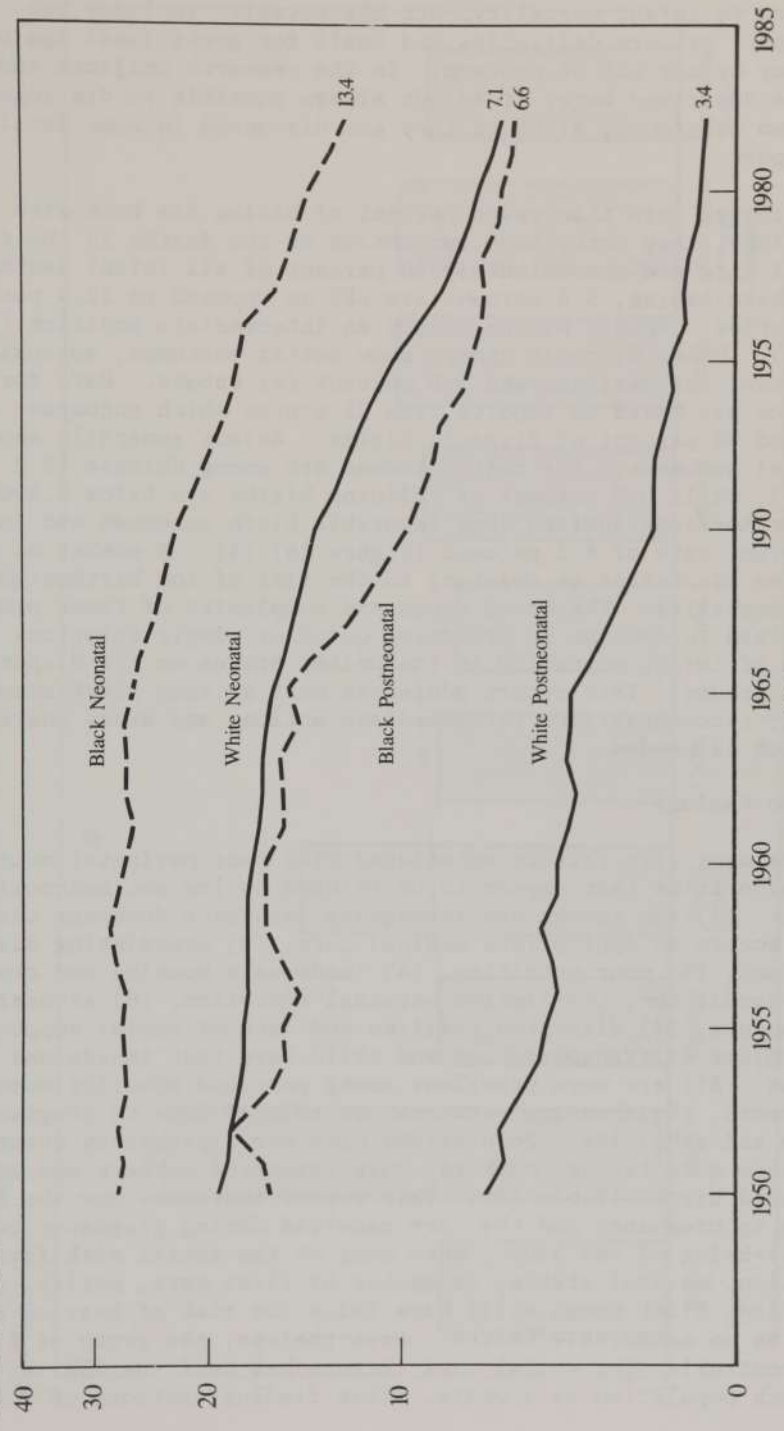
Infant Mortality Rates, 1950-1982



SOURCE: National Center for Health Statistics.

Figure 15

Neonatal and Postneonatal Mortality Rates, 1950-1982



SOURCE: National Center for Health Statistics.

The distinction between normal and low birthweight is a powerful one in regard to infant mortality, but LBW actually includes two subgroups: preterm deliveries and small for gestational age babies, which may or may not be preterm. In the research projects and data that are described here, it is not always possible to distinguish these two subgroups, although they are discussed in some detail in the full report.

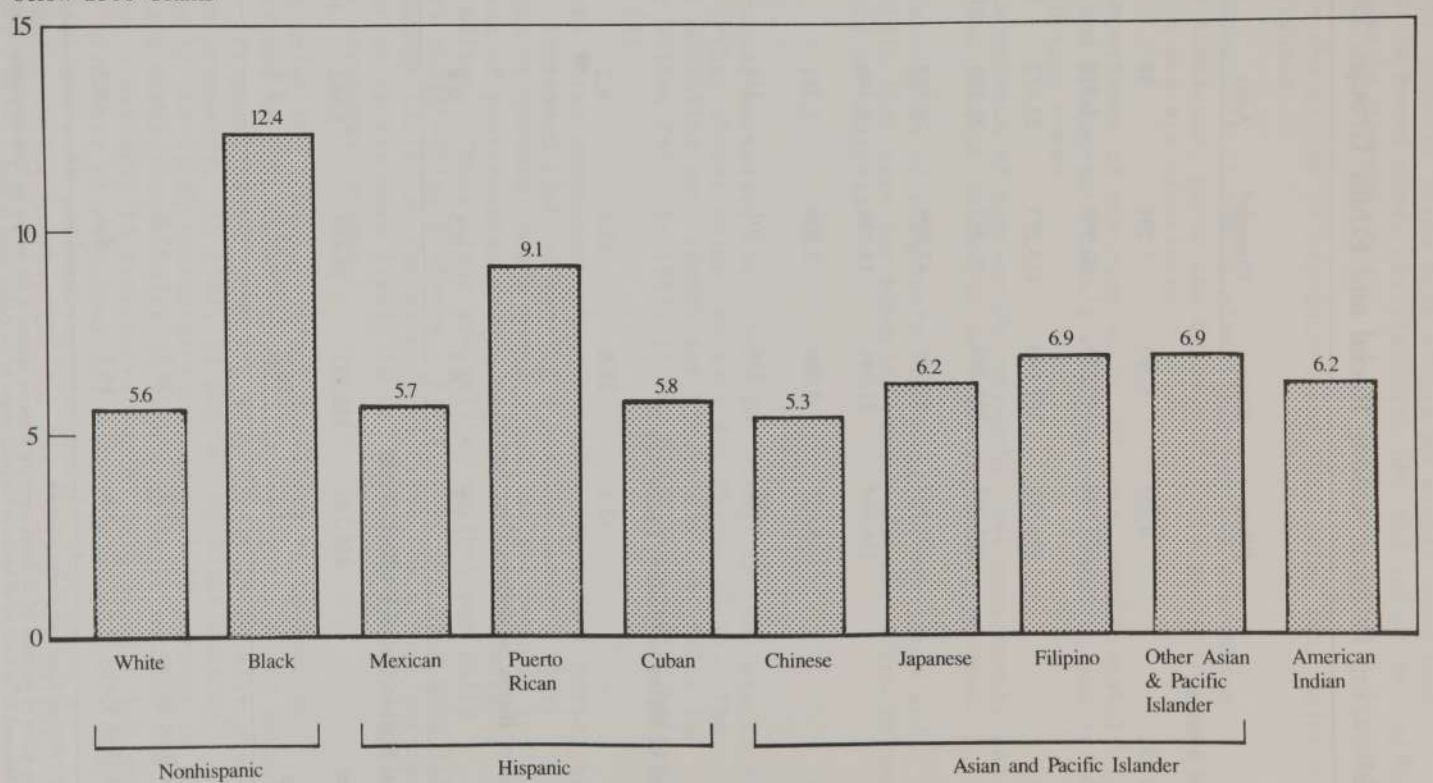
Although less than seven percent of babies are born with low birthweight, they contribute two-thirds of the deaths in the first month of life and approximately 60 percent of all infant deaths (4). Among White babies, 5.6 percent are LBW as opposed to 12.4 percent for Black babies. Puerto Ricans occupy an intermediate position (9.1 percent). Other Hispanic groups show better outcomes, approximately 5.7 percent for Mexicans and 5.8 percent for Cubans. Data for Hispanics are based on reports from 22 States which encompass an estimated 90 percent of Hispanic births. Asians generally show good perinatal outcomes. The best outcomes are among Chinese (5.3 percent), while 6.9 percent of Filipino births are below 2,500 grams. Data for American Indians show favorable birth outcomes and low birthweight rate of 6.2 percent (Figure 16) (5). A number of factors have been identified as relating to the risk of low birthweight and infant mortality. The broad range and complexity of these problems should lead to caution in presuming quick or simple solutions to the problem of infant mortality in the United States or the disparity between groups. This report addresses what we know about etiologic factors, recommendations for immediate action, and areas where reasearch is needed.

Etiologic Factors

The many risk factors associated with poor perinatal outcome among minorities that appear to be related to low socioeconomic status include: (1) low income and inadequate insurance coverage that often reduce access to appropriate medical care, (2) preexisting disease conditions, (3) poor nutrition, (4) inadequate housing and crowded living conditions, (5) limited maternal education, (6) stressful work environments, (7) disrupted families and lack of social supports, and (8) problems of transportation and child care that impede use of services. All are more prevalent among poor and minority women. Furthermore, childbearing patterns are related both to pregnancy outcome and ethnicity. Populations with worse pregnancy outcomes tend to include more teenage mothers, more unmarried mothers and more unintended births (Table 15). This report addresses how the factors leading to pregnancy and the care received during pregnancy relate to the well-being of the baby. When many of the social risk factors (education, marital status, trimester of first care, parity, age) are controlled, Black women still have twice the risk of bearing LBW babies as do comparable Whites. Nevertheless, the group of Black women controlled for social risk factors has half the LBW incidence of the Black population as a whole. This finding cautions us that this

Figure 16

Low Birth Weight Ratios According to Race and Ethnicity, United States, 1982



SOURCE: National Center for Health Statistics.

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Table 15

Childbearing Patterns Among Racial and Ethnic Groups, 1982

	White	Black	Hispanic*	Asian	American Indian, Alaska Native
Age of Mother					
Under 15	4,153	5,395	1,288	88	126
15-19	357,948	140,534	60,369	6,278	8,749
20-24	958,509	207,640	115,275	23,872	15,364
25-29	961,053	143,748	90,393	36,303	10,236
30-34	503,847	69,781	47,999	26,394	4,886
35-39	136,664	21,341	18,056	8,146	1,627
40-44	19,027	3,966	3,809	1,351	287
45-49	853	236	201	131	14
Percent of Births to Mothers Under Age 20	12.3	24.6	18.3	6.2	21.5
Percent of Births to Mothers Over Age 35	5.3	4.3	6.5	9.4	4.7
Marital Status: Out-of-Wedlock Births					
Number	355,180	335,927	86,488	8,642	14,998
Percent	12.1	56.7	25.6	8.4	36.3
Parity					
Percent First Births	43.3	39.2	37.0	41.8	36.9
Percent High Parity (4+)	8.6	14.2	16.4	10.7	17.0

SOURCE: National Center for Health Statistics.

*Refers to births to residents of 23 States reporting Hispanic origins of the mother on birth certificates. These States accounted for an estimated 95 percent of all births of Hispanic origin in the United States in 1982.

is a difficult, complex issue that offers no simple solutions. Although much is known about the risks for LBW and infant mortality, much remains to be learned.

Based on the review of literature and NCHS data, four major areas can be highlighted:

- The importance of family planning/pregnancy prevention among teenagers, given the disproportionate number of teen parents who are minorities.
- The importance of assuring early and continuous prenatal care and appropriate levels of maternity, newborn, and infant care to minority women.
- The importance of aggressive outreach, case management, and expanded patient education services for minority women.
- The importance of adequately financing the providers and hospitals that care for minority women, who are often uninsured or rely on Medicaid.

Blacks

The neonatal mortality rate (NMR) for Blacks in 1981 was 13.4 per 1,000 live births, almost twice the rate for Whites (7.1). The postneonatal mortality rate (PNMR) for Blacks was 6.6, twice the 3.4 rate for Whites (6). In 1983, 11,060 Black babies died before one year of age (1).

There are three components of excess risk for infant mortality for Blacks: increased risk of bearing a low birthweight baby; increased risk of neonatal death among normal weight babies; and increased risk of postneonatal death, regardless of birthweight, relative to Whites. These risks are related to (but not fully explained by) childbearing patterns. Black women are much more likely to have a teenage birth, an out-of-wedlock birth, or a high parity birth, all of which are more likely to be unintended and associated with adverse perinatal outcome.

A focal point for lowering infant mortality is to improve services designed to help women, especially teenagers, avoid unwanted pregnancies. Pregnant Black women are less likely to receive prenatal care early in pregnancy. In 1982, 61 percent of Black mothers received care in the first trimester compared with 79 percent of White mothers. Black mothers were twice as likely as White mothers (10 percent versus 5 percent) to receive either no care or care beginning in the third trimester of pregnancy (5). It is also possible that there is a biologic role influencing birthweight that gives a different meaning to low birthweight for Blacks than for Whites. This issue deserves research attention. It is clear, unfortunately, that normal weight Black babies have far higher rates of neonatal mortality

than White babies. This may reflect the prenatal care received, other health behaviors of the mothers, quality of care in hospitals providing routine obstetrical care, or other factors. To the extent that deaths occur after the baby has left the hospital, excess deaths may reflect living conditions or health knowledge and health behavior on the part of the mother and family.

