



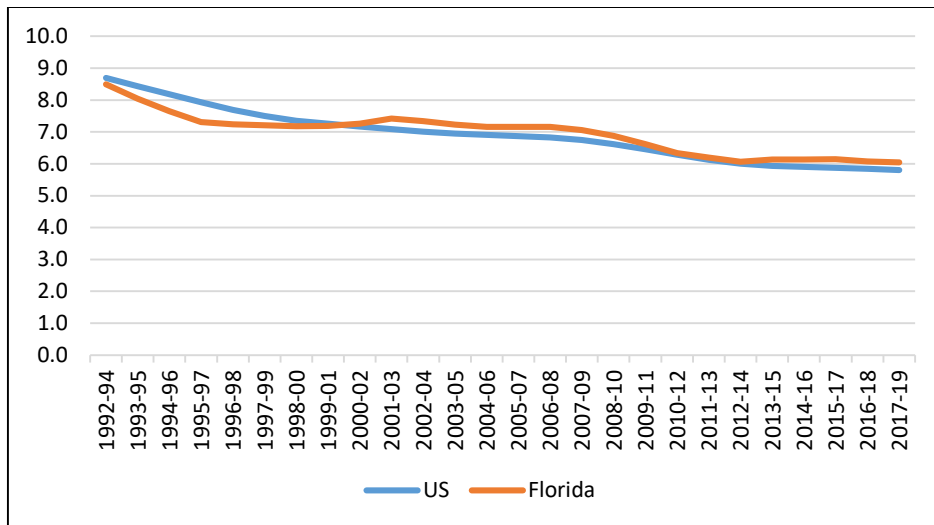
Improving Outcomes for Mothers & Babies: Infant Mortality in Florida

Infant mortality rate is often used as an indicator to measure the health and well-being of a community. Infant mortality is the death of an infant during the first year of life and is calculated as the number of infant deaths per 1,000 live births. Infant mortality is further classified into neonatal deaths which occur during the first 27 days of life and post-neonatal deaths which occur from 28-364 days of life. These two categories have different primary causes of death.

Prevalence & Impact

- Florida's infant mortality rate from 2017–2019 was **6.0 per 1,000 live births**. Florida has experienced a 30% decline in infant deaths since the implementation of Healthy Start in 1992. The three-year rolling rate from 1992-1994 for Florida was 8.5, and the three-year rolling rate from 2017-2019 is 6.0.

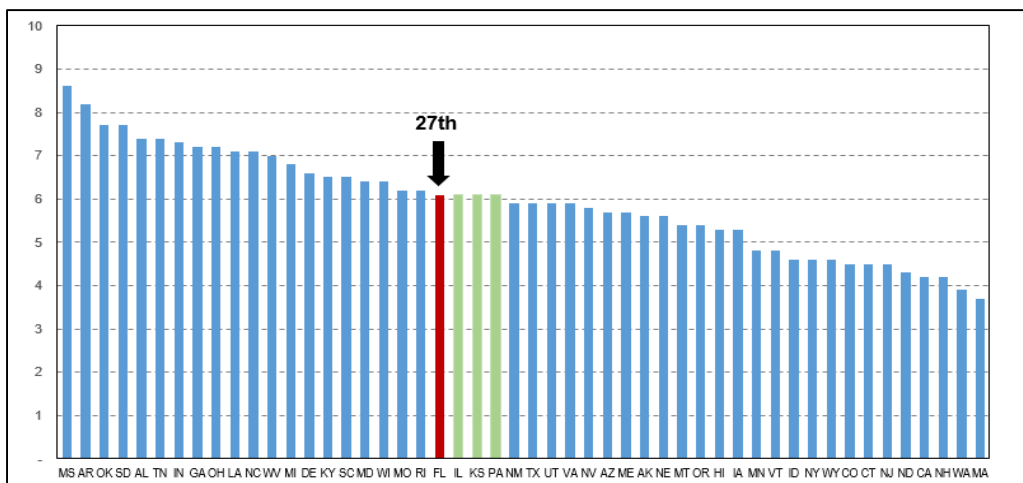
Infant Mortality Rates, 1992-2019, Florida vs. the United States



