

Child Health



Child Mortality

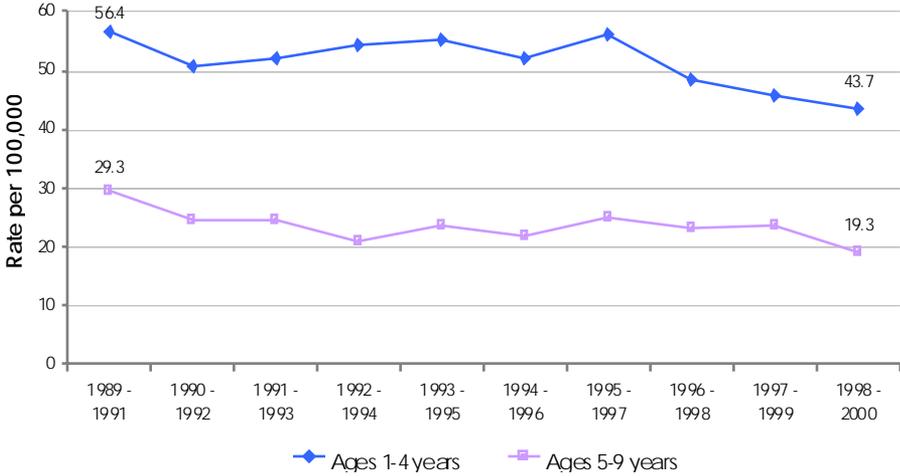
With over one-half of all child mortality attributable to unintentional injury, the majority of deaths to Alaskan children could be prevented. Unfortunately, there has not been a statistically significant decline in the child mortality rate among children ages 1 - 4 or 5 - 9 years over the last decade.

- ◆ In 1998 - 2000, Alaska's child mortality rate was 43.7 per 100,000 population for children ages 1 - 4 years and 19.3 per 100,000 for children ages 5 - 9 years. In comparison, child death rates for the nation as a whole were 32.9 and 16.4 per 100,000 respectively for children ages 1 - 4 and 5 - 9 years.
- ◆ Alaska's mortality rate for children ages 1 - 4 years is 33% higher than the national rate and almost 2.5 times the Healthy People 2010 target. Alaska's mortality rate for children ages 5 - 9 years is 18% higher than the national rate and almost 1.6 times the Healthy People 2010 target.
- ◆ In 1998-2000, 62% of all deaths to Alaskan children ages 1 - 9 years were among 1 - 4 year-olds. A similar distribution was observed nationally in 2000 with 60% of total child deaths occurring among 1 - 4 year-olds.
- ◆ The leading manner of death for Alaskan children is unintentional injury, which accounted for 54% of deaths to children ages 1 - 4 years and 62% of deaths to children ages 5 - 9 years over the last decade.
- ◆ After intentional injury, the second leading manner of death for Alaskan children over the last decade was homicide. The cause-specific mortality rate for homicide among children 1 - 4 years old was 3.5 times that of Alaskan 5 - 9 year-olds.

The Healthy People 2010 target for child deaths ages 1 - 4 years is 18.6 per 100,000 population. The Healthy People 2010 target for child deaths ages 5 - 9 years is 12.3 per 100,000.

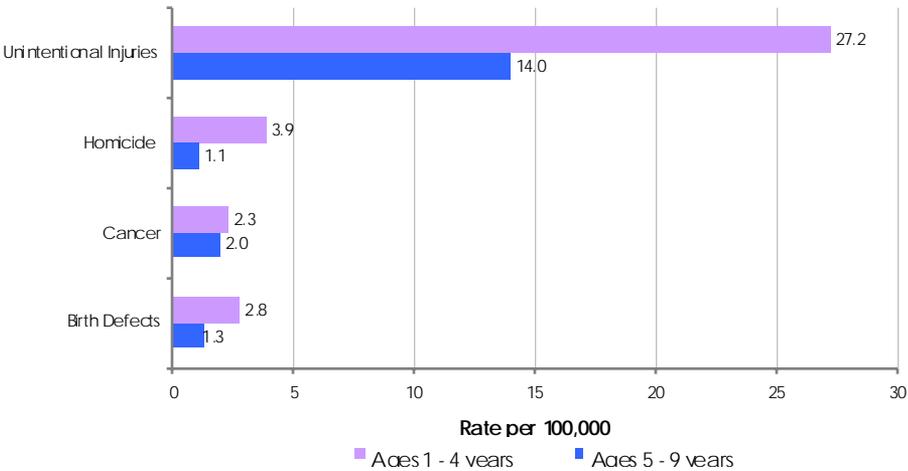
Data Source: Alaska Bureau of Vital Statistics

