

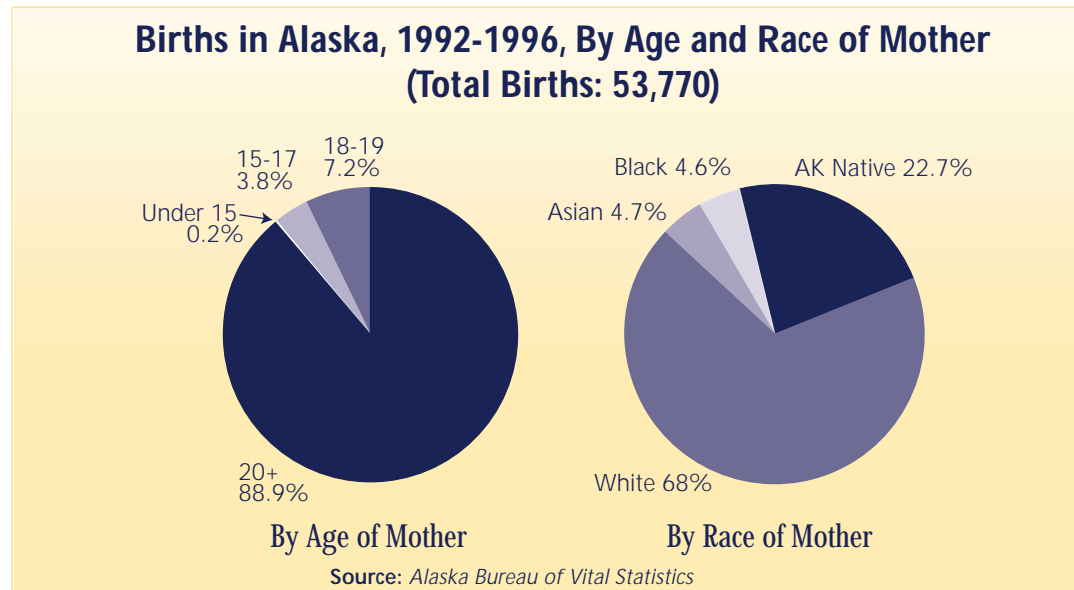
Definition

The Alaska Bureau of Vital Statistics uses the Kessner Index to classify prenatal care as adequate or less than adequate. Care is classified as “adequate” among pregnant women who see doctors or other health professionals at least once during their first trimester and at least nine times throughout their pregnancy. “Less than adequate care” is divided into intermediate and inadequate care. Women who see doctors at least once during their first or second trimesters and at least four additional times receive “intermediate” prenatal care. Pregnant women who don’t visit doctors at all during their first six months of pregnancy, or fewer than five times throughout their pregnancy, receive “inadequate” care.

Significance of Indicator

Scientists have known for a long time that how pregnant women care for themselves and their unborn children is critical to the future health and learning ability of those children.

Data provided by the Alaska Bureau of Vital Statistics, unless otherwise noted



Births in Alaska, 1992-1996

From 1992 through 1996, 53,770 babies were born in Alaska. Nearly 90 percent of these babies were born to mothers at least 20 years old. But that means more than 10 percent of babies were born to teenage mothers, and four percent were born to mothers under 18.

The biggest share (68 percent) of women who had babies in Alaska during that period were White, 22.7 percent were Alaska Native, 4.7 percent were Black, and 4.6 percent were Asian or Pacific Islander.

Quality of Prenatal Care

About one in four women who had babies in Alaska from 1992 through 1996 received less than adequate prenatal care, under the Kessner Index. Younger mothers are the least likely to get adequate care when they’re pregnant. More than half the mothers under 15, and 43 percent of those 15 to 17, received less than adequate prenatal care in recent years. But only 25 percent of mothers 20 or older got less than adequate care.



Prenatal Care (continued)

Alaska Native mothers were the least likely to get adequate prenatal care in recent years, according to records of the Alaska Bureau of Vital Statistics. Those figures show that nearly 40 percent of Native women failed to see doctors or other medical professionals often enough during their pregnancies.