Source: Florida CHARTS, www.flhealthcharts.com and <https://www.macrotrends.net/countries/USA/united-states/infant-mortality-rate>

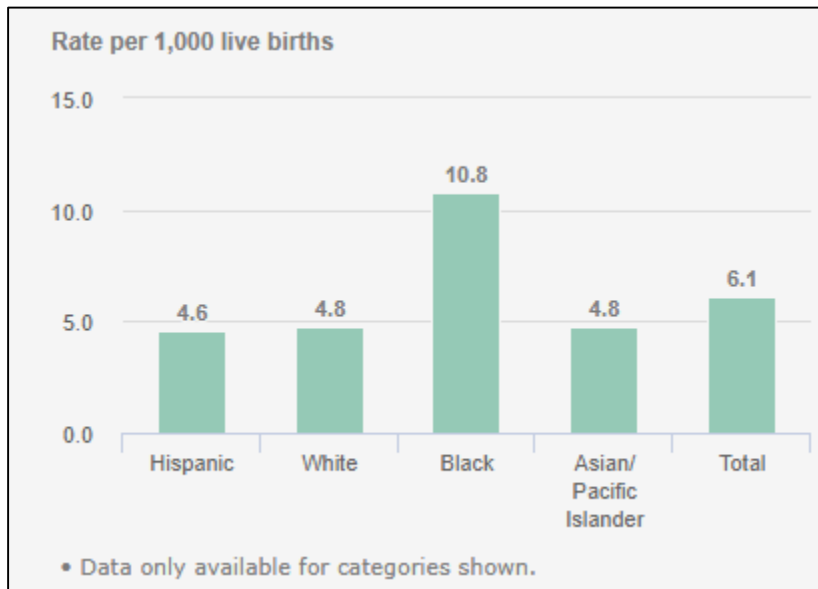
Even though Florida's infant mortality rate has been decreasing, it is ranked 27th compared to other states.

Infant Mortality Rates, U.S. States, 2017



Source: CDC NCHS 2017 Report

Infant Mortality Rates by Race/Ethnicity, Florida, 2016-2018



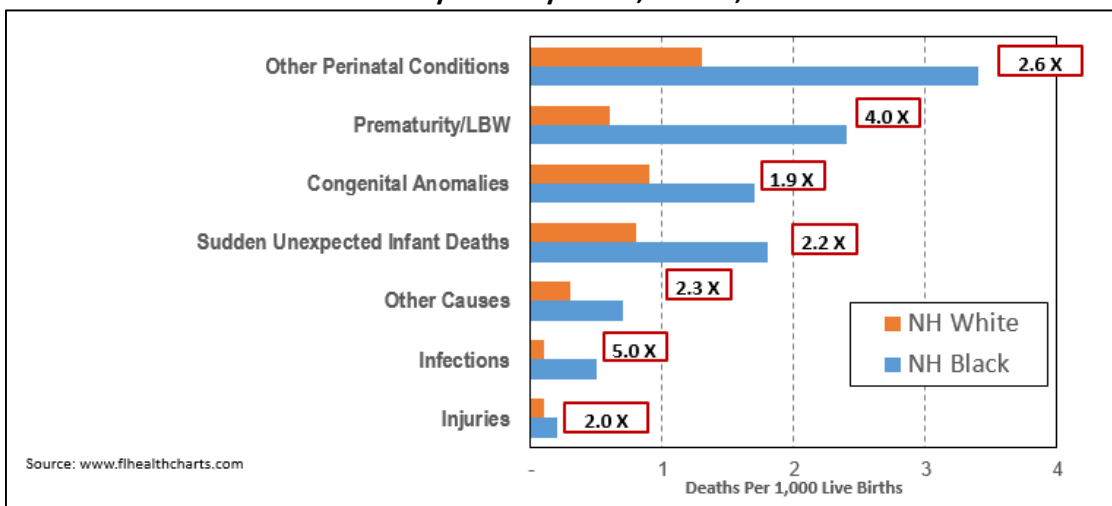
All race categories exclude Hispanics. An infant death occurs within the first year of life. Source: National Center for Health Statistics, period linked birth/infant death data. Retrieved August 4, 2021, from www.marchofdimes.org/peristats.

