

ENSURE HEALTH THROUGH THE CONTINUUM OF PREGNANCY, BIRTH, AND THE POSTPARTUM PERIOD





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Despite possessing ample knowledge and technology to provide exceptional health care, the United States lags behind other industrial nations in providing quality care to women throughout the reproductive continuum. Maternal and child health are affected by events along a life-course continuum, beginning with preconception care and continuing through the prenatal, perinatal, postnatal, postpartum, and interconception periods.ⁱ Across the reproductive health continuum, poor maternal and infant health outcomes are consistently tied to adverse socioeconomic factors and systemic barriers.¹ Adverse maternal and child health outcomes result in medical and socioeconomic burdens for women, their families, and their communities, particularly for low-income people of color. U.S. cities bear the brunt of this burden; city fertility rates are higher than the national average, and rates for key outcomes such as low birthweight and infant mortality exceed national averages, resulting in an urban reproductive health deficit with far-reaching consequences.² Addressing women's health throughout the continuum ensures that all women will achieve and maintain optimal health before, during, and beyond their reproductive years, regardless of their childbearing plans.

THE NECESSITY AND SCOPE OF COMPREHENSIVE PRENATAL CARE

Prenatal care remains the most common health intervention targeted at improving birth outcomes and overall maternal-child health. The initiation of attentive, culturally competent prenatal care in the first trimester, followed by at least thirteen prenatal visitsⁱⁱ throughout a full-term pregnancy, can result in improved birth outcomes with fewer complications, the reduction of maternal smoking rates, increased childrearing education, and a preemptive approach to decreasing the costly maternal health care associated with low birthweight and preterm births.³ Conversely, late or no prenatal care has been associated with a wide range of poor pregnancy outcomes, including a 40% increase in neonatal death, maternal health complications, and future health problems for children.⁴

Marked disparities exist regarding the provision of prenatal care. Low-income women of color bear the brunt of this burden, often entering prenatal care later, having fewer total visits, and experiencing less attentive care than white women of higher socioeconomic levels in the same city.⁵ Additionally, recent research surrounding the efficacy of prenatal care suggests that even when women of color do receive best-practice prenatal care, nine months cannot mediate the lifetime of health inequities many of them have faced.⁶

i Health care during the *preconception* period has been emphasized recently by the CDC as a critical avenue for improving the overall health of women throughout the life cycle, as well as pregnancy outcomes should a woman decide to become pregnant. It is important to note that preconception care refers to the reproductive health and overall wellness of women regardless of their choice to bear children. For those women who do give birth, *prenatal* refers to the period of pregnancy before birth, *perinatal* refers to the time around birth, *postnatal* and *postpartum* refers to the period after birth, and *interconception* refers to the period between one birth and a subsequent pregnancy. Together, these five terms cover the wide expanse of the *reproductive health continuum*.

ii The American College of Obstetricians and Gynecologists recommends a minimum of thirteen prenatal visits beginning in the first trimester of pregnancy.

PERINATAL TRENDS: LOW BIRTHWEIGHT, MATERNAL AND INFANT MORTALITY

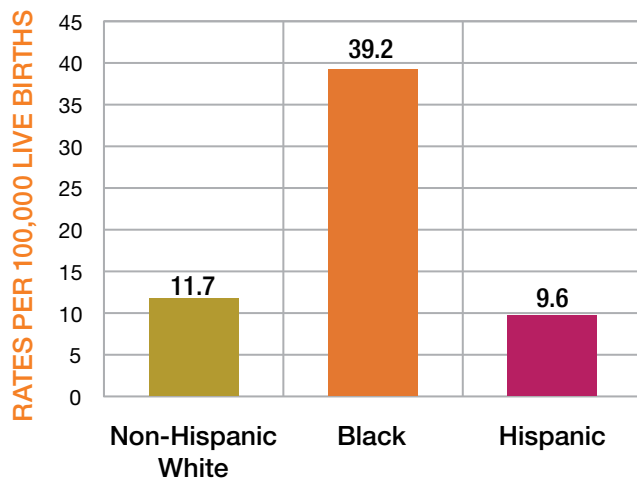
Sufficient knowledge and technology exist to facilitate safe and healthy full-term births.⁷ However, an overreliance on interventions has resulted in nearly one-third of all U.S. births utilizing Cesarean sections, a rate significantly higher than World Health Organization need-based projections.⁸ Furthermore, key outcomes such as maternal mortality, infant mortality, and preterm births show little or no progress. Given that many maternal deathsⁱⁱⁱ could be prevented with timely reproductive health care, high maternal mortality rates indicate poor provision of care and subsequently an overall shortfall in women's health.⁹

