

Alaska
Health Status Indicators
1996-2005

Compiled by the Alaska Division of Public Health

Published December 2006

Table of Contents

Alaska Health Status Indicators

Introduction	Page 2
 Infectious Disease Indicators	
TB.....	4
Chlamydia.....	5
Gonorrhea.....	6
HIV Incidence.....	7
Measles.....	8
Pertussis.....	9
Hepatitis A.....	10
Hepatitis B.....	11
Fully immunized two-year-olds.....	12
 Chronic Disease Indicators	
Stroke mortality.....	14
Hypertension prevalence.....	15
Coronary (ischemic) heart disease	16
Lung cancer.....	17
Diabetes.....	18
Adult smokers.....	19
High school smokers.....	20
Adults who are inactive.....	21
Adults overweight or obese.....	22
Adolescents overweight or at risk.....	23
Adults with high cholesterol.....	24
Education for people with diabetes.....	25
Women over 40 receiving mammograms.....	26
 Injury Indicators	
Unintentional injury deaths.....	28
Occupational fatalities.....	29
Attempted suicides, ages 10-19.....	30
Traumatic brain injury to youth.....	31
Pregnant women physically abused.....	32
Seat belt use.....	33
Firearms loaded and unlocked.....	34
 Maternal Child Health Indicators	
Post-neonatal deaths.....	36
Low birth weight and preterm births.....	37
Hearing screenings with 30 days of birth.....	38
 Health Care Access & Safety Indicators	
Pregnant women getting adequate care.....	40
Alaskans reporting no health care plan.....	41
Complaints against providers investigated.....	42
Table: Responsibility of DPH Sections for Indicators.....	43

Introduction

The mission of the Division of Public Health (DPH) is to protect and promote the health of all Alaskans. As such, information on the health status of Alaska's people is both a valuable tool and an important product of the Division's work.

This report was developed by DPH executive leaders and is intended for use by them, other government agencies, community organizations and all Alaskans to identify health priorities and help guide policy and funding decisions where appropriate.

These indicators represent a cross-section of health and safety issues monitored by DPH and are intended to provide only a snapshot of the health of Alaskans. This set of indicators is somewhat different from last year's edition and may change in future reports as the focus on health priorities evolves and important new data become available.

The Alaska data in this document are reported for the most recent 10 years available and compared to national data for the same period. For most indicators Alaska data are also compared to targets in Healthy Alaskans 2010, a framework constructed by statewide partners to guide health improvements in Alaska between 2000 and 2010. However, in some instances there is no corresponding Healthy Alaskans target or national data. Still, DPH considers the Alaska information reported in these indicators valuable and plans to continue to track it in years to come.

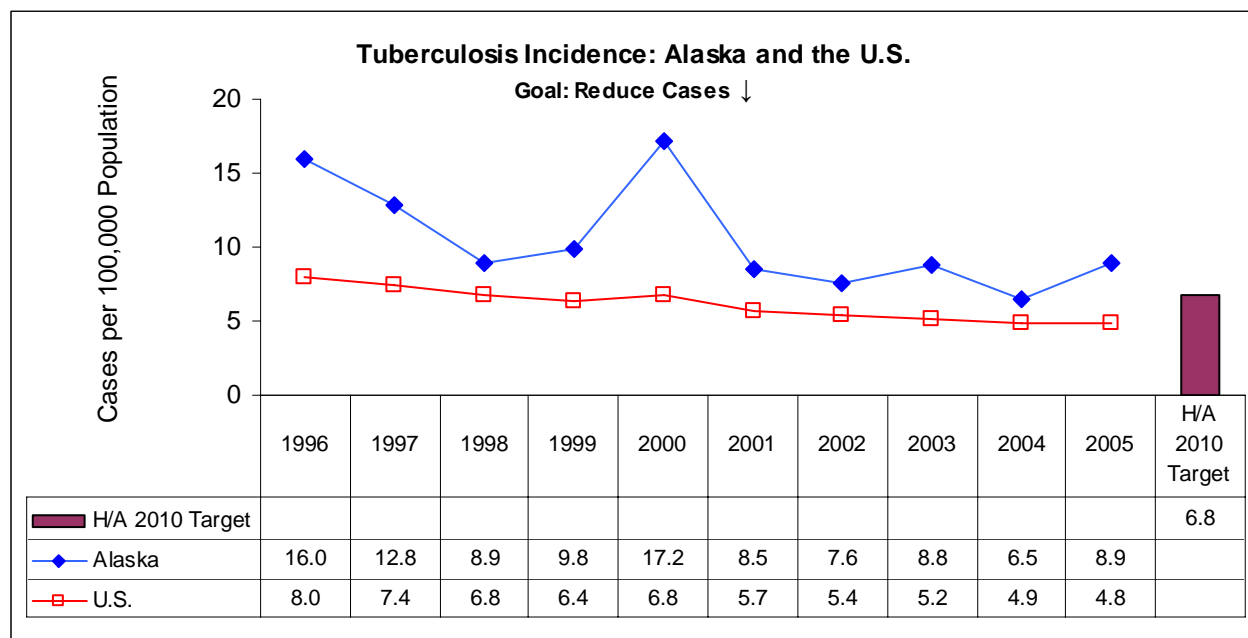
This report is produced as part of DPH's ongoing development of a performance management system.

For other publications and data on the health status of Alaskans and topics of public health importance, see the Center for Health Data and Statistics at: <http://www.hss.state.ak.us/dph/infocenter/>



Infectious Disease Indicators

Infectious Disease Indicator: Tuberculosis Incidence



Data Source: Alaska – Morbidity Database; U.S. – National Notifiable Diseases Surveillance System
U.S. 2005 data is provisional from CDC

Current Issues and Trends

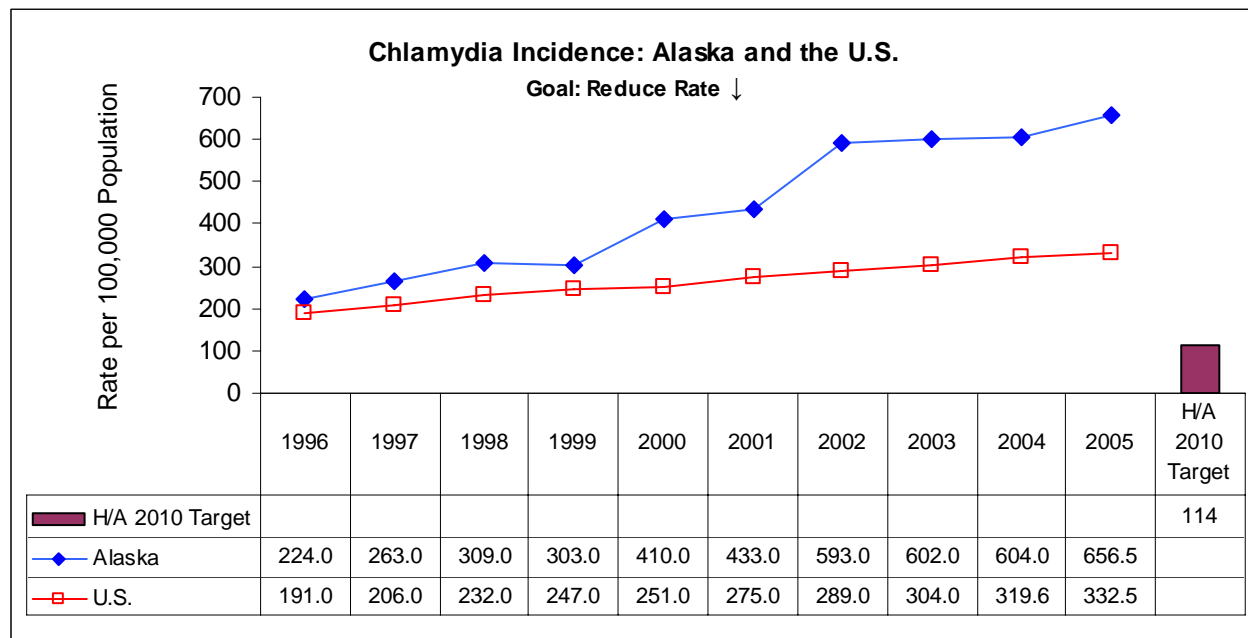
The incidence rate of tuberculosis (TB) in Alaska shows an overall decreasing trend over the past 10 years. In 2004, the rate fell below the Healthy Alaskans 2010 target for the first time; however, the rate rose to 8.9 in 2005. Of particular concern are two groups, Alaska Natives and Asian people, who have rates of TB that are up to five times greater than the state average. These groups represent only 16% and 4% of the total population, respectively, but suffer 75-85% of the burden of this disease. Because many people in Alaska are infected with the TB germ (have *latent TB* diagnosed by a positive TB skin test), it is very likely that sporadic outbreaks will occur, as in 2000 when Alaska had the highest rate of TB in the country

People who have been in contact with each case of TB are evaluated for infection and disease due to TB. The investigation of contacts is a critical part of TB control, and is not directly reflected in this graph. There are about 16 contacts identified for each person with TB. In addition, between 600 and 800 people are found to have latent TB infection each year in Alaska and are started on treatment to prevent TB disease.

Data Limitations

TB reporting is part of a passive disease surveillance system. It is possible that cases went unreported, but this is highly unlikely for the following reasons: 1) most providers, public and private, utilize the State Public Health Laboratory for TB cultures; 2) the State provides TB medications free of charge; and 3) a 2001 pilot study of pharmacies dispensing TB meds failed to find additional cases.

Infectious Disease Indicator: Chlamydia Incidence



Data Source: Alaska – Section of Epidemiology; U.S. – CDC

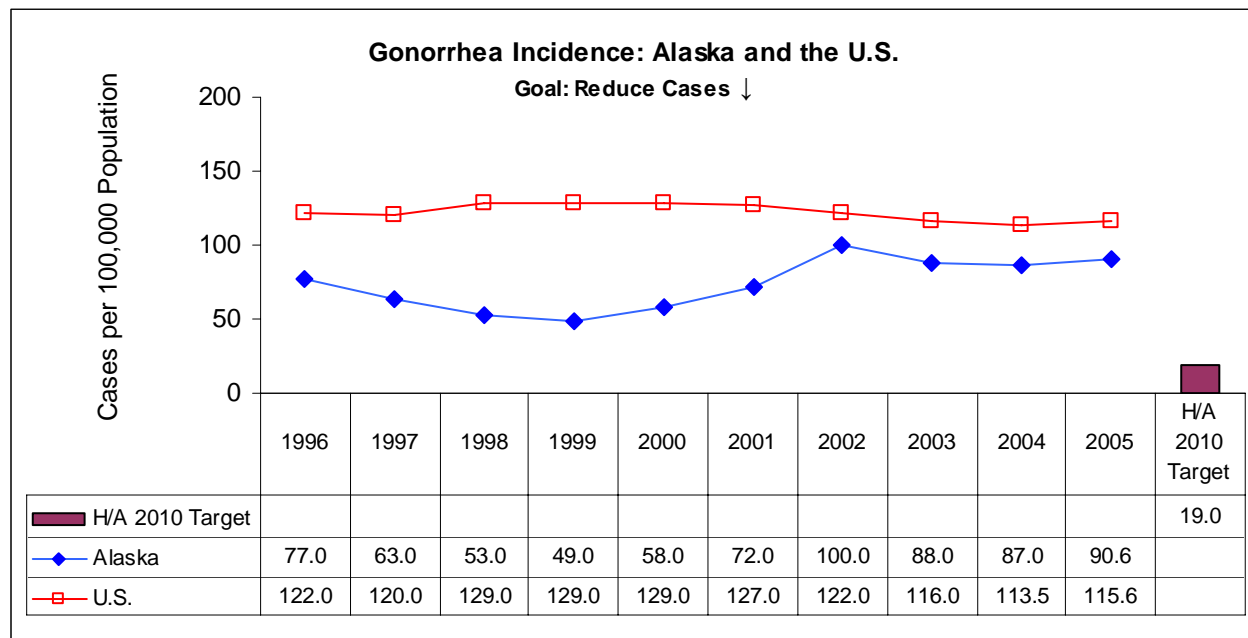
Current Issues and Trends

Rates of chlamydia infection have risen steadily in Alaska and the U.S. in recent years, and Alaska's rate has been nearly twice the U.S. rate since 2002. Several factors increased chlamydia detection in Alaska after 1999. Partner notification activities were strengthened in Anchorage beginning in 2000 and subsequently in some other areas, targeting testing to those individuals most likely to be infected. New testing technology introduced by the State Public Health Laboratory in 2002 is more sensitive than prior tests. Improved tests likely facilitated detection of more infections. This technology also allowed testing specimens for both chlamydia and gonorrhea, testing urine specimens (making screening more acceptable to males and allowing screening in non-clinical settings), and shipping of specimens from outlying areas. Timely notification, testing, and treatment of partners are all necessary to interrupt transmission and avoid re-infection of previously treated individuals. Partner notification services and targeted screening for high-risk populations have helped slow the increase in infection rates since 2002 and remain public health priorities to prevent new infections.

Data Limitations

Chlamydia infection is often asymptomatic. Reported incidence is influenced by the degree to which infected persons' sex partners are tested. The number of reported infections is likely an underestimate. It is difficult to determine if the rise in reported cases represents a true increase in disease incidence, improved reporting, increased screening – or all three of these factors.

Infectious Disease Indicator: Gonorrhea Incidence



Data Source: Alaska – Section of Epidemiology; U.S. – CDC

Current Issues and Trends

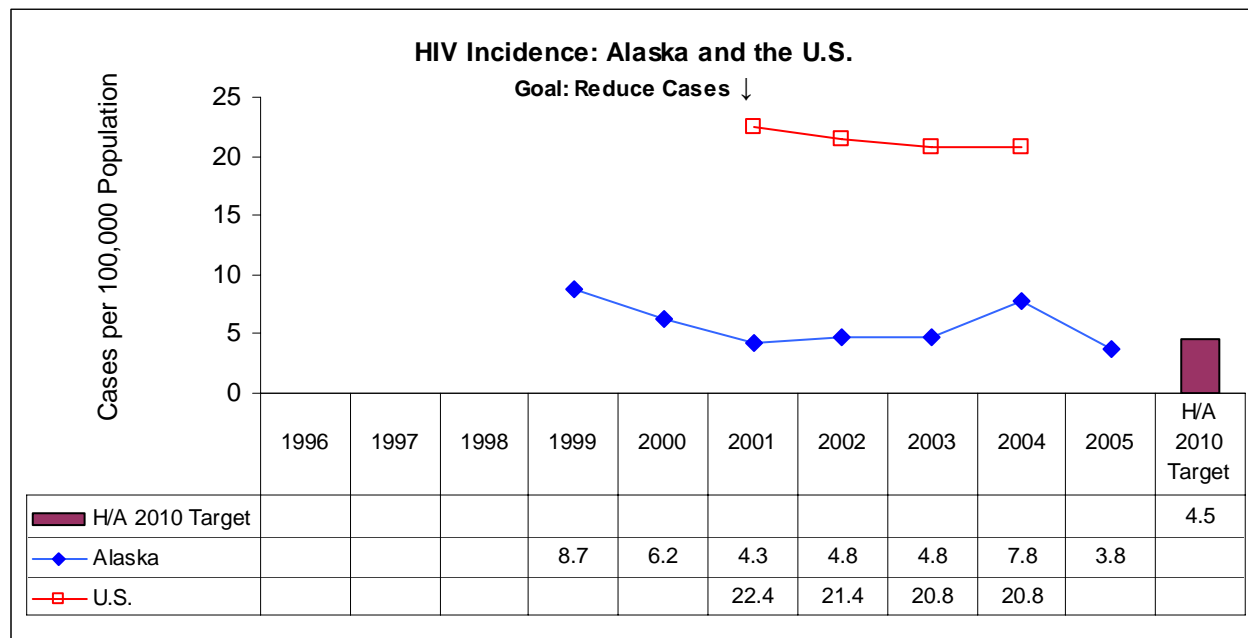
Gonorrhea rates in Alaska have fluctuated but have remained below U.S. rates over the past 10 years, despite the fact that Alaska's population is much younger than the U.S. population. In 2000, Anchorage public health professionals began an initiative to strengthen partner notification activities, testing many more persons at high risk than in the past. Similar activities subsequently occurred in some other areas of the state. New testing technology introduced by the State Public Health Laboratory in 2002 is more sensitive than prior tests. The greater acceptability of urine testing, particularly among males, facilitated targeted screening of populations at increased risk of infection. Gonorrhea infection is sometimes asymptomatic, especially in females, and timely treatment of infected individuals' partners is crucial to avoid re-infection as well as further transmission.

Partner notification, timely diagnosis, and appropriate treatment, as well as targeted screening of high-risk populations, remain public health priorities for disease intervention and have helped reduce infection rates since 2002.

Data Limitations

Gonorrhea infection may be asymptomatic, particularly in females. Reported disease incidence is influenced by the degree to which infected persons' sex partners are tested.

