

Delaware Addresses Racial Disparities in Infant Mortality Rates

Delaware's infant mortality rate dropped 14 percent in the decade between 2000 and 2010, thanks to a multi-pronged collaborative effort to address the social and clinical factors leading to these deaths.

Delaware's Infant Mortality Task Force was established in 2004 by executive order of then-Gov. Ruth Ann Minner. At the time, Delaware's infant mortality rate was 9.3 deaths per 1,000 live births, among the highest in the nation. The task force's charge was to "identify risk factors and implement practices to prevent infant mortality." In May 2005, the task force released the [Reducing Infant Mortality in Delaware report](#), which outlined 20 recommendations to reduce the incidence of infant mortality.

Today, 18 of the task force's initial 20 recommendations are fully implemented or are in progress. For example, one of the task force's

recommendations was for the state to establish the Delaware Healthy Mother and Infant Consortium (DHMIC) to implement the recommendations and lead efforts to improve infant mortality rates, as well as the health of women of childbearing age and infants throughout the state. The legislature [created](#) DHMIC in state code in 2005, with membership jointly appointed by the governor and the legislature. Other task force recommendations included: conduct a comprehensive review of every fetal and infant death in Delaware; create a monitoring system to increase understanding of the risks faced by pregnant mothers; create the Center for Excellence in Maternal and Child Health and Epidemiology within the Delaware Division of Public Health; and Improve comprehensive reproductive health services for all uninsured and underinsured Delawareans living at up to 650 percent of the poverty level.

- Delaware's infant mortality rate dropped from 9.3 to 8.0 deaths per 1,000 from 2005 to 2010.
- Premature births have decreased 13 percent since 2005.
- Delaware was one of the first states to offer 17p for free to uninsured and underinsured women, greatly reducing the reoccurrence of low birth weight and premature birth.

In the decade since this work began, Delaware has aimed to address the full scope of issues that drive infant mortality, including what it calls the "root social causes of infant mortality—persistent poverty, pervasive, and subtle racism, and the chronic stresses associated with them." The state has concentrated its efforts on what the report calls "two chains of events: a sequence of socioeconomic and biological forces on the mother's health that influence the outcome of her pregnancy; and the adverse outcome of this sequence of events is usually the delivery of a premature, low birth weight, or sick neonate."

Steps Taken:

- To make its recommendations, the task force first researched the causes of infant mortality. The task force called for improved data collection activities in Delaware, which was implemented by the Division of Public Health.

State Story



- The state improved data collection through a series of changes brought on by Delaware's participation in the [State Infant Mortality Collaborative](#) (SIMC)—convened by the Association of Maternal and Child Health Programs (AMCHP), CDC, and the March of Dimes—helped state leaders craft and implement improvements in data collection and analysis. SIMC activities took place between 2004 and 2007.
- The state was able to isolate the main driver of its infant mortality rate from 2002-2006: poor maternal health in the preconception period, especially among African American women.
- Over time, the state also noticed a paradox: more women than average received prenatal care, but the infant mortality rate remained high.
- The analysis proved that Delaware's infant mortality rates were driven by poor maternal health in preconception period (e.g., diabetes, obesity, hypertension, and other preexisting chronic conditions). Even though women were accessing prenatal care, it was too little too late to address some of the huge underlying health issues that significantly complicated pregnancies and led to poor outcomes.
- In response, Delaware created [Healthy Women, Healthy Babies](#) (HWHB) program to improve birth outcomes, especially among African Americans.
- HWHB provides preconception and prenatal care to women who are at risk or whose most recent pregnancies resulted in poor outcomes.
- General eligibility criteria for HWHB include having two of the following risk factors: a BMI greater than or equal to 30, a chronic disease, an income at or below 300 percent of the federal poverty level, self-reported high stress, late entry to prenatal care, maternal age under 18 or over 35, mental illness, or risk of birth defects. However, to address racial disparities, all African American women are eligible, regardless of other eligibility criteria.
- No Medicaid dollars support HWHB. The program is entirely state funded, which allows Delaware to set eligibility criteria such as race, rather than income.
- The state Division of Public Health reimburses providers for services rendered. Delaware contracts directly with providers to offer women care in four bundles of services: Preconception care, psychosocial care, prenatal care, and nutrition care. The bundles are specially designed for this population and take into account interventions for some social determinants of health (e.g. housing, domestic violence, etc.).
- HWHB's contracted providers also collect electronic medical records data that the state can use to better understand which interventions are working to improve outcomes.
- To address preconception health, DHMIC created several [population-specific online tools](#) to encourage adolescents, young men, and reproductive-aged women to make a reproductive life plan and develop healthy lifestyles before they start families.
- Delaware also established a perinatal cooperative under DHMIC. This group of medical professionals and representatives from birthing hospitals sets standards of care and works on continuous quality improvement measures. The public health division collects and analyzes the data and then shares it with hospital sites.