The U.S. maternal mortality rate of 12.1 per 100,000 live births falls behind many other industrialized nations, and urban populations are faring much worse, particularly in low-income neighborhoods.¹⁰ For example, the 2005 maternal mortality rate for New York City was 25.1 deaths per 100,000, while the rate for primarily low-income Kings County was 33.5.¹¹ Overall, it is non-Hispanic Black women who bear the highest burden with a national maternal mortality rate of 39.2 per 100,000 births, three times that of non-Hispanic White women (11.7 per 100,000). Hispanic women have the lowest rate of maternal mortality (9.6 per 100,000) despite the many socioeconomic parallels between Hispanic and African American women.¹² This trend is most notable among first-generation Mexican and

Central American immigrants and has been attributed to the prevalence of a healthy traditional diet, strong cultural support for pregnant women, and multigenerational community networks that provide care and information to new mothers.¹³ However, these reproductive health outcomes worsen as continuing generations of children are born in the United States, from the combined effects of acculturation, health behaviors, and lack of access to health care.¹⁴

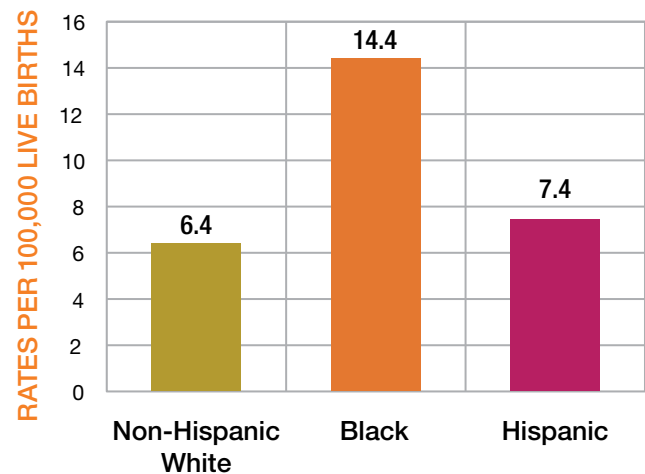
As with maternal mortality, high rates of infant mortality often reflect poor maternal health and lack of quality prenatal care, which impede fetal development and infant health. The 2006 national infant mortality rate of 6.9 per 1,000 live births places the United States thirty-third out of 195 nations, far behind most other developed nations.¹⁵ U.S. cities fare even worse. In 2003, U.S. cities had an average of 7.9 deaths per 1,000 live births, with marked racial and ethnic disparities. The average urban non-Hispanic Black infant mortality rate was 14.4 per 1,000 live births, over twice the average rate for non-Hispanic White infants (6.4 per 1,000) and nearly twice the Hispanic rate (7.4 per 1,000).¹⁶ Overall, cities are falling drastically short of the Healthy People 2010 infant mortality goal of 4.5 per 1,000 live births, and urban non-Hispanic Black populations are bearing an immense burden in comparison to the national average.¹⁷

U.S. MATERNAL MORTALITY RATES BY RACE AND ETHNICITY



Source: U.S. Department of Health and Human Services

U.S. URBAN INFANT MORTALITY RATES BY RACE AND ETHNICITY



Source: Nanette Benbow, ed.

iii The following data are based on the World Health Organization's definition of *maternal death*: the death of a woman while pregnant or within forty-two days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to, or aggravated by, the pregnancy or its management but not from accidental or incidental causes.

