

MATERNAL, CHILD, AND ADOLESCENT HEALTH

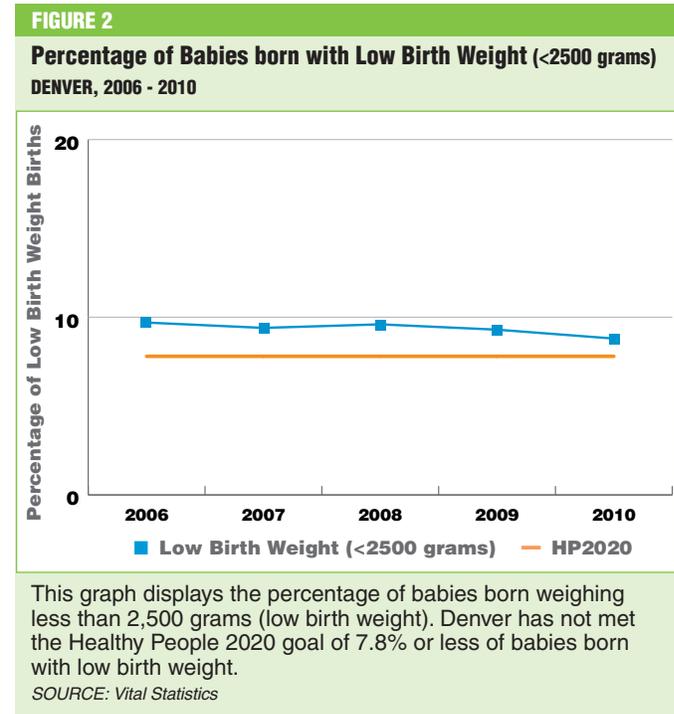
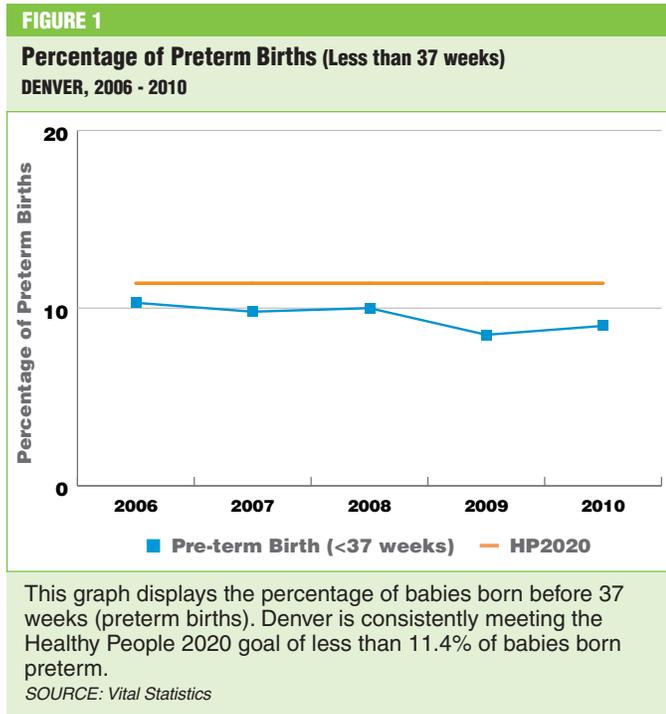
Overview

Biology, behavior, and society are connected to health throughout a person's life. Differences in economic status, behaviors, and social factors can impact health through generations. The health and well being of a mother, from childhood through adult life, directly affects the health and well being of her children.

Maternal, child, and adolescent health programs seek to improve the health of a mother and child throughout their lives. Preconception, pregnancy, early childhood, and adolescence are key development periods. Addressing health issues during these key periods can greatly improve the health of the individual, as well as the community. For example, one of the best things a mother can do for the health of her baby is to breast feed. To improve the health of Denver babies, maternal and child health programs attempt to promote breast feeding, decrease preterm births, and decrease the percentage of low birth weight babies (FIGURES 1 AND 2). Since 2006, Denver has met or exceeded the Healthy People 2020 goals for the percentage of preterm births. Infant deaths from risk factors or other causes are closely monitored and are more common in some areas of Denver (FIGURES 3 AND 4).

