

Low Birth Weight

DEFINITION

This indicator reports the number of infants weighing less than 2,500 grams at birth per 1,000 live births. Births include all babies born live to mothers who were residents of New Hampshire at the time of birth, regardless of the state in which the birth occurred (NHVRIN 2007-2009).

The term “low birth weight” describes infants weighing less than 2,500 grams (5 pounds, 8 ounces) at birth; the term “very low birth weight” describes infants weighing less than 1,500 grams at birth (3 pounds, 5 ounces) (March of Dimes 2010).

CONTEXT

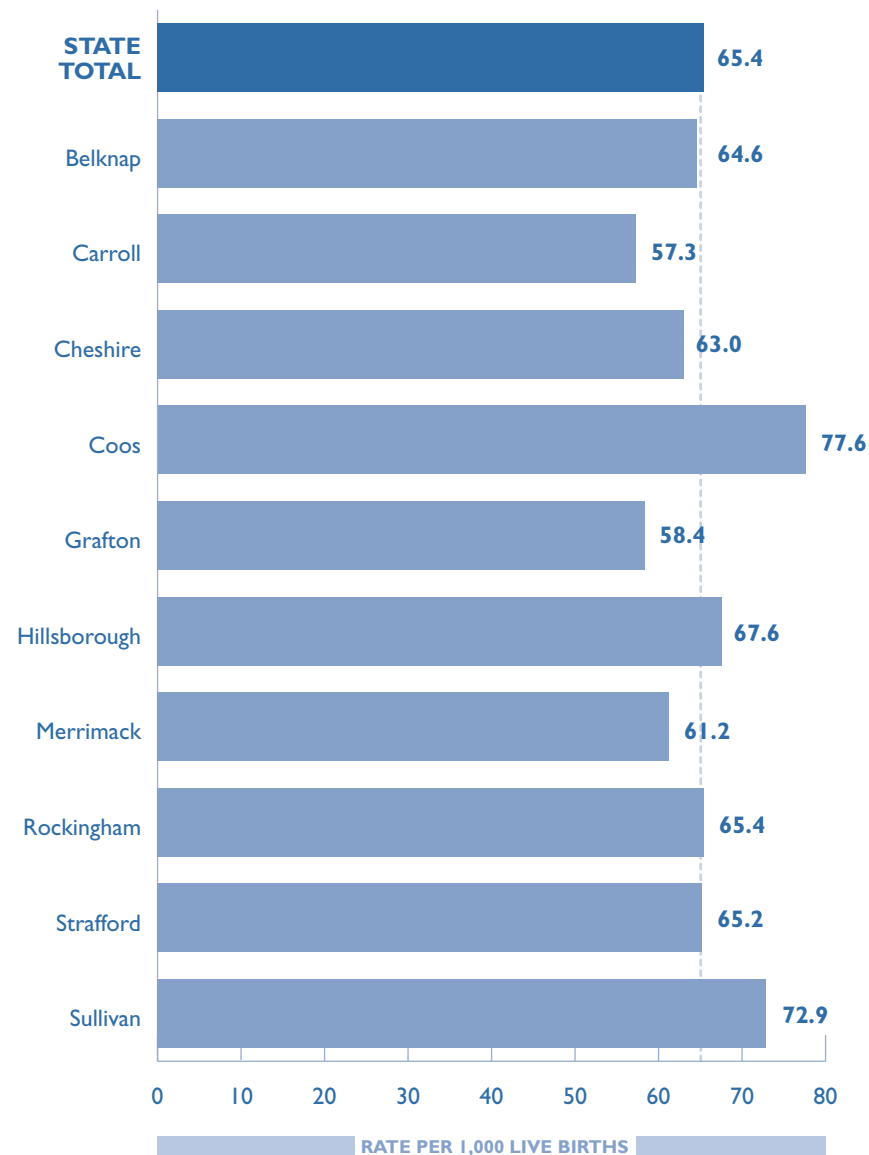
In 2005 low birth weight was the leading cause of death nationally in the first month of life (over 24 percent), and caused 16.6 percent of deaths in the first year of life (March of Dimes 2010). These infants are more likely to be hospitalized and require medical treatment as newborns. Recent research indicates low birth weight infants show an increased risk of chronic health problems throughout life including cerebral palsy, mental retardation, vision and hearing loss, developmental disabilities such as ADHD and behavioral problems compared to infants who weighed at least 5 pounds, 8 ounces at birth (March of Dimes 2010).