Postneonatal mortality rates are higher for Blacks for all major causes of death except congenital anomalies. Sudden infant death syndrome (SIDS) is the leading cause of postneonatal death, and research is continuing on its causes and prevention. Accidents are another major cause of death and may be related to dimensions of living conditions, knowledge of health behaviors, or quality of care provided to children (7). Among all groups, the mother's education is strongly associated with infant mortality, presumably because it taps these dimensions, as well as reflecting access to well and sick baby health care services. There are a number of specific risks regarding adverse pregnancy outcome such as the role of stress or infection that are suspected of influencing the disparity between Black and White rates. Specific health conditions related to perinatal outcome among Blacks are discussed in the report. In many cases, research currently under way should add to the presumptive evidence for the effect of these factors or their relationship with race. The relationship of economic conditions to health, especially infant mortality, is another area that deserves further research. The Subcommittee urges that further research address these factors.

Hispanics

As the second largest minority group, Hispanics present a complex picture in terms of low birthweight and infant mortality. There is considerable variation within the Hispanic population, and while postneonatal mortality rates are elevated, the birthweight distributions are generally favorable. Subgroups must be discussed separately, however.

Mexican Americans

As the largest component of the Hispanic population in the United States, and given their geographic concentration, there are more data on Mexican Americans than for other groups. Babies of Mexican American mothers have a relatively good birthweight distribution, which is somewhat surprising given their social and economic characteristics. Demographically, Mexican American women have fairly high rates of teen childbearing and more high-parity births. Their rates of out-of-wedlock childbearing are lower than those for Black women (but higher than those for Whites), and there is a greater tendency to be in a two-parent household than among Black mothers.

Only 58 percent of Mexican American mothers begin prenatal care in the first trimester, less than for Blacks or non-Hispanic Whites (5). The neonatal mortality rate appears good in some analyses, but

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other studies suggest that rates are artificially low due to underreporting (8). Recent studies suggest that, compared with non-Hispanic Whites, Mexican Americans have higher neonatal mortality at any particular birthweight (9).

This debate draws attention to the data and research needed to address the interrelationships among intrinsic birthweight distribution, health behaviors and prenatal care, and the access to and use of health care services. For Mexican Americans, the question of how individual health endowments and behaviors affect perinatal outcome are complicated further by the role of migration. The selectivity of migration may mean that Mexican women who migrate to the United States represent a selected, or healthier, subgroup. Because many Mexican American women are of low socioeconomic status, issues regarding access to subsidized care are extremely important to them and to the outcome of their pregnancies.

Puerto Ricans

The birthweight and hence infant mortality rates for United States-born Puerto Ricans are less favorable than those for Mexican Americans. The low birthweight rate is 9.1 percent overall and 9.6 percent for United States-born Puerto Ricans. This is the highest for any Hispanic group. The proportion of low birthweight is between the rates for Whites and for Blacks. This is not too surprising because their childbearing rates are in many ways more like patterns seen in the Black population than those seen among other Hispanics. For example, among Puerto Ricans, 48 percent of births were out of wedlock, but among Mexican Americans, it was only 14 percent. The economic circumstances of many Puerto Rican women are such that considerations regarding socioeconomic status, access to health care, and health education and behaviors that apply to Blacks, apply to Puerto Ricans as well. Fuller understanding of the differences among the several Hispanic populations requires better data systems that collect information on ethnicity and requires creative ways of dealing with data for small subpopulations.

Cubans and Other Hispanics

Data on birthweight show a favorable distribution for Cubans. The low birthweight rate for Cubans is 5.8 percent; it is somewhat higher among United States-born Cuban mothers. This is not surprising, given their apparently better socioeconomic status than that of Mexican American or Puerto Rican women. For example, Cuban women have a relatively low proportion of births occurring out-of-wedlock (14 percent) and high rates of use of prenatal care (80 percent beginning in the first trimester). It is not presently possible to construct mortality rates for Cuban births; moreover, much of the research does not provide sufficient information on ethnicity or a large enough number of cases to draw conclusions about Cuban or other Hispanic outcomes.

Native Americans

National data for American Indians and Alaska Natives indicate that birthweight distribution and neonatal mortality for Native Americans are quite good and have shown improvement over time. Unfortunately, postneonatal mortality is quite high. The reduction in postneonatal mortality should be a high priority. Special considerations for American Indian and Alaska Natives are the high rates of death from unintentional injuries and the possible influence of diabetes or alcohol use of the mother on perinatal outcome or postneonatal deaths (10). As with all populations, health education, living conditions and access to health care are especially important. Use of well baby care and the quality of sick baby care must be considered.

Neonatal mortality rates and the birthweight distribution are favorable and have improved along with improvements in prenatal care for American Indians and Alaska Natives. These good outcomes are observed despite the relatively poor patterns of prenatal care among American Indians and Alaska Natives with far more women receiving late prenatal care or no prenatal care at all than among Whites. Birthweight has the predictable relationship with prenatal care--i.e., the earlier the care, the better the birthweight--but the level of care is depressed and birthweight is not. Clearly there is room for improvement in the receipt of prenatal care, but a number of questions are raised.

Data problems, evident for other subgroups, are even greater for Native Americans. Diversity within the Native American population and likely changes over time in the proportion of American Indians who so declare themselves in official documents create special problems. The Indian Health Service data systems are an excellent beginning for understanding infant mortality, but additional data are highly desirable.

Asian/Pacific Islanders

The Asian/Pacific Islander population within the United States is quite diverse, and available data are often not adequate. In general, perinatal outcomes are good among Asian/Pacific Islander women with relatively low rates of low birthweight (6.5 percent). Chinese had the lowest rate (5.3 percent) and Filipinos the highest rate (6.9 percent) of low birthweight. Asian/Pacific Islander mothers are less likely than White mothers to be teenagers (6 percent versus 12 percent among Whites) or unmarried (8.4 percent vs. 12.1 percent for Whites). Maternal education and socioeconomic status are relatively high among many Asians, and prenatal care patterns are good, with 75 percent beginning care in the first trimester. Southeast Asian refugees

present a somewhat different picture, with considerable variability and numbers too small to permit national estimates of rates. Some groups, for example the Hmong, have cultural patterns of very early childbearing that may place them at greater perinatal risk.

OPPORTUNITIES FOR PROGRESS

The following are highlights of the Subcommittee's deliberations regarding needs in the area of infant mortality:

- Personal reproductive responsibility should be enhanced through a variety of channels, including enlarged content of health education for providers and lay audiences, improved family planning services, research on prevention of unplanned pregnancies, and the development of improved approaches to fertility regulation. Further research is needed on behaviors associated with unplanned pregnancies, including perceived risks and benefits of methods of fertility regulation. This is especially true for teenage women who constitute an important segment of the minority childbearing population.

- Since many risks exist before pregnancy or are actualized early in pregnancy, steps should be taken to improve our ability to increase minority women's knowledge of risks during pregnancy and of the value of early and ongoing prenatal care. Research should elaborate the mechanisms by which the planning of pregnancies influences prenatal care and pregnancy outcome. Behavioral approaches to accurate dating of pregnancies should be explored.

- Use of prenatal care is influenced by the availability and accessibility of services. Many minority women, especially teenagers, receive their care through Federal or State-subsidized services or must pay for their own care. It is important to lower barriers created by coverage patterns for high-risk women low physican participation in Medicaid; problems with processing claims/eligibility quickly; caring for women who move during pregnancy; and others.

- Provision of technical assistance to State Title V agencies and other providers of care for mothers and infants interested in trying innovative approaches to funding care programs. Continue to monitor changes in expanded eligibility resulting from the Child Health Assistance Program (CHAP) in terms of characteristics of new eligibles, use of care and outcomes.

- High-risk women often need a larger array of services than others, and minority women are often high risk. The Subcommittee recommends ways to address these needs through expanded nutrition supplements, health education services, provider and patient education regarding risk assessment, and recognition of preterm labor and removal of arbitrary limits to services.

- Special attention should be given to aspects of prenatal care designed to identify women at risk of preterm labor. Presently there are innovative programs designed to identify and treat women at risk of preterm labor. These programs should be evaluated and considered for replication. Similarly, regionalization of care for women at high risk has been valuable and should be maintained.

- Although it is clear that early prenatal care is valuable, it is also clear that more should be known about how the specific components of care influence women's likelihood of coming for care and the effect of that care. Research is needed on the other health-related behaviors women may engage in during pregnancy that are related to pregnancy outcome but not necessarily a part of typical prenatal care. Special attention should be given to improving techniques to help pregnant women stop smoking.

- A number of conditions can be screened during pregnancy and knowledge of identified risks can then influence treatment or type of care. For example, Black women are at increased risk of bearing twins, and multiple pregnancies are high risk for early labor and adverse outcome; recent immigrants, especially Asians and those from parts of the developing world, are at risk of hepatitis B which affects the neonate and creates a carrier pool. Screening for such conditions is important to secure optimal care.

- A number of areas require improved research and attention by health providers, such as the role of stress, type of employment, transportation problems, and nutrition on pregnancy, the use of prenatal care and pregnancy outcome. Comprehensive health education for providers and information campaigns for the public could address avoidable health risks during pregnancy.

- A model state brochure should be developed for low-income pregnant women describing simply how and where to obtain Medicaid eligibility, the need for early care, avoidable risks to the fetus (e.g., smoking), and a list of providers accepting Medicaid. Assure that the message is delivered to high-risk groups in culturally appropriate forms.

- The Federal Government should continue to review and sponsor mechanisms to aid in local and state investigations of infant deaths in areas of high or changing infant mortality rates.

- The Department should coordinate with the American College of Obstetricians and Gynecologists and other professional organizations to review the influence of malpractice insurance on Medicaid participation and to seek an appropriate vehicle for assessing the role of uncompensated care in influencing pregnancy outcome.

- Assess evaluations and consider replication of innovative models of active follow-up programs to support families of infants at high risk of postneonatal disease. Support groups in other disease areas have had documented successes. Their value in regard to assisting parents of high-risk infants should be evaluated.

- Many postneonatal deaths are due to injury. The recent improvements in seat belt protection for children and childproof containers should serve as a model for preventing other sources of accidental death for infants. The 1990 Objectives for the Nation which have focused attention to the role of seat belts in child safety, and other areas (such as death from burns) could be considered at the mid-decade review.

- To understand better the interplay of social, biological and environmental factors associated with low birthweight and the relationship of low birthweight to infant mortality among minority groups, research should address birthweight-specific mortality rates for minority groups, investigate the role of nutrition or generational effects as an influence on the relatively high low birthweight rates for apparently low-risk Black women, and attempt to verify and explain the apparently favorable birthweight distributions found among Mexican American and Native American women.

- Research on the perinatal period has paid far less attention to the factors associated with postneonatal mortality. It is recommended that research be increased and directed at the preventable causes of postneonatal mortality, including the interrelationship of individual and familial behaviors, health care delivery factors, use of well and sick-baby care; immunizations for babies, and sources of accidental death such as risks associated with substandard housing.

- Research is needed on the link between economic conditions and infant mortality to specify better the interplay between the individual, financing differences, and structural factors. Expanded research on economic aspects of infant mortality in conjunction with sociocultural factors may help explain the relatively good outcomes experienced by Asian/Pacific Islanders and Native Americans.

- Most of the large programs, like Maternal and Infant Care (MIC), Improve Pregnancy Outcome (IPO), and the Special Supplemental Food Program for Women, Infants, and Children (WIC) have only partially been evaluated. More complete evaluations of these programs should be undertaken. Evaluation techniques have not kept pace with the programs; specific recommendations for strengthening evaluations are made in the Subcommittee report.

Evidence is accumulating to document the value of nutrition programs (such as WIC). Continued research and implementation should be considered.

- States should be encouraged to modify their birth and death certificates to include better identification of ethnic groups, especially Hispanics (already available on the certificates from 22 states). Furthermore, the addition of certain new items of information on the birth certificate (such as smoking, prepregnancy weight and height, and insurance coverage, and so forth) could be extremely beneficial in monitoring and studying the factors that influence pregnancy outcome.

- The National Infant Mortality Surveillance project done by CDC in collaboration with NICHD, HRSA, NCHS and the State vital registrars is developing a national data base of linked birth and death records for 1980 that will provide valuable data for analyzing infant mortality. The extension of this project to a linked birth and death record for all births and infant deaths is planned by NCHS. It is strongly recommended that this project begin with the 1982 birth cohort and be continued.

- Much of the evaluative research on infant mortality interventions was undertaken before some major changes in the U. S. demographics, poverty populations, financing shifts and changes in treatment systems. It is recommended that more contemporary data collection and prospective studies be undertaken. Data should be disaggregated by race and ethnicity, providing detail within major ethnic groups such as Hispanics, and adequate cases for comparison of adolescent with nonadolescent mothers.