In 2005, 36.5% of infant deaths were associated with preterm births.¹⁸ Known maternal risk factors for preterm births and low birthweight include prenatal smoking and substance abuse, high blood pressure, diabetes, and prenatal stress.¹⁹ Even with these known risk factors, adverse birth outcomes are increasing and disparities are widening. Preterm births (before thirty-seven weeks of gestation) accounted for 12.5% of all births in 2005, an increase of 30% since 1981.²⁰ A 2005 review of reproductive health trends in high-poverty urban neighborhoods found the urban prevalence of babies born with low birthweight (8.9% of all births) higher than the national average (7.9% of all births), and a distinct disparity persisted between high-poverty neighborhoods and other

neighborhoods in the same city.²¹ Marked racial disparities also exist among preterm births, with the highest rate found among non-Hispanic Black populations. In 2003, 17.8% of all non-Hispanic Black births occurred before thirty-seven weeks of gestation in contrast to 11.5% for non-Hispanic White women.²² Among urban populations of color, these disparities are compounded. In a 2008 study of U.S. metropolitan areas, non-Hispanic Black women were nearly three times more likely (34.8 per 1,000 births) to have a very preterm birth (before thirty-two weeks of gestation) than non-Hispanic White women (12.3 per 1,000 births) and twice as likely as Hispanic women (15.7 per 1,000 births).²³

RACIAL AND GEOGRAPHIC DISPARITIES IN BREASTFEEDING

The American Academy of Pediatrics and the American College of Obstetricians and Gynecologists recommend exclusive breastfeeding for six months following birth. Yet in 2004, 23% of children in the United States received supplemental formula within two days of birth.²⁴ Breastfeeding provides numerous benefits for both women and infants, including bolstered infant immune and digestive systems, lower rates of infant hospitalization, increased mother-child bonding, facility of postpartum weight loss, and reduced risk of postpartum depression as well as breast and ovarian cancers.²⁵ Unfortunately, strong economic, racial,

and geographic disparities persist in breastfeeding practices. New mothers residing on the West Coast are approximately two to three times more likely to initiate breastfeeding than those in many parts of New England and 2.5 to 5.15 times more likely to initiate breastfeeding than those residing in most southern states.²⁶ These geographic disparities are then exaggerated along racial and economic lines.²⁷ A 2008 study found that non-Hispanic White women are twice as likely to breastfeed as Non-Hispanic Black women and 1.5 times more likely to breastfeed than Hispanic women who do not speak Spanish in the home.²⁸

PROMOTING OVERALL WELLNESS THROUGH PRECONCEPTION CARE

While the provision of best-practice health care throughout the prenatal, perinatal, and postpartum periods is a necessary component in achieving healthy births, it has not proven sufficient in improving health and abolishing maternal and child health disparities.²⁹ Current research suggests that the many preconception stressors women face prior to pregnancy, such as racial discrimination, poverty, environmental toxics, and sexually transmitted infections, are linked to the risk of poor birth outcomes.³⁰ Furthermore, nearly 50% of all pregnancies in the United States are unplanned, which is often associated with delayed initiation of prenatal care, inadequate consumption of folic acid, increased fetal exposure to potential teratogens,^{iv} increased likelihood of postpartum

depression, and lower rates of breastfeeding.³¹ The preponderance of unplanned pregnancies and preconception stressors conflate to create a large reproductive, maternal, and sexual health burden for women. Preconception care aims to address this burden by improving the health of women throughout their lifetimes, thus fostering overall wellness and helping to ensure favorable outcomes should a woman decide to become pregnant.³² Preconception care that emphasizes overall wellness and health education, consistent screenings, and family planning is particularly important for non-Hispanic Black communities, which consistently have some of the worst reproductive health outcomes in the nation regardless of socioeconomic status.³³



iv Teratogens are any agents that can cause birth defects.