Child Mortality Trends by Age Group, Three-Year Moving Average, Alaska, 1991-2000



Data Source: Alaska Bureau of Vital Statistics. Prepared by MCH Epidemiology Unit.

Most Common Causes of Child Mortality, by Age Group Alaska, 1991-2000



Data Source: Alaska Bureau of Vital Statistics. Prepared by MCH Epidemiology Unit.

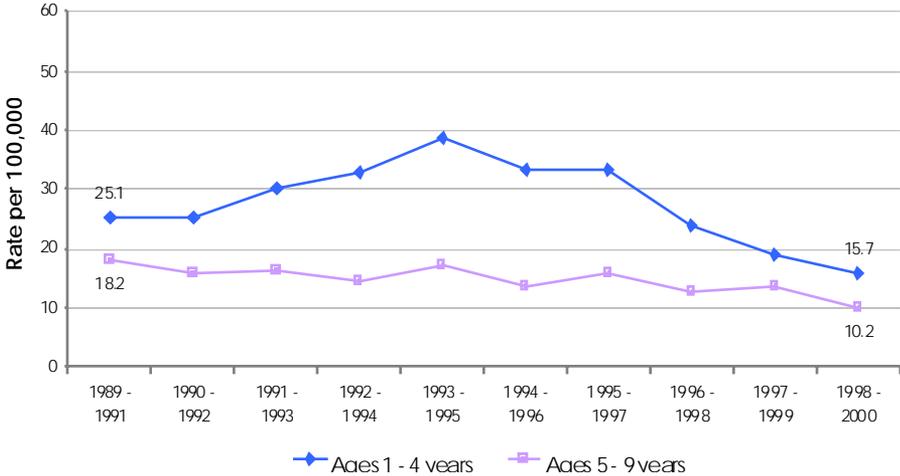
Unintentional Injury Mortality

In Alaska and in the United States (U.S.), the leading manner of death among children of all ages is injury, which accounted for 39% of deaths nationally to children ages 1 - 9 years in 2000. The most common causes of unintentional injury deaths among children are motor vehicle crashes, drowning, and fires. Over the last decade, child mortality rates for unintentional injury declined in Alaska and in the nation; but in Alaska, the declining trends are not statistically significant.

- ◆ In 1998 - 2000, Alaska's unintentional injury mortality rate was 15.7 and 10.2 per 100,000 for children ages 1 - 4 and 5 - 9 years, respectively. In comparison, unintentional injury mortality rates for U.S. children ages 1 - 4 and 5 - 9 years were 12.1 and 7.0 per 100,000 in 2000.
- ◆ Compared to national child mortality rates, Alaska's unintentional injury mortality rates are 30% higher among 1 - 4 year-olds and 46% higher among 5 - 9 year-olds.
- ◆ Over the last decade, the most common cause of unintentional injury mortality among Alaskan children was motor vehicle crashes. The cause-specific mortality rate for motor vehicle crashes among 1 - 4 year-olds (9.0 per 100,000) was nearly twice that of 5 - 9 year-olds (5.0 per 100,000).
- ◆ The second most common cause of unintentional injury mortality for Alaskan children over the last decade was exposure to smoke, fire and flames. Cause-specific mortality was nearly 4 times higher among 1 - 4 year-olds than 5 - 9 year-olds.
- ◆ Nearly one-third of all deaths among 1 - 4 year-olds in Alaska are caused by the combined effects of motor vehicle crashes (60%) and exposure to smoke, fire and flames (25%).