- Data on insurance coverage of women and infants should be improved, especially in regard to those eligible and receiving Medicaid. These data could aid in our understanding of the role of financing and service delivery issues regarding infant mortality.

- Several national data bases (e.g., the National Natality Survey, the National Survey of Family Growth, and the National Longitudinal Survey--Youth Cohort) include rich data regarding pregnancy outcome. Improvements are recommended to enhance their value in regard to increasing knowledge of infant mortality/low birthweight for minorities and for research on teenage childbearing.

- Research on some ethnic groups (e.g., Indochinese refugees) will be better served by data collection and research efforts directly addressing their health concerns, rather than oversampling in multipurpose surveys. In other cases, valuable data sets exist regarding specific minority groups and could receive further analysis, e.g., the Puerto Rican Fertility Survey or Indian Health Service data.

The opportunities summarized above point to issues in education, information, research, and services where advances could be made. Infant mortality is a complex problem with many medical and nonmedical aspects. There are no simple solutions, but there are many things that we know about fertility, pregnancy and infant care that can help address the problem of infant mortality, a problem that takes a disproportionate toll on minorities.

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Infant Mortality and
Low Birthweight

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Report of the Secretary's Task Force on

Black & Minority Health

U.S. Department of Health and
Human Services

SUBCOMMITTEE ON INFANT MORTALITY AND LOW BIRTHWEIGHT

INTRODUCTION

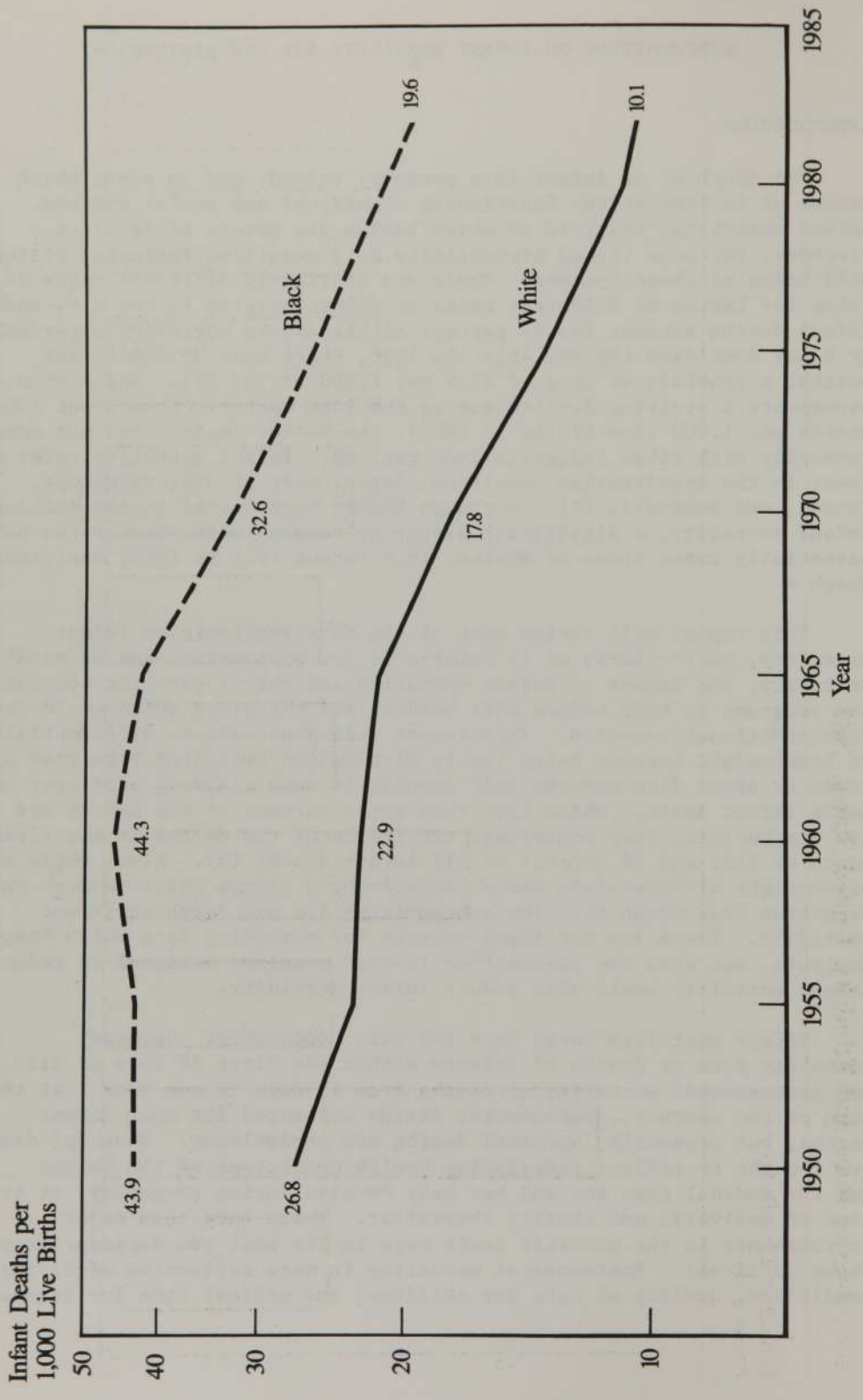
The death of an infant is a personal tragedy and an event which causes us to look at the functioning of medical and social systems. Infant mortality, the rate at which babies die before their first birthday, has been viewed historically as a sensitive indicator of the well-being of these systems. There are distinctly different risks of dying for babies of different races or ethnic origins in the U.S. today. Infant deaths account for 27 percent of the excess mortality experienced by Black Americans (by age 45). In 1983, there were 39,400 infant deaths, a provisional rate of 10.9 per 1,000 births (1). While this represents a striking decline during the 20th century (from about 100 deaths per 1,000 live births in 1900), the United States does not compare favorably with other industrialized nations. Infant mortality rates are lower in the Scandinavian countries, Japan, most of Western Europe, Canada, and Australia (2). Although Blacks have shared in the decline in infant mortality, a significant disparity remains with Black rates being essentially twice those of Whites, 19.6 versus 10.1 in 1982, depicted in Graph A.

This report will review much of the data available on infant mortality, particularly as it relates to low birthweight and neonatal mortality; the causes of infant mortality and the disparities observed; the programs to help reduce this burden; and the areas which would profit from additional research. This report will also address differentials in birthweight because being low in birthweight (weighing less than 2,500 grams or about five-and-one-half pounds) is such a strong predictor of early infant death. While less than seven percent of the babies are low birthweight, they contribute two-thirds of the deaths in the first month of life and 60 percent of all infant deaths (4). Also, there are birthweight differentials among racial/ethnic groups which deserve our attention (see Graph B). The subcommittee did not focus on infant morbidity. There are far fewer sources for morbidity data which hampers analysis, but also the presumption is that programs designed to reduce infant mortality would also reduce infant morbidity.

Infant mortality rates have two main components: neonatal mortality rate or deaths of infants within the first 28 days of life, and postneonatal mortality or deaths from 28 days to one year. At the turn of the century, postneonatal deaths accounted for most infant deaths, but presently, neonatal deaths are predominant. Neonatal deaths are thought to reflect preexisting health conditions of the mother and the medical care she and her baby receive during pregnancy, at the time of delivery, and shortly thereafter. There have been major improvements in the neonatal death rate in the past two decades (Graph C shows declines). Postneonatal mortality is more reflective of living conditions, quality of care for children, and medical care for treatable

Graph A

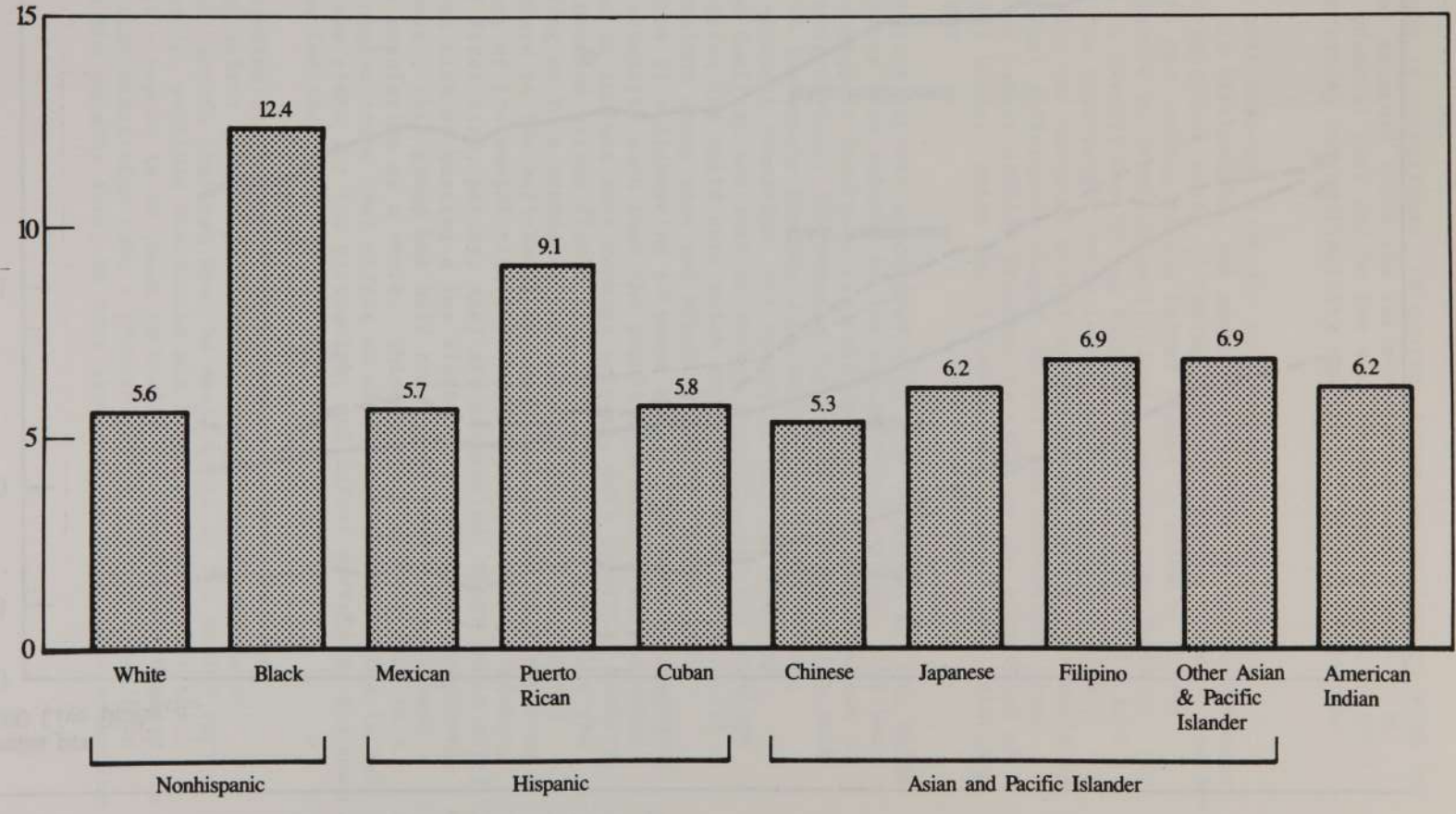
Infant Mortality Rates, 1950-82



Source: National Center for Health Statistics.