But we believe those figures may overstate the share of Native mothers who don't get adequate prenatal care. It's possible that prenatal care among Native women from rural places who have their babies at the Alaska Native Medical Center in Anchorage may be underestimated, according to experts familiar with the Alaska Native Health Service.

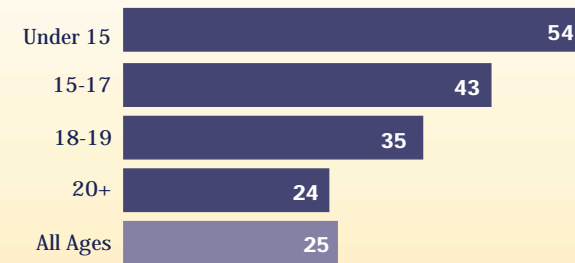
Also, in small rural villages without doctors, Native women typically see rural health aides for prenatal care. Those prenatal visits to health aides might not be reported in figures on visits to health professionals or on birth certificate information. So we recognize that these figures may underestimate prenatal care among Native mothers. But they are nevertheless the best figures available.

Close to one in three Asian mothers in Alaska received less than adequate prenatal care in recent years. Among White and Black mothers, about one in five failed to get enough prenatal care.

Costs and Prevention

- An estimated 25 percent of pregnant women in the U.S. fail to get prenatal care during the first trimester of their pregnancy. Babies who fail to get care during this crucial early stage are four times more likely to die before their first birthday.¹
- Pregnant women who see their doctors regularly are more likely to discover medical problems that might injure them or their fetuses. They are also more likely to be aware that eating poorly, drinking alcohol, and smoking can harm their babies. And some researchers have found that women who visit doctors regularly while they are pregnant are more likely to continue getting good preventive health care for themselves and their infants.²

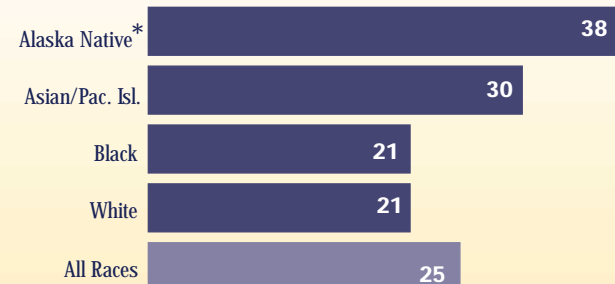
Percentage of Babies Receiving Less Than Adequate* Prenatal Care, By Age of Mother, 1992-1996



* Mothers receiving "less than adequate" prenatal care are defined as those who fail to see a doctor at least once during the first three months of pregnancy and at least nine times over the entire pregnancy.

Source: Alaska Bureau of Vital Statistics

Percentage of Babies Receiving Less Than Adequate* Prenatal Care, By Race of Mother, 1992-1996

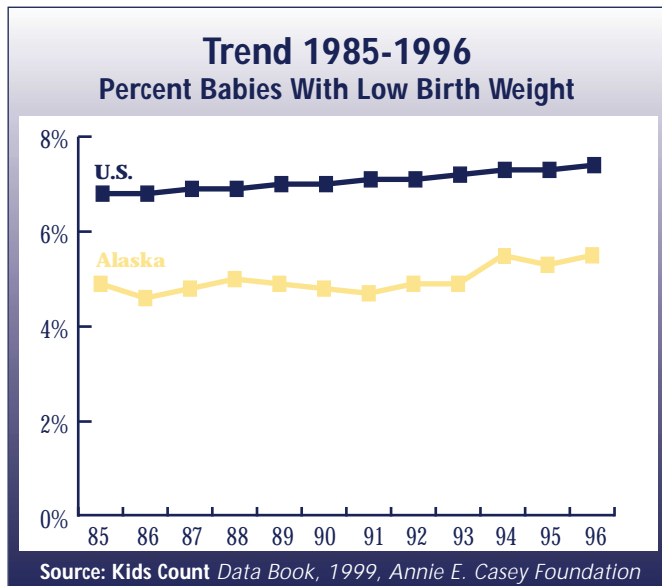


* See text for discussion of why prenatal care among Alaska Native women may be underestimated.