Infectious Disease Indicator: HIV Incidence



Data Source: Alaska – Section of Epidemiology; U.S. – CDC

Current Issues and Trends

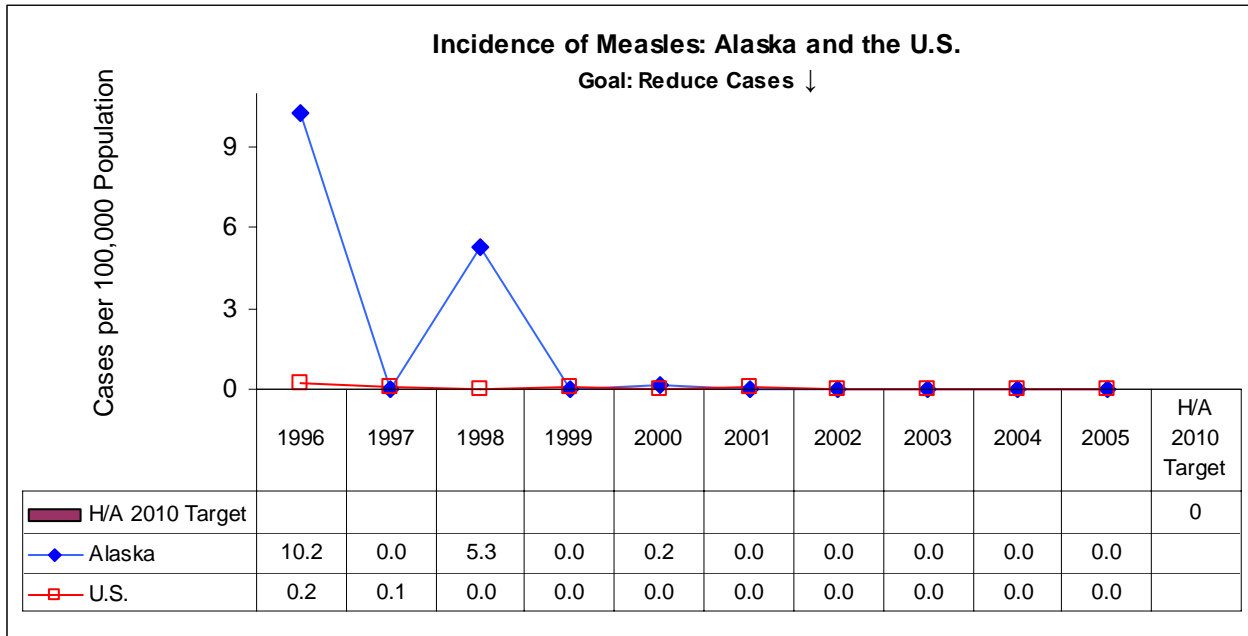
HIV incidence in Alaska (HIV infection with and without AIDS) has been relatively stable in recent years, remaining well below the U.S. rate. Progression to AIDS declined in both Alaska and the U.S. after 1996, when medical treatments to prolong life and protect health were first introduced for persons with HIV infection. Preventing HIV infection remains the most effective means of reducing illness and death from AIDS. Individuals with HIV infection may have no symptoms for many years and may unknowingly transmit HIV to others. Partner notification by public health professionals has substantially increased early HIV diagnosis in Alaska by making individuals exposed to HIV aware of their exposure and detecting infection much earlier than would otherwise be the case. Awareness of infection has been shown to significantly reduce individual behaviors likely to transmit infection. Early HIV diagnosis also increases opportunities for treatment to maintain health and supports access to other preventive services.

Partner notification activities remain among the highest public health priorities.

Data Limitations

HIV was made a reportable condition in Alaska in 1999. Data presented are for individuals known to be Alaska residents at their first known date of HIV diagnosis. Case numbers are small, making rates unstable. Increased activities to detect HIV may artificially increase rates. National rates were calculated from Centers for Disease Control (CDC) data for 35 states (including Alaska) with confidential HIV reporting.

Infectious Disease Indicator: Measles Incidence



Data Source: Alaska – Section of Epidemiology *Bulletin*; U.S. – CDC, Center for Health Statistics

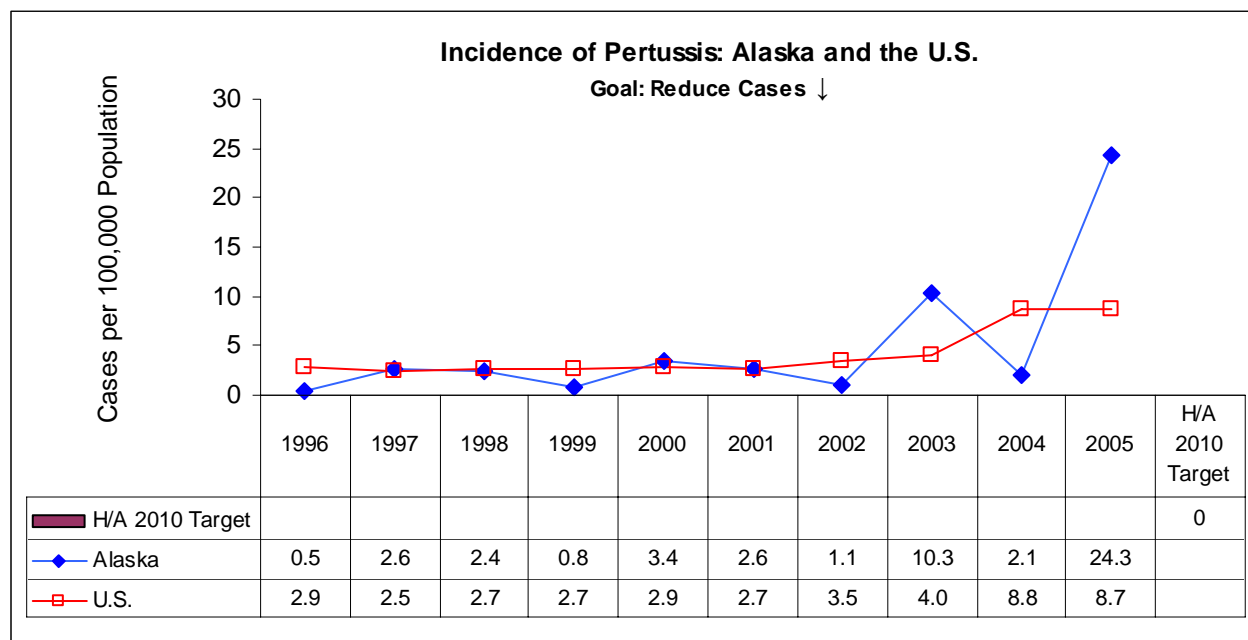
Current Issues and Trends

Measles is nearly eliminated in Alaska and the U.S. In the past 10 years, two outbreaks of measles occurred in Alaska: the first in Juneau in 1996 and the second in Anchorage in 1998. Following the 1998 outbreak, the Department of Education and Early Development, with the support of the Department of Health and Social Services, began to require two doses of MMR (measles, mumps and rubella) vaccine for all students attending school in Alaska. Since the implementation of the two-dose MMR requirement, there has only been a single case of imported measles – and none since 2001.

Data Limitations

According to state regulation, measles cases are to be reported to the Division of Public Health. It is possible there have been cases that were not reported; however, reported cases of measles-like rash illness are investigated to determine if measles is the cause.

Infectious Disease Indicator: Pertussis Incidence



Data Source: Alaska – Section of Epidemiology *Bulletin*; U.S. – CDC, Center for Health Statistics
U.S. 2005 data is provisional from CDC

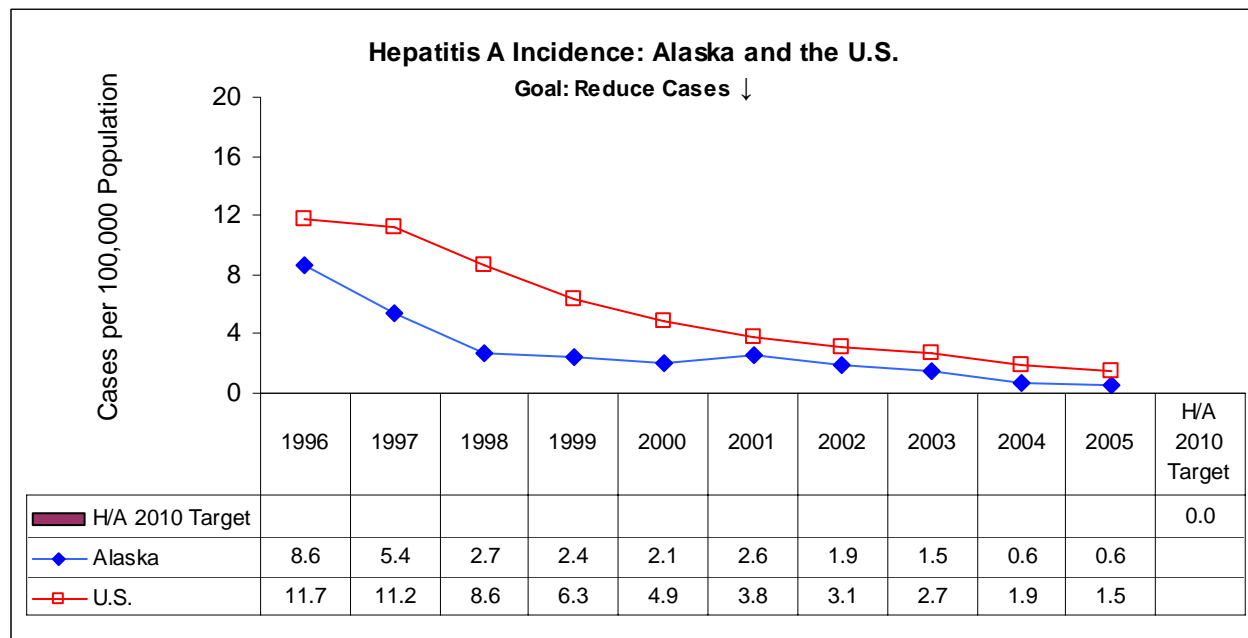
Current Issues and Trends

Pertussis is vaccine preventable, but still occurs in the U.S. and Alaska. Between 1995 and 2004 there were, on average, 16.7 cases of pertussis annually in Alaska. In 2003, 67 cases of pertussis were reported due to a large outbreak in an unimmunized community near Homer. In July 2005, the State Laboratory began offering a new, more sensitive testing methodology - PCR (polymerase chain reaction). Because of this combination of better testing and awareness by providers that pertussis is still a disease of ongoing concern, more tests were ordered. As a result, more cases of pertussis were reported in 2005, a trend expected to continue for the next few years. Several outbreaks of pertussis were identified in Alaska communities in 2005. A newly licensed adolescent/adult pertussis vaccine will help reduce the burden of pertussis in years to come.

Data Limitations

According to state regulation, pertussis cases are to be reported to the Division of Public Health. It is possible some cases were not reported.

Infectious Disease Indicator: Hepatitis A Incidence



Data Source: Alaska – Morbidity Database; U.S. – National Notifiable Diseases Surveillance System

Current Issues and Trends

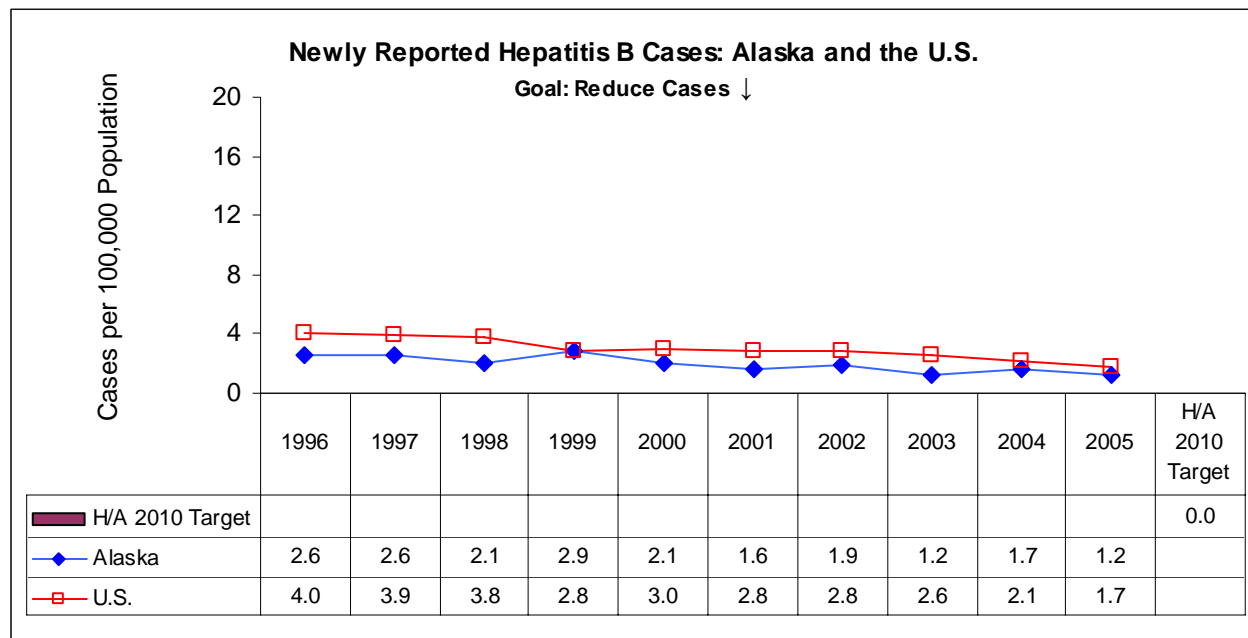
The rate of hepatitis A has declined dramatically over the past 15 years. This is a direct result of hepatitis A vaccine, which was first used in Alaska Native communities to ameliorate and prevent cyclic outbreaks. The vaccine was licensed by the U.S. Food and Drug Administration (FDA) in 1995 and became available through the Alaska Immunization Program in 1996. The vaccine was recommended for all children ages 2-14; in 1997, the recommendation was expanded to children ages 2-18. Then, in the fall of 2001, all children enrolled in public or private schools or childcare in Alaska were required to either be vaccinated against hepatitis A or have proof of immunity.

The Healthy Alaskans 2010 goal of 0 cases of hepatitis A is probably unrealistic because sporadic cases due to travel-related exposure and immigration are expected to continue.

Data Limitations

Hepatitis A cases are to be reported to the Division of Public Health. National studies have demonstrated that hepatitis A is grossly underreported. The true occurrence of hepatitis A nationally is probably more than 4 times the amount reported, and such similar underreporting may occur in Alaska.

Infectious Disease Indicator: Newly Reported Hepatitis B Cases



Data Source: Section of Epidemiology, notifiable conditions surveillance; comparable national data unavailable

Current Issues and Trends

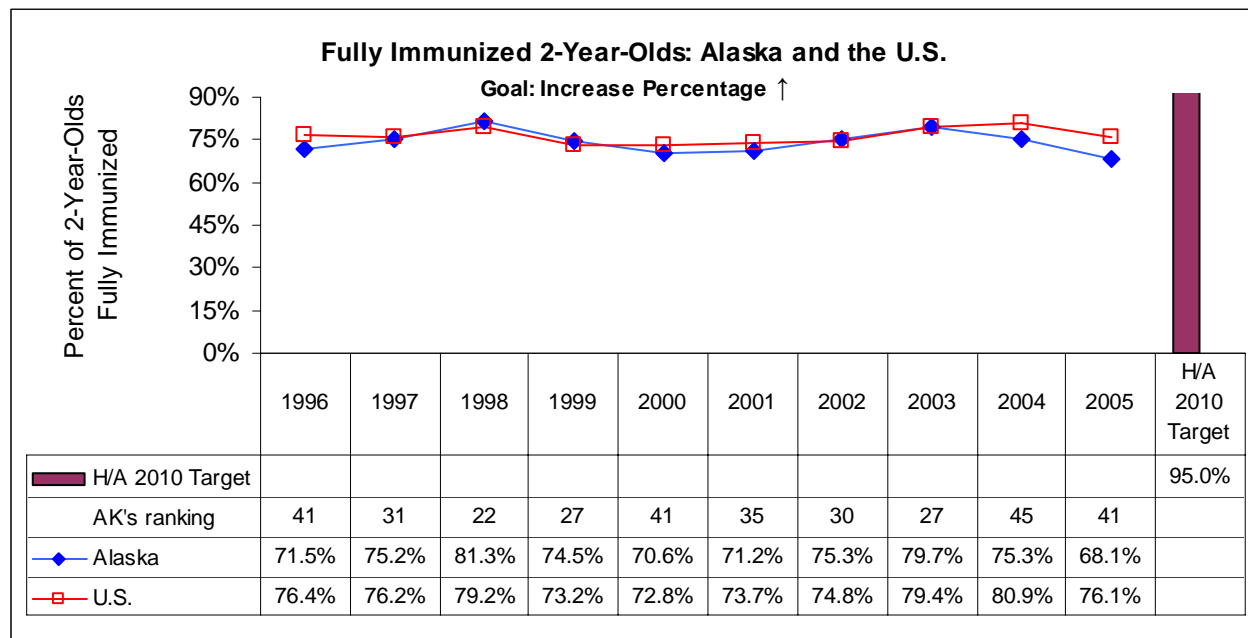
The rate of hepatitis B has declined dramatically over the past 25 years, in part a result of the infant hepatitis B immunization program. This vaccine was licensed by the U.S. Food and Drug Administration (FDA) in 1982 and administered widely in Alaska Native communities throughout Alaska. In 1991, the Centers for Disease Control (CDC) recommended that all infants be vaccinated against hepatitis B, and in 1993 the Alaska Immunization Program began providing the vaccine to all newborns. It became a required vaccine for attendance in school or childcare facilities in Alaska in the fall of 2001.