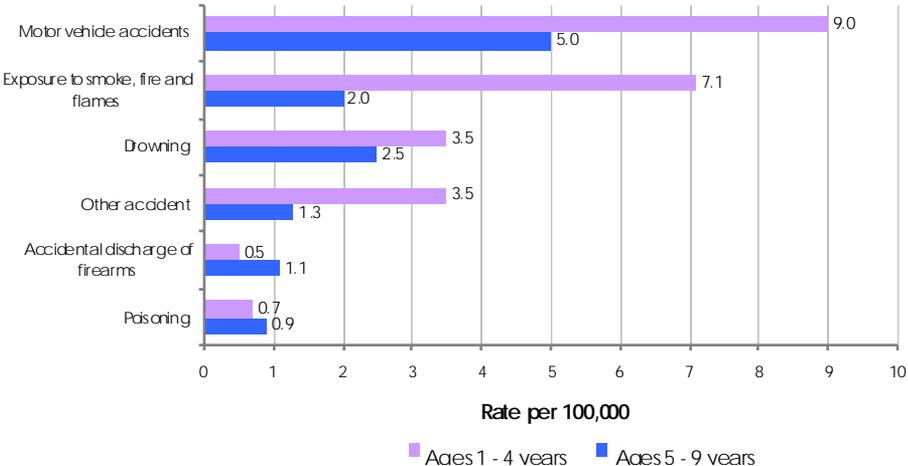
Data Source: Alaska Bureau of Vital Statistics

Unintentional Injury Mortality Trends by Age Group Alaskan Children, 1991-2000



Data Source: Alaska Bureau of Vital Statistics. Prepared by MCH Epidemiology Unit.

Most Common Causes of Unintentional Injury Mortality by Age Group, Alaskan Children, 1991-2000



Data Source: Alaska Bureau of Vital Statistics. Prepared by MCH Epidemiology Unit.

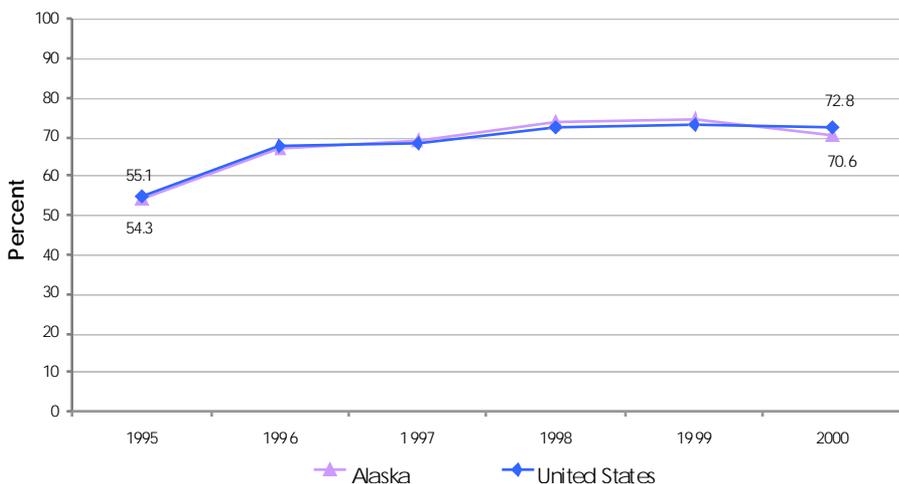
Immunization

Routine immunization against infectious diseases of childhood is, along with basic sanitation, a hallmark of public health and one of the most effective means of preventing widespread outbreaks of disease. Immunization coverage is an important indicator of health care accessibility and quality. The Healthy People 2010 goal for the nation is 90% immunization coverage among children ages 19 - 35 months old, for five childhood vaccines: diphtheria, tetanus, pertussis (DTP); polio (OPV); measles, mumps, rubella (MMR); haemophilus influenza (Hib); and hepatitis B. The completed vaccine series is referred to as the 4:3:1:3:3 series, based on the number of age-appropriate doses recommended for each vaccine.

- ◆ From 1995 - 2000, the percentage of Alaskan children ages 19-35 months that have completed the 4:3:1:3:3 series has increased 30%.
- ◆ Results from the 2000 National Immunization Survey results showed that 70.6% of Alaskan two year olds were appropriately immunized, ranking Alaska at 42nd in the nation.