Graph B

Low Birth Weight Ratios According to Race and Ethnicity, United States, 1982



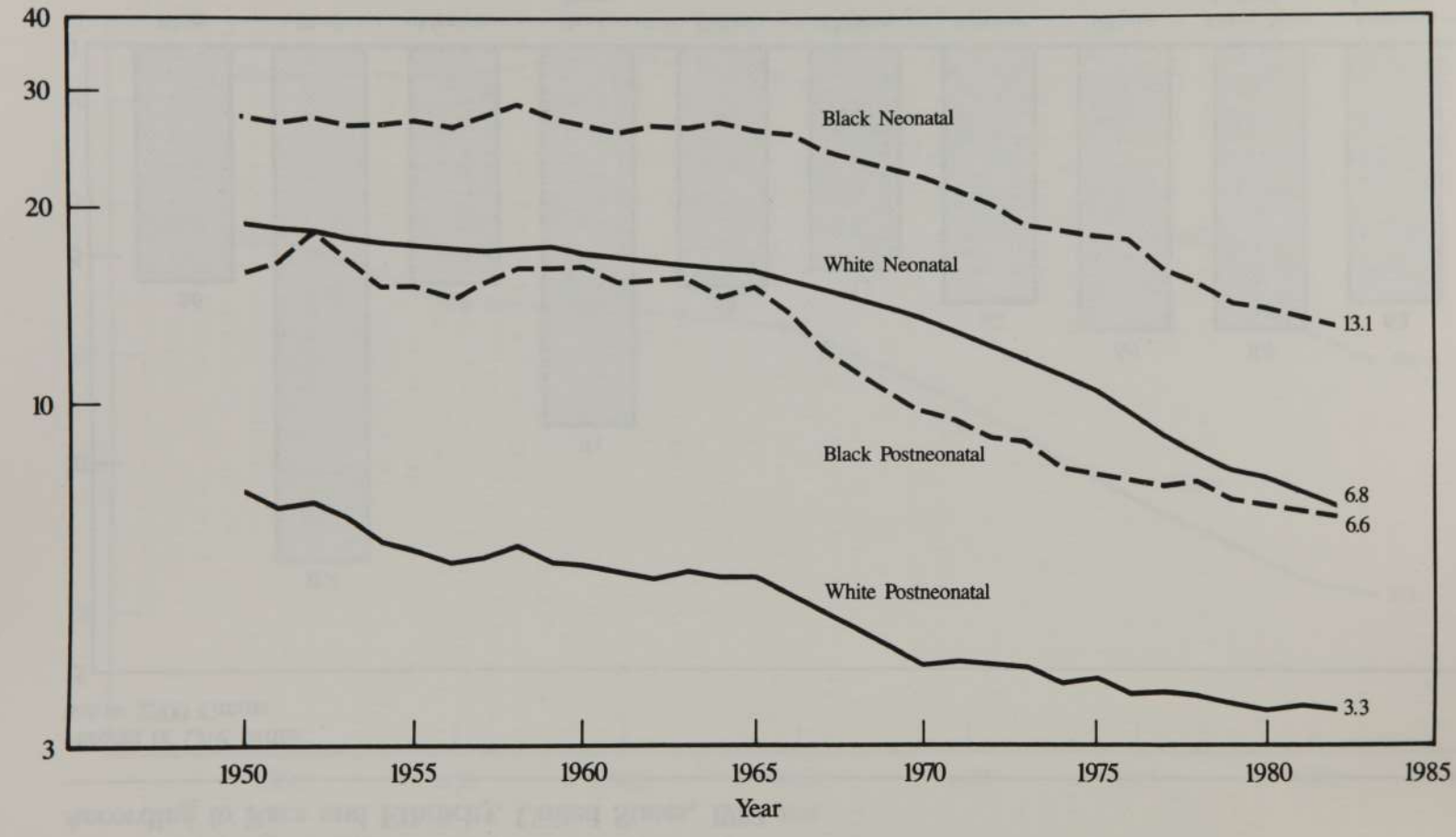
Source: National Center for Health Statistics.

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Graph C

Neonatal and Postneonatal Mortality Rates, 1950-82



Source: National Center for Health Statistics.

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conditions such as infections. Of course, these two sources of risk for babies are not separate since the factors that influence a woman to obtain early prenatal care may be the same things that influence the quality of parenting and availability and use of services after the birth (3).

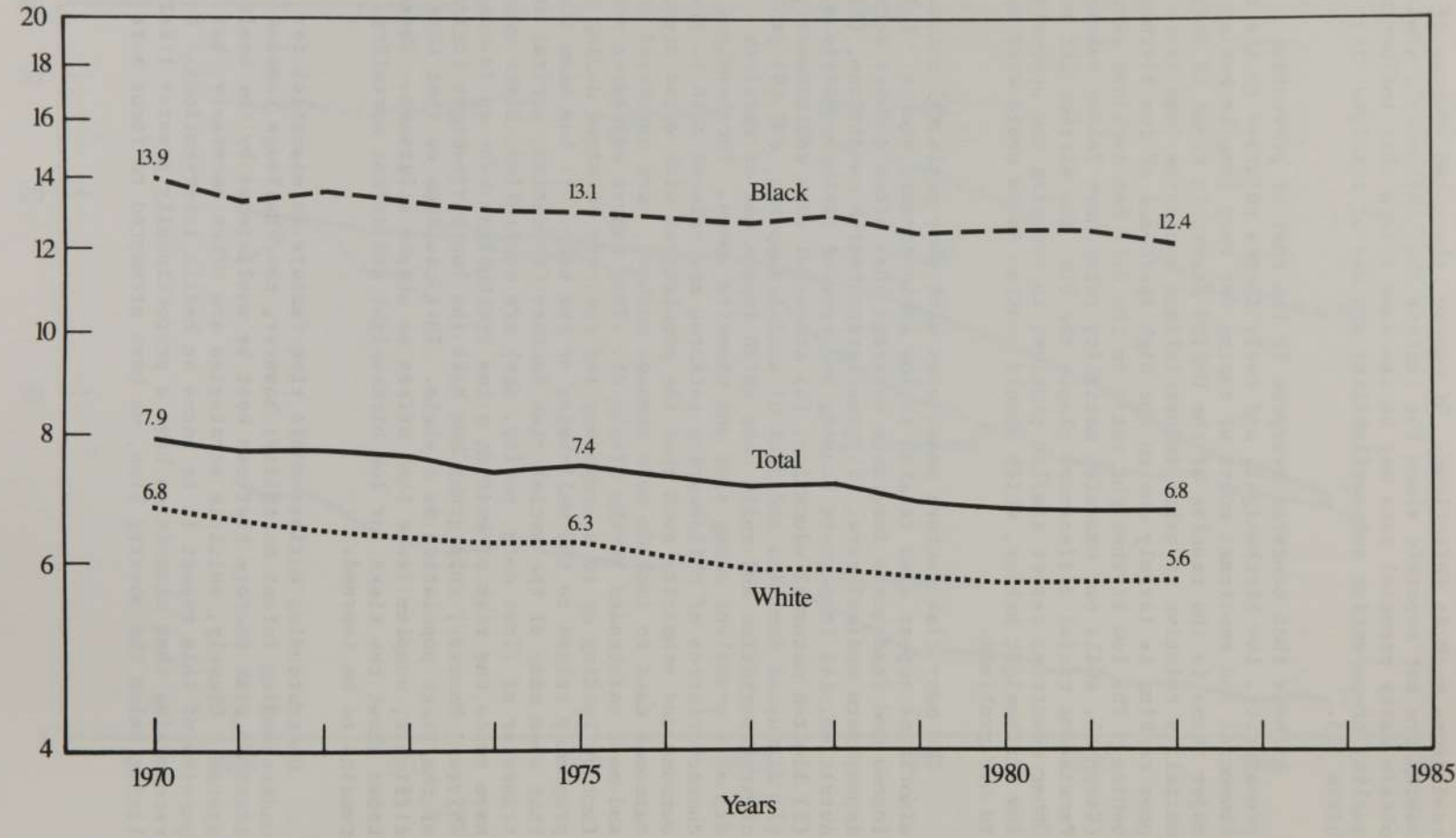
A theme that concerns everyone is the cost of preventing prematurity, low birthweight, and early deaths relative to the enormous financial and emotional costs of caring for very fragile babies. Another major theme is the ranking of the United States in terms of infant mortality relative to other industrialized countries (see Table A). Our poor ranking is largely due to our high incidence of low birthweight babies. The low birthweight ratio in the U.S. has declined slowly (Graph D), while our neonatal mortality rates have fallen substantially. Persistent racial differences plague the U.S. low birthweight rates. Other countries report similar problems in reducing the proportion of low birthweight babies, which should caution us to avoid easy solutions to our problems.

The many risk factors associated with poor perinatal outcome among minorities appear also related to low socioeconomic status: (1) low income and inadequate insurance coverage that often reduces access to appropriate medical care, (2) preexisting health conditions, (3) poor nutrition, (4) inadequate housing and crowded living conditions, (5) limited maternal education, (6) stressful work environments, (7) disrupted families and lack of social supports, and (8) problems of transportation and child care which impede use of services. All are more prevalent among poor and minority women. Furthermore, characteristics of childbearing patterns are related both to pregnancy outcome and ethnicity such that the populations with worse pregnancy outcomes tend to include more teenage mothers, more unmarried mothers, and more unintended births (Table B). This report addresses how the factors leading up to a pregnancy and the care received during the pregnancy relate to the well-being of the baby. It has been observed that when many of the social risk factors (education, marital status, trimester of first care, parity, age) are controlled, Black women still have twice the risk of bearing a low birthweight baby as do comparable Whites. However, this group has half the low birthweight incidence of the Black population as a whole. This cautions us that this is a difficult, complex issue that offers no simple solutions. There is much known about the risks for low birthweight and infant mortality, but much remains to be learned.

Understanding socioeconomic risk factors is essential for understanding infant mortality; however, the challenge remains to identify risk factors that can best be ameliorated by the health care system. Clearly, multiple strategies are often necessary, but the purview of this report is to focus on health interventions. However, in recognizing that minorities have a proportionally greater likelihood of living below the poverty line, we have attempted to focus more attention

Graph D

Low Birth Weight Ratios, 1970-82



Source: National Center for Health Statistics.

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TABLE A

Infant Mortality Rates for the United States and Selected Countries - 1981[1]

Country	Infant Deaths per 1,000 Live Births
Sweden	7.0
Japan	7.1
Finland	7.6
Norway	8.1
Netherlands	8.2
Denmark	8.4
Switzerland	8.5
France	9.6
Spain	10.3
Singapore	10.8
Canada	10.9
Australia	11.0
Belgium	11.7
New Zealand	11.7
United States	11.9
United Kingdom	12.1
German Democratic Republic	12.3
Austria	12.6
Federal Republic of Germany	12.6
Italy	14.3
Israel	15.1
Jamaica	16.2
Czechoslovakia	16.8
Greece	17.9
Cuba	18.5

[1]Data for Jamaica are for 1978. Data for Switzerland and Canada are for 1979. Data for Finland, Norway, Denmark, Australia, United Kingdom, Federal Republic of Germany, Italy, Israel, and Greece are for 1980. Data for all other countries refer to 1981; of these, the U.S. figure is final and all others are provisional.

Source: National Center for Health Statistics: Health, United States, 1984. DHHS Pub. No. (PHS) 85-1232. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1984.

TABLE B

Childbearing Patterns Among Racial/Ethnic Groups--1982
(By race/ethnicity of child)

Age of Mother	White	Black	Hispanic <1 <2	Asian	American Indian and Alaskan Natives
<15	4,153	5,395	1,288	88	126
15-19	357,948	140,534	60,369	6,278	8,749
20-24	958,509	207,640	115,275	23,872	15,364
25-29	961,053	143,748	90,393	36,303	10,236
30-34	503,847	69,781	47,999	26,394	4,886
35-39	136,664	21,341	18,056	8,146	1,627
40-44	19,027	3,966	3,809	1,351	287
45-49	853	236	201	131	14
Percent of Births <20	12.3	24.6	18.3	6.2	21.5
Percent of Births 35+	5.3	4.3	6.5	9.4	4.7
Marital Status					
Number of Out-of-Wedlock Births	355,180	335,927	86,488	8,642	14,998
Percent of Births Out-of-Wedlock	12.1	56.7	25.6	8.4	36.3
Parity					
Percent First Births	43.3	39.2	37.0	41.8	36.9
Percent 4+	8.6	14.2	16.4	10.7	17.0

<1 By Hispanic orgin of mother

<2 Refers to births to residents of 23 States reporting Hispanic origins on the birth certificate. These states accounted for an estimated 95 percent of all births of Hispanic origin in the United States in 1982.

Source: National Center for Health Statistics

on health insurance and financing issues as they relate to improved pregnancy outcomes for minorities.

The sources of data for infant mortality are death certificates filed by states which are then reported to the National Center for Health Statistics. States vary in their reporting of other characteristics of mothers and infants which limits analysis of infant mortality by ethnicity. Other data sets, such as birth certificates and surveys, provide more data on ethnicity and include information on birthweight which is a major risk factor for infant mortality. Based on the review of literature and available data, four major issues need to be highlighted:

- The importance of family planning/pregnancy prevention among teenagers, a disproportionate number of whom are minorities.
- The importance of assuring early and continuous prenatal care and appropriate levels of maternity and newborn care to minority women.
- The importance of aggressive outreach, case management, and expanded patient education services for pregnant minority women.
- The importance of adequately financing the providers and hospitals that care for minority women, who are often uninsured or relying on Medicaid.

This report includes an overview (with references) of racial and ethnic variability in low birthweight and infant mortality. An analysis of programs designed to address these problems is included, with special reference to racial and ethnic populations. A distillation of the subcommittee's deliberations is included in the section on recommendations. Detailed reports appear in the appendix. Readers interested in going beyond this report may want to consult the section on related activities, as well as the bibliographies of the individual reports. A glossary offers definitions of frequenty used terms and acronyms.

OVERVIEW

A wide variety of risk factors for low birthweight and infant mortality have been identified. Many of these appear related to the disparity between minority and White rates. For some of these risks, it is possible to intervene given present knowledge and existing programs, or modifications of existing programs. In other cases, the risk is not related to the disparity and/or we do not have adequate knowledge to intervene. In many of the latter cases, there is needed research which has been indicated in the report. It is difficult to discuss risks and interventions for all minority groups together, since they present different pictures in terms of low birthweight and infant mortality. Most research has dealt with Black-White differences and far less data

exist on American Indians, Hispanics, and Asians. This review will address each group separately. The recommendations apply to many minority groups, however, because a common denominator for risk is low socioeconomic status and inadequate access to health care.