The Healthy Alaskans 2010 goal of 0 cases of hepatitis B is probably not realistic due to ongoing immigration and sporadic domestic cases.

Data Limitations

Hepatitis B is reported through the Alaska notifiable disease surveillance system, which is a passive system. National studies have demonstrated that hepatitis B is grossly underreported. The true occurrence of hepatitis B nationally is probably more than 3 times the amount reported, and the same underreporting is likely in Alaska.

Infectious Disease Indicator: Fully Immunized Two-Year Olds



Data Source: CDC National Immunization Survey – See Data Limitations below

Current Issues and Trends

Over the past decade, since the National Immunization Survey began gathering data about the status of fully immunized 2-year-olds, Alaska has ranked as low as 45th and as high as 22nd among the 50 states.

Statistics varied as the CDC added new vaccines to its recommended “basic immunization series.” From 1996 to 1998, a four-dose vaccination series was the recommendation. That increased to five doses in 1999 and, in 2005, was updated again to the new six-dose recommended series.

Under the new guidelines, the U.S. rate of fully immunized 2-year-olds dropped to 76.1% in 2005; Alaska’s rate was 68.1%, ranking it 41st among the states.

Data Limitations

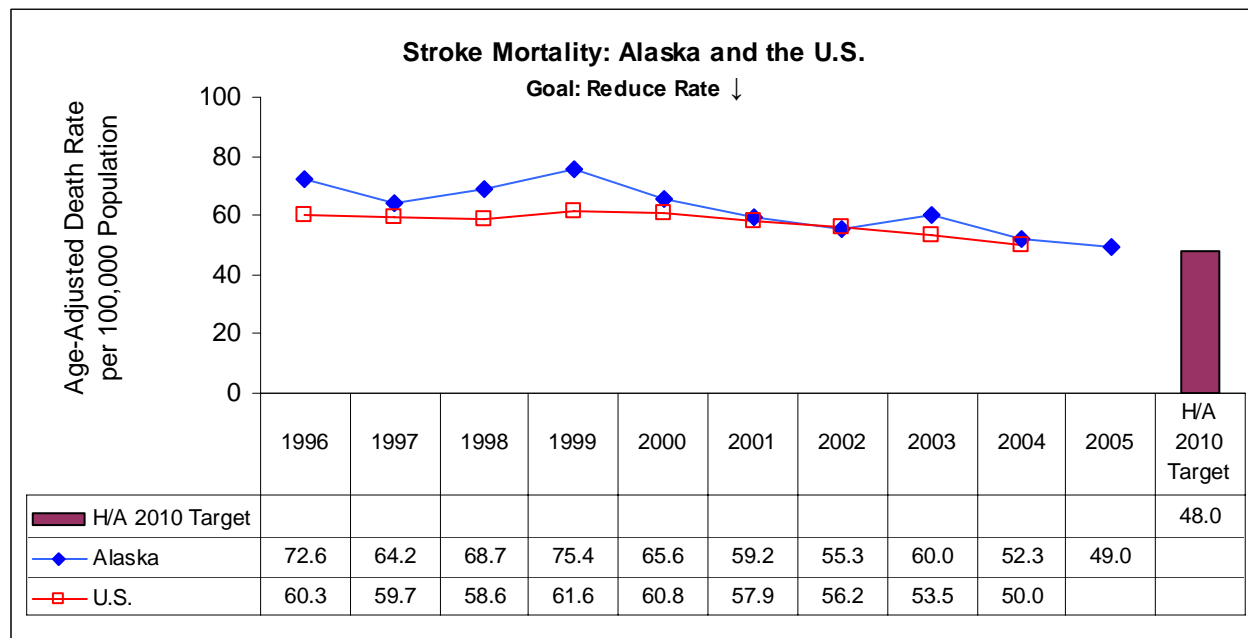
Annual percentages and rankings in the table above are based on CDC recommendations at the time, which changed over the years when new vaccines were added to the “basic immunization series”:

- 1996 – 1998, four-dose series = 4/3/1/3 (4 DTaP/ 3 polio/ 1 MMR/ 3 Hib)
- 1999 – 2004, five-dose series = 4/3/1/3/3 (4 DTaP/ 3 polio/ 1 MMR/ 3 Hib/ 3 Hep B)
- 2005 to date, six-dose series = 4/3/1/3/3/1 (4 DTaP/ 3 polio/ 1 MMR/ 3 Hib/ 3 Hep B/ 1 Varicella)

A grayscale photograph of a person's hands holding a handheld medical device, likely a glucose meter. The device has a small screen and several buttons. The text "Chronic Disease Indicators" is overlaid in the center of the image. The person is wearing a watch on their left wrist. The background is a plain, light-colored surface.

Chronic Disease Indicators

Chronic Disease Indicator: Stroke Mortality



Data Source: Bureau of Vital Statistics

Current Issues and Trends

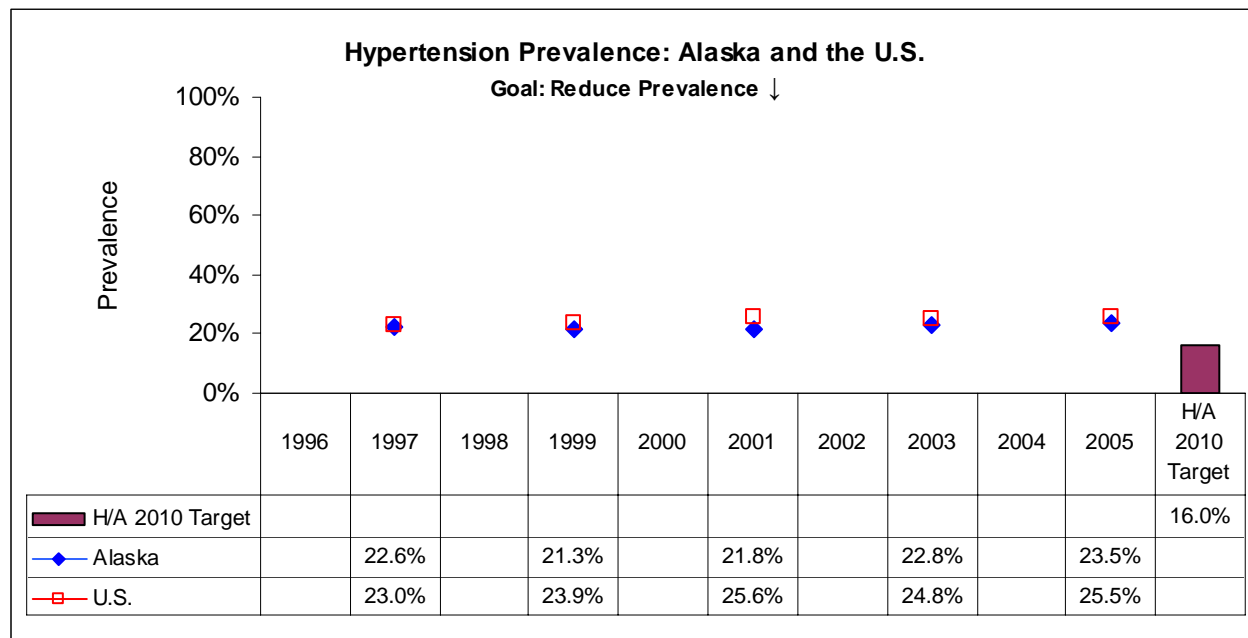
Age-adjusted stroke mortality rates have declined in both the U.S. and in Alaska between 1996 and 2005 (2004 for the U.S.). During that period Alaska's rates have been above the U.S. rates for all but a single year (2002). As of 2005, Alaska's rate is very close to meeting the Healthy Alaskans 2010 target of 48 deaths per 100,000 (age-adjusted).

The occurrence of stroke is associated with several risk factors, including hypertension and history of smoking. In Alaska (2003 and 2005 data combined), nearly half (49%) of adults reporting having ever been told they had a stroke also were told they had high blood pressure, and 65% were current or former smokers.

Data Limitations

Alaska 2005 data are preliminary. The following limitations apply to death certificate data generally: incomplete death certificate forms, inaccurate diagnosis information, and variations in interpretation of causation and contribution of specific causes.

Chronic Disease Indicator: Hypertension Prevalence



Data Sources: Chronic Disease Prevention and Health Promotion, BRFSS (AK); CDC, BRFSS (U.S.)

Current Issues and Trends

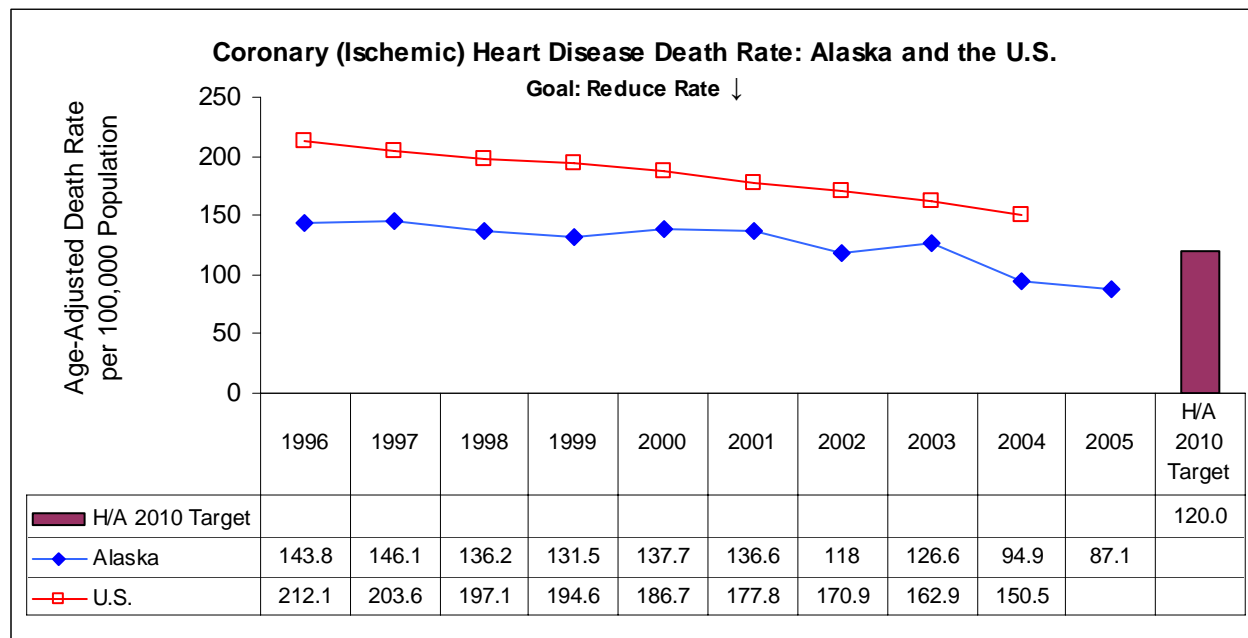
The percentage of Alaskan adults who report having been told they have high blood pressure (i.e., hypertension) has remained relatively stable since 1997. The comparable U.S. data have been consistently higher compared to Alaska’s rates, and reveal a slight increase over the same time period.

Considering Alaska data from 2005, self-reported high blood pressure increased with lower levels of income and also with increasing age; approximately half of Alaskans over the age of 64 reported high blood pressure. There were no differences in the prevalence of high blood pressure by gender, race, or education level. Of those Alaskans who self-reported having high blood pressure, 66% reported they were currently taking blood pressure medicine, and 93% reported that they believed their blood pressure was either “normal” or “under control”.

Data Limitations

Data from the BRFSS: are not representative of Alaskans without phones (3% of the state); only provide statewide and large regional estimates; and are self-reports and subject to a number of potential sources of bias, including the tendency to under-report undesirable behaviors, such as smoking. As BRFSS data are not age-adjusted, caution is advised when making comparisons between Alaska and U.S. median prevalence.

Chronic Disease Indicator: Coronary (Ischemic) Heart Disease



Data Source: Bureau of Vital Statistics

Current Issues and Trends

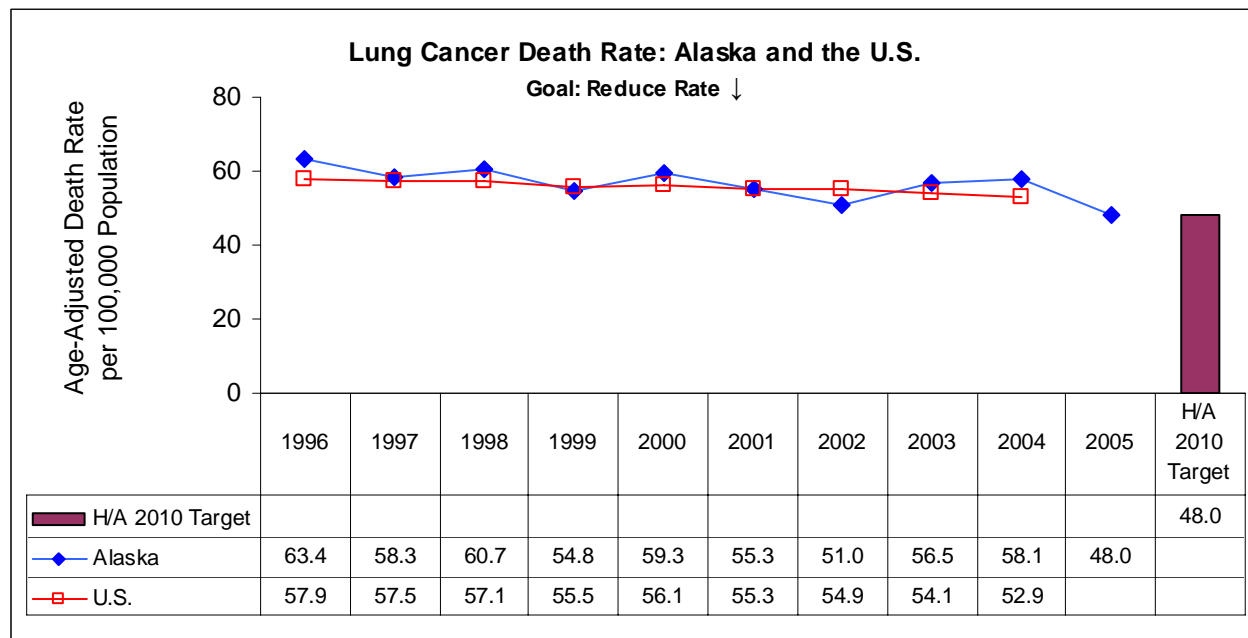
Paralleling the U.S. trend, coronary heart disease (CHD) mortality in Alaska has declined over the past decade. The Alaska CHD mortality rate has consistently been lower than the U.S. mortality rate. Since 2004, the Alaska CHD age-adjusted mortality rate has been below the Healthy Alaskans 2010 target of 120 deaths per 100,000.

The decline in CHD mortality rates is likely due in part to increased survival related to better medical care.

Data Limitations

Alaska 2005 data are preliminary. The following limitations apply to death certificate data generally: incomplete death certificate forms, inaccurate diagnosis information, and variations in interpretation of causation and contribution of specific causes.

Chronic Disease Indicator: Lung Cancer Deaths



Data Source: Bureau of Vital Statistics

Current Issues and Trends

Lung cancer mortality rates have declined slightly in Alaska over the past decade. Age-adjusted rates of death due to lung cancer in Alaska have been comparable to U.S. rates during the past 10 years. In 2005, the Healthy Alaskans 2010 target rate of 48 lung cancer deaths per 100,000 was reached.