Unintended pregnancies and teen births can be risky for mothers and their babies and are common in Denver. Reducing unintended pregnancy and teen pregnancy (ages 15 to 19 years) while supporting teen mothers increases the health of mothers and babies (FIGURES 5 AND 6). Healthy People 2020 sets a goal for 56% of pregnancies to be intended and Denver has consistently exceeded that goal for the past five years (FIGURE 7). In Denver, Hispanic women have the highest rates of teen births and unintended pregnancies (FIGURE 6 AND 8). As a result, there are a number of programs that target this group. The Nurse-Family Partnership (NFP) is a public health program that supports families and reaches a number of Denver's teen moms. The NFP targets younger mothers (average age 17) during their first pregnancy and throughout the first two years of the child's life. NFP provides support and community resources through home visiting. Every NFP dollar invested in home visiting for new moms saves \$5.40.³⁵

continued



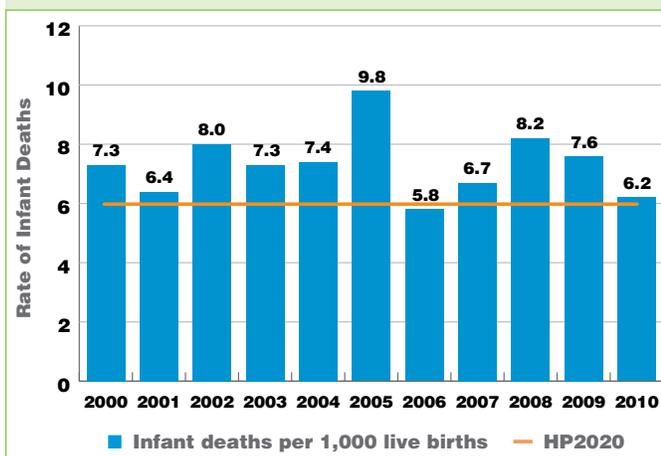
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The health of a mother and father can impact the health of a child. If a mother or father is obese, the child is more likely to be overweight. Mothers who gain too much weight during their pregnancy are at an increased health risk later in life (FIGURE 9). If a child is overweight, she or he is more likely to become an overweight adult. If a child's parent smokes, she or he is more likely to smoke.^{36, 37}

The mental well being of the mother and the father can have a direct impact on the growth and development of the baby. Efforts should include monitoring the mother for pre- and post-partum depression (see *Mental Health*). These can affect the health of the child through adolescence and into adulthood. The health issues of adolescence are covered throughout this report, such as *Injury and Violence, Weight, Substance Abuse, and Tobacco*.

FIGURE 3

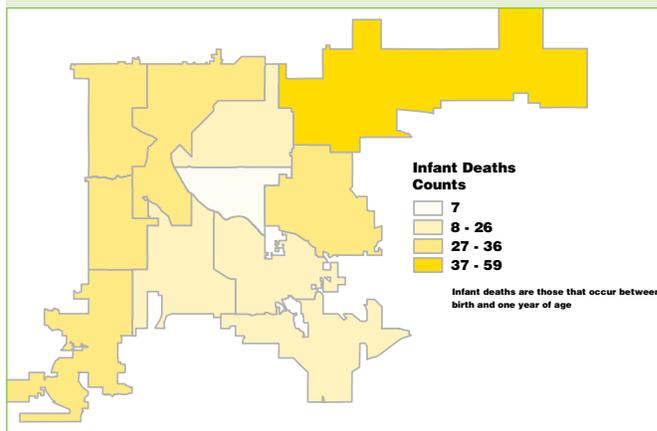
Rate of Infant Deaths (under 1 year) DENVER, 2000 - 2010



Fewer than 100 deaths occur each year in children under one year of age (infants). Since 2000, the rate in Denver has ranged from 5.8 to 9.8 deaths per 1,000 live births. Denver typically does not meet the Healthy People 2020 goal of 6.0 per 1,000 live births
SOURCE: Vital Statistics

FIGURE 4

Infant Deaths DENVER, 2006 - 2010

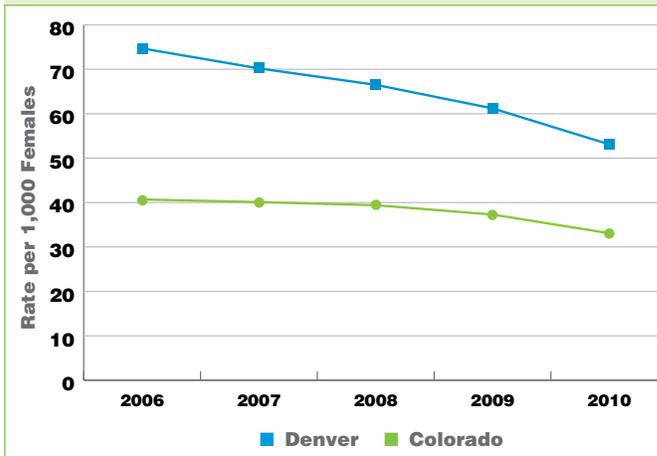


The number of infant deaths rates varies throughout Denver. Highest numbers of infant deaths are seen in the darkest color on this map.