These deaths are related 85% of the time to prematurity and subsequent very low birth weight (VLBW < 3.5 pounds) infants compared to women with the best birth outcomes. These deaths are primarily related to the health of the mother prior to becoming pregnant. NH Black pregnant women with hypertension are almost three times more likely to have a very low birth weight infant (RR 2.97, 95% CI=2.1,4.2) and those who are overweight to obese are 30% more likely to have a VLBW infant (RR 1.32, 95% CI=1.01, 1.7). They are 75% more likely to experience a VLBW infant when they lack social support as evidenced by the lack of the father's name on the birth

certificate (RR=1.75, 95% CI=1.3, 2.4). For these women with a previous preterm birth, they are four times more likely to experience a VLBW infant (RR=3.9, 95% CI=2.2, 6.9) in a subsequent pregnancy. When they do not get prenatal care, their risk of a VLBW infant is three-fold higher (RR, 2.97; 95% CI=1.9, 3.8). [Data from Hillsborough County, 2016-2018; Community Health Assessment].

- **The disparity for NH Black infant deaths persists even when stratified by the different causes of death.**

Infant Mortality Rates by Cause, Florida, 2016-2018



- **Black infants are at least 2.5 times more likely to have infants die due to sleep-related causes** (Florida Charts, www.flhealthcharts.com , accessed 8/3/21).

Strategies & Solutions

FAHSC recommends possible strategies and solutions.

- **Interconception Care**, also known as preconception health, refers to the health of women and men during their reproductive years. It encompasses improving maternal health and increasing baby spacing. Interconception care is the services a woman or man receives from a doctor or other health professional that focuses on care that increases the chance of having a healthy baby. The ICC framework is a cornerstone of infant mortality prevention. The framework focuses on reducing individual, behavioral, and environmental factors that may contribute to poor maternal and child outcomes.

84% of Healthy Start Participants Delivered Full Term Babies

- **Improving maternal health** between pregnancies addresses the leading cause of infant deaths due to prematurity. Chronic health conditions such as hypertension, obesity, diabetes and heart-related conditions can be addressed through access to primary health care; programs that address nutrition, exercise and stress reduction. Increasing access to Medicaid beyond the 12-month post-partum period would aid in improving access to primary health care services.
- **Improving baby spacing** to at least 18 months has been shown to improve both maternal health and infant outcomes. Long-acting reversible contraception provides a proven method to increase spacing between pregnancies. The increase in Medicaid reimbursement for these services is helpful; however, women report they want greater control over their reproductive health. Strategies that reduce the number of needed clinic visits for insertion of LARC and its removal may increase access. In Duval County several initiatives are aimed at increasing access to LARC. The FIMR CAT developed “Thank my lucky LARCs,” an information card distributed at the Magnolia Project and in the community. Magnolia also offers contraceptive counseling as a

standalone intervention that focuses on the most effective to the least effective contraceptive method, including utilizing a video that was developed specifically for use in case management.