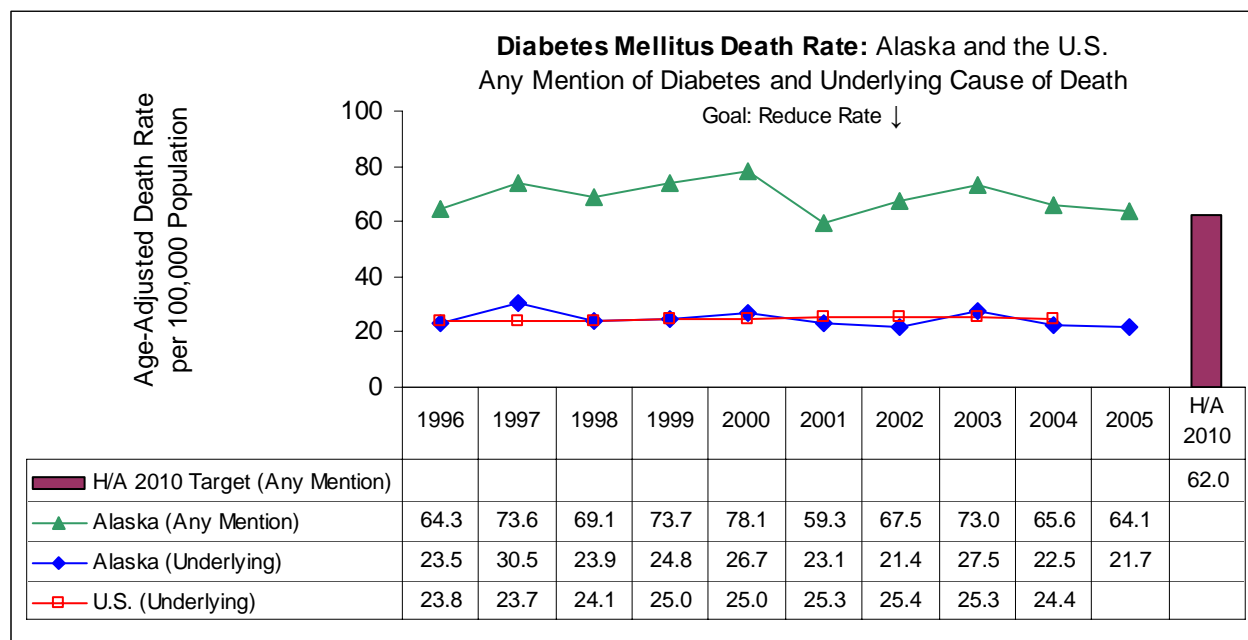
Cancer of the lung is the second most common type of cancer among both men and women in Alaska, behind prostate cancer in men and breast cancer in women. In terms of mortality rates, however, lung cancer is number one among both men and women.

The vast majority of Alaskans with lung cancer have a history of smoking. Of those cases of lung cancer for which smoking status was available, 95% of men and 92% of women had been smokers in their lifetime or were smokers at the time of diagnosis.

Data Limitations

Alaska 2005 data are preliminary. Death certificate data have the following limitations generally: incomplete death certificate forms, inaccurate diagnosis information, and variations in interpretation of causation and contribution of specific causes.

Chronic Disease Indicator: Diabetes Mellitus Deaths



Data Source: Bureau of Vital Statistics

Current Issues and Trends

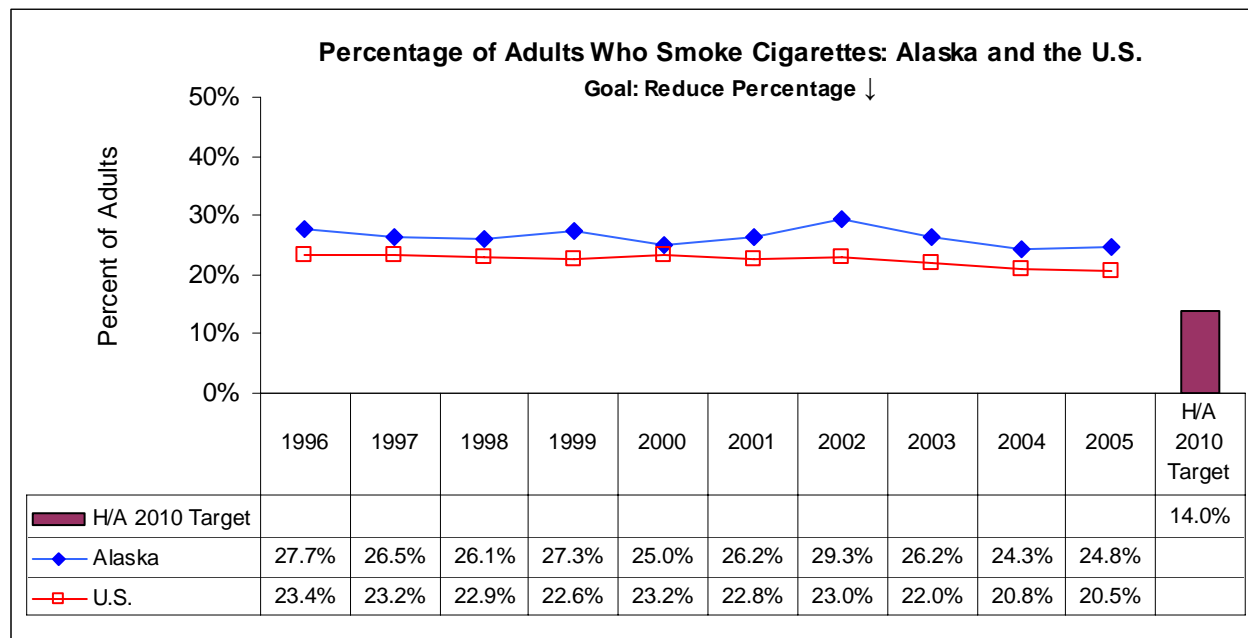
Mortality rates are calculated based on the “underlying cause” of death listed on the death certificate. Due to a number of factors, many individuals whose deaths were related to their diabetes have their “underlying cause” of death reported as something other than diabetes (e.g., heart disease). Although this is understandable given that 80% of persons with diabetes ultimately die from heart disease or stroke, this calculation likely results in significant underreporting of diabetes mortality rates. For this reason, Alaska has chosen a Healthy Alaskans 2010 target based on diabetes listed as a contributing factor anywhere on the death certificate (“any mention”), and monitors trends in diabetes deaths using both the “any mention” and “underlying cause” of death methods. Comparable U.S. data using the “any mention” method are not available.

Both Alaska trends indicate that diabetes mortality rates have been relatively stable over the past 10 years. The Healthy Alaskans 2010 target was reached only for a single year – 2001.

Data Limitations

Comparable U.S. “any mention” diabetes mortality rates are not available. Death certificate data underreport diabetes as a contributing or underlying cause and do not distinguish between Type 1 and Type 2 diabetes. Death certificate data also have the following limitations: incomplete death certificate forms, inaccurate diagnosis information, and variations in interpretation of causation and contribution of specific causes.

Chronic Disease Indicator: Adults Who Smoke Cigarettes



Data Sources: Chronic Disease Prevention and Health Promotion, BRFSS (AK); CDC, BRFSS (U.S.)

Current Issues and Trends

Since 1996, the prevalence of cigarette smoking among adult Alaskans has remained fairly level, ranging between 24 and 29 percent. The median state prevalence (of all 50 states, DC, and all U.S. territories) has been consistently lower, but also has not declined over the decade, according to the Behavioral Risk Factor Surveillance System (BRFSS). In 2005, the adult smoking prevalence rate in Alaska was 77% higher than the Healthy Alaskans 2010 target.

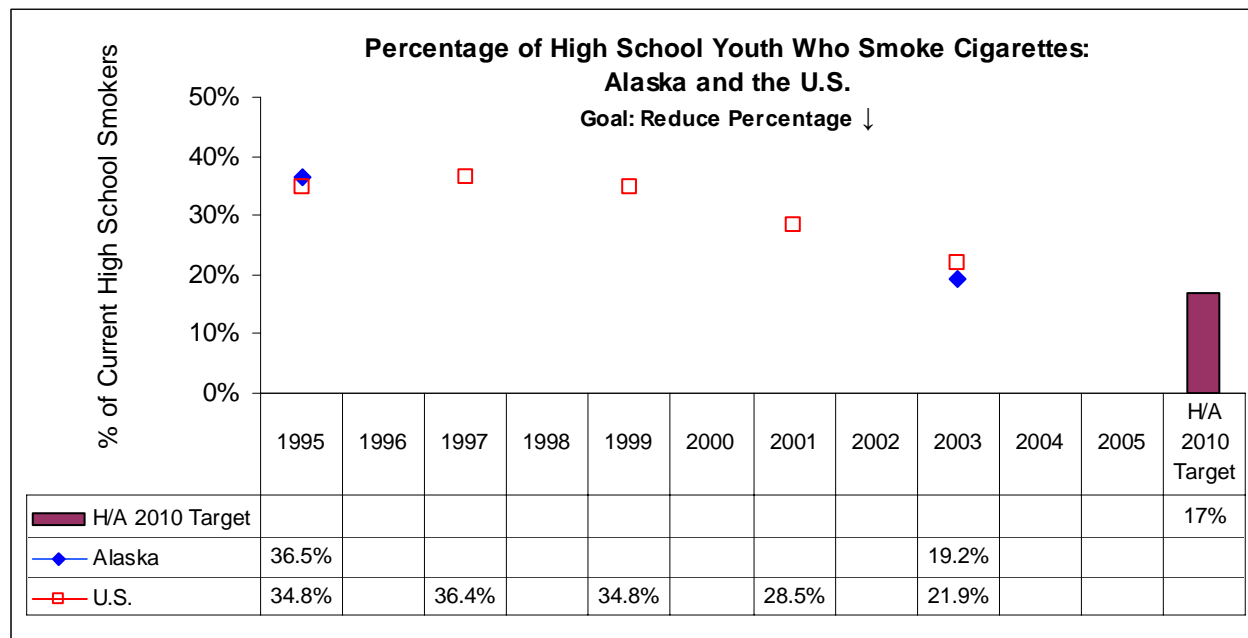
Alaska Native adults are approximately twice as likely as their non-Native counterparts in Alaska to smoke. Residents of rural regions of the state and Alaskans with relatively little income or education are also significantly more likely to be smokers.

Although the percentage of Alaskan adults considered to be smokers has changed little over the decade, there has been a slight decrease in the amount of cigarettes that smokers smoke. This is reflected both in self-reported consumption data and Department of Revenue tobacco sales data.

Data Limitations

Data from the BRFSS: are not representative of Alaskans without phones (3% of the state); generally only provide statewide and large regional estimates; and are self-reports and subject to a number of potential sources of bias, including the tendency to under-report undesirable behaviors, such as smoking. As BRFSS data are not age-adjusted, caution is advised when making comparisons between Alaska and U.S. median prevalence.

Chronic Disease Indicator: High School Youth Who Smoke Cigarettes



Data Sources: Chronic Disease Prevention and Health Promotion, YRBS (AK); CDC YRBS (U.S.)

Current Issues and Trends

In contrast to the stability of adult smoking rates, rates of smoking among high school students in Alaska have dropped considerably over the past 10 years, from 37% in 1995 to 19% in 2003. A similar trend occurred nationally during this time period. As of 2003, Alaska was only 2 percentage points from achieving its Healthy Alaskans 2010 goal for smoking prevalence among adolescents.

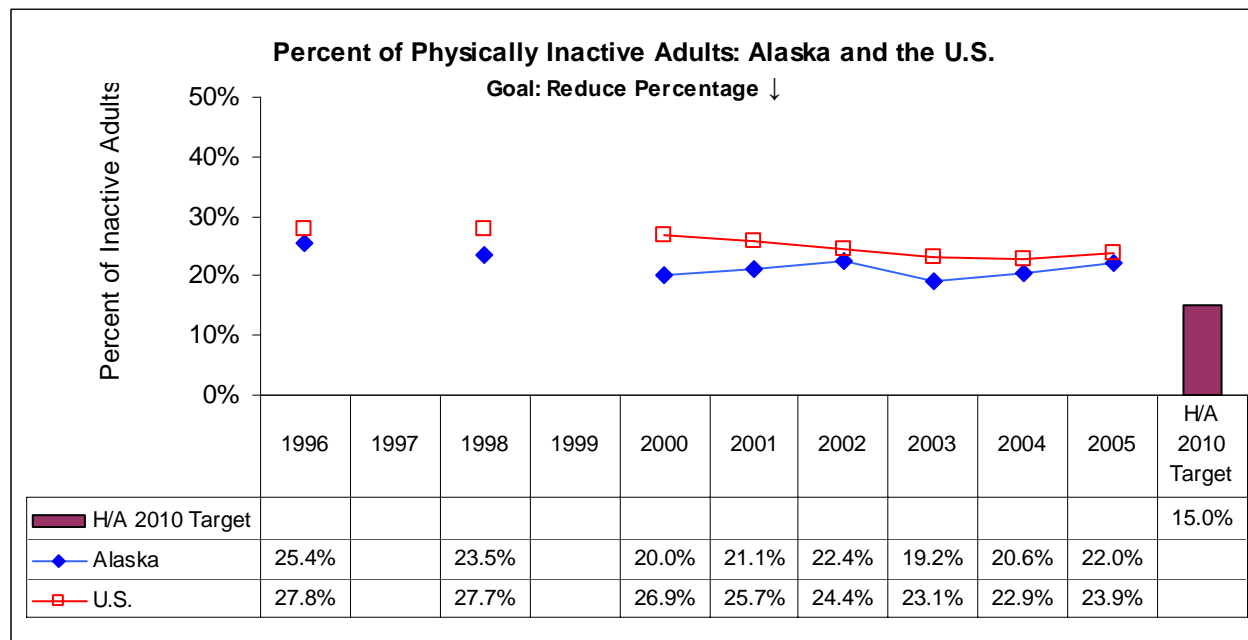
In Alaska, smoking rates declined among girls and boys, as well as among both Alaska Natives and non-Natives. However, Alaska Native students are still smoking at rates three to four times the rates of their non-Native peers. Alaska Native students also start smoking at an earlier age compared to non-Native students. In 2003, 21% of Alaska Native students reported having smoked by the age of 13; by comparison, only 5% of non-Native students reported having smoked by that young age.

No 2005 Alaska data are available because there were not enough participating students in the Youth Risk Behavior Survey (YRBS) that year to report a statistically valid sample.

Data Limitations

Data from the YRBS are representative only of students attending public high school in Alaska. Data are self-reported and are subject to biases such as underreporting of stigmatized behaviors. In addition, caution should be used when interpreting two data points as a trend. There is no way to determine smoking prevalence rates during the 8 years between the 1995 and 2003 data points.

Chronic Disease Indicator: Adults who are Physically Inactive



Data Sources: Chronic Disease Prevention and Health Promotion, BRFSS (AK); CDC, BRFSS (U.S.)

Current Issues and Trends

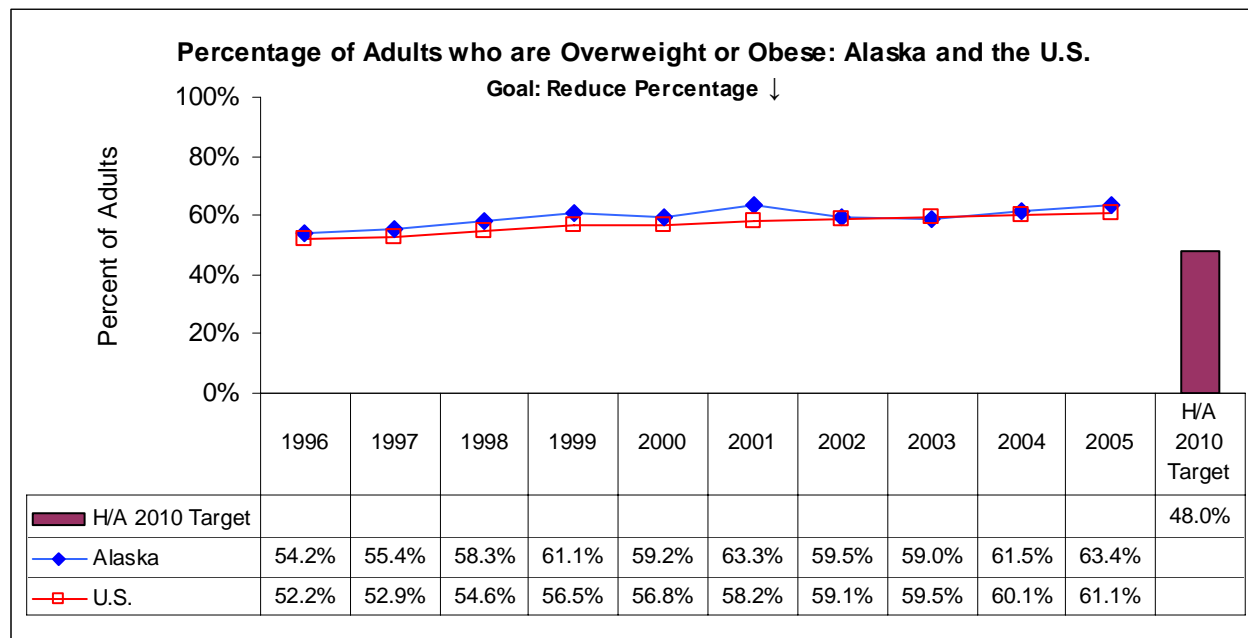
In both Alaska and the U.S., there has been a slight decline over the past 10 years in the proportion of adults who are physically inactive. In 2005, 22% of adult Alaskans indicated they did not participate in any leisure time physical activity, a slight drop from 25% in 1996. The Healthy Alaskans 2010 target of 15% has not yet been met.