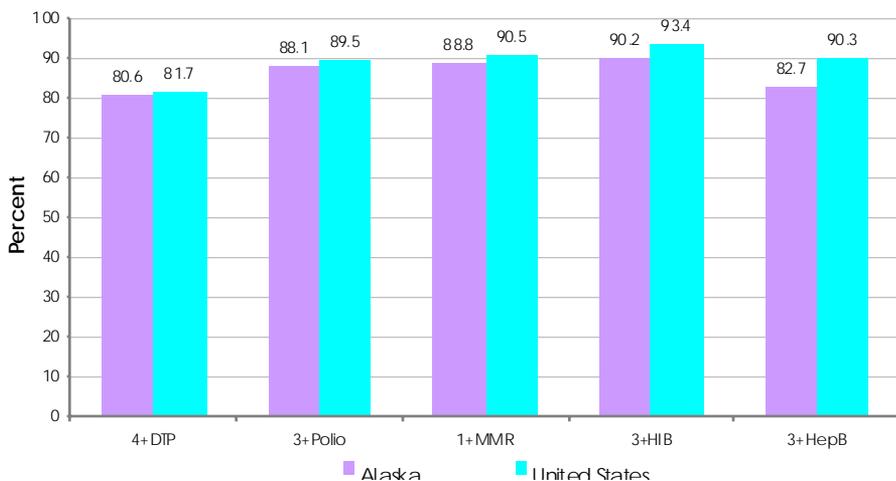
Data Source: National Immunization Survey, 2000.

Completed Combination Immunization Series for Children 19-35 Months, Alaska and United States, 1995-2000



Data Sources: National Immunization Survey. Prepared by MCH Epidemiology Unit.

Child Immunization by Vaccine Series Alaska and United States, 2000



Data Source: National Immunization Survey. Prepared by MCH Epidemiology Unit.

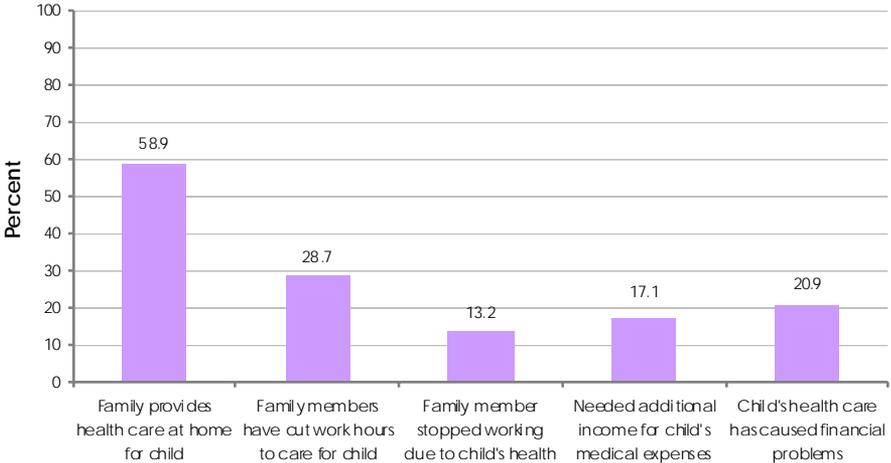
Special Health Care Needs

According to a recent national survey, 10.5% of children in Alaska have special health care needs (CSHCN). Of those children, 63% are boys and 37% are girls. An estimated 17.4% of households in Alaska have children with special needs and 40.2% of those households are below the 200% federal poverty level.

- ◆ Most (93.5%) CSHCN have a usual health care source.
- ◆ Approximately 13.6% of CSHCN were not insured in the past 12 months and 8.1% of CSHCN are considered uninsured by the National Center for Health Statistics (NCHS) definition. Of those that are insured, 46.3% indicated that their health benefits don't always meet their child's needs.
- ◆ Twelve percent of CSHCN had health care delayed or forgone in the past 12 months. Of those:
 - 70.4% indicated that they did not have money to pay their provider.
 - 34.5% indicated that the type of care needed was not provided in their area.
 - 40% indicated that the care needed was not covered by their health plan.
- ◆ About 18% of CSHCN indicated that getting a referral to a specialist was a problem in the past 12 months.