Source: Alaska Bureau of Vital Statistics



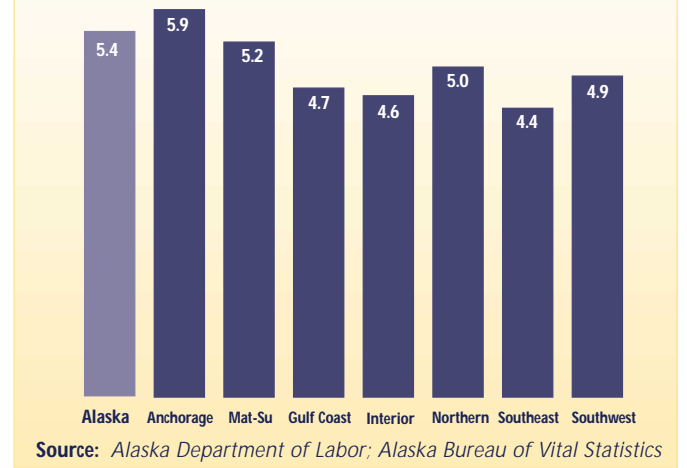
Babies with Low Birth Weight



What About Alaska?

Alaska consistently has one of the lowest rates in the nation of babies with low birth weights. In 1996, just 5.4 percent of Alaska babies weighed less than 5.5 pounds when they were born. Only two states (New Hampshire and Oregon) had lower rates that year. The national average in 1996 was considerably higher—7.4 percent.

Percent of Babies with Low Birth Weight, by Region (Babies Weighing Less than 5.5 Pounds, 5-year Average, 1992-1996)



Definition

Babies weighing less than 5.5 pounds (or 2,500 grams) at birth are classified as having low birth weight. Data are reported by place of mother's residence, not place of infant's birth.

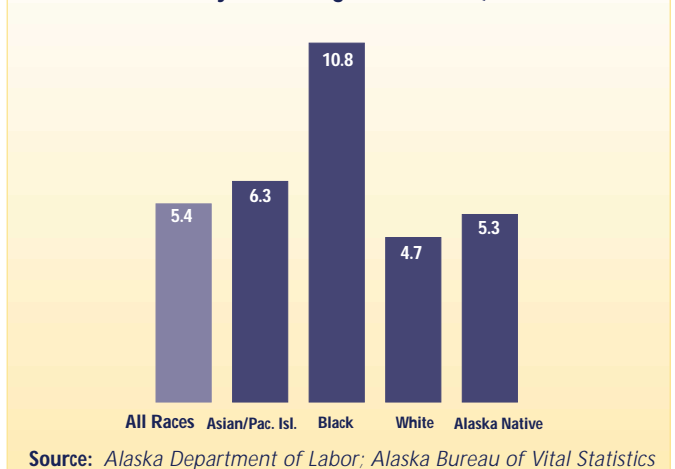
Significance of Indicator

Research has found that babies who weigh less than about 5.5 pounds at birth are much more likely to die before they are a year old.

From 1992 through 1996, the percentage of Alaska babies weighing less than 5.5 pounds at birth averaged 5.4—a rate that has been stable for more than 10 years. Among regions of Alaska during that period, the percentage of small babies varied from a low of 4.4 percent in Southeast Alaska to a high of 5.9 percent in Anchorage.

The percentage of babies with low birth weights was highest among Black babies (10.8 percent) and smallest among White babies (4.7 percent).

Percent of Babies with Low Birth Weight, by Race (Babies Weighing Less than 5.5 Pounds, 5-year Average, 1992-1996)



Data provided by Annie E. Casey Foundation and Alaska Bureau of Vital Statistics, unless otherwise noted



Babies with Low Birth Weight (continued)