Not all of the 78% of “physically active” adult Alaskans are actually meeting the levels of physical activity recommended to achieve health benefits or to keep from gaining weight. The Centers for Disease Control (CDC) recommends that adults get at least 30 minutes of moderate physical activity on 5 or more days per week, or at least 20 minutes of vigorous physical activity on 3 or more days per week. In 2005, 42% of adult Alaskans failed to meet either of these recommended physical activity levels.

Data Limitations

Data from the Behavioral Risk Factor Surveillance System (BRFSS): are not representative of Alaskans without phones (3% of the state); generally only provide statewide and large regional estimates; and are self-reports and subject to a number of potential sources of bias, including the tendency to under-report undesirable behaviors. As BRFSS data are not age-adjusted, caution is advised when making comparisons between Alaska and the U.S.

Chronic Disease Indicator: Adults Who Are Overweight or Obese



Data Sources: Chronic Disease Prevention and Health Promotion, BRFSS (AK); CDC, BRFSS (U.S.)

Current Issues and Trends

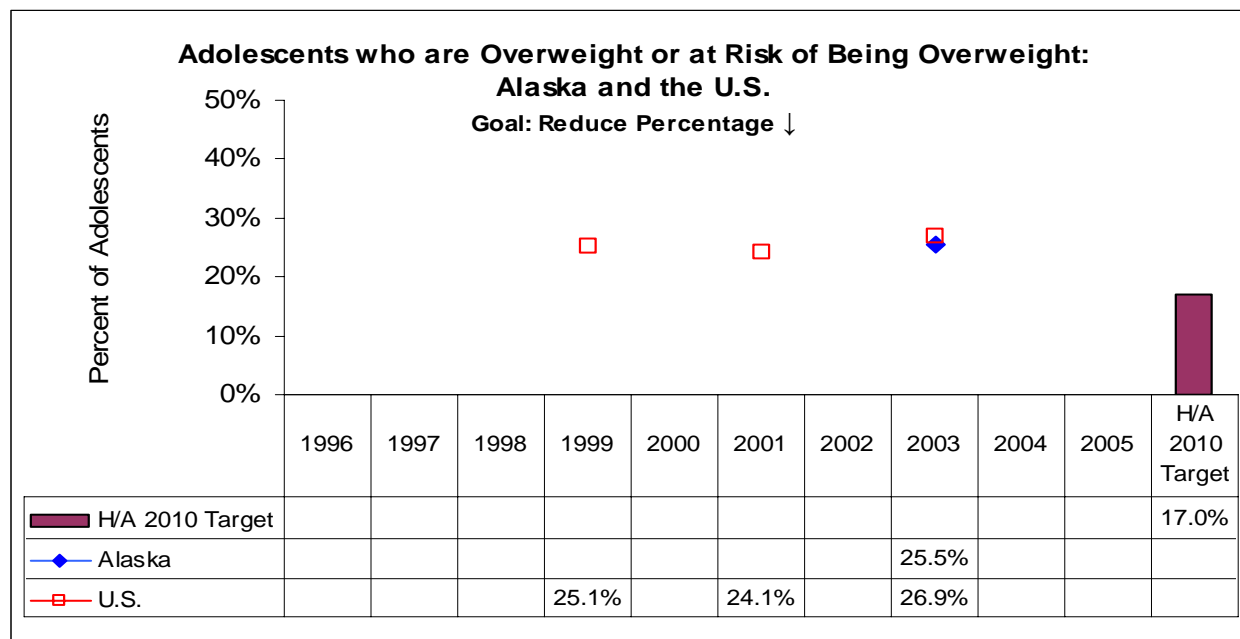
There has been a steady increase over the past decade in the proportion of adult Alaskans who are above a normal weight, defined as a body mass index (BMI) of 25.0 or higher. BMI is a function of weight (in kilograms) divided by height (in meters, squared). Individuals with a BMI of between 25.0 and 29.9 are considered to be overweight; those with a BMI of 30.0 or higher are considered obese. In 2005, 63% of adult Alaskans could be classified as either overweight or obese, up from 54% in 1996. A similar pattern is seen nationally.

There is no single Healthy Alaskans 2010 target for the combination of overweight and obesity. However, the separate targets for adult overweight (30%) and obesity (18%) can be combined to generate a target for overweight/obesity of 48%. Current rates are 15 percentage points higher than this target. Given that the trend shows no indication of leveling out at this point, it is unlikely that this 2010 target will be met.

Data Limitations

Data from the Behavioral Risk Factor Surveillance system (BRFSS): are not representative of Alaskans without phones (3% of the state); generally only provide statewide and large regional estimates; and are self-reports and subject to a number of potential sources of bias, including the tendency to under-report undesirable behaviors. As BRFSS data are not age-adjusted, caution is advised when making comparisons between Alaska and the U.S.

Chronic Disease Indicator: Adolescents Who Are Overweight or at Risk of Being Overweight



Data Sources: Chronic Disease Prevention and Health Promotion, YRBS (AK); CDC, YRBS (U.S.)

Current Issues and Trends

In 2003, 25.5% of Alaska high school students met the definition of being overweight or at risk of being overweight, based on data collected from the Youth Risk Behavior Survey (YRBS). Children and youth aged 2 to 20 are considered “at risk for overweight” if they have a gender and age-specific BMI between the 85th and 95th percentile based on 2000 Centers for Disease Control (CDC) growth charts; youth with a gender and age-specific BMI at or above the 95th percentile are considered “overweight”.

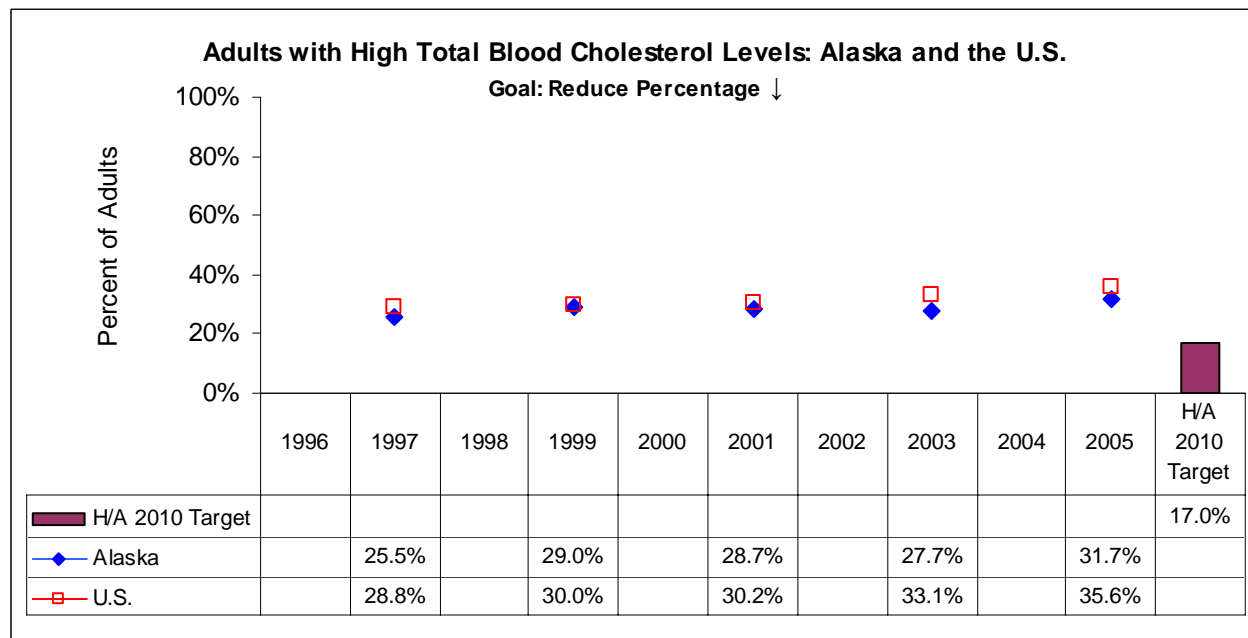
There is not enough Alaska data to examine trends in adolescent overweight. Data about student height and weight are only available from the 2003 YRBS. The survey was not published in 2005 because there were not enough participating students to generate a statistically valid sample.

There is no single Healthy Alaskans 2010 target for the combination of at-risk of overweight and overweight. However, the separate targets for at-risk of overweight (12%) and overweight (5%) among adolescents can be combined to generate a target for at-risk/overweight of 17%. The current Alaska rate is 50% above this target.

Data Limitations

Data from the YRBS are representative only of students attending public high school in Alaska. Data are self-reported and are subject to biases such as underreporting of stigmatized behaviors.

Chronic Disease Indicator: Adults with High Blood Cholesterol Levels



Data Sources: Chronic Disease Prevention and Health Promotion, BRFSS (AK; CDC BRFSS (U.S.))

Current Issues and Trends

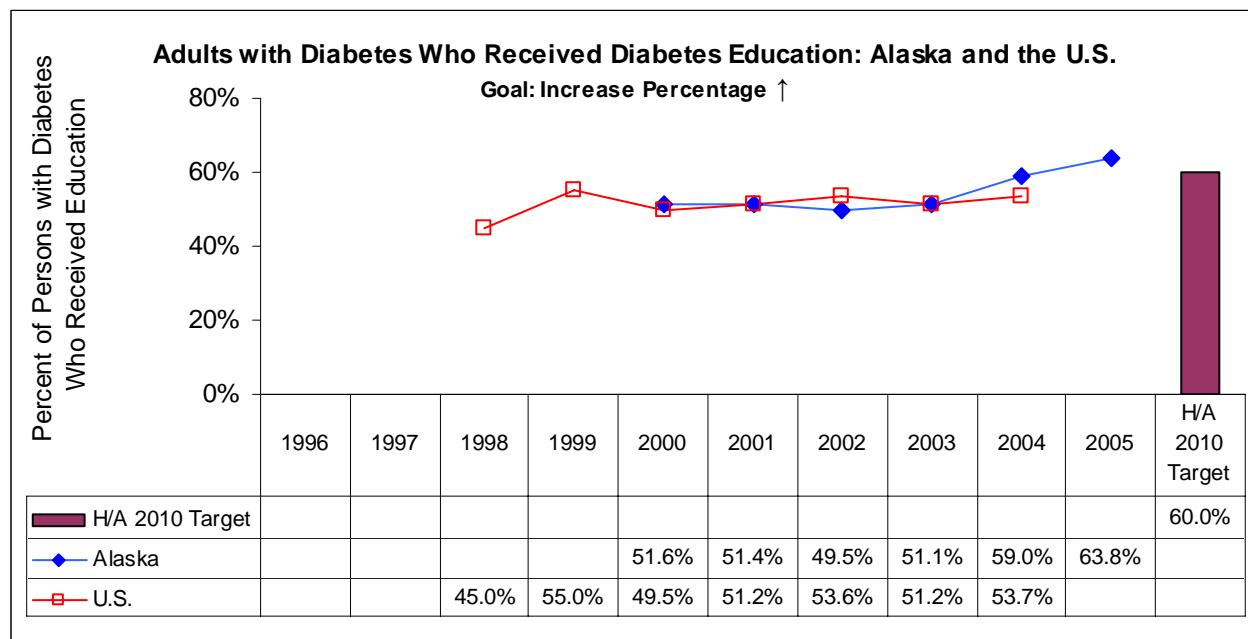
Rates of self-reported high total blood cholesterol have increased very slightly over the decade in both the Alaska and U.S. populations. In Alaska, the percentage of adults reporting having been told by a doctor they had high cholesterol went from 25.5% in 1997 to 31.7% in 2005, a figure 86% higher than the Healthy Alaskans 2010 target.

The proportion of adult Alaskans obtaining cholesterol screenings has increased over the decade. In 1997, 38% of adults had not obtained a screening test for cholesterol in the past 5 years; by 2005, this figure was down to 32%. Alaska Natives, Alaskans living in rural areas of the state, those with lower income levels, and those with less education are less likely to have their cholesterol levels tested.

Data Limitations

Data from the Behavioral Risk Factor Surveillance system (BRFSS): are not representative of Alaskans without phones (3% of the state); generally only provide statewide and large regional estimates; and are self-reports and subject to a number of potential sources of bias. As BRFSS data are not age-adjusted, caution is advised when making comparisons between Alaska and U.S. median prevalence. This measure underestimates true high cholesterol prevalence to the extent that adults do not access care and do not obtain the screening test.

Chronic Disease Indicator: People With Diabetes Who Receive Formal Diabetes Education Annually



Data Source: Chronic Disease Prevention and Health Promotion, BRFSS (AK); CDC, National Health Interview Survey (1998, 1999) and BRFSS (2000-2004) (U.S.)

Current Issues and Trends

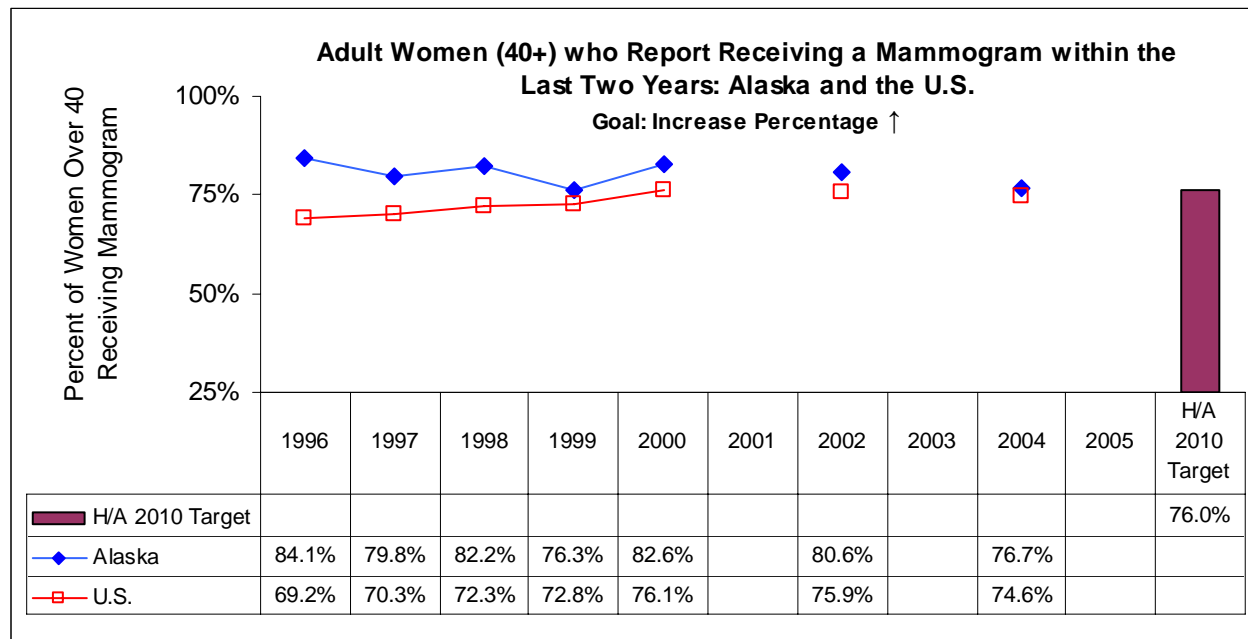
In Alaska, the proportion of adults with diabetes who received some diabetes education increased from 51.6% in 2001 to 64% in 2005. With this most recent data, Alaska met its Healthy Alaskans 2010 target for diabetes education.

Still, much work remains to improve the status of diabetes education in Alaska. The Behavioral Risk Factor Surveillance System (BRFSS) question for this indicator assesses whether the person has *ever* received *any form* of diabetes education. Thus 'diabetes education' could mean anything from a single session with a dietician to a 6-week diabetes self-management course. Since recommendations for the secondary and tertiary prevention of diabetes are continually updated, it is important that diabetes education be an ongoing process. Furthermore, this information should be provided by someone who has received formalized training in diabetes education. Data on who provides diabetes education in Alaska is currently unavailable; however, the small number of Certified Diabetes Educators (CDE) in the state is an indication that only a fraction of those individuals with diabetes who are receiving diabetes education are obtaining that education from a CDE.

Data Limitations

Data from the BRFSS: are not representative of Alaskans without phones (3% of the state); generally only provide statewide and large regional estimates; and are self-reports and subject to a number of potential biases, including the tendency to under-report undesirable behaviors. As BRFSS data are not age-adjusted and U.S. figures come from the National Health Interview Survey, caution is advised when making comparisons.

Chronic Disease Indicator: Women Over 40 Who Have a Mammogram at Least Every Two Years



Data Source: Chronic Disease Prevention and Health Promotion, BRFSS (AK); CDC, BRFSS (U.S.)

Current Issues and Trends

While data from 1996 to 2004 show a recent decline in the percent of women over the age of 40 who have had a mammogram within the past two years, the change is not statistically significant and the data indicate no improvement. National rates for 2004 are similar to those for Alaska. Five federally funded Breast and Cervical Cancer Early Detection Programs currently cover the cost of mammography services for medically underserved income-eligible women statewide. Mammography rates for women in Alaska's Breast and Cervical Cancer Early Detection Program demonstrate some decline over the past decade. No data were collected in 2005.