- **Improving maternal social support** has been shown to improve maternal depression and birth outcomes.
 - An evaluation of the *Mothers & Babies Course* (an evidence-based program to improve maternal stress and depression) in Florida by Northwestern University found a 36% significant reduction in maternal depression for those who received services compared to a control group (Tandon D, McGown M, Campbell L and Brady C., Evaluation of the *Mothers & Babies Course*, Hillsborough County Coalition Report, July 2019).
- 87%** of Healthy Start Participants were Screened for Depression
- An evaluation of the *Moving Beyond Depression* program (an evidence-based program to improve maternal mental health) in Hillsborough County, Florida, showed a significant improvement in post-partum depression for those in the treatment group. These women experienced a 58% decline in post-partum depression which was higher than the national evaluation (Cincinnati Every Child Succeeds, Florida Evaluation of *Moving Beyond Depression*, December 2018).
 - In addition, improving maternal mental health may also reduce deaths due to sleep-related conditions as research in Florida has shown that for Black mothers, maternal stress was related to the decision to co-sleep.
 - **Home Visiting** provides intensive, long-term relationships that are focused on family support and counseling on parenting skills, health education, social determinants of health, evidence-based screenings, and risk appropriate care coordination.
 - **Social determinants of Health (SDOH)** are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. During 2020 Healthy Start provided 444 participants

referrals and support to address various SDOH conditions that influenced the health of mothers.

- **Nurse-Family Partnership** is an evidence-based program demonstrated to improve birth outcomes, maternal health and maternal life-course. NFP research studies have found a 79% reduction in preterm delivery for women who smoke, an overall 18% reduction in preterm deliveries, 35% reduction in hypertension disorders during pregnancy, 32% reduction in subsequent pregnancies, and an 82% increase in months employed.

(www.nursefamilypartnership.org, accessed August 3, 2021).

80% of Healthy Start Participants Initiated Breastfeeding

- **Doula Services** – Tampa Bay Doula Program is an emerging promising practice that provides free perinatal services to low income pregnant women at risk for poor birth outcomes. It provides labor support, childbirth education, and focuses on mother-infant attachment, breastfeeding and interconception care. This program demonstrated lower Black infant mortality rates (1 per 1,000 compared to 12.4 per 1,000 county-wide, 91% breastfeeding rates, and 99% with appropriate infant bonding and attachment. This program was replicated in three other sites in Florida (Association of Maternal Child Health Programs, Innovation Station, Innovation Station: Emerging, Promising and Best Practices on Infant Mortality & Improving Birth Outcomes, 2008).
- **Safe Sleep Campaigns** that promote safe sleep are advocated by the American Academy of Pediatrics and demonstrated to reduce infant deaths due to sleep-related causes. Recommendations include back sleeping, use of a firm sleep surface with no loose bedding or other objects in the sleep area, no co-sleeping or bed-sharing, and no use of pillows during sleep. Programs such as the Safe Sleep Campaign in Hillsborough and Duval County adhere to these recommendations in teaching both medical personnel, parents and other caregivers in how to put their infants to sleep. (American Academy of Pediatrics, www.aap.org, accessed August 3, 2021). An early evaluation of this program found that mothers who had the Safe Sleep used back-sleeping 85% of the time compared to 65% of the time for Florida mothers. Only 27% of the mothers reported

any bed-sharing compared to 61% of mother in Florida (Healthy Start Coalition of Hillsborough County, 2015, unpublished data).

- **Enhanced Medicaid benefits** – There are numerous benefits to enhancing Medicaid benefits. Please see related FAHSC issue paper on Enhancing Medicaid Benefits for Pregnant Women.
- **Social Marketing Campaign** to increase public awareness about infant mortality and birth outcomes. The Make a Noise! Make a Difference! encourages individuals to take action in Duval County.

References & Links

www.aap.org

www.amchp.org/programsandtopics/womens-health/Pages/default.aspx

www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm

www.flhealthcharts.com

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www.floridahealth.gov/index.html

www.macrotrends.net/countries/USA/united-states/infant-mortality-rate

www.marchofdimes.org/peristats/ViewTopic.aspx?reg=12&top=6&lev=0&slev=4

www.mothersandbabiesprogram.org

www.movingbeyonddepression.org

www.nursefamilypartnership.org