SOURCE: SOURCE: Vital Statistics

FIGURE 5

Birth Rate for Teens (Ages 15-19) DENVER AND COLORADO, 2006 - 2010



Denver has a higher rate of teen births than Colorado. The rate of teen births has been steadily decreasing in Denver and Colorado.

SOURCE: Vital Statistics



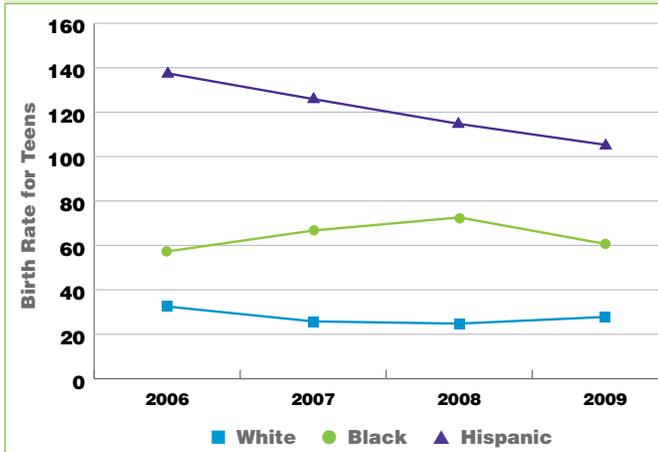
Cost Facts

Each year, almost half of babies born in the U.S. are a result of an unintended pregnancy (FIGURE 7). Having access to effective and affordable birth control may reduce unintended pregnancies. Every \$1 spent to avoid unintended pregnancies saves society \$3.74 in Medicaid costs.³⁹

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FIGURE 6

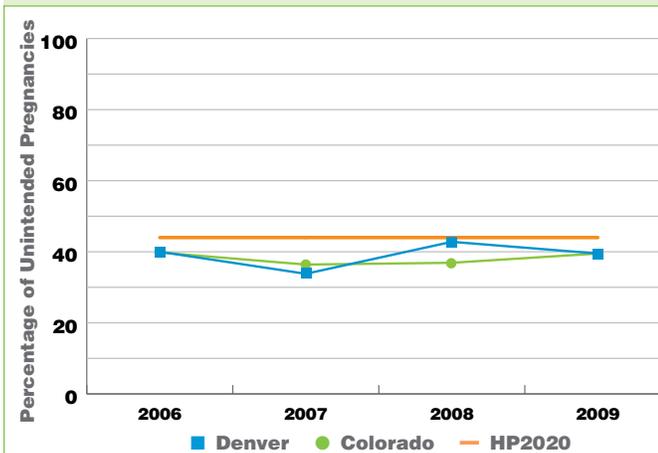
**Birth Rate for Teens (Ages 15-19) by Race and Ethnicity
DENVER, 2006 - 2009**



Teen birth rates vary by race and ethnicity in Denver. The rate among Hispanic teens is significantly higher than any other race and ethnicity, but has been steadily declining from 2006 to 2009.
SOURCE: Vital Statistics

FIGURE 7

**Percentage of Unintended Pregnancies
DENVER AND COLORADO, 2006 - 2009**



From 2006 to 2009, the percentage of unintended pregnancies in Denver was stable and similar to the percentage for Colorado, but above the Healthy People 2020 goal.

SOURCE: Pregnancy Risk Assessment Monitoring System

Local Story

Cavity Free at Three

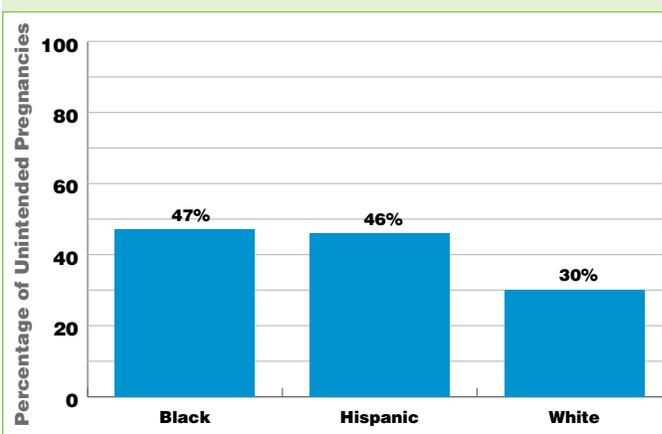
Tooth decay is one of the most common diseases of childhood and poverty is a risk factor. Among Colorado kindergartners in schools in low income areas, 64% had a history of cavities and 32% had untreated tooth decay. More than half of children ages five to nine have at least one cavity or filling. Less than 5% of Colorado children under three years of age have ever seen a dentist. Cavity Free at Three is a Colorado-based oral health promotion program to prevent cavities for children under three years of age. The program has trained more than 1,150 Colorado child health care providers on how to teach oral health care to parents. At routine child visits, parents receive information about oral health and a toothbrush and toothpaste for the parent and child. To help prevent decay, fluoride treatment is applied to the child's teeth during the visit.