In recent years, Alaska's population has experienced a steady increase in the number of women over 40. During this time the number of certified mammography facilities has remained constant. Cost and ease of access to preventive health services are recognized determinants in the frequency of healthy behaviors, such as seeking a mammography. Access appears to be a factor in a woman's receipt of mammography testing, even when the barrier of cost is removed.

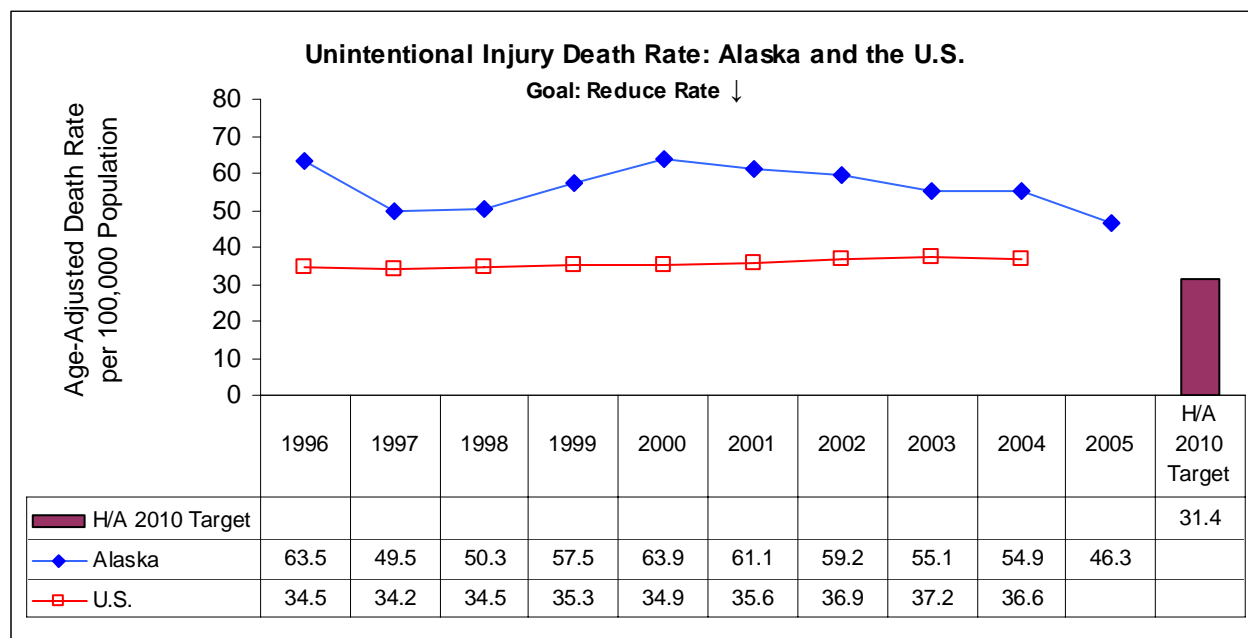
Interest groups in some states are addressing access to mammography issues; in Alaska no organized interest group has yet taken on this task.

Data Limitations

The sampling methods for Behavioral Risk Factor Surveillance System (BRFSS) data are designed to be representative of the general population and may lose power in subgroup analysis. Confidence intervals overlap for mammography estimates so the apparently declining trend may not be statistically significant.



Injury Indicator: Unintentional Injury Deaths



Data Sources: Bureau of Vital Statistics

Current Issues and Trends

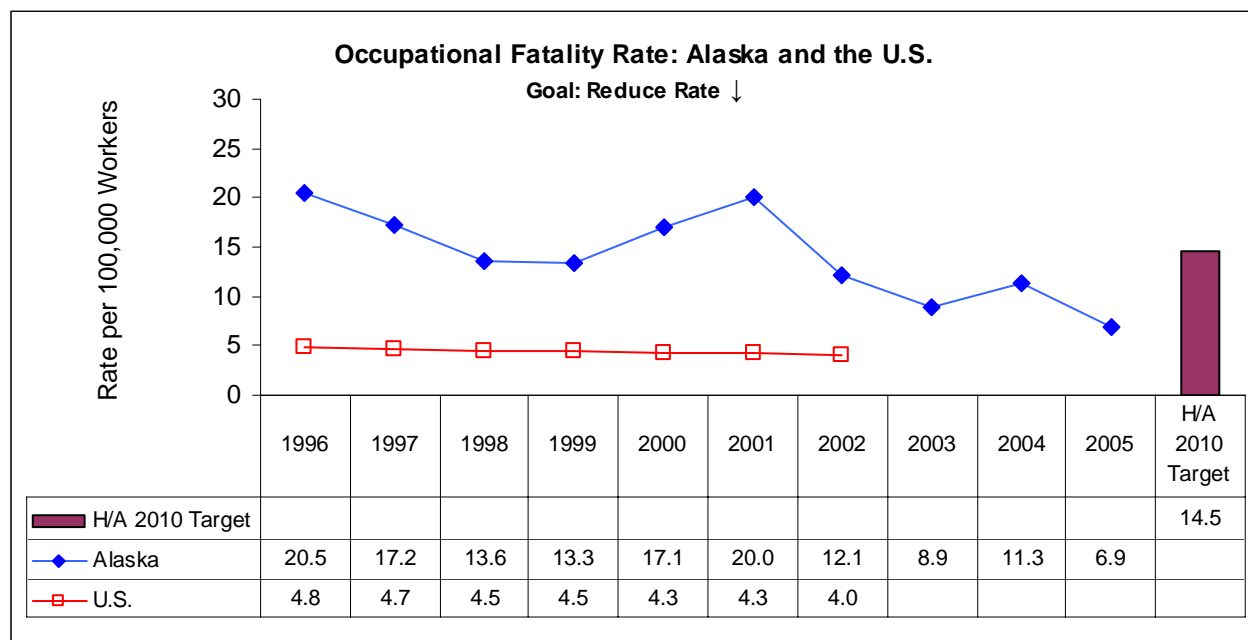
Alaska has one of the highest injury death rates in the U.S., but this rate has been decreasing over the past 10 years. Intrinsic hazards of environment and terrain impact the rate. In addition, positive long-term behavior change toward safety may also be impacting the rate; however, few Alaska-based studies are available and existing studies reflect similar declines as those at the national level. Several factors likely have contributed to this decline, including policy and legislation changes, enforcement of laws, changes in the engineering of cars and roads, and education for all ages.

Collaboration continues with federal, state and local programs as well as tribal health programs and other injury prevention agencies to reduce unintentional injury deaths statewide.

Data Limitations

Compilation of accidental deaths is based on ICD-9 (E-codes) and ICD-10 codes.

Injury Indicator: Occupational Fatality Rate



Data Source: AK Fatality Assessment and Control Evaluation Program (AK-FACE); CDC-NIOSH Worker Health Chartbook, 2004

Current Issues and Trends

Alaska's work-related deaths declined approximately 66% from 1996 to 2005, and the gap between the Alaska and the U.S. average annual fatality rates significantly narrowed, from five-fold in 1996 to three-fold in 2002. Still, annual occupational fatality rates in Alaska remain higher than the U.S. rate.

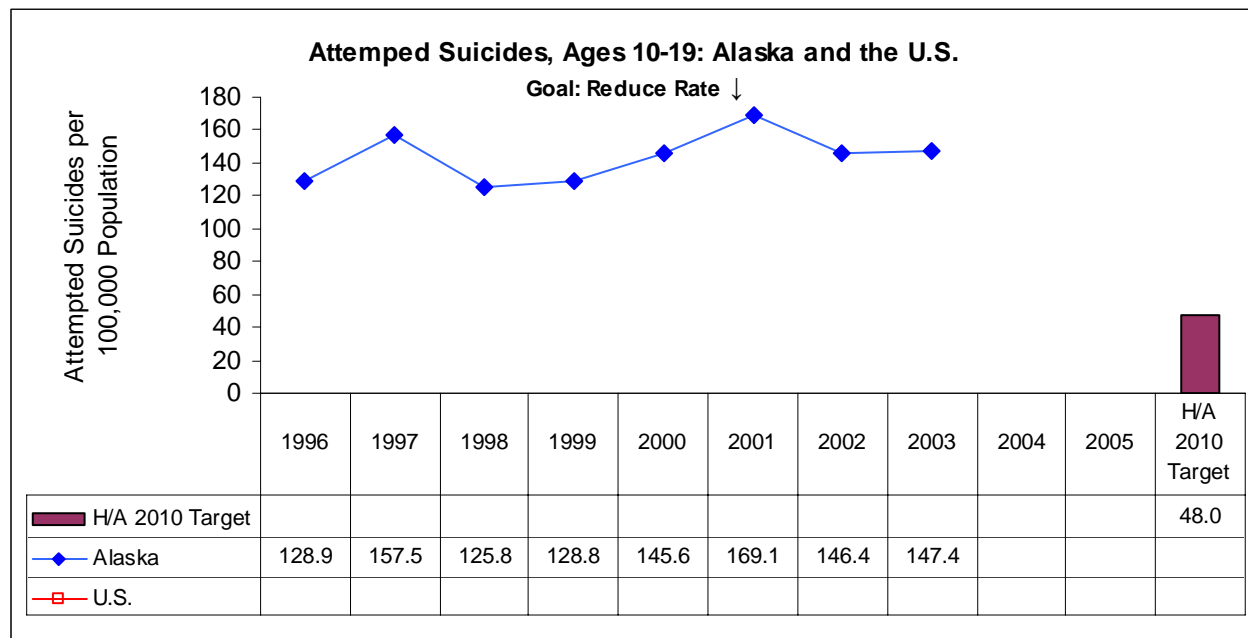
The general narrowing between Alaska and U.S. rates was briefly interrupted in 2000 and 2001, when single events with multiple worker fatalities occurred in Alaska.

It is unclear if this declining rate is a reflection of employment trends in high-hazard industries, such as reductions in commercial fishing and timber harvesting in Alaska. Because the economic forecast for 2005 through 2015 focuses on increasing levels of construction, both heavy construction and residential housing, the viability of strategic planning and current prevention interventions will be tested.

Data Limitations

Denominator: Current Population Survey (CPS), Alaska Dept. of Labor & Workforce Development (AKDOLWD), Research and Analysis Section. Military population is based on assignment, not residence. While 2003-2005 military population data are not available, 2002 data are used as a population estimate for rate calculations. Data excludes worker population estimates of commercial fishing industry.

Injury Indicator: Attempted Suicides, Ages 10 – 19



Data Source: Alaska Trauma Registry

Current Issues and Trends

Non-fatal suicide attempt rates continue to vary from year to year among Alaskan youth but demonstrate no upward or downward trend. Beginning in January 1997, observation admissions were added to the trauma registry case criteria, which accounts for a 9.5% increase in suicide attempt cases reported in the registry after 1996.

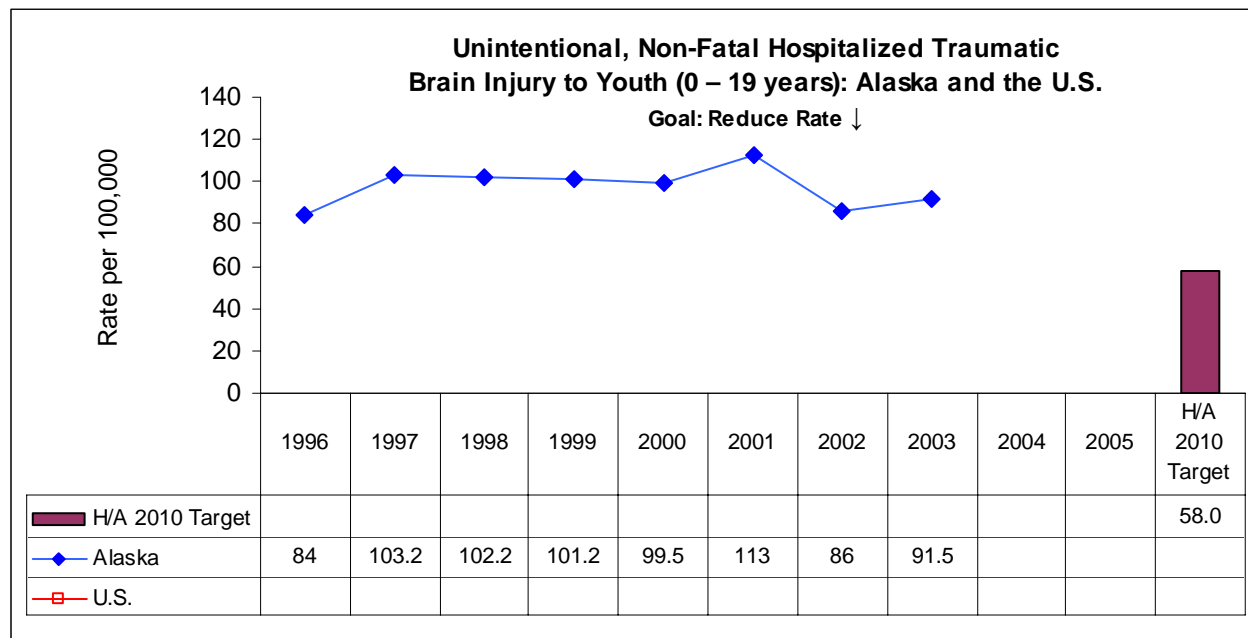
Non-fatal suicide hospitalizations can be used as a measure of the mental health status of Alaskan youth, of the high cost of neglecting this public health problem, and of access to means of self-harm. The characteristics of this group vary significantly from that of suicide completers, in demographics and intent, as well as outcome and access to lethal means.

From 1996 to 2003, 72% of the young suicide attempters were female and 53% were Alaska Native, even though Alaska Natives comprise only 19% of this population. Eighty-two percent (82%) of the non-fatal suicide attempts recorded in the trauma registry were by poisoning. The vast majority of these poisonings involved overdose on over-the-counter or prescription medications. Of the poisoning suicide attempters, 77% were females, whereas of those using firearms, 85% were males.

Data Limitations

Only suicide attempts causing serious enough injury to require admission to the hospital are included for this indicator. Suicide ideation only, high-risk behavior, and symbolic attempts may not be counted in these numbers. There are no national data comparable to the Alaska Trauma Registry data for this indicator. Alaska data for 2004 are still being verified; 2005 data are still being collected.

Injury Indicator: Unintentional, Non-Fatal Traumatic Brain Injury to Youth



Data Source: Alaska Trauma Registry

Current Issues and Trends

Non-fatal traumatic brain injury rates among Alaskan youth have remained fairly constant from 1996 through 2003, although beginning in January 1997, observation admissions were added to the trauma registry case criteria. The addition of these cases account for a 19% increase in TBI cases reported in the trauma registry, so rates have actually decreased in the past seven years. Also influencing these numbers is the acquisition of CT scanners by more of the smaller hospitals in recent years. Patients who test negative for brain injury are now discharged home from these hospitals instead of being transferred on to another facility for diagnostic testing, a criterion for entry into the trauma registry.

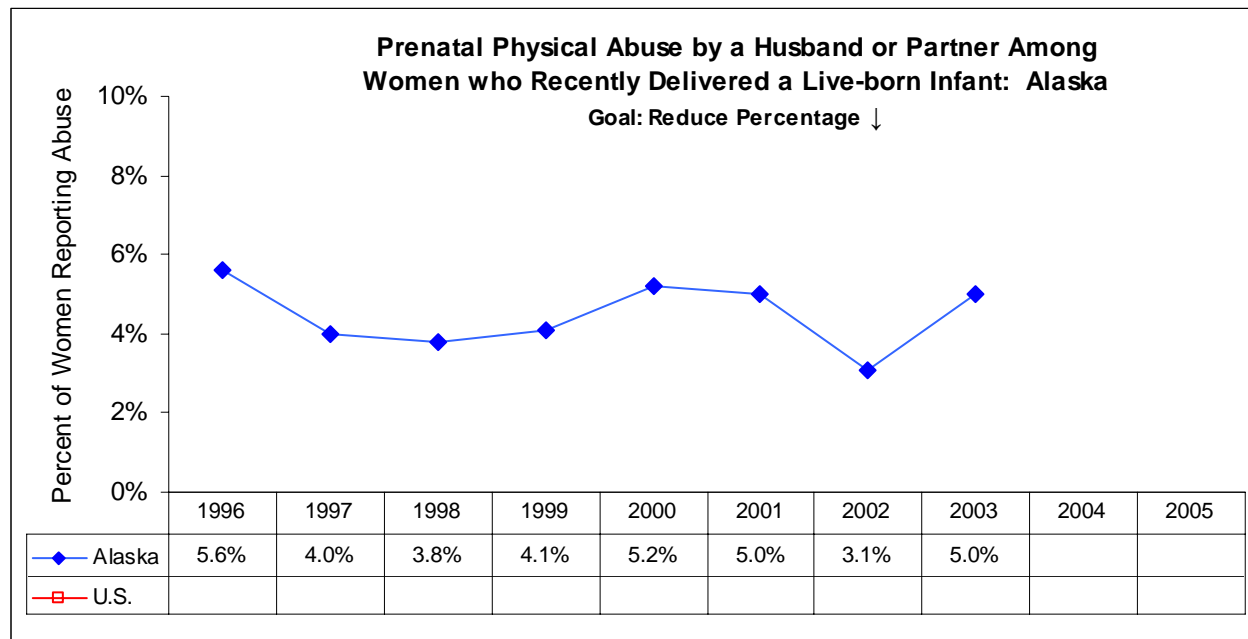
Alaskan youth are at particularly high risk for accidental brain injuries due to widespread use of off-road vehicles in the state, specifically all-terrain vehicles and snow machines. In rural Alaska, off-road vehicles are as common as the family car, but with considerably less regulatory and safety protections in place.