Results:

- Delaware's infant mortality rate dropped from 9.3 in 2005 to 8.0 deaths per 1,000 live births in 2010.

State Story



- Although the state has made progress among all racial and ethnic groups, a huge racial disparity remains. In 2005, the infant mortality rate among African Americans was 16.1. In 2010, the rate dropped to 14.2. Among whites, however, the infant mortality rate was 6.5 in 2005 and 5.8 in 2010.
- The state credits the improvement in the infant mortality rates to changes in preconception health and a 13 percent decrease in premature births since 2005.
- The rate of babies born at very low birth weight (1,500 grams or less) dropped from 2.0 per 1,000 live births in 2006 to 1.8 in 2010.
- Babies weighing less than 2,500 grams—considered low birth weight—dropped from 9.4 per 1,000 live births in 2006 to 8.9 in 2010.
- As the number of premature births and babies born at low or very low birth weight came down, so did the neonatal infant mortality rate. Deaths among children 28 days old or younger dropped from 6.7 in 2005 to 5.6 in 2010. Among whites, the rate went from 5.0 to 3.8. Among African Americans, the rate dropped from 12.2 to 10.3, which is still nearly double the rate of whites.
- The perinatal cooperative is committed to implementing clinical best practices to prevent low birth weight and premature delivery. Due to its work, Delaware was one of the first states to offer 17 alpha-hydroxyprogesterone for free to uninsured and underinsured women through its [Prematurity Prevention Program](#).
- In FY 2012, 13,696 women took advantage of the HWHB program, likely preventing many poor outcomes. The legislature appropriated \$4.5 million per year on average from 2006 to the present to fund HWHB.
- Delaware expanded its Medicaid program to all citizens under age 65 with family incomes at or below 133 percent of the federal poverty guidelines, as allowed by the Patient Protection and Affordable Care Act, effective in January 2014.

Lessons Learned:

- Delaware attributed its success decreasing the infant mortality rate to strong partnerships between policymakers at all levels, state agencies, providers, and community groups. DHMIC has been the convening and oversight body for these collaborative relationships. The formalized structure meant that the people crucial to the process have been at the table, working together, and that leadership has been actively involved in crafting solutions.
- Because of their involvement with DHMIC and their intimate knowledge of these issues, legislators have been strong advocates across various executive administrations.
- Public health operates in budget-driven environment. However, by having the fiscal decision makers involved in the process, they saw that the solutions—even those with a financial cost—were smart, effective, and fiscally prudent.
- The process the state used to reach this point has been data-driven. The various collaborative groups built and used common data sets. The data and the task force's initial outline helped groups clearly define the problems and solutions, and then measure improvement indicators.
- Delaware found that people from all sectors were very willing to help craft solutions once they understood the problems. Parties that were part of process to identify the problem had a vested interest in helping to implement them by the time groups worked on action strategies.

State Story



- Delaware credits national partners—ASTHO, AMCHP, and CDC—for keeping its momentum going. It has been a decade since the task force first started looking at infant mortality. Although the state has made huge gains over the years, there is still progress to be made. Delaware appreciates the national spotlight on its success, and the motivation for future improvement.

For More Information:

Mawuna Gardesey
Chief
Center for Family Health Research and Epidemiology
State of Delaware
Email: Mawuna.gardesey@state.de.us
<http://dethrives.com>

Ellen Schleicher Pliska, MHS, CPH
Family and Child Health Director
Association of State and Territorial Health Officials
Email: epliska@astho.org