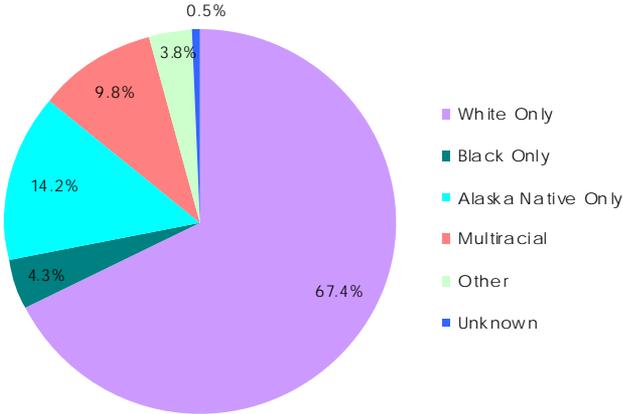
Data Source: National State and Local Area Integrated Telephone Survey (SLAITS), 2000, provisional data unadjusted for 2000 census estimates.

Children with Special Health Care Needs, Financial Impact on Family, Alaska, 1998-2000



Data Source: National State and Local Area Integrated Telephone Survey (SLATS), 2000, provisional data unadjusted for 2000 census estimates. Prepared by MCH Epidemiology Unit.

Children with Special Health Care Needs by Race Alaska, 1998-2000



Data Source: National State and Local Area Integrated Telephone Survey (SLATS), 2000, provisional data unadjusted for 2000 census estimates. Prepared by MCH Epidemiology Unit.

EPSDT and WIC Participation

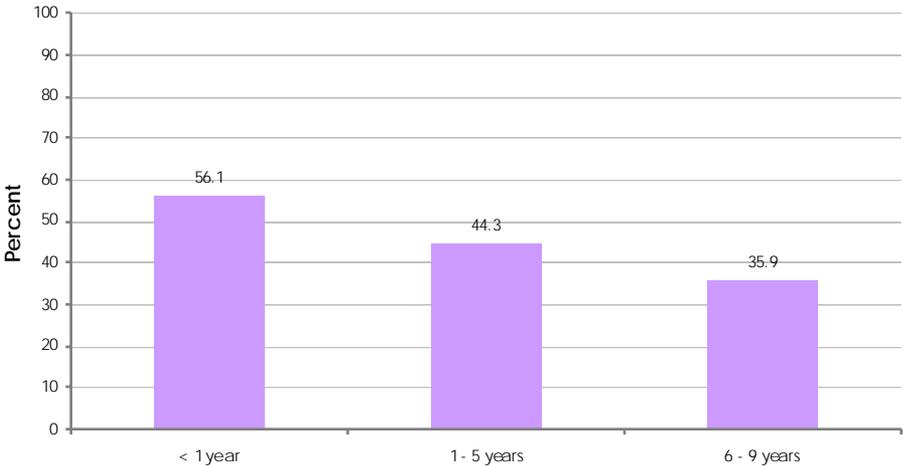
Many low-income families in the State of Alaska receive well-child care and nutritional support through the Early and Periodic Screening, Diagnosis and Treatment Program (EPSDT) and the Supplemental Nutrition Program for Women, Infants and Children (WIC). EPSDT provides well-child medical exams and assessments to ensure children receive the preventive medical and specialty care they require. WIC provides nutrition counseling, monthly dietary supplementation, food vouchers, growth assessments and referrals, to new and pregnant mothers of children 0 - 5 years of age.

- ◆ Half the population of Alaska-resident women (51%) who had a baby during 1996 - 1999 indicated that they used WIC services for their newborn. According to the Alaska Pregnancy Risk Assessment Monitoring System, Alaska Native (70%) and black women (69%) were most likely to use these services.
- ◆ Approximately 56% of infants under one year of age, 44.3% of children ages 1 - 5 years, and 35.9% of children ages 6 - 9 years were eligible* for EPSDT well-child care in 2000.
- ◆ According to the annual EPSDT Report to the Federal Center for Medicaid and State Operations, 81.7% of infants under one year of age, 48.3% of children ages 1 - 5 years, and 18.2% of children ages 6 - 9 years who were eligible* for EPSDT services during 2000 received at least one initial or periodic well-child screening paid through Medicaid or Denali KidCare (Alaska's State Child Health Insurance [S-CHIP] program).
- ◆ Approximately 24% of children ages 1 - 5 years, and 47% of children ages 6 - 9 years who were eligible* for EPSDT care received dental services, including cleanings, fluoride, dental exams and treatment.