BLACKS

The neonatal mortality rate (NMR) for Blacks (1982) is 13.1 (per 1,000 live births), almost twice the rate for Whites (6.8). The postneonatal mortality rate (PNMR) for Blacks is 6.6, twice the rate for Whites (3.3) (6). In 1983, 11,060 Black babies died before one year of age (1). Among Black women, the components of risk for infant mortality are three: increased risk of bearing a low birthweight baby; increased risk of neonatal death among normal weight babies; and increased risk of postneonatal death, regardless of birthweight, relative to Whites. These risks are related to the patterns of childbearing in that Black women are much more likely to bear a child as a teenager and to have an unplanned birth. A focal point for lowering infant mortality is to improve services designed to help women, especially teenagers, control their fertility. This is an area that has received considerable attention in recent years, and successful programs have been constructed in a number of sites. This report will not go into the family planning issues in depth, but references are provided. As Table B shows, Black women are at increased risk of teenage births, out-of-wedlock births, and high parity births, all of which are more likely to be unintended and associated with adverse perinatal outcome.

Pregnant Black women are less likely to receive prenatal care or more likely to receive it later in pregnancy than White women (5). The subcommittee holds the view that while research is clearly needed on the content of care and the interplay of individual behaviors and health service activities, the 1990 Health Promotion and Disease Prevention goals regarding pregnancy and infant health were sound in pointing to the importance of:

- Assurance that all populations are served by organized medical care systems that include providers who are trained to deliver prenatal and postnatal care on site.

- Adequate public financing for outreach, early and continuous prenatal care, deliveries, support services and intensive care when needed, and for continuing care of infants.

It is clear that barriers to care exist, and barriers to poor women are barriers to minority women. Financing issues weigh heavily among these barriers. Recommendations are made for ways to reduce these barriers.

While most agree that research is needed on the content of prenatal care, there is also agreement that poor/minority women are often at

high risk medically and require a larger package of prenatal care services. Moreover, care for high-risk women may require more attention to non-medical concerns such as transportation, child care, or health education. Recommendations are made about components of care that appear promising and service delivery approaches that could be tried, such as case management.

It appears that improvements in neonatal medicine may be partly responsible for the lack of a disparity between Black and White low birthweight babies in terms of neonatal mortality. It is also possible that there is a genetic role influencing birthweight that gives a different meaning to low birthweight for Blacks than for Whites. This issue deserves research attention. It is clear, unfortunately, that normal weight Black babies have far higher rates of neonatal mortality than White babies. This may reflect the prenatal care received, other health behaviors of the mothers, quality of care in hospitals providing routine obstetrical care, or other factors. To the extent that deaths occur after the baby has left the hospital, excess deaths may reflect living conditions or knowledge of health behavior on the part of the mother and family.

Postneonatal mortality rates are higher for Blacks for all major causes of death except congenital anomalies. Sudden Infant Death Syndrome, SIDS, is the leading cause of death, and research is continuing on the causes and treatment of babies at risk of SIDS. Accidents are another major cause of death and may also be related to living conditions and to knowledge of health behaviors or quality of child care (7). Among all groups, mother's education is strongly associated with infant mortality, presumably because it taps these dimensions, as well as access to well and sick baby health care services.

There are a number of specific risks regarding adverse pregnancy outcome, such as the role of stress or infection, that are suspected of influencing the gap between Black and White rates. Specific health conditions related to perinatal outcome among Blacks are discussed in the report. In many cases, research currently underway should add to the presumptive evidence for the effect of these factors or their relationship with race. For most factors, the relationship is not firmly identified. The subcommittee urges that further research address these factors, since definitive conclusions at this time are not warranted. The relationship of economic conditions to health, especially infant mortality, is another area that deserves further research.

HISPANICS

As the second largest minority group, Hispanics present a complex picture in terms of low birthweight and infant mortality. There is considerable variation within the Hispanic population, and while postneonatal mortality rates are elevated, the birthweight distributions are generally favorable. Subgroups must be discussed separately, however.

- Within the context of general health care which is comprehensive and continual, opportunities exist to inform women and their partners of behaviors that can be initiated before pregnancy which influence the health of the baby. It is recommended that providers of health care incorporate this concept into their ongoing provision of health services.

PRENATAL CARE

Early, appropriate and comprehensive prenatal care should be obtained by all pregnant women. Some of these women can be served in public (federal, state, or local) programs, and others may receive their health care from private sources. All of these providers should take steps to see that high-risk women are served. The absence of prenatal care, or its initiation late in pregnancy, is clearly associated with adverse pregnancy outcome. While there are numerous research questions about the actual number of visits required and content of each visit (noted below), a pregnant woman should initiate prenatal care in the first trimester with a plan for continuous supervision throughout her pregnancy.

Unfortunately, barriers to obtaining early and continuous prenatal care appropriate to their risk status are more likely to be encountered by Black and other minority or high-risk women. Access to care appears to be significantly influenced by financial issues. Minority women are disproportionately low income and uninsured or dependent upon some form of subsidized care, particularly Medicaid and Title V-funded services. Consequently, the subcommittee observation that financial barriers are a major risk for poor prenatal care is coupled with possible approaches to reducing those barriers. The 1990 Objectives for the Nation in Pregnancy and Infant Health call for "adequate public financing for outreach, early and continuous prenatal care, deliveries, support services, intensive care when needed, and continuing care of infants." The following are possible mechanisms for achieving this goal:

- Assess the feasibility of increasing federal or state subsidized prenatal care coverage to decrease the size of the uninsured pool of pregnant women and children. This could be achieved by raising state-set AFDC payment levels, by adding optional categorically needy groups (e.g., pregnant women in two-parent families), by adding or extending medically needy programs, and by adding state only programs.

- Assess the feasibility of developing mechanisms to allow for interstate Medicaid eligibility to assure coverage of migrant women and their children, most of whom are minorities as well as low income.

- Encourage the use of the EPSDT for pregnant adolescents to provide comprehensive prenatal and maternity care.

- States, as the administrators of Medicaid, should review ways to shorten the length of time required to process Medicaid eligibility. Because pregnancy only lasts nine months and many high-risk women initiate care in the second or third trimester, mechanisms are needed to fast-track applications for Medicaid eligibility for pregnant women. In addition, lower cost efficiency improvements should be experimented with to improve physician participation, such as improving claims processing and changing reimbursement methods and amounts.

- Provide technical assistance to State Title V agencies and other maternal and child health providers interested in trying innovative financing and delivery approaches, e.g., applying for waivers, expanding their use of EPSDT, adding medically needy programs, adding optional and state-only categories of pregnant women and children, expanding optional benefits, and coordinating Title V with Title XIX reimbursement. Case management and standard setting are important areas that Title V agencies can provide or coordinate technical assistance to State Title XIX agencies.

- Continue to monitor changes in expanded eligibility resulting from CHAP in terms of characteristics of new eligibles, participation rates, use patterns, costs of care, and outcomes. Assess state efforts to inform potential new eligibles of changes in Medicaid.

Along with reducing financial barriers to maternal and infant care, there are modifications in present services that should be considered. Therefore, within what we currently know about maternal and infant care, it is likely that modifications in prenatal care could be made at this time. While research is not definitive, it appears that minority women may be in need of services not always available in subsidized maternal and infant care. Since reimbursement policies and practices exert enormous influence over the content of medical care, the following recommendations are made:

- Prenatal care benefits, regardless of type of provider, should be expanded to include other services that appear beneficial, such as prenatal vitamins, expanded nutrition supplements, psychosocial and health education services, and childbirth education classes.

- Funding sources, both public and private, should consider ways to eliminate arbitrary limits to prenatal care for high-risk women.

- Continue to encourage states to apply for Medicaid waivers to test the cost-effectiveness of "locking in" high-risk women into a case-managed system of care, expanding the package of reimbursed services, and experimenting with different delivery alternatives such as aggressive/passive case management, psychological

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counseling, home visitation, and their impact on reducing risk factors and improving pregnancy outcome.

- Assess evaluations and consider replication of innovative state models of comprehensive prenatal care such as the California, Washington, D.C., New York, and South Carolina experiences.

- Efforts should be maintained to continue to regionalize care and refer high-risk women for delivery in the appropriate level of care. Level I and II hospitals should have improved capability to manage obstetric emergencies and deal with the transport of pregnant women and sick infants.

- Coordinate with ACOG and other professional organizations to assess the problems of malpractice insurance and limited participation in Medicaid and identify possible mechanisms to moderate physician liabilities from birth-related suits and increase their participation.

CONTENT OF CARE

Virtually all groups of scientists reviewing our current state of knowledge regarding perinatal outcome agree that more must be known about the content of prenatal care: What components of care have what effects? How do these components interact? What constitutes a minimal program of care? How should the components vary by risk status of the woman? Some recommendations that can be made at this time are the following:

- Expand provider and patient education regarding risk assessment and recognition of preterm labor along with appropriate tocolytic treatment and modification of prenatal care. Current randomized trials should be monitored. Other programs using these approaches should be evaluated.

- Evaluate programs to help providers offer smoking cessation education and patient's understanding of the risks. While smoking may not help to explain the Black/White birthweight differential, it has an adverse impact on the outcome of pregnancy for many minority women.

- Clarify the interplay of multiple drug and cigarette use on pregnancy outcome. Studies give conflicting reports on the profile of substance abusers, and research should be undertaken to assess the quantity and timing of drug and cigarette use in relationship to pregnancy.

- Multiple gestations, specifically dizygotic twinning, are twice as frequent among Blacks as among Whites in the U.S. and represent a source of risk for early delivery, low birthweight, and infant mortality. Routine screening with ultrasound imaging at

mid-pregnancy for Black women could result in modifications of the management of the pregnancy and delivery and reduce the losses incurred.

- Consider including more prenatal screening for conditions which affect the neonate and, in the case of hepatitis b, foster a carrier pool. Recent immigrants from Asia and other areas of the developing world are at increased risk for hepatitis b, and routine screening of Asian women for hepatitis HBsAg and prompt treatment of the neonate could greatly reduce this carrier pool. Black women are at risk for sickle cell disease which contributes to infant mortality. Maternal screening can facilitate prompt, targeted screening of Black neonates and lead to improved follow-up and counseling.

- Expand research to better understand the experiences, attitudes, and beliefs among women that make some disinclined to seek and continue care. Such findings have implications for better health education, provider education, and the delivery of health services.

- Expand research on the role of nutrition on pregnancy outcome. While results of evaluations of nutritional supplementation programs are difficult to interpret, it appears that pregnancy outcome is improved when adequate prenatal nutrition is assured.

- Increase attention of health service providers to the possibilities for intervention using counseling and other support services for non-medical risk factors (such as stress, type of employment, transportation/child care problems), since they may be more prevalent among minority/high-risk women.

- Develop a comprehensive education and information campaign on avoidable risks to maternal and fetal health during pregnancy to be aimed at minority pregnant women, health providers, and the general public.

- Develop a model state brochure for low-income pregnant women describing simply how and where to obtain Medicaid eligibility, the need for early care, and a list of providers accepting Medicaid. Assure that the message is delivered to high-risk groups in culturally appropriate forms.

- Set up a task force or commission a major report on the issue of uncompensated care for pregnant women and infants. Assess current state activities surrounding uncompensated care for this population.

- Continue to review and sponsor state and local mechanisms to investigate cases of infant deaths in areas with high or

changing infant mortality rates. This should result in a better understanding of the nature of difficulties in local maternal and infant health care systems, and the development of strategies that will provide opportunities for ameliorating such problems.

POSTNATAL FACTORS

The major causes of postneonatal mortality are Sudden Infant Death Syndrome, congenital anomalies, infections, and accidents. While there are increased risks of postneonatal mortality among low birthweight babies, the factors associated with postneonatal mortality are more predominately the health behavior in the family, socioeconomic conditions, and access to medical care. Several special issues can be highlighted, including issues of financing, medical insurance coverage, transportation, and education.

- Assess evaluation and consider replication of innovative models of active follow-up programs to support families of infants at high risk of postneonatal disease. Support groups in other disease areas have had documented successes. Their value in regard to assisting parents of high-risk infants should be evaluated.

- Many postneonatal deaths are due to injury. The recent improvements in seat belt protection for children should serve as a model for dealing with other causes of accidental death for infants. The 1990 Objectives for the Nation have been successful in influencing this area of risk to infants, and other areas (such as death by fire) could be considered at the mid-decade review.

RESEARCH RECOMMENDATIONS

The above recommendations regarding service improvements have been made on the basis of the weight of the evidence regarding differentials in low birthweight and infant mortality among minorities. In many areas, there are significant knowledge gaps; some are in the process of being filled, but others deserve attention.