Low birth weight is usually the result of preterm labor or fetal growth restriction; a majority of low birth weight babies are born preterm. Infants born before 37 weeks gestation are considered preterm. Common risk factors for preterm labor or fetal growth restriction include a history of previous preterm labor; multiple embryo gestation, assisted fertilization, birth defects, chronic health problems, smoking, use of alcohol or drugs during pregnancy, infections in the mother or baby, placental problems, and inadequate maternal weight gain. Women with socioeconomic factors such as low income and low education levels and black women under 17 and over 35 are also at an increased risk for low birth weight infants (March of Dimes 2008).

Children who were born preterm tend to have lower IQs and lower test scores than their healthy full-term counterparts. Among preterm infants, those born the earliest and at the lowest birth weights are at highest risk for medical and developmental problems (IOM 2007).

Low Birth Weight Infants

By County, 2007-2009



The cost of caring for low birth weight infants is high. According to a 2010 report published by March of Dimes, “Low birth weight accounts for 10 percent of all healthcare costs for children.” A 2007 study estimated the cost of care for a preterm infant (medical care, early intervention, special education and lost productivity) over the course of a lifetime was \$51,589 more than the cost of care for infants born full-term (IOM 2007).

NEW HAMPSHIRE FINDINGS

From 2007 to 2009, the rate of low birth weight infants born to New Hampshire mothers was 65.4 per 1,000 live births. In other words, for every 1,000 infants born live to New Hampshire women between 2007 and 2009, approximately 65 infants weighed less than 5 pounds, 8 ounces. Rates of low birth weight infants vary among counties with a high of 77.6 per 1,000 live births for Coos County to the state bottommost rate of 57.3 for Carroll County. The variation does not follow any geographic pattern. (see chart on previous page)

Following the national trend, the rate of low birth weight infants in New Hampshire has fluctuated upward over the last 15 years, from 55.2 per 1,000 in 1995 to 68.95 per 1,000 in 2009. The low birth weight rate in New Hampshire reached bottom at 47.9 in 1996 and a high of 69.1 in 2006 (NHVRIN 2010 and March of Dimes 2010). A 2007 study by the Institute of Medicine linked the rise in preterm birth rates nationally to “social trends” including increased use of fertility treatments, multiple embryo gestation resulting from treatment for infertility, older average age of mothers and more comprehensive prenatal care (IOM 2007). New Hampshire has one of the lowest preterm birth rates in the U.S. In 2008, more than twelve percent of U.S. births were preterm (March of Dimes 2010). Only New Hampshire and Idaho had preterm birthrates lower than 10 percent (March of Dimes).

SOURCE OF DATA FOR ILLUSTRATION/METHODOLOGY

New Hampshire Vital Records Information Network (NHVRIN). 2010. New Hampshire Department of State, Division of Vital Records Administration. nhvrinweb.sos.nh.gov/

REFERENCES

Institute of Medicine (IOM). Behrman, Richard E. and Adrienne Stith Butler, Editors. 2007. *Preterm Birth: Causes, Consequences, and Prevention*. Washington D.C.: The National Academies Press.

March of Dimes. 2010. *2010 Premature Births Report Card*. www.marchofdimes.com/padmap.html

March of Dimes. 2008. *Quick Reference Fact Sheet: Low Birthweight*. http://www.marchofdimes.com/printableArticles/14332_1153.asp

Maternal, Infant, and Child Health in the United States. 2010. March of Dimes Foundation Data Book for Policy Makers. www.marchofdimes.com/Databookforpolicymakers.pdf