*Note: EPSDT and WIC "Eligible" means "Enrolled" at some point in time during the Federal fiscal reporting period for 2000. EPSDT and WIC do not monitor population-based eligibility.

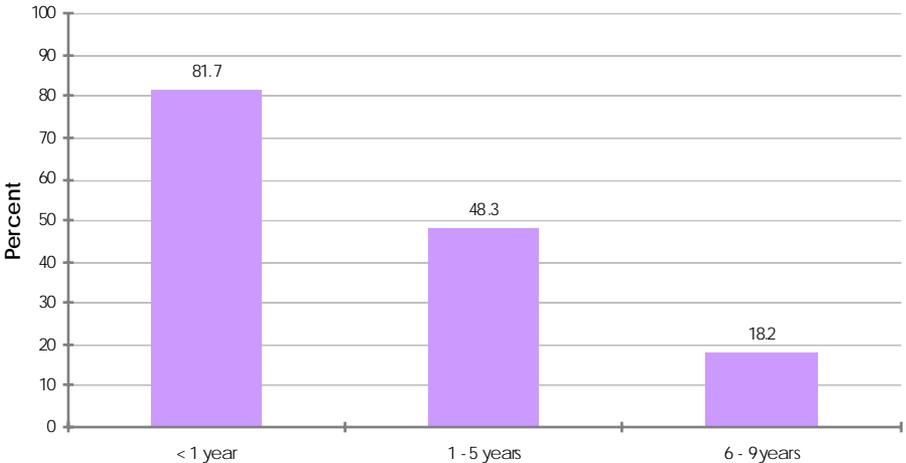
Data Sources: Alaska Pregnancy Risk Assessment Monitoring System; Department of Health and Social Services Annual EPSDT Report to the Federal Center for Medicaid and State Operations; Alaska WIC Management Information System.

EPSDT Enrollment by Age Alaska, 2000



Data Source: Early and Periodic Screening, Diagnosis and Treatment Program, Alaska Department of Labor July 1 2000 population estimates. Prepared by MCH Epidemiology Unit.

EPDST-Eligible Children Receiving at least One Well-Child Medical Screening, Alaska, 2000



Data Source: Early and Periodic Screening, Diagnosis and Treatment Program, Alaska Department of Labor July 1 2000 population estimates. Prepared by MCH Epidemiology Unit.

Fetal Alcohol Syndrome (FAS)

Fetal Alcohol Syndrome (FAS) is an irreversible congenital condition characterized by facial deformities, developmental delays, central nervous system impairments and growth deficiencies. FAS among Alaskan children is of considerable concern. Among states that have conducted population-based FAS surveillance, Alaskan children have the highest reported prevalence of FAS.¹ The Alaska FAS Surveillance Project uses a standardized surveillance case definition to confirm the presence of FAS based on specific deficiencies in each of these categories. Because certain tests for developmental delays are not reliable until age three years or later, most FAS cases are not diagnosed at birth and many are not diagnosed until after the child enters school.

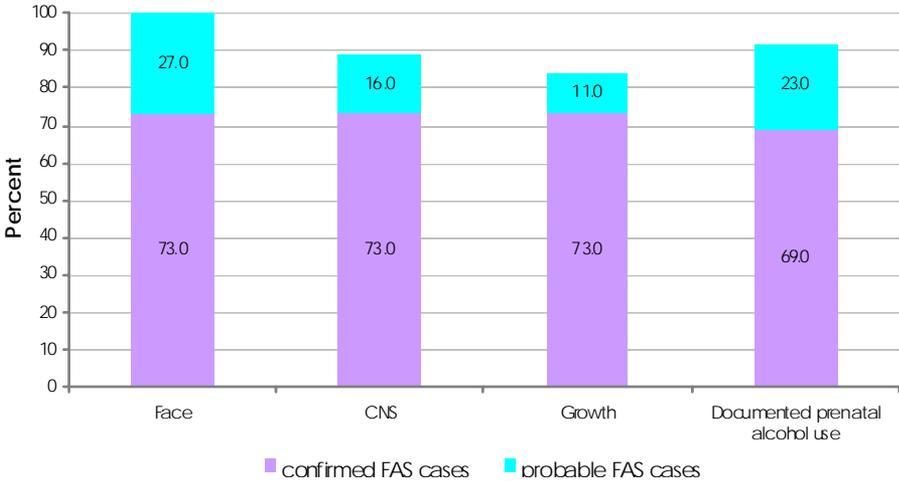
Of children born during 1995 - 1999 who met the surveillance case definition¹ for FAS:

- All had facial deformities characteristic of FAS as defined by the FAS surveillance definition.
- 89% had structural and or functional central nervous system (CNS) impairments.
- 84% had growth deficiencies.
- 92% had documented maternal alcohol use during pregnancy.

Data Source: Alaska Fetal Alcohol Syndrome Surveillance Project.

¹ CDC. *Fetal alcohol syndrome - Alaska, Arizona, Colorado, and New York, 1995-1997*. MMWR 2002; 51(20): 433-435.

Percent of FAS Children Meeting Various Surveillance Criteria Alaska, Birth Years 1995-1999



Data Source: Fetal Alcohol Syndrome Surveillance Project, MCH Epidemiology Unit.

Child Health Issues

Asthma is one of the leading causes of childhood morbidity in the developed world and the most common chronic childhood disease in the United States. A recent study evaluated asthma prevalence among Alaskan children enrolled in Medicaid during 1998-1999. Based on this study, 6.9% of Medicaid enrollees under 20 years of age had one or more claims for asthma-related care or medication. Several similar studies of Medicaid populations suggest that asthma prevalence in other states is 1.5 to 2 times higher than in Alaska.¹

Iron deficiency anemia in early childhood is associated with potentially permanent cognitive and developmental deficits. The estimated prevalence of anemia among Alaska Native children in a study conducted in Hooper Bay, Alaska was more than twice the average in the United States. Based on evidence suggesting that some childhood anemia may be related to infection with *Helicobacter pylori*, an investigation is underway in 2003 to determine if *H. pylori* eradication therapy will lead to resolution of iron deficiency and anemia.²

Approximately 60% of Alaskans are either overweight or obese, and the prevalence is on the rise both nationally and in Alaska. Alaska currently ranks fifth in the Nation for **obesity**. Overweight and obesity are also increasing nationally among children. While some population-based self-reported survey data exists for Alaskans ages 18 and older, very little is known about the prevalence of obesity among Alaskan children.³

Approximately 4% of Alaskan adults are estimated to have diagnosed **diabetes** and it is the seventh leading cause of death. Very little is known about the prevalence of diabetes for the population of Alaskans ages less than 18 years of age.

Despite the dramatic improvements in reductions in **dental caries** (dental decay) in the last half-century with community water fluoridation, fluoridated dentifrice (toothpaste), other topical fluorides, and increased access to dental care, dental caries remains the most common disease of childhood.⁴ A 1999 screening of dental clinic users in Alaska Native health corporation dental programs indicates that Alaska Native pre-school age children experience about four times the rate of caries of all children in the United States.⁵ Statewide baselines for the prevalence of childhood caries in Alaska are not currently available. Alaska's Oral Health Program is seeking funding to conduct oral health screening to establish statewide and regional baselines for caries prevalence and rates of untreated caries.

Data Sources: Section of Maternal, Child and Family Health, Alaska Diabetes Control Program, Section of Epidemiology.

¹ Gessner, B. Asthma Prevalence Among Alaska Residents Less Than 20 years of Age Enrolled in Medicaid. Family Health Dataline. State of Alaska, Department of Health and Social Services, Section of Maternal, Child, and Family Health, 2001; 7:1.

² Centers for Disease Control and Prevention (CDC). Iron Deficiency Anemia in Alaska Native Children, Hooper Bay Alaska. MMWR 1999; 48 (32): 714-716.

³ Healthy Alaskans 2010 Volume I: Targets for Improved Health, April 2002.

⁴ U.S. Dept. of Health and Human Services. Oral Health in America: A Report of the Surgeon General, Rockville, MD. U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research. National Institutes of Health, 2000.

⁵ An Oral Health Survey of American Indian and Alaska Native Dental Patients: Findings, Regional Differences and National Comparisons. Indian Health Service, 1999.