- To better understand the interplay of social, biological, and environmental factors associated with low birthweight and the relationship of low birthweight to infant mortality among minority groups, research should address birthweight-specific mortality rates for minority groups; investigate the role of nutrition or generational effects as an influence on the relatively high low birthweight rates for apparently low-risk Black women; and attempt to explain the apparently favorable birthweight distributions found among Mexican American and Native American women.

attending public health clinics (94,95,96). This pattern held for all age groups of infants examined and for the duration of breast-feeding (94). Earlier studies showed somewhat different results. One study based on the 1965 National Fertility Study (before the recent rise in breast-feeding) noted a curvilinear pattern for maternal education and breast-feeding, with the highest incidence among those with the least and the most education (56). A later study based on the 1973 National Survey of Family Growth revealed a change in the pattern. The curve was now J-shaped, with a sharp decline in breast-feeding among those mothers with less education compared to the earlier data set (55). The earlier study had noted an increased likelihood for black and Latin mothers to breast-feed compared to white, Anglo mothers. This was felt to reflect social and not ethnic/racial variables (56). The 1973 study showed less tendency to breast-feed among blacks and Hispanics (55). Generally, there was a strong association, with breast-feeding among women who were college graduates, worked as professionals, or were married to professionals (55). A Canadian study also found breast-feeding more prevalent in families with higher incomes and more education (168).

BLACKS

Although blacks demonstrate adverse infant survival outcomes, black infant mortality rates have improved, falling from 43.9 per 1,000 live births in 1950 to 19.6 in 1982 (73). The black neonatal mortality rate has fallen from 27.8 to 13.1; postneonatal, from 16.1 to 6.6 over the same period (73). Changes in birth-weight distribution have been minimal in blacks during this period (33,163).

Black/white differentials still exist in pregnancy outcome measures. The corresponding rates for whites for the above figures during the same period show an infant mortality rate decline from 26.8 to 10.1; neonatal mortality rate, 19.4 to 6.8; postneonatal from 7.4 to 3.3 (73). Black/white disparities in postneonatal mortality have decreased relatively more than the corresponding disparities in neonatal mortality (that is, the percentage reduction in postneonatal mortality has been greater for black while the percentage reduction in neonatal mortality has been greater in whites). As a result, the latest data show that postneonatal mortality disparities are about the same as neonatal mortality (75). The black infant mortality rate will not meet the 1990 Public Health Service objectives for races other than white, 12.0 per 1,000 live births. The percentage decrease needed to obtain this goal, 43.9 percent, would exceed the entire decrease from 1970-1980 of 34.4 percent. White and native Americans have already met the 1990 infant mortality objectives (77).

The objectives for low birth-weight proportions put forth by the Public Health Service are 5 percent overall and 9 percent for subgroups by 1990 (77). Again, whites and native Americans are under target while black low birth-weight proportion is still almost twice that of other groups (77). The 1982 low birth-weight rate for blacks was 12.4; for

whites, 5.6 (147). Low birth-weight proportion ranged from 11.7 in black mothers over 30 years of age to 14.0 in teenagers[22] (152). In 1982, black infants accounted for 16 percent of all live births; 30 percent of all low birth-weight infants; and 34 percent of all very low birth-weight infants (99).

Blacks demonstrate increased risks for poor pregnancy outcome because of increased incidence among blacks of many of the risk factors discussed in the text.[23] Primary risk factors that are particularly pertinent in the black population include amniotic fluid infections (104) and chronic diseases like hypertension, diabetes, and sickle-cell anemia. Blacks showed increased incidences of premature rupture of membranes and placental growth retardation compared to white mothers in one study. Once established, amniotic fluid infections, large placental infarcts, abruptio, and postnatal infections were more lethal in black women than white women (104). Multiple gestations occur at higher rates in blacks, 24.1 per 1,000 in 1980, than whites, 18.5 (147). The study of preterm delivery in Norwegian and Minnesotan data showed an almost three-fold increase among black multiple gestations than white (58).

Almost 63 percent of black mothers began prenatal care in the first trimester of pregnancy during 1980 versus 76.3 percent of white mothers. Almost 3 percent of black mothers had no care compared to 1.5 percent of white mothers. The average number of visits was 9.9 for blacks and 11.4 for whites (147).

Important secondary risk factors include maternal age, parity, educational attainment, and out-of-wedlock births. In 1980, the median age for blacks giving birth was 24.2 years versus 25.9 years in whites. Twenty-seven percent of black mothers were less than 20 years old compared to 14 percent of white mothers. Fifteen percent of black mothers were older than 30 while 20 percent of white mothers were in this age category (147).

Blacks displayed higher parity than whites in 1980. Approximately 15 percent of black births were fourth order or higher; 9 percent of white births had similar birth order. Forty percent of black births were first order versus 44 percent in whites (147).

Educational attainment, closely linked to maternal age, also displayed racial disparities in the 1980 data. Fewer black mothers had 16 or more years of schooling, 6.3 percent, than white, 15.6 percent, or Asians, 30.2 percent. Sixty-four percent of black mothers completed 12 or more years of schooling while 80 percent of white mothers did. Median years of school completed were 12.3 for blacks and 12.6 for whites (147).

Out-of-wedlock birth ratio for blacks in 1980 was 553 per 1,000 black births. The corresponding figures were lower for whites, 110 per 1,000 white births, and Asians, 78. A difference between out-of-wedlock black and white births was maintained across all age groups (147).

Out-of-wedlock births and maternal education are two markers for low socioeconomic status. A relatively higher proportion of blacks live near or below poverty levels. Thus, income, lack of health insurance, cultural norms, psychological barriers associated with poverty, and discrimination have been cited as major impediments to the health care system for blacks (and other minority groups) (11,24,79). Most studies have shown that increased participation of blacks in (for example) prenatal care improves outcome (43,45,141,142), although this was not the case in one study from North Carolina (114). These have been discussed in the text.

While much has been made of the elevated low birth-weight rate in blacks and its contribution to black infant mortality, overemphasis of the low birth-weight issue obscures other causes of infant mortality. Several investigators have shown higher birth weight-specific and gestational age-specific mortality rates above 3,000 grams (1,10). Data from California and Georgia showed optimal survival rates for black infants occurred at weights approximately 500 grams below white optimal survival weights. However, optimal-weight mortality rates for blacks were twice the rates of whites at the white optimal weight. Thus, within normal weight ranges, blacks demonstrated higher neonatal mortality. The authors suggest that improvements are needed not only in the prevention of low birth weight in blacks, but also in the care of black term infants (10). This leads back to issues of access to care, especially for those in lower income brackets. In short, although low birth weight is a crucial component of black infant mortality, the contribution of deaths of normal-sized infants cannot be overlooked.

Black postneonatal death rates are also problematic. The leading cause of death for black postneonates, as in whites, is SIDS. Black SIDS rates are over twice the national rate, 5.04 versus 1.5 to 2.0 per 1,000 live births (7,136). Infections are the second leading cause of death in this age group for blacks as opposed to congenital anomalies in white postneonates (71). This suggests that a large proportion of black postneonatal death is due to preventable causes and, again, raises the issue of access to care. Congenital anomalies are the third leading cause of postneonatal deaths for blacks. The three leading causes of accidental death for black postneonates are mechanical suffocation, fires, and homocides (71). Motor vehicle accidents are not as prominent in black postneonatal mortality as in white postneonatal mortality. This is probably related to general differences in socioeconomic status between the two groups.

HISPANICS

Data on Hispanics have increased in recent years. Problems persist in data collection. Most studies rely on Spanish language or surname to identify Hispanics, but Hispanic origin items are more appropriate and accurate. Over time, the collection of ethnicity data has become more standardized and is more available for research and other purposes.

KEY INTERVENTION COMPONENTS

Several key components are consistently found in the program interventions aimed at reducing infant mortality among minorities. These interventions, described below, are directed at the individual woman, her family, her community, and the system providing and paying for her care. The regional development of perinatal care, although not explicitly defined as a key component, is clearly the underlying system that is essential to the success of each and every intervention (AAP/ACOG, 1983).

While the jury is still out on the individual impact of each strategy for decreasing low birthweight (LBW), neonatal mortality (NM), and/or postneonatal mortality (PNM) among each minority group, the combination of strategies or the multidisciplinary approach characterizing these demonstrations is often associated with improved outcomes and worthy of expanded evaluation and replication.

These comprehensive interventions have contributed to reducing many of the medical and nonmedical risk factors associated with LBW, NM, and PNM. In particular, they have resulted in more appropriate utilization of prenatal, maternity and newborn services as well as in increased adoption of preventive actions in nutrition, psychosocial problems, smoking, drinking, physical exercise, recognition of premature labor, compliance with medical regimens, parenting skills, and family planning.

The following is a listing of the key intervention components:

1. Carefully targeting of high risk areas, using matched birth and death certificates and special needs assessment surveys.

2. Aggressive outreach for case finding, using Title V agencies, health departments, WIC, welfare offices, etc.

3. System of case management to assure appropriate referrals and continuity of care.

4. Standardized risk assessment of pregnant women.

5. Expanded patient education services, including nutrition counseling, psychosocial counseling, alcohol and drug abuse prevention, smoking cessation, stress reduction, physical exercise, birth education, premature labor prevention, parent education, etc.

6. Program of home visiting during and after the pregnancy.

7. Extensive follow-up (for one year) of mother and infant, emphasizing family planning and early identification of infant problems.

8. Active participation and coordination by multidisciplinary teams of obstetricians/gynecologists, neonatologists, pediatricians, nurse midwives, nurse practitioners, and lay health visitors.

9. Active involvement of advisory committees with provider and community participation in the design and implementation of interventions as well as in perinatal audits that evaluate the outcomes.

10. System of service linkages with regionalized obstetrical and neonatal services, Title V and XIX agencies, WIC, family planning, etc.

11. Expanded insurance/payment options, for example:

    a) expanded insurance eligibility through Medicaid or special state funds or joint federal/state funds, to cover additional categories of needy pregnant women, and/or

    b) expanded package of prenatal care and infant benefits, including more prenatal care visits, nutrition supplements, psychosocial counseling, health education, vitamins and other drugs, birth education and some newborn follow-up, and/or

    c) increased amount and timeliness of reimbursement for providers to encourage their participation, and/or

    d) changes in the methods of reimbursement, using prospective payment or capitation (other than global fee unadjusted for risk), and/or

    e) allowance of reimbursement for care delivered by nurse midwives and nurse practitioners.

12. Development/adoption of standards for regionalized obstetric and newborn care.

13. Continuing education and training of providers, particularly in behavioral sciences.

14. Plans for ongoing systematic evaluation of process (organization, utilization, and payment for services), outcome (changes in maternal knowledge, attitudes, and behaviors), and impact (changes in LBW, NM, and PNM).

Each of these key components combined represents a comprehensive system of care that is likely to result in reduced LBW, NM, and PNM. Unfortunately, the maximum and minimum set of program components necessary to reduce LBW, NM, and PNM among minorities is unknown. That is, we do not know if all fourteen key components are essential or only seven out of the fourteen or which combinations are needed to achieve decreases in infant mortality. The relative importance of the multidisciplinary team or the presence or absence of home visiting or the extent of insurance coverage or the critical patient education services (psychosocial counseling or smoking cessation) has not yet been determined. However, particular attention should be focused on aggressive outreach (#2), systems of case management (#3), expanded patient education services (#5), and expanded insurance/payment options (#11).

Although there is a general lack of definitive program evaluation from which to judge effectiveness, it is clear, however, from the sheer weight of the literature and of reports of maternal and child health programs that a multidisciplinary approach with expanded medical, psychosocial and system-wide interventions is essential for reducing racial disparities in infant mortality. In addition, it is also evident that the "technologies" to evaluate the impact of multiple interventions on LBW, NM, and PNM among minorities are very limited.

alcohol abuse take extensive medical histories during the prenatal care vists. Those women identified at risk for alcohol abuse and FAS are provided intensive counseling and follow-up that continues after the infant has been delivered.

If risk assessment protocols for alcohol abuse and FAS as well as training programs for staff can be developed and evaluated, widespread replication could occur in a system like the IHS.

One final note: the infant mortality intervention literature on American Indians, as reviewed through the CDC literature search and the National Library of Medicine searches, was nonexistent. If articles, published or unpublished, exist through other sources, these should be identified. Moreover, the perinatal data that IHS collects on their service population should be carefully analyzed for its potential contribution to better understanding Indian women's health and risk status, perinatal outcomes, socio-demographic characteristics, health care delivery system characteristics, and costs of care.

Since the IHS operates somewhat like an HMO, greater emphasis might be placed on primary and secondary prevention. For example, greater encouragement of family planning, expanded patient education programs with a strong focus on substance abuse, and aggressive continuing child health care within their existing treatment system offers exciting potential.

