

INTRODUCTION

ABOUT ALASKA

Alaska is the largest of the 50 United States and contains approximately 16% of the country's land mass. Because of its size, Alaska contains widely diverse geographic, climatic, and demographic characteristics, all of which affect public health.

Alaska contains roughly 586,412 square miles of land. Alaska's estimated population on July 1, 1995, was 603,453, or slightly more than one person per square mile. Alaska also claims the most northern, western and eastern points of land in the United States, more miles of coastline than all of the contiguous 48 states combined (6,640 miles not including islands), over 5,000 glaciers, over 3 million fresh water lakes (one of which, Iliamna, is the second largest in the U.S.), and 3,000 rivers, one of which is the third longest river in the United States (the Yukon River). Much of the coastline and fresh water areas are used as transportation corridors, as well as fishing grounds. Remote lands are used for hunting and recreational activities.

Unique climatic conditions affect Alaska's people. Temperatures can range from as high as 100°F to lows that approach -80°F. Alaska experiences extremes in precipitation as well. Some areas of the state may receive up to 200 inches of precipitation annually, while other areas receive as little as 12 inches.

Demographically, whites make up 75.0 percent of the total population; Natives¹, 16.3 percent; blacks, 4.5 percent; and Asian and Pacific Islanders, 4.2 percent.²

With diverse cultures, sparse population, severe temperatures, vast coastline, and outdoor lifestyles, the state experiences many unique health care challenges. One such challenge is providing adequate medical care and health care assistance to residents who live in remote areas of the state. The federal Indian Health Service (IHS), the State of Alaska, and private entities provide health care in these areas through funding for Public Health Nurses and other health care workers.

The *Bureau of Vital Statistics 1995 Annual Report* focuses on health status indicators in Alaska. Some comparisons between Alaska health status indicators and national indicators are made. Although some similarities between Alaska and the rest of the United States exist, there are many dissimilarities. By reporting these indicators, our hope is to assist other professionals to evaluate the status of health in Alaska. The events and vital statistics discussed throughout this report can be useful tools for health care planners, providers, and professionals, but do not provide answers in themselves.

HOW VITAL STATISTICS ARE COLLECTED

Section 18.50.010 of the Alaska Statutes establishes the Bureau of Vital Statistics to install, maintain, and operate a system of vital records. These records contain birth, death, fetal death, divorce, marriage, and adoption information. This report focuses primarily on statistics for residents of Alaska.

When a birth occurs in Alaska, there is a legal process for recording that birth (AS 18.50.160). Generally, a physician, midwife, and/or hospital medical records staff person prepares a birth certificate from information provided by the birth mother and the delivery attendant.

1 In this report, Native includes any people indigenous to the Western Hemisphere: Alaska Native, Native mixed, Aleut, Eskimo, Canadian Eskimo and Indian, and American Indian.

2 Alaska Department of Labor, Research and Analysis Section, Demographics Unit.

Death certificates are usually completed by a funeral home staff member or a local magistrate, and then signed by the attending physician or medical examiner. Death certificates should be filed with the local recording district office within three days of the date of death (AS 18.50.230). After the certificate has been recorded at the local district office, it is then forwarded to the Bureau of Vital Statistics in Juneau for registration.

When a birth or death occurs in Alaska to a resident of another state, the Bureau sends the respective state's registrar a copy of the certificate. Similarly, when a birth or death occurs to an Alaskan resident in another state, that state's registrar, by formal agreement, sends a copy of the certificate the Alaska Bureau of Vital Statistics.

A certificate of marriage for each marriage performed in the state must be filed with the local recording office within seven days of the marriage (AS 18.50.270). The local recording office then forwards the certificate to the Bureau for registration and permanent retention.

Divorce, dissolution, and annulment certificates are prepared by a clerk of the court from information provided by the petitioner, plaintiff, and (possibly) court documents. The completed certificate is then forwarded to the Bureau for final registration (AS 18.50.280).

For each adoption granted by the court, a report of adoption is prepared and registered with the Bureau (AS 18.50.210). In the event that a child was born in Alaska and adopted in another state, the Bureau receives that state's equivalent of our report of adoption. These copies may only be used for statistical purposes. They may not be released to third parties. Individuals must obtain copies of their birth record from the jurisdiction (state, county or city) where they were born.

