

BLACK-WHITE DISPARITIES IN INFANT MORTALITY

Public Health Issue

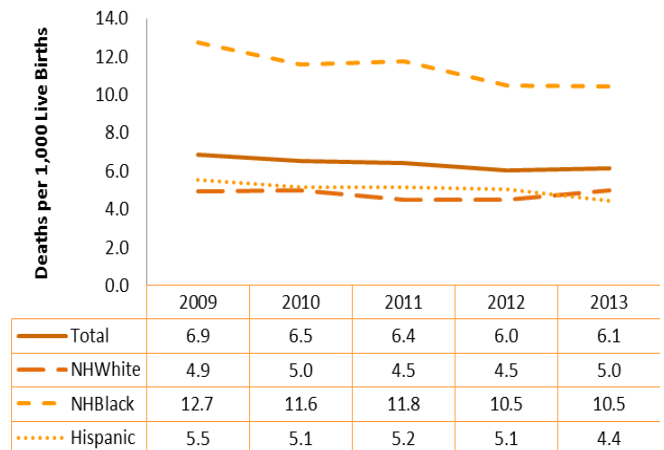
Infant mortality is defined as the death of a child within the first year of life. The standard measure of the extent of infant mortality in a population is the infant mortality rate (IMR). The IMR is calculated as the number of infant deaths in a period of time per 1,000 live births that occurred during the same time period. A health disparity is defined as ‘differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups’ or ‘if a health outcome is seen in a greater or lesser extent between populations’ [1, 2].

IMRs are viewed internationally as indicators of population health [3]. Reidpath and Allotey (2003) state: “IMR remains an important indicator of health for whole populations, reflecting the intuition that structural factors affect the health of entire populations” [4]. This is a primary reason why IMRs can also be used to “assess the presence and magnitude of infant health disparities between populations and population subgroups” [5]. Thompson, Clark and Canty (2014) state: “Historically, nationally and in Florida, IMRs of infants born to black mothers have been much higher than IMRs of infants born to white mothers despite declines in overall infant mortality... Consistent racial disparities in infant mortality are a national and state public health issue” [5].

Magnitude and Trend

In Florida, overall infant mortality rates declined from 6.9 infant deaths per 1,000 live births in 2009 to 6.1 infant deaths per 1,000 live births in 2013. During the same time period, non-Hispanic white infant mortality stayed relatively flat with IMRs of 4.9 infant deaths per 1,000 live births in 2009 and 5.0 infant deaths per 1,000 live births in 2013. However, between 2009 and 2012, non-Hispanic black infant mortality rates declined significantly from 12.7 to a historic low of 10.5 infant deaths per 1,000 live births and remained at the same IMR in 2013 [6]. With Florida’s recent declines in non-Hispanic black infant mortality, the infant mortality disparity between non-Hispanic black and non-Hispanic white infants decreased from a ratio of 2.6:1 in 2009 to 2.1:1 in 2013. However, it is important to note that despite this decline in the magnitude of disparity, non-Hispanic black infant mortality rates have consistently remained more than two times higher than non-Hispanic white and Hispanic infant mortality rates. Disparities in infant mortality are also present and consistent at the national level – the preliminary 2011 U.S. IMRs for non-Hispanic white and black are 5.1 and 11.4 deaths per 1,000 births [7], respectively, for an IMR ratio of 2.2:1.

Figure 1. Infant Mortality Rates by Race/Ethnicity, Florida 2009-2013



Source: Florida Department of Health Vital Statistics Tables

National and State Goals

No national or state goals will be found for black-white disparities in infant mortality. This is because the primary aim, as stated in the Healthy People 2020 Objective MICH-1.3, is to decrease the IMRs for all infant deaths to 6.0 infant deaths per 1,000 live births [8] and thereby, eliminate all disparities. From 2008 through 2013, Florida's non-Hispanic white and Hispanic infant mortality rates have been below the Healthy People 2020 IMR goal [6]. To meet the Healthy People 2020 goal of an IMR for all infants, 6.0 infant deaths per 1,000 live births, the 2013 non-Hispanic black IMR of 10.5 infant deaths per 1,000 would have to be reduced by 43%.

Current State Programs and Initiatives

The Florida Department of Health (FDOH) is addressing black-white disparities in infant mortality by providing and facilitating primary care for women and men, preconception care and counseling, prenatal care, infant health services, interconception care and counseling, and other preventive health services. FDOH, maternal and child health (MCH) practitioners, and community partners realize confronting inequities in health access, interventions and outcomes requires examining care systems, individual risk factors, community resources and deficits, and cultural factors that interact to influence and/or determine health outcomes, including infant mortality.

- The FDOH is participating in the national Collaborative Improvement and Innovation Network (CoIIN) that focuses on strategies to implement best programs, policies, and practices to reduce infant mortality, ensure health equity, and eliminate health disparities.
- In collaboration with FDOH, the Florida Healthy Start Coalitions conduct inclusive planning and service delivery approaches that incorporate all Florida communities as partners and participants in disparity elimination.
- The FDOH is also working to understand factors related to specific causes of death that contribute to black-white disparities in infant mortality. For example, black infants are disproportionately represented in the occurrences of sudden unexpected infant deaths (SUIDs) related to infant sleep positions and sleep environments. In response, FDOH has established a SUID Workgroup comprising maternal and child health internal and external partners to understand the multilevel complexities of infant sleep placement and develop health messaging and interventions that are both culturally respectful and informative to our diverse populations.

Public Health Strategies and Practices

In 2003, the Maternal and Child Health Journal published a seminal commentary authored by the current Associate Administrator of the Maternal and Child Health Bureau (MCHB) and former UCLA faculty/researcher, Dr. Michael Lu, and Dr. Lu's UCLA colleague, Dr. Neal Halfon, entitled *Race and ethnic disparities in birth outcomes: A life-course perspective* [9]. This writing set the path for public health efforts to eliminate disparities through focused interventions over the lifespan. As part of the life course approach, Lu and Halfon called for researching the presence and impact of cumulative "exposures to risk and protective factors" among compared racial/ethnic groups; implementing integrated interventions through the preconception to interconception to post-reproductive phases of a woman's life; and generating policies that work to ensure that lifespan interventions and access to health care and health care systems are possible [9]. The CoIIN is a culmination of this life course approach. The CoIIN involves indicator tracking and research to inform and improve states' integrated interventions and supports efforts to implement evidence-based programs, policies, and practices to reduce overall infant mortality, ensure health equity, and eliminate health disparities. The CoIIN is sponsored and facilitated by

federal and national organizations that have long-standing histories of funding, providing administrative oversight and advisement to states on issues pertinent to the MCH population and public health practice. CoIIN is “part of a portfolio of Public/Private and the Maternal and Child Health Bureau’s efforts to improve birth outcomes” [10].

DOH Capacity

The FDOH is Florida’s Title V agency and receives the federal Title V Maternal and Child Health Block grant to fund, support, and facilitate MCH interventions, initiatives and systems of care, and care coordination in local health departments and Florida’s network of Healthy Start Coalitions. Also at FDOH are the state’s Title X Family Planning Program; Women, Infants, and Children Program (Florida WIC); Chronic Disease Prevention Program; School Health Program, Child and Adolescent Health Program and Children’s Medical Services, a medical program for children with special health care needs. Together, these programs along with many other FDOH programs serve a large proportion of Florida’s population (i.e., women of childbearing age, pregnant women, infants, children, adolescents and families).

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