III. Common Issues Among Black and Hispanic Women

Black and Hispanic women have in common many medical risk factors: high parity with short intervals between births, high rates of teen pregnancy, for example. They also share many of the same non-medical risk factors: insurance problems (previously discussed in the financing section), limited use of prenatal care, and extensive reliance on publicly funded services for their perinatal care (versus conventional private practice or prepaid health plans). Historically, most of the federal, state and local-funded projects (including Medicaid, Title V services and demonstration projects like the IPO and MIC projects, Title X family planning services, and WIC) were designed to serve low income and minority populations because of their high risk health status and the access problems they commonly experience. While not as organized/standardized nor as controlled as the Indian Health Service, a network of publicly funded maternal and child health services has existed for years in every state in the U.S. Not surprisingly, these programs have had their greatest impacts (in terms of increasing early initiation of prenatal care and reducing IMR) among high risk women many of whom are Black and Hispanic.

The program evaluation literature, though limited, shows that major strides have been made in improving use of prenatal care since the introduction of publicly funded programs. However, with recent funding cutbacks and changes in reimbursement, many states are reporting reductions in the availability of public services for low income women and children. In other words, those Black and Hispanic women and their children who rely on public programs also suffer the most during periods of realignment and retrenchment (Budetti, et al., 1982; McManus and Davidson, 1982; McManus, 1984; Rosenbaum, 1983 and 1984; U.S. Congress, Subcommittee on Health and the Environment, 1984; FRAC, 1984; California Public Advocates, 1983).

Several cities and states are beginning to report increases in LBW rates and IMR among their Black and Hispanic populations along with increasing poverty rates, AFDC payment standards not keeping pace with inflation, and reductions in public funding for maternal and child health services. It is unclear from the available research why these changes are occurring in some states and not in others with similar characteristics. Additional research is needed to investigate the impact of such changes in federal and state support of public services on use of prenatal care and newborn intensive care as well as on LBW, NMR and PNMR.

Women and children in general and Black and Hispanic women in particular are far more likely to be living in poverty than persons of other ages, sex, and races (Bureau of Census, 1982). Nationally, Blacks represented 11.7% of the U.S. resident population in 1980, yet they made up 28.3% of the number of persons below poverty (Bureau of Census, 1982). Similarly, 6.5% of the U.S. residents were of Spanish origin[5] in 1980, yet 12.4% of the U.S. population living below poverty were of Spanish origin.

In the state of Virginia, for example, 19% of the population is Black. However, a shocking 46.7% of Virginia's poverty population is Black.[6] In the state of Colorado, 12% of the

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5 Persons of Spanish origin may be of any race.

6 Interestingly, the state of Virginia recently commissioned a report by Ernst and Whinney on AFDC (Aid to Dependent Children or ADC in Va.). They recommended an increase of 30% in ADC aid. Presently, recipients receive 90% of the standard of need based on the 1974 cost of living. Translated into real dollars, an average family of three (where the cost of living is defined as moderate) presently receives $269 a month to live on. Ernst and Whinney recommend that this be brought up to $354 a month. They also found that while many ADC recipients are eligible for Food Stamps, Housing Aid, and Fuel Assistance, few actually receive them. Virginia's (Footnote continued)

population is of Spanish origin and 27.6% of the state's poverty population is Spanish. Similar disparities in population size and poverty size can be found in every state.

Analyzing poverty data for female householders with no husband present shows an even more dramatic difference by race and sex. The Bureau of Census (1983) reports that in 1982, 12.2% of all families lived below poverty.[7] However, 36.3% of all families with a female household with no husband present were in poverty (Bureau of Census, Table 18, p. 36). For Black female households, the poverty rate in 1982 was 56.2% and for persons of Spanish origin, the poverty rate was 55.4%.

One final and important note on poverty data for Blacks and Hispanics from the Bureau of Census (1983, p. 22), shows that the poverty rate for Black and Hispanic families has increased between 1980 and 1982, as shown below:

Year	Percent Below Poverty			
	All Races	White	Black	Spanish Origin
1980	11.5	8.6	31.1	25.1
1981	12.5	9.5	33.2	25.9
1982	13.6	10.6	34.9	29.2

The poverty rate for persons of Spanish origin has increased the most. Whether or not this is due to higher rates of unemployment or a shifting age distribution (more younger persons) or other factors, is unclear.

In summary, the major theme to be highlighted in this section on common issues is the correlations between poverty status, race, sex, and infant mortality. With the changing poverty statistics among high risk populations, as described above, and the shifting demographics of our minority population (NOTE: by 1990, it is projected that one-third of all persons under 20 will be minorities, according to the DMCH Forward Plan), speedy and dramatic attention needs to be focused on insurance coverage

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(Footnote 6 continued from previous page)
Board of Social Services plans to recommend ADC increases to the Virginia Legislature (though not the 30% that Ernst and Whinney recommend).

7 $9,287 - poverty level for family with 4 persons in 1982.

and service provisions as well as aggressive adolescent pregnancy prevention to prevent increasing declines and disparities in IMR among Black and Hispanic women.

IV. Black Women

While Black and Hispanic women have in common many medical and non-medical risk factors, they differ significantly in pregnancy outcome, with Black women having higher rates of LBW, NMR and PNMR (Binkin, et al., forthcoming). Black women generally have higher relative risks of teenage pregnancy, single-parent families, poverty, limited use of prenatal and ambulatory care, and Medicaid reliance. Closer examination of other Black socio-demographic data might further elucidate the nonmedical risk factors that singly or in combination influence the high rate of Black infant mortality. (Note: Many of these have been discussed in the report by Samuels.) Some of these variables, though seldom analyzed, might include region and residence (SMSA central city, SMSA non-central city, urgan non-SMSA, and rural), occupation (manual labor/level of exertion/hours worked per week) and regular source of care (yes/no; physician office/hospital outpatient/clinic/other).[8]

Health service researchers investigating 1) family planning (Edwards, et al., 1980; Grossman, 1984); 2) prenatal care (Gortmaker, 1979; Greenberg, 1983; Kessner, et al., 1973; Peoples and Seigel, 1983; Showstack, et al., 1984); 3) newborn intensive care (Budetti, et al., 1981; Grossman, 1984; Grossman and Jacobwitz, 1983); Lee et al., 1980; Williams, 1979); 4) extent of regionalization - Levels I, II, III and type of hospital care - private vs. public (Budetti, et al., 1982; Butterfield, 1981; Cordero, et al., 1982; Williams, 1979; Williams and Chen); 5) WIC supplemental feeding program (Kennedy, et al., 1982; Kotelchuck, et al., 1984; Rush, 1982); and 6) Improved Pregnancy Outcome Projects and the Maternal and Infant Care Projects (Goldenberg and Koski, 1984; Grossman, 1984; Peoples and Seigel, 1983; Sokol, et al., 1980; Sprague and Taylor, 1983) have consistently found that extending these services to Black women and their infants is associated with reductions in risk factors leading to infant mortality.

A recent report by Binkin, et al., (forthcoming) comparing Black neonatal mortality rates in California and Georgia, highlights this case in point. Using matched cohort records for California from 1980-81 and for Georgia from 1979-81, Binkin,

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[8] Note: Much of this information is available in the National Longitudinal Survey.

et al., found that Black Georgia mothers are at higher risk for neonatal mortality than Black California mothers. They speculated "that either Black mothers in Georgia are at higher risk of experiencing a neonatal death than those in California by virtue of other demographic or behavioral risk factors or, more likely, that the availability of prenatal, intrapartum, and postnatal care may be better for the largely urban California Black population when compared with the Georgia Black population, which is about 40% rural (p.7)."

Binkin, et al., commenting on the relatively greater viability of Black infants (vs. White infants) at an early gestational age and their increased risk of prematurity, stressed that physicians "should be aware of the higher viability of Black infants even at early gestational ages in the use of tocolytic agents and the transfer of mothers and infants." (p.1).

In summary, the intervention literature documents the impact of various prenatal, intrapartum and postnatal services on women at high risk for LBW, particularly Blacks. What appears lacking is the consistency of an organized system of perinatal care to treat Black women, many of whom are at high risk. Much of the knowledge, training, and technology (related to family planning, prenatal care, delivery, and postnatal care) are available. What is missing is the diffusion of and access to those services for such a high risk group as Black women. Particular attention to family planning for Black teenagers is an important element for any comprehensive strategy targeted at reducing Black IMR.

V. Hispanic Women

Hispanic women[9] are at the greatest risk (as compared to Whites and Blacks) for being uninsured as well as being non-U.S. citizens (with all of the obvious implications for insurance coverage and use of health services). They also have the highest rates of out-of-hospital births. Like Blacks, a disturbingly large number live below poverty, lack access to prenatal care, rely on Medicaid, use publicly founded clinics and hospitals, conceive infants when they are both extremes of the reproductive cycle, have many births with short intervals between them, and use contraceptives on a limited basis. Fortunately, unlike Blacks, they are less likely to have LBW infants and consequently their NMR is lower as Williams, et al., (forthcoming) stated, ". . . (Hispanic's) higher birthweight-specific fetal and

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[9] U.S.-born Hispanics as compared with Mexicans or Cubans or Puerto Ricans or Central Americans vary in the degree to which each of the above risk factors affect them.

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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA, WESTERN DIVISION

ERICA JIMENEZ, individually and on behalf of a class of similarly situated individuals,

Plaintiff,

v.

DR. ERICA PAN, in her official capacity as Director of the California Department of Public Health; DR. BARBARA FERRER, in her official capacity as Director of the Los Angeles County Department of Public Health; MANUEL CARMONA, in his official capacity as the Director of Public Health for the Pasadena Public Health Department; LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH; and PASADENA PUBLIC HEALTH DEPARTMENT,

Defendants.

CASE NO. 2:26-cv-03500

COUNTY DEFENDANTS' REQUEST FOR JUDICIAL NOTICE IN SUPPORT OF DEFENDANTS' OPPOSITION TO PRELIMINARY INJUNCTION

Assigned to the Hon. Sherilyn Peace Garnett and Magistrate Judge Sheri Pym

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REQUEST FOR JUDICIAL NOTICE

Defendants Dr. Barbara Ferrer, in her official capacity as Director of the Los Angeles County Department of Public Health and Los Angeles County Department of Public Health (collectively "County Defendants") hereby submit this Request for Judicial Notice pursuant to Rule 201 of the Federal Rules of Evidence in support of the concurrently-filed Opposition to Preliminary Injunction (the "Opposition"):

I. LEGAL STANDARDS

"The court may judicially notice a fact that is not subject to reasonable dispute because it: (1) is generally known within the trial court's territorial jurisdiction; or (2) can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned." Fed. R. Evid. 201(b). A court "may take judicial notice at any stage of the proceeding," and "must take judicial notice if a party requests it and the court is supplied with the necessary information." *Id.* at 201(c)(2), (d).

Courts routinely "take judicial notice of . . . the legislative history of state statutes[.]" *See Louie v. McCormick & Schmick Restaurant Corp.*, 460 F. Supp. 2d 1153, 1155 n. 4 (C.D. Cal. 2006) (collecting cases); *see also Chaker v. Crogan*, 428 F. 3d 1215, 1223 n. 8 (9th Cir. 2005) ("We grant Chaker's motion for judicial notice, in which he requests we take judicial notice of the legislative history of" a state statute); *Belcher v. Lowe's Home Centers, LLC*, 2023 WL 12143971, at *1 n. 3 (C.D. Cal. Dec. 28, 2023) (granting request for judicial notice of "public documents in the form of court filings or legislative history."); *Gutierrez v. New Hope Harvesting, LLC*, 2022 WL 17217440, at *3 (C.D. Cal. Sept. 21, 2022) (granting requests for judicial notice "because they concern the analyses of the California Senate Judiciary Committee and Assembly Committee on Labor and Employment Bill on Assembly Bill No. 1897, which are relevant to the statute's legislative history."); *Garcia v. Pacificare of California, Inc.*, 2013 WL 12114019, *3 n. 2 (C.D. Cal. Mar. 6, 2013) ("The Court takes judicial notice pursuant to Fed. R. Evid.

201, which authorizes judicial notice of the legislative history of state statutes.").

In addition, courts regularly take judicial notice of documents that are "publicly available through government websites" because their "accuracy cannot reasonably be questioned." *Benabou v. Seng Jin Cheo*, 2019 WL 8017820, at *3 (C.D. Cal. Nov. 8, 2019); *see also Daniels-Hall v. National Educ. Ass'n*, 629 F. 3d 992, 998-99 (9th Cir. 2010) ("It is appropriate to take judicial notice of this information, as it was made publicly available by government entities"). This extends to documents available through international health organizations as well, including the World Health Organization ("WHO"). *See Martin v. Baj Management*, 2024 WL 1198850, at *2 (C.D. Cal. Mar. 20, 2024) (taking judicial notice of "statement[s] by the World Health Organization for which there is no reasonable dispute as to authenticity.").

The factual basis for the Opposition is that the purpose of the Black Infant Health ("BIH") Program is to address a unique public health issue facing the Black community, namely, the disparity between Black and non-Black infant mortality rates in California, and is not directed toward remedying past racial discrimination. This is reflected in the legislative history of the Senate Bill ("SB") 165, which established the BIHP in 1989, and of Assembly Bill ("AB") 1701, which led to the amendments to the California Health and Safety Code §§ 123259 and 123260, which are the current subject of Plaintiffs' Complaint and her Motion for Preliminary Injunction.