HOW CERTIFICATES ARE PROCESSED

In 1994, the Bureau instituted an Electronic Birth Certificate (EBC) system. This system enables hospital and clinic staff to record all birth certificate information by computer. As information is entered for each individual certificate, the computer checks for invalid or improbable data. When the certificate has been entered on the EBC system, the data is certified, recorded, and filed by the Bureau. Each certificate is then examined electronically for missing or out-of-range information and returned to the facility or birth attendant for verification and/or correction. During 1995, approximately 95-99% of all births were recorded by EBC.

Other vital records received by the Bureau go through a different verification process. First, a trained documents processor reviews the certificate for completeness. If the certificate is incomplete it is returned to the appropriate office for completion. Once a document has been received and accepted, information is entered into the data base by two different employees. This double-entry verification process reduces data entry errors. In addition, these records are tested for missing, out-of-range, and duplicate data.

INTERPRETATION OF VITAL STATISTICS

People use vital statistics for a variety of purposes ranging from planning for health, education, and social service delivery systems to economic planning and business development. For this reason, the Bureau takes particular care in reporting vital statistics data. In Alaska, statistics are often based upon few events and small populations. Therefore, year-to-year variations in statistics may not reflect actual trends but, rather, random or unusual events. Appendix B includes detailed information on use and interpretation of vital statistics.

DETERMINATION OF RACE

The National Center for Health Statistics (NCHS) issues guidelines for determining the race of a child at birth. With few exceptions, the child's race on the birth certificate is the same as the mother's stated race. These guidelines became effective in 1989. Appendix E provides more details on how the race of the child is determined.

Sometimes race will be recorded differently on death certificates. This can distort death rates, particularly in the case of infant mortality, where a child's race may be reported as white on the birth certificate because the mother is white,

and Native on the death certificate because the father is Native. To ensure consistent reporting and calculation of rates, a new procedure was used in this report. All death certificates for decedents who were born in Alaska in 1989 or later are matched with the birth certificate and the child's race at birth is used for calculating deaths and death rates by race.

POPULATION ESTIMATES

Population information in this report was obtained from the State of Alaska, Department of Labor (DOL), Research and Analysis Section (R&A), Demographics Unit. Estimates are made by race, age, and geographic area. The 1995 estimated Alaskan population was 603,453 persons, with 315,329 males and 288,124 females. During 1995 there were 109.4 males for every 100 females in Alaska.

The Alaska Department of Labor updates its population estimates annually. The total population is revised each year to correspond to the U.S. Census Bureau state total. Using the decennial census as a base; birth, death, IRS, Alaska Permanent Fund and education statistics are used to produce annual population estimates for geographic areas. Based on this information, the 1995 estimated population is less than the 1994 estimated population reported in the Bureau of Vital Statistics 1994 Annual Report, but is greater than the current estimate of the 1994 population. A summary of revised population estimates is included in Appendix I.

In Alaska during 1995, 452,650 persons were white, 98,363 were Native, 26,974 were black, and 25,466 were Asian and Pacific Islander. The racial composition of Alaska's population is somewhat unique because of its large Native population. Residents of the Anchorage census area comprised 42 percent of the state's population during 1995. About 78.6 percent of Alaska's population was concentrated in six census areas: Anchorage, Fairbanks, Juneau, Kenai, Ketchikan, and Matanuska-Susitna. For the five year period from 1990 through 1995, the average annual rate of increase in population for Alaska was 1.9 percent.

The median age for Alaskan males during 1995 was 30.4 years; for females it was 30.6 years; and for all Alaskans it was 30.5 years³ The overall median age in the United States during 1995 was 34.3 years. The median age for males in the United States was 33.2 years and for females it was 35.5 years⁴. The age of a population is important when interpreting vital statistics, because behaviors and health risks of younger populations differ from those exhibited by older populations. Age, race, and sex distributions within a population are also important. For an example of the disparity of the age distribution of Alaska versus that of the United States, please refer to Chart I.1 in Appendix I. For further information about interpretation of vital statistics, refer to Appendix B.

3 Alaska Department of Labor, Research and Analysis Section, Demographics Unit.

4 Day, Jennifer Cheeseman, *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1995 to 2050*, U.S. Bureau of the Census, Current Population Reports, P25-1130, U.S. Government Printing Office, Washington, DC, 1996, p. 42.