The five leading causes of hospitalized brain injury are highway motor vehicle crash injuries, falls, assaults, all-terrain vehicle and snow machine crash injuries. Alaska has no statewide helmet use laws for bicyclists, motorcyclists or off-road motor vehicle users. As of May 1, 2006, Alaska does have a primary enforcement seat belt law.

Data Limitations

Minor head injuries, treated in the emergency room and discharged home, are not included. Traumatic brain injury fatalities for this age group are also not included for this chart. There is no national data comparable to the Alaska Trauma Registry data for this indicator. Alaska data for 2004 are still being verified; 2005 data are still being collected.

Injury Indicator: Physical Abuse During Pregnancy By a Husband or Partner Among Women Who Recently Delivered a Live Birth



Data Source: Section of Women's, Children's and Family Health, Alaska PRAMS; U.S. data not available

Current Issues and Trends

Between 1996 and 2003, there was no significant change in the proportion of Alaska women who experienced prenatal physical abuse by a husband or partner. Prevalence estimates ranged from 3.1% to 5.6% over the time period.

As a comparison, the prevalence of prenatal physical abuse by a husband or partner in 17 other states who participated in the Pregnancy Risk Monitoring Assessment System (PRAMS) in 1999 ranged from 2.1% to 6.3%.

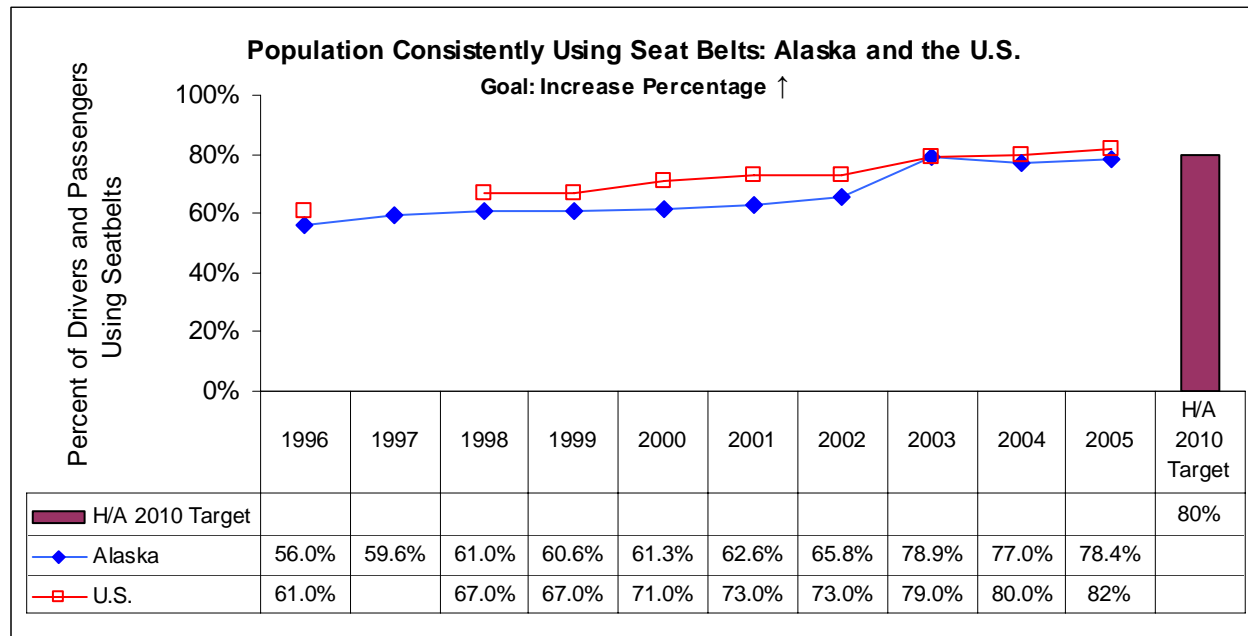
Intimate partner violence against pregnant women appears to be far less common than pre-pregnancy abuse. For example, according to PRAMS, the proportion of Alaska women who experienced physical abuse by anyone in the 12 months prior to pregnancy was 80% higher than the proportion of new mothers who reported prenatal intimate partner abuse in 2001.

There is no corresponding Healthy Alaskans 2010 indicator or target.

Data Limitations

PRAMS data are based on sample survey data of women who recently delivered a live birth. Women with other pregnancy outcomes would not be included in these estimates. Survey responses are not verified by medical or criminal records. Alaska PRAMS data for 2004 are not yet available from the Centers for Disease Control (CDC).

Injury Indicator: Population Consistently Using Seat Belts



Data Sources: Alaska Highway Safety Office and National Highway Transportation Safety Administration

Current Issues and Trends

Seatbelt use by drivers and passengers in Alaska increased from 52% in 1995 to 78.4% in 2005, still below the Healthy Alaskans 2010 target of 80%. Extensive awareness and education materials in addition to law enforcement campaigns may have facilitated the increase.

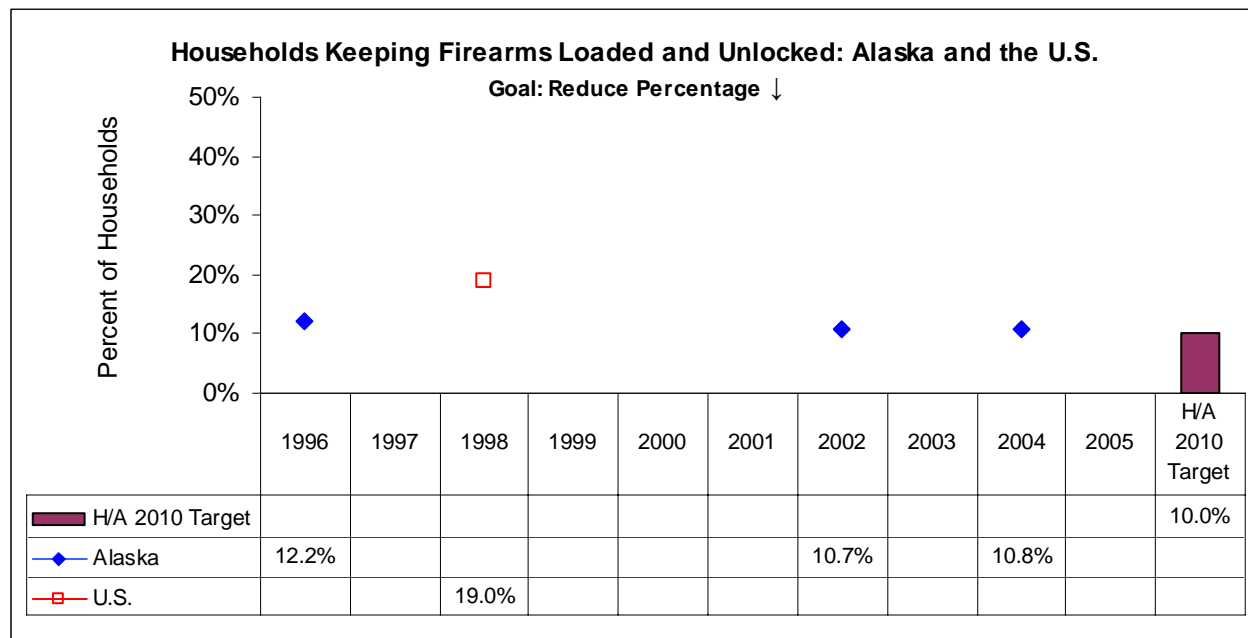
Seatbelt use remains a major instrument for preventing serious and fatal injury, but Alaska usage is still below the national average. However, a new primary enforcement seatbelt law took effect in Alaska on May 1, 2006.

Data is from an observational study conducted by the Alaska Highway Safety Office using the National Occupant Protection Use Survey from the National Highway Transportation Safety Administration.

Data Limitations

While the Alaska Highway Safety Office collects this data as the result of random observation criteria, it is further supported when compared to a corresponding 14% decrease from 1999-2004 in the motor vehicle fatality rate.

Injury Indicator: Households Keeping Firearms Loaded and Unlocked



Data Source: Alaska and U.S BRFSS

Current Issues and Trends

Between 1996 and 2004, reports of loaded and unlocked firearms in Alaska decreased from 12.2% to 10.8%. Extensive awareness and education materials in addition to a piloted gun storage program in rural Alaska and a trigger-lock campaign by law enforcement agencies may have facilitated the reduction.

Firearms remain a major instrument of serious and fatal injury, both intentional and unintentional. In 2004, 115 Alaskans lost their lives due to the intentional and unintentional use of firearms.

According to state and national Behavioral Risk Factor Surveillance System (BRFSS) data, reports of loaded and unlocked firearms in Alaska remain lower than the U.S. rate of 19%.

Firearm surveillance questions are not collected annually. No 2005 data were collected.

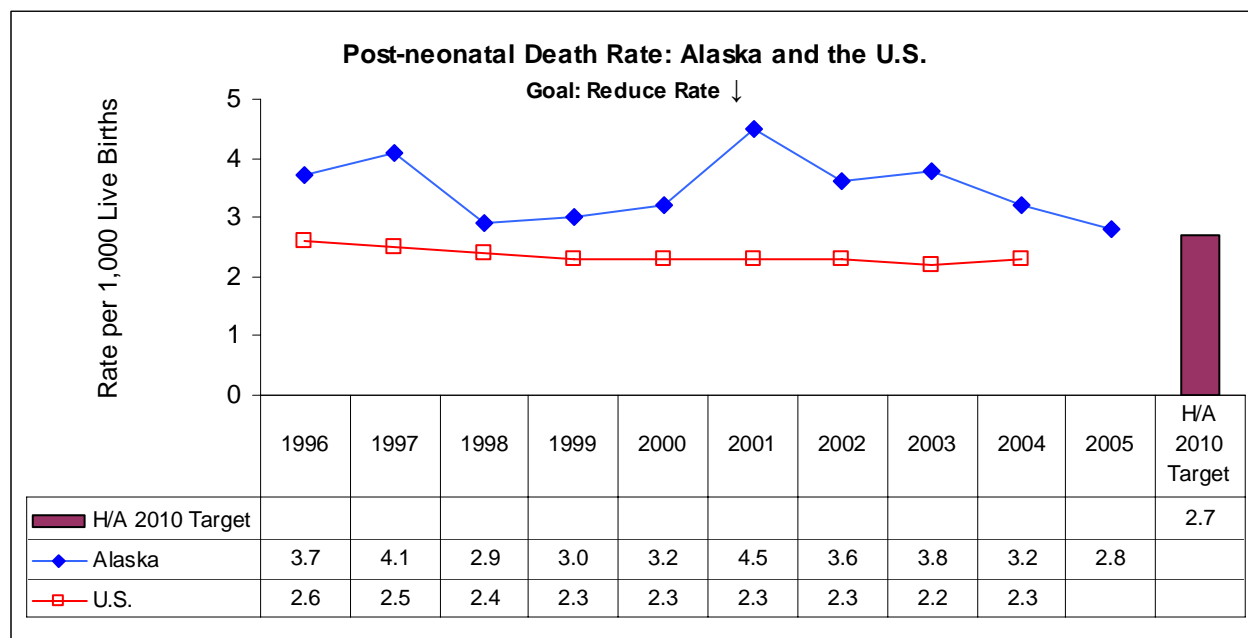
Data Limitations

Data are based on adults reporting: (a) having firearms in or around their home that are both (b) loaded and (c) unlocked during telephone survey. Data from the BRFSS: are not representative of Alaskans without phones (3% of the state); generally only provide statewide and large regional estimates; and are self-reports and subject to a number of potential sources of bias, including the tendency to under-report undesirable behaviors.



Maternal, Child Health Indicators

Child Health Indicator: Post-neonatal Deaths



Data Source: Bureau of Vital Statistics

Current Issues and Trends

Post-neonatal mortality is more often caused by environmental conditions than problems with pregnancy and childbirth. Nationally, leading causes of death during the post-neonatal period (29 through 364 days) are: Sudden Infant Death Syndrome (SIDS), birth defects, injuries, pneumonia/influenza and homicide.

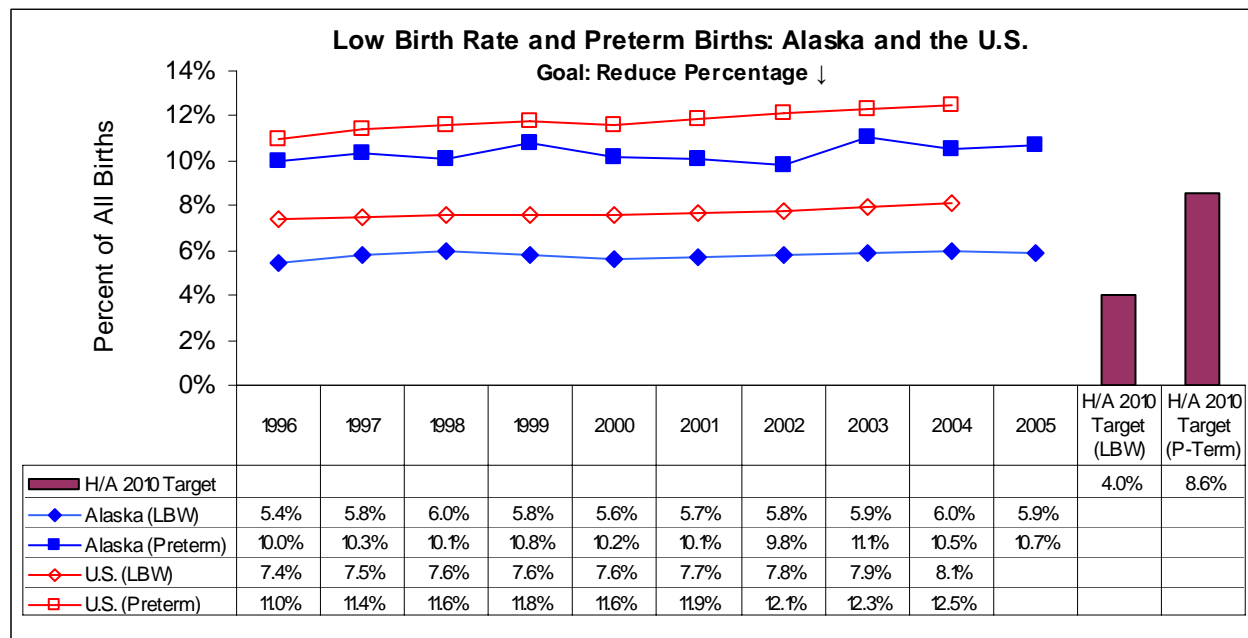
From 1991-2005 in Alaska, post-neonatal mortality declined 33% for non-natives and 65% for Alaska Natives. However, there is still room for improvement and the disparity is notable. For 2003-2005, the average post-neonatal mortality rate for Alaska Natives was almost twice that of non-natives (5.0 and 2.6 per 1,000 births, respectively).

For the 2003-2005 period, Alaska's average overall post-neonatal mortality rate (3.2 per 1,000 births) was nearly 42% higher than the national rate.

However, in 2005 alone the Alaska rate declined enough to nearly meet the Healthy Alaskans 2010 target.