The importance of low infant mortality rates from a public health standpoint, and the disproportionately high rate of infant mortality in the Black population, are further reflected in studies published by various government agencies on their websites, including the Center for Disease Control, the U.S. Department of Health & Human Services, the Black Infant Health Program, and the National Institute of Health, as well as studies published by other national and global health organizations, including the National Academy for Medicine and the WHO.

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Defendants respectfully request that the Court take judicial notice of the below pieces of legislative history and studies published on government and other official web pages. As explained in the accompanying Declaration of Amnon Z. Siegel ("Siegel Decl."), all of these materials are true and correct copies, or excerpts from, publicly available locations. (Siegel Decl. ¶¶ 3–13.) They are as follows:

- Chapter 93 of the Statutes of California, 1988-1989 Regular Session: 1989 Chapters, a true and correct copy of which is attached to the Siegel Declaration as Exhibit D.
- California Bill Analysis, Assembly Committee on Health, A.B. 1701, April 11, 2023, a true and correct copy of which is attached to the Siegel Declaration as Exhibit E.
- Senate Rules Committee, Third Reading of A.B. 1701, June 8, 2023, a true and correct copy of which is attached to the Siegel Declaration as Exhibit F.
- World Health Organization, Infant Mortality Rate Indicator Metadata, located at https://www.who.int/data/gho/indicator-metadata-registry/imr-details/1, a true and correct copy of which is attached to the Siegel Declaration as Exhibit G.
- Centers for Disease Control and Prevention, Infant Mortality (Sept. 16, 2024), located at https://www.cdc.gov/maternal-infant-health/infant-mortality/index.html, a true and correct copy of which is attached to the Siegel Declaration as Exhibit H.
- D.D. Reidpath & P. Allotey, Infant Mortality Rate as an Indicator of Population Health, 57 J. Epidemiol. Community Health 344, 344–46 (2003), located at https://pmc.ncbi.nlm.nih.gov/articles/PMC1732453/, a true and correct copy of which is attached to the Siegel Declaration as Exhibit I.
- National Academy of Medicine, Vital Signs for Pediatric Health: Infant Mortality, located at https://nam.edu/perspectives/vital-signs-for-pediatric-health-infant-mortality/, a true and correct copy of which is attached to the Siegel Declaration as Exhibit J.

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- D.M. Ely & A.K. Driscoll, Infant Mortality in the United States, 2023, 74 Nat'l Vital Statistics Reports No. 7, at 3 (2025), located at https://www.cdc.gov/nchs/data/nvsr/nvsr74/nvsr74-07.pdf, a true and correct copy of which is attached to the Siegel Declaration as Exhibit K.
- U.S. Dep't of Health & Human Services, Office of Minority Health, About the Office of Minority Health, located at https://minorityhealth.hhs.gov/about-office-minority-health, a true and correct copy of which is attached to the Siegel Declaration as Exhibit L.
- Black Infant Health Program, Resources, located at https://blackinfanthealth.org/resources/, a true and correct copy of which is attached to the Siegel Declaration as Exhibit M, and which is further described in paragraph 35 of the Declaration of Melissa Franklin ("Franklin Declaration").
- Relevant excerpts from the Department of Health and Human Services' *Report of the Secretary's Task Force on Black & Minority Health* (i.e. the "Heckler Report") a true and correct copy of which is attached to the Siegel Declaration as Exhibits N through Q, and which is further described in paragraph 22 of the Franklin Declaration.

II. CONCLUSION

The above materials are judicially noticeable records pertinent to the Defendants' concurrently-filed Opposition. Defendants respectfully request the Court take judicial notice of these materials and consider them in connection with the Opposition.

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DATED: May 6, 2026

MILLER BARONDESS, LLP

By: _____

AMNON Z. SIEGEL
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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

ERICA JIMENEZ, individually and on behalf of a class of similarly situated individuals,

Plaintiff,

v.

DR. ERICA PAN, in her official capacity as Director of the California Department of Public Health; DR. BARBARA FERRER, in her official capacity as Director of the Los Angeles County Department of Public Health; MANUEL CARMONA, in his official capacity as the Director of Public Health for the Pasadena Public Health Department; LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH; and PASADENA PUBLIC HEALTH DEPARTMENT,

Defendants.

Case No. LA CV 2:26-cv-03500-SPG(SPx)

[PROPOSED] ORDER GRANTING THE COUNTY'S REQUEST FOR JUDICIAL NOTICE [ECF NO. 24-25] AND DENYING PLAINTIFF'S MOTION FOR PRELIMINARY INJUNCTION [ECF NO. 13]

On April 13, 2026, Plaintiff Erica Jimenez filed a Motion for Preliminary Injunction in the above-captioned matter. (*See* ECF No. 13.) Plaintiff requested that the Court order Defendants to suspend the enforcement of any race-based criteria as a determination of eligibility for the Black Infant Health ("BIH") Program. Defendants Dr.

Barbara Ferrer (in her official capacity as Director of the Los Angeles County Department of Public Health) and the Los Angeles County of Department of Public Health (collectively, the "County Defendants") filed their Opposition on May 6, 2026. They also filed a Request for Judicial Notice. (*See* ECF No. 24-25)

The Court, having considered Plaintiff's Motion, the County Defendants' Opposition, any replies or submitted evidence, and any oral argument, hereby DENIES Plaintiff's Motion, GRANTS the County's Request for Judicial Notice, and ORDERS as follows:

1. "The court may judicially notice a fact that is not subject to reasonable dispute because it: (1) is generally known within the trial court's territorial jurisdiction; or (2) can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned." Fed. R. Evid. 201(b). Here, the legislative history and other documents referenced in the County Defendants' Request for a Judicial Notice are the types of materials of which this Court may take judicial notice. Accordingly, the County Defendants' Request for Judicial Notice is GRANTED.

2. Plaintiff has not met her burden to show that she has standing to bring a preliminary injunction or otherwise pursue relief via this lawsuit. "[C]ourts do not opine on legal issues in response to citizens who might 'roam the country in search of governmental wrongdoing.'" *Food & Drug Admin. v. All. for Hippocratic Med.*, 602 U.S. 367, 379 (2024). She has not established that she has suffered an injury in fact that was caused by the County Defendants' conduct. *P.P. v. Compton Unified Sch. Dist.*, 135 F. Supp. 3d 1098, 1122 (C.D. Cal. 2015).

Although Plaintiff completed an interest/eligibility form and subsequently spoke with a BIH program coordinator at the City of Pasadena, she has not established that this interaction constitutes a concrete injury in fact. Completing an interest form and having an initial telephone call does not amount to a formal application for, or denial of, BIH Program services. (Scott Declaration ¶¶ 9–12.) Moreover, Plaintiff's statement that she "would be ready and able to apply" (Jimenez Declaration ¶ 6) underscores that she has not

actually completed the formal enrollment process. Plaintiff's failure to apply to the program forecloses her ability to bring a claim. *See, e.g., Alexandre v. Amazon.com, Inc.*, No. 22-CV-1459-MMA (VET), 2024 WL 2445705, at *4 (S.D. Cal. May 23, 2024).

Additionally, Plaintiff's failure to attempt to receive comparable services offered through the County undercuts her claim of an injury in fact. It is undisputed that the County offers various services for mothers and infants, and that Plaintiff was advised of these services, but did not avail herself of them. (*See* Declarations of Melissa Franklin & McKenzie Scott.) Plaintiff's manufactured injury is insufficient to confer standing.

3. As explained more fully below, Plaintiff fails to meet her burden to make a clear showing that a preliminary injunction is necessary. *E.g.*, *Mazurek v. Armstrong*, 520 U.S. 968, 972 (1997). She has not established that there are serious questions as to whether she would prevail on the merits of her case, nor that the balance of hardship tips in her favor. *All. for the Wild Rockies v. Cottrell*, 632 F.3d 1127, 1135 (9th Cir. 2011). She likewise has not met her burden to establish that she faces an irreparable injury, or that an injunction would favor the public interest. *Id.*

4. The BIH Program does not violate the Equal Protection Clause or Title VI of the Civil Rights Act of the 1964. This is so because the County Defendants have established that the BIH Program serves a compelling governmental interest, and that the program is narrowly tailored to serve that interest. The BIH Program serves the compelling governmental interest of improving the disparity in mortality rates among Black infants and mothers. (*See* Declaration of Melissa Franklin.) This is unquestionably a compelling government interest. *E.g.*, *Regents of Univ. of California v. Bakke*, 438 U.S. 265, 310 (1978) ("a State's interest in facilitating the health care of its citizens is sufficiently compelling to support the use of a suspect classification").

The BIH Program is likewise narrowly tailored in that it is based upon extensive studies and research showing that any less-targeted approach would not solve the mortality crisis at issue. (*See* Declaration of Melissa Franklin.) So, the BIH Program represents the type of narrowly-tailored approach that has been approved by, among other courts, the

Ninth Circuit. *See Hunter ex rel. Brandt v. Regents of the Univ. of Cal.*, 190 F.3d 1061, 1066–67 (9th Cir. 1999).

Accordingly, because Plaintiff has not established a likelihood of prevailing on the merits of her claims, injunctive relief is not warranted.

5. Plaintiff has not met her burden to show that she faces irreparable harm. There is no presumption of irreparable harm in her favor because she has failed to demonstrate she would succeed on the merits of her case. *Associated Gen. Contractors of Cal., Inc. v. Coal. for Econ. Equity*, 950 F.2d 1401, 1412 n.9 (9th Cir. 1991). And Plaintiff otherwise does not present evidence of any harm she faces. As discussed above, she does not even state that she wants to avail herself of the services of the BIH Program, only that she is "ready and able to apply" for those services. (*See* Jimenez Decl. ¶ 6.) Plaintiff has not explained how she will be harmed by failing to participate in group sessions among Black mothers that are targeted to address Black infant and maternal mortality, a risk that is inapplicable to Plaintiff. (*See* Jimenez Decl. ¶ 2.)

6. Plaintiff has also not met her burden to show that the balance of hardships favors an injunction, or that the public interest is best served by an injunction. The Court considers these two factors together where, as here, the government is a defendant. *Drakes Bay Oyster Co. v. Jewell*, 747 F.3d 1073, 1092 (9th Cir. 2014). There is no question that an injunction affecting the County Defendants' ability to maintain a program designed to curb Black infant and maternal mortality would adversely affect the public interest. *E.g.*, *Reach Cmty. Dev. v. United States Dep't of Homeland Sec.*, No. 26-1575, 2026 WL 1133351, at *4 (9th Cir. Apr. 27, 2026) (staying district court's entry of a preliminary injunction because "[t]he public has a compelling interest in promoting public safety").

Moreover, where, as here, the Plaintiff had alternative services available to her but failed to take advantage of them, it cannot be said that the balance of hardships weighs in her favor. *See Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci*, 857 F.2d 505, 506 (9th Cir. 1988). An injunction would thus impose a great harm upon the County

Defendants and the public, while Plaintiff cannot show that a denial of that injunction would harm her.

7. For all of those above reasons, Plaintiff's Motion for a Preliminary Injunction is DENIED.

IT IS SO ORDERED.

Dated:

HON. SHERILYN PEACE GARNETT
UNITED STATES DISTRICT JUDGE

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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

WESTERN DIVISION

ERICA JIMENEZ, individually and on behalf of a class of similarly situated individuals,

Plaintiff,

vs.

DR. ERICA PAN, in her official capacity as Director of the California Department of Public Health; DR. BARBARA FERRER, in her official capacity as Director of the Los Angeles County Department of Public Health; MANUEL CARMONA, in his official capacity as the Director of Public Health for the Pasadena Public Health Department; LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH; and PASADENA PUBLIC HEALTH DEPARTMENT,

Defendants.

Case No. 2:26-cv-03500-SPG-SP

Assigned to Hon. Sherilyn Peace Garnett

NOTICE OF JOINDER BY DEFENDANTS MANUEL CARMONA AND PASADENA PUBLIC HEALTH DEPARTMENT TO DEFENDANTS DR. BARBARA FERRER AND LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH'S OPPOSITION TO PLAINTIFF ERICA JIMENEZ' MOTION FOR PRELIMINARY INJUNCTION

Hearing Date: May 27, 2026
Time: 1:30 PM
Ctrm: 5C

Complaint filed: April 2, 2026
Trial date: None

TO THE HONORABLE COURT, ALL PARTIES, AND TO THEIR ATTORNEYS OF RECORD:

PLEASE TAKE NOTICE that Defendants Manuel Carmona and the Pasadena Department of Public Health (collectively, the "Pasadena Defendants") hereby join in Defendants Dr. Barbara Ferrer and Los Angeles County Department of Public Health's (collectively, the "County Defendants") Opposition (Dkt. No. 24) to Plaintiff Erica Jimenez' Request for Preliminary Injunction (Dkt. No. 13).

Dated: May 6, 2026

MICHELE BEAL BAGNERIS
City Attorney
ARNOLD F. LEE
Chief Assistant City Attorney
AMANDA CUSICK
Assistant City Attorney

By: /s/ Arnold F. Lee
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