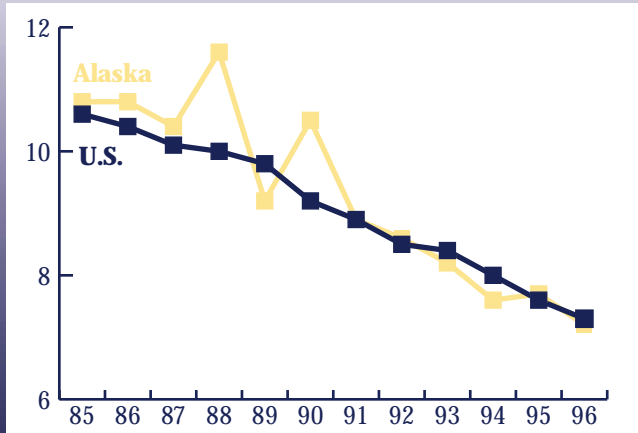
Costs and Prevention

- Medical costs during the first year of life are much higher among babies born under 5.5 pounds. For example, of the \$11.4 billion spent on infants in the U.S. in 1988, an estimated 35 percent of that spending was for babies with low birth weights—who made up less than 7 percent of all babies born that year. That amounted to almost \$15,000 in extra costs for babies with low birth weights.³
- Lifetime costs of medical care, special education, early intervention, and other support services are higher for children born with low birth weights.⁴
- Medical costs for extremely premature infants (those weighing less than 1,000 grams or experiencing respiratory distress syndrome) are the highest of all—almost three times higher even than for other babies with low birth weights.⁵
- Women who gain less than 22 pounds during their pregnancies are two to three times more likely to have babies who are born weighing less than is considered healthy. An estimated 15 to 33 percent of pregnant women nationwide gain an inadequate amount of weight.⁶
- If all pregnant women stopped smoking, the percentage of babies with low birth weights would drop dramatically. Smoking among pregnant women has been linked to 20 to 30 percent of low-birth-weight births (and to 10 percent of fetal and infant deaths). An estimated 20 to 25 percent of pregnant women smoke.⁷
- Women who drink while they're pregnant are also more likely to have small babies. Babies born to women who drink an average of more than one alcoholic drink daily throughout their pregnancies are not only smaller and shorter but also have smaller head circumferences than infants of mothers who don't drink when they're pregnant. Pregnant women who drink heavily can have babies with fetal alcohol syndrome, which includes a range of developmental and other problems.⁸



Infant Mortality

Trend 1985-1996: Infant Mortality Rate (Deaths Before Age 1, Per 1,000 Live Births)



Source: Kids Count Data Book, 1999, Annie E. Casey Foundation

What About Alaska?

Over the past 10 years, the infant mortality rate in Alaska has declined significantly. In 1986, 10.8 infants died per 1,000 births. By 1996 the rate was 7.3—just about at the national average.

Between 1992 and 1996, the infant mortality rate in Alaska averaged 8.0 per 1,000 live births. Rates among regions of Alaska differed sharply in recent years, with the highest rate at 12.4 per 1,000 births in the Northern region and the lowest 6.6 in the Southeast region. In other regions, the rates varied from 6.8 in the Interior to 9.5 in the Southwest.

- Improved medical technology has steadily cut the rate of infant mortality over the past 15 years.¹⁰
- Infants born into poor families are more likely to die than those born into families with incomes above the poverty line. One study at the end of the 1980s found that the infant mortality rate in poor families was 50 percent higher than in other families (13.5 deaths per 1,000 live births, as compared with 8.3 deaths). The link between poverty and infant mortality could explain why the national infant mortality rate in 1995 was 15.1 per 1,000 births among Black Americans, compared with 6.3 among White Americans.¹¹

Definition

The number of infant (less than one year old) deaths per 1,000 live births. Data are reported by the child's place of residence, not place of death.

Significance of Indicator

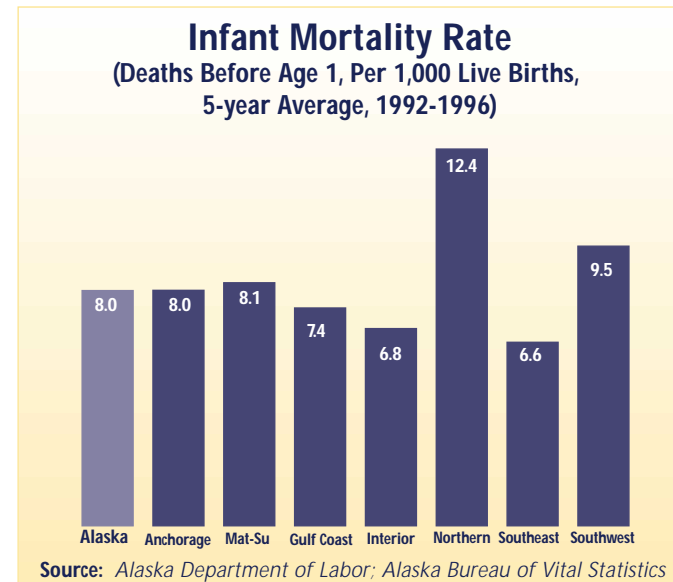
The medical community often cites the infant mortality rate as an indicator of the overall health of the population. Babies who live through their first year are much more likely to survive to adulthood.