RECOMMENDATIONS TO ENSURE HEALTH THROUGH THE CONTINUUM OF PREGNANCY, BIRTH, AND THE POSTPARTUM PERIOD

Investing in and promoting reproductive health throughout the life-course continuum reduces the incidence of adverse outcomes for both women and their children, creating a foundation of good health within our communities. Successfully achieving optimal urban maternal health requires dynamic approaches to health care along the continuum and strong political commitment at the city and county levels. As evidenced in many urban areas, innovative and creative thinking and collaboration can facilitate the implementation of safe reproductive health interventions and ensure their sustainable integration into the health care system.

WE CALL ON LOCAL LEADERS TO ENSURE HEALTH THROUGH THE CONTINUUM OF PREGNANCY, BIRTH, AND THE POSTPARTUM PERIOD BY:

Recognizing the role that overall health has on producing healthy pregnancies in public health care delivery. Healthy pregnancies require good overall health throughout a woman's life. In order to achieve healthy pregnancies and births, preconception health education and services, as well as prenatal care, must be easily accessible throughout the health care system. Further, services must be made available to first-time mothers needing support to help them and their infants achieve optimal health during the postpartum period. Better pregnancy outcomes will produce healthier communities and signal an improvement in overall women's health.

- We urge local leaders to integrate preconception and prenatal health education and care into primary and other public health care settings.

Supporting home-visiting programs that support mothers and help them to succeed as parents and experience healthy outcomes for themselves and their infants. Programs that utilize home-visitation strategies, such as the nurse-family partnership program, show promise for improving reproductive and maternal health. Developed thirty years ago, the nurse-family partnership program focuses on providing support for low-income and young mothers during pregnancy and the postpartum period. These interventions have proven to improve prenatal health, reduce subsequent unintended pregnancies, and also increase rates of employment.³⁴

- We urge local leaders to support and expand local nurse-family partnership programs that target women experiencing adverse pregnancy and birth outcomes.

Supporting public education campaigns that empower women to make fully informed decisions about their pregnancies. In order for women to have positive pregnancy and birthing experiences, they need educational resources to help them make informed decisions about their maternal health care.³⁵

- We urge local leaders to collaborate with local advocacy groups to create resources that educate their communities about local birthing options and other pregnancy-related services.

Ensuring, affirming, and protecting a mother's right to breastfeed. Local officials need to protect the rights of mothers to breastfeed if they choose. Breastfeeding provides numerous health benefits to infants but also provides many positive mental and physical health benefits for breastfeeding mothers.

- We urge local leaders to implement policies that promote the ability of women to breastfeed, especially at work, at school, and in public spaces.

LOCAL EXAMPLES:

- The Preconception Care Health Collaborative in **Los Angeles County** is working to improve women's health by integrating preconception care into the Department of Public Health's general public health practice.
- **Dane County, WI**, has passed a municipal ordinance that protects a mother's right to breastfeed or express milk in public places or accommodations.
- In **New York City**, the Department of Health and Mental Hygiene's nurse-family partnership coordinates a home-visiting program for low-income, first-time mothers, their infants, and families that focuses on preventive health practices and parenting skills.
- In **Contra Costa, CA**, the county's Building Economic Security Today (BEST) program is teaching financial skills as a way to address the social determinants of health to ultimately improve infant mortality rates.

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The Urban Initiative for Reproductive Health is a program of the National Institute for Reproductive Health (National Institute).

The National Institute is an innovation institute for state and local organizations working on reproductive health issues. We offer strategic guidance, hands-on support and funding to help state and local leaders remove barriers to health care, win public battles and change public policies. Together, we are helping women in communities across the country gain access to the full range of quality reproductive health care options, the freedom to exercise their reproductive rights and the opportunity to have healthy pregnancies.

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