Data Limitations

Child Health Indicator: Low Birth Weight and Preterm Births



Data Source: Bureau of Vital Statistics

Current Issues and Trends

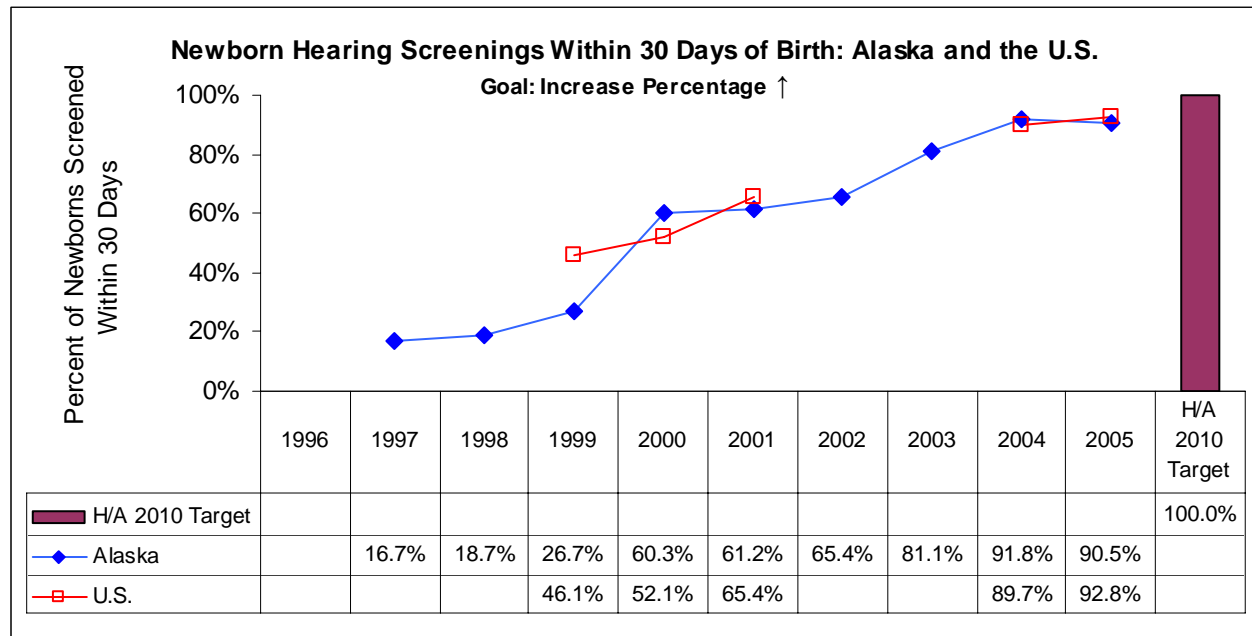
Most pregnancies last around 40 weeks and infants born between 37 and 42 weeks of pregnancy are considered full term. Preterm babies are at risk for serious health problems including cerebral palsy, lung and gastrointestinal problems, and vision and hearing loss. Risk factors associated with preterm birth include: multiple births; previous preterm delivery; stress; infection; vaginal bleeding; smoking; illicit drugs; and low pre-pregnancy weight. In addition, women less than 17 or over 35 years of age are at increased risk of premature birth.

Compared to infants of normal weight, low birth weight infants (less than 2500 grams, or 5.5 pounds) are at increased risk of impaired development such as delayed motor and social development. The majority of low birth weight infants are born preterm (less than 37 weeks gestation).

Preterm birth in Alaska, although slightly lower than the nation as a whole, was 20% higher than the Healthy Alaskans 2010 target in 2005. Nationally, the proportion of live births born with low birth weight is about 1.3 times higher compared to Alaska.

Data Limitations

Child Health Indicator: Newborn Hearing Screenings Within 30 Days of Birth



Data Source: Section of Women's, Children's and Family Health

Current Issues and Trends

Detecting hearing loss as early as possible is important because 80 percent of a child's language ability is established by the time the child is 18 months of age. Early intervention and treatment have been demonstrated to be highly effective. Children with hearing loss who do not receive early treatment frequently require special education services. It is expected that approximately 30 newborns per year will be diagnosed with hearing loss.

Alaska has met the Healthy Alaska 2010 objective of screening 90% of newborns by age 1 month. 30% more newborns were screened in 2005 than in 2000.

In 2006, the Alaska Legislature passed HB 109 to implement a universal newborn hearing screening program. The goal is to screen 100% of newborns for hearing loss by January 1, 2008.

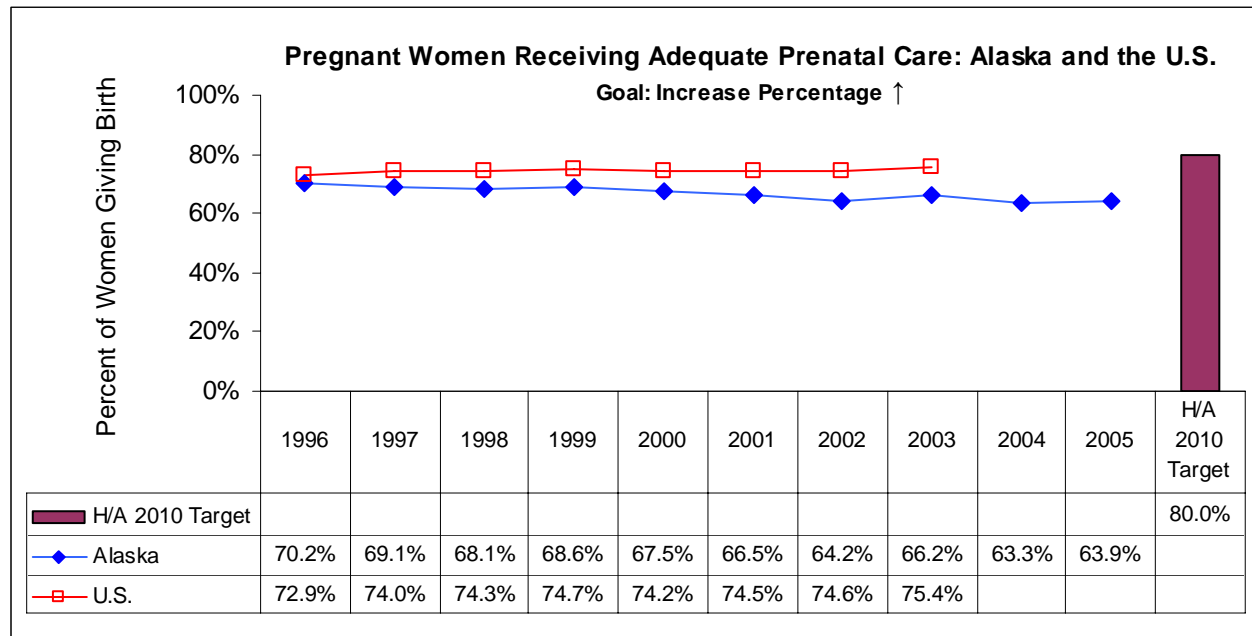
Data Limitations

Alaska data only covers births in hospitals and not other birthing facilities. Of the infants born in hospitals in 2005, 97.5% were screened. U.S. data only covers states that had universal screening programs and/or reported data.



Health Care Access and Safety Indicators

Health Care Access Indicator: Pregnant Women Getting Adequate Prenatal Care



Data Source: Bureau of Vital Statistics

Current Issues and Trends

In Alaska, the proportion of women who have adequate prenatal care is relatively low compared to the U.S. average and, based on information collected on birth certificates, is declining – from 70% in 1996 to 64% in 2005.

Adequate prenatal care is typically lower for Alaska Native women (51% in 2000) and for teenage women (60% for ages 15-19 in 2000).

Adequacy of prenatal care for Alaskan women of all age groups is significantly lower than both the Healthy Alaskans 2010 target (80%) and the Healthy People 2010 national target (90%).

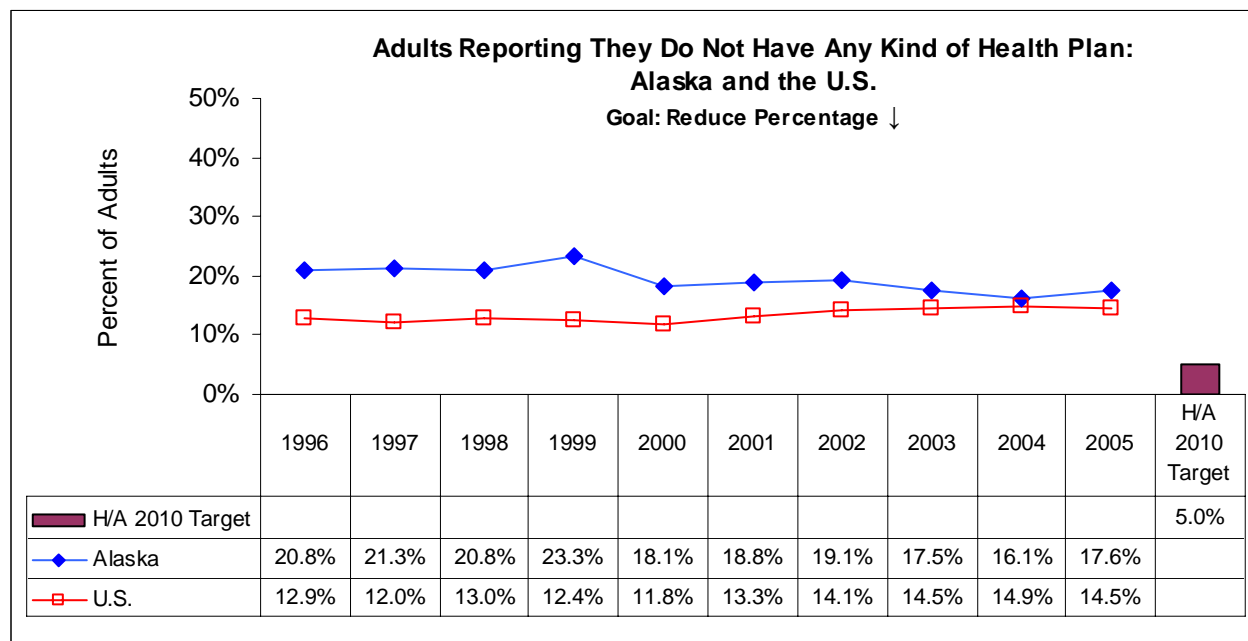
The Alaska Pregnancy Risk Assessment Monitoring System (PRAMS) reported that 20% of women who delivered in 2000 did not get prenatal care as early as they wanted.

Most women received prenatal care from private physicians (41%) and hospital clinics (16%). In 2000, 41% of women delivering live births relied on Medicaid to pay for all or part of their prenatal care.

Data Limitations

Data on prenatal care comes from vital records. Reporting of prenatal visits on the birth certificate may be incomplete. Reporting may also be inconsistent: the person recording the number of prenatal visits (mother or health care provider or clerical staff) may differ depending on the reporting source; the person reporting the information may not have access to all records. Data based on the Adequacy of Prenatal Care Index.

Health Care Access Indicator: Adults Reporting They Do Not Have Any Type of Health Plan



Data Source: Chronic Disease Prevention and Health Promotion, BRFSS

Current Issues and Trends

Over the past decade, the percentage of adult Alaskans who do not have health care coverage (including prepaid plans, government plans, or Indian Health Service) has decreased slightly, from 20.8% in 1996 to 17.6% in 2005. Although this trend has been in the right direction, and in fact has closed the gap between the Alaska and U.S. rates, it has not been a steep enough decline to meet the Healthy Alaskans 2010 goal of 5%.

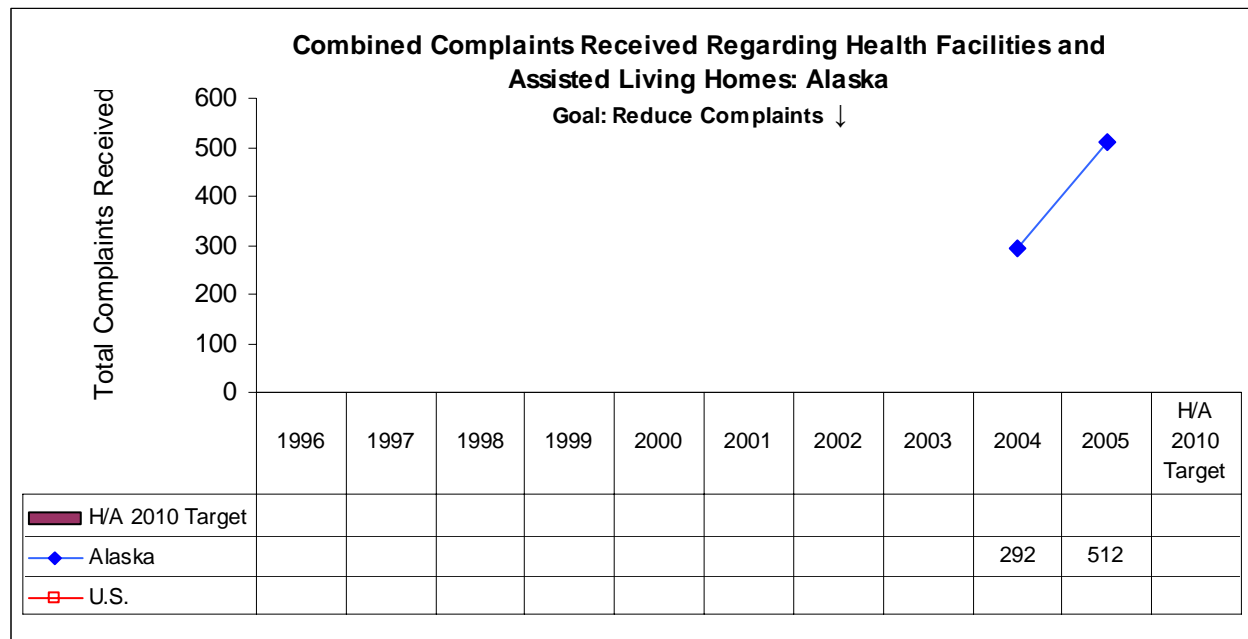
This should be considered a crude indicator of health care because many variables (geographic access, cost of deductibles, other restrictions of the plan) can affect whether individuals actually receive care even if they do have health coverage.

Data from 2005 show that having a health plan was unrelated to sex or race, but that younger Alaskans and those with less education or income were the least likely to have coverage. While 55% of adult Alaskans said they have one person they think of as their regular health care provider, 29% reported having no regular provider.

Data Limitations

Data from the BRFSS: are not representative of Alaskans without phones (3% of the state); generally only provide statewide and large regional estimates; and are self-reports and subject to a number of potential sources of bias, including the tendency to under-report undesirable behaviors.

Health Care Safety Indicator: Complaints Regarding Health Facilities and Assisted Living Homes



Data Source: Certification and Licensing

Current Issues and Trends

The Section of Certification & Licensing (C & L) processes and investigates complaints in all licensed Medicare/Medicaid health facilities, assisted living homes and child residential treatment facilities.

There were 244 Assisted Living Home complaints for the most recent full year; for health facilities, 268 complaints were received, for a combined total of 512. The increase in complaints in 2005 is attributed to enhanced collaboration with local partner agencies such as Adult Protective Services, the Long Term Care Ombudsman and community advocates. Also, by consolidating into the new Section, units once scattered throughout state government have created and are maintaining consistent, accurate record keeping – which may help account for the elevated number of complaints.

Newly revised regulations detailing health and safety requirements for licensed facilities became effective in June 2006; as a result, staff will be spending more time on inspections, which may result in an increase of complaints in coming years.

Data Limitations

C & L is a newly created Section in the Division of Public Health; because of this, some data are still limited as reporting and record-keeping procedures come up to speed.

There is no comparable national data or Healthy Alaskans 2010 target for this indicator.

Division of Public Health Sections Contributing to This Report

<u>Infectious Disease</u>	<u>Data</u>	<u>Program Info</u>
TB	Epi	Epi
Chlamydia	Epi	Epi
Gonorrhea	Epi	Epi
HIV prevalence	Epi	Epi
Measles	Epi	Epi
Pertussis	Epi	Epi
Hepatitis A	Epi	Epi
Hepatitis B	Epi	Epi
Fully immunized two year olds	Epi	Epi
<u>Chronic Disease</u>		
Stroke mortality	BVS	CDPHP
Hypertension prevalence	CDPHP	CDPHP
Coronary (Ischemic) Heart Disease	BVS	CDPHP
Lung cancer	BVS	CDPHP
Diabetes	BVS	CDPHP
Adult smokers	CDPHP	CDPHP
High school smokers	CDPHP	CDPHP
Adults who are inactive	CDPHP	CDPHP
Adults overweight / obese	CDPHP	CDPHP
Adolescents overweight / at risk	CDPHP	CDPHP
Adults with high cholesterol	CDPHP	CDPHP
Education for people with diabetes	CDPHP	CDPHP
Women over 40 / mammograms	CDPHP	WCFH
<u>Injury</u>		
Unintentional injury deaths	BVS	IPEMS
Occupational fatalities	IPEMS	IPEMS
Attempted suicides, ages 10-19	IPEMS	IPEMS
Traumatic brain injury to youth	IPEMS	IPEMS
Pregnant women physically abused	WCFH	WCFH
Seat belt use	CDPHP	IPEMS
Firearms loaded and unlocked	CDPHP	IPEMS
<u>Maternal Child Health</u>		
Post-neonatal deaths	BVS	WCFH
Hearing screenings within 30 days of birth	WCFH	WCFH
Low birth weights and pre-term births	BVS	WCFH
<u>Health Care Access & Safety</u>		
Pregnant women getting adequate care	BVS	WCFH
Alaskans with no health care plan	CDPHP	CDPHP
Complaints against providers investigated	C&L	C&L

Key to DPH Sections: BVS = Bureau of Vital Statistics; C&L = Section of Certification & Licensing; CDPHP = Section of Chronic Disease Prevention and Health Promotion; Epi = Section of Epidemiology; IPEMS = Section of Injury Prevention and Emergency Medical Services; WCFH = Section of Women's, Children's and Family Health