Costs and Prevention

- Fewer infants would die if fewer were born at low weights. Experts say the relationship between infant mortality and low birth weight is so strong that the rate of babies with low birth weights is a reasonably accurate prediction of the infant mortality rate.⁹

Data provided by Annie E. Casey Foundation and Alaska Bureau of Vital Statistics, unless otherwise noted

Infant Mortality Rate (Deaths Before Age 1, Per 1,000 Live Births, 5-year Average, 1992-1996)



Source: Alaska Department of Labor; Alaska Bureau of Vital Statistics



Notes for Infancy Section

¹ Prenatal Care Hotlines, Maternal and Child health Bureau, U.S. Department of Health and Human Services. Online at: <http://www.hrsa.dhhs.gov/mchb/hotline1.htm>

² A.M. Butz, A. Funkhouser, L. Caleb, and B.J. Rosenstein, " Infant health care utilization predicted by pattern of prenatal care," in *Pediatrics* 92, 1:50-54, 1993.

³ E. M. Lewit, L.S. Baker, H. Corman, and P.H. Shiono, " The direct cost of low birth weight," in *The Future of Children: Low Birth Weight*, 5, (1), 35-56. The David and Lucile Packard Foundation, 1995.

⁴ See note 3.

⁵ See note 3.

⁶ V. R. Chomitz, L. W. Y. Cheung, and E. Lieberman, " The role of lifestyle in preventing low birth weight," *The Future of Children: Low Birth Weight* , 5, (1), 121-138. The David and Lucile Packard Foundation, 1995.

⁷ See note 6.

⁸ See note 6.

⁹ The David and Lucile Packard Foundation, *The Future of Children: Low Birth Weight*. 5, (1), 20, 1995.

¹⁰ Annie E. Casey Foundation, *Kids Count Data Book* 1998.

¹¹ Annie E. Casey Foundation, *Kids Count Data Book* 1998.



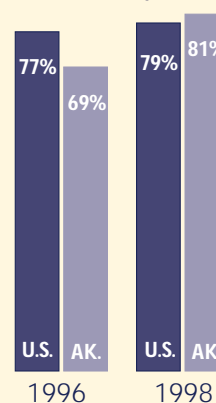
Immunizations by Age Two: A Success Story

Federal and state health authorities want all children under age two to have a series of shots to protect them from polio, diphtheria, tetanus, rubella, measles, and other diseases that in the past commonly crippled or killed scores of American children. In 1996, nearly one-third of Alaska's toddlers had not received all the recommended immunizations—making Alaska 48 among the 50 states in a survey by the federal Centers for Disease Control.

Alarmed by the large number of young children exposed to potentially deadly diseases, the Alaska Department of Health and Social Services launched the Year 2000 Childhood Immunization Initiative. That initiative built cooperation with local organizations around the state, publicized the problem, and devoted more public health money to getting Alaska's children immunized.

By 1998, as the bar graph shows, Alaska had increased the share of two-year-olds with all the recommended immunizations from 69 percent to 81 percent. In just two years, Alaska had an immunization rate better than the national average and had moved from 48 to 22 among the 50 states. Still, Alaska health authorities are continuing their initiative, hoping to boost the immunization rate even higher.

Immunization Levels* Among Two-Year-Olds, U.S. and Alaska, 1996 and 1998



*Percentage with 4 DTP, 3 polio, 1 MMR and 3 Hib immunizations
Source: CDC National Immunization Survey, courtesy of Laurel Wood, Alaska Department of Health and Social Services, Section of Epidemiology