As one mom said, "I had no idea improving my child's teeth could be so easy."⁴⁰



FIGURE 8

**Percentage of Unintended Pregnancies by Race and Ethnicity
DENVER, 2006 - 2009**



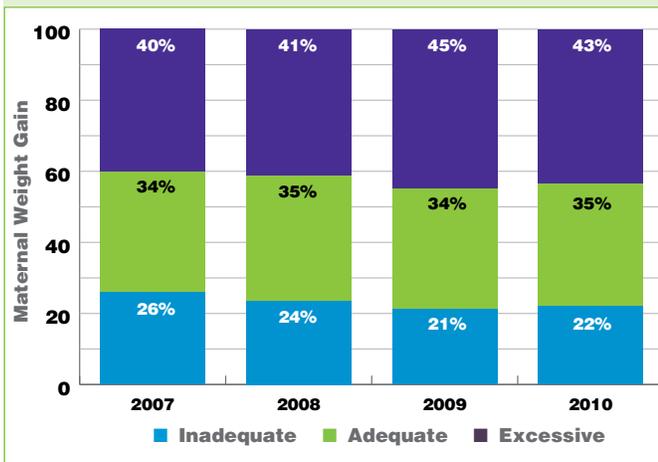
Unintended pregnancy varies by race and ethnicity of the mother. In Denver from 2006 to 2009, the highest percentage of unintended pregnancies was in Black and Hispanic women.

SOURCE: Pregnancy Risk Assessment Monitoring System

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FIGURE 9

Maternal Weight Gain DENVER, 2007 - 2010



During a pregnancy, a physician advises mothers on how much weight gain is healthiest for the mom and baby. This graph shows the percentage of mothers who experience inadequate, adequate, or excessive weight gain during pregnancy in Denver from 2007 to 2010. Only one third of Denver mothers are gaining the recommended amount of weight.

SOURCE: Vital Statistics

Comparison Story

Help Me Grow

Connecting families to parenting resources as early as possible improves a child's health and success in school. Connecticut Help Me Grow is one program that identifies at-risk children and links families to services such as newborn home visits. This is done through a call center supported by Connecticut's departments of Public Health, Developmental Services, Education, and Social Services, and the Connecticut United Way/2-1-1.⁴

In Colorado, a comparable program is being developed. Colorado Help Me Grow (CHMG) will be a full-service parenting advice and resource hotline. It will serve families with children up to age 21. It will be similar to Denver's '311' hotline, which provides a one-call link to all city services. CHMG will connect parents to community-based programs and follow-up to ensure that parents are getting the services they need. Colorado Help Me Grow will greatly benefit the health of Denver families.



Did You Know

- The Denver Preschool Program (DPP), made possible by Denver voters and taxes, is helping families send their children to quality preschool. Nearly 75% of DPP children scored at or above average in reading and math in the spring of their preschool year. Teachers report significantly more positive behaviors and fewer behavioral problems among DPP children.⁴¹
- Last year, 1,757 Denver County children were referred to Denver Options for developmental screening. Half of those children were found to be eligible to receive early intervention services. The estimated government savings for a high-risk child that receives early intervention is \$12,000.⁴²
- A common indicator of poverty in a community is the percentage of school children who qualify for free or reduced price meals at school. In 2010, 73% of Denver Public School students were eligible for a free or reduced price lunch at school. Of these, 33% (279,275 children) were eligible for a free lunch.⁴⁴
- Drinking alcohol during pregnancy puts a baby at risk for permanent physical, mental, behavioral, and learning disabilities. The estimated lifetime cost of caring for a person with Fetal Alcohol Spectrum Disorder (FASD) is more than \$1.4 million.⁴⁵ It is estimated that at least 150 babies were born with FASD in Denver last year.¹⁰
- Colorado law does not mandate health education and there are no mandates for health education in Denver Public Schools. However, as of March 2011, 52% of Colorado schools individually required some type of health education.⁴⁶