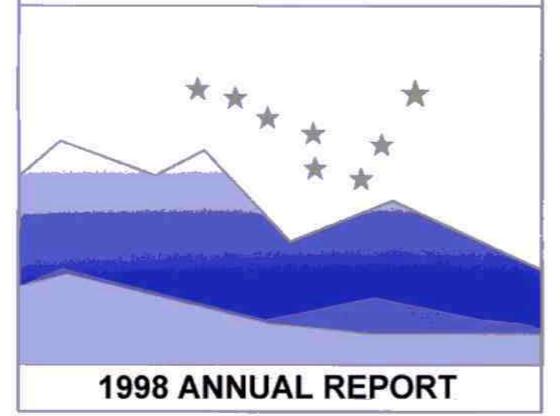
# ALASKA BUREAU OF VITAL STATISTICS



TONY KNOWLES Governor STATE OF ALASKA



KAREN PERDUE Commissioner

DEPT. OF HEALTH & SOCIAL SERVICES

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# **PREFACE**

#### PURPOSE OF THIS REPORT

The Alaska Bureau of Vital Statistics 1998 Annual Report was written by Research Unit staff of the Alaska Bureau of Vital Statistics. This document contains data on births, fetal and infant deaths, adoptions, marriages and divorces, and deaths. The purpose of this report is to provide reference material and indicators for health and vital events in Alaska. Other data sources for analyzing public health trends are also available from the Alaska Department of Health and Social Services. Please refer to Appendix J for other data sources within the department.

## **HOW THIS REPORT IS ORGANIZED**

#### Table of Contents

The table of contents contains chapter headings and major sections, and lists of tables, charts, and maps.

#### **Preface**

This section describes the organization of this report.

## **Executive Summary**

The executive summary includes population estimates, and numbers and rates of vital events (births, deaths, marriages, divorces and adoptions) in Alaska for the 1998 calendar year.

#### Introduction

The introduction provides an overview of Alaska, information on population and demographics, and an explanation of how vital statistics are collected and recorded.

#### **Births**

The birth section includes tables showing numbers of births by census area and Native regional corporation boundaries, birth characteristics of babies, and demographic and behavioral information on parents.

#### **Fetal and Infant Deaths**

This chapter includes tables showing fetal deaths by census area and Native regional corporation boundaries, mother's age and length of gestation; and deaths and mortality rates for infants up to one year of age by census areas, Native regional corporations, and causes of death.

#### **Childhood Deaths**

This chapter provides specific information on deaths to children from 1 through 17 years of age.

# **Adoptions**

The adoption chapter provides information on census areas and Native regional corporation boundaries where adoption decrees were granted; adoptions by age, race, and birth place of children; and race of adoptive parents.

## **Marriages and Divorces**

This chapter provides information on the number and rates of marriages and divorces by residence, and marriages by ages of brides and grooms.

#### **Deaths**

This section includes information on all deaths by census area and Native regional corporation boundaries; death rates; causes of death; and age, gender, and race of decedents.

#### References

This section lists the sources from which information has been used or referenced in this report.

## **Appendices**

The appendices include definitions of terms, technical notes, classification of causes of death, prenatal care index, method of determining child's race, Year 2000 health objectives, sample certificates, maps of Alaska, population statistics, and sources for additional data.

#### **HOW TO OBTAIN A COPY**

The 1998 Annual Report of the Bureau of Vital Statistics is available at many local libraries throughout the state and on the internet at http://www.hss.state.ak.us/dph/bvs/annrpt/ar1998/annrpt.htm. We welcome any comments, questions, or concerns you may have about this report. You may contact us at:

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Division of Public Health
Bureau of Vital Statistics
P.O. Box 110675
Juneau, Alaska 99811-0675
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Fax: (907) 465-3618 EMail:BVSResearch@health.state.ak.us

## **ADDITIONAL INFORMATION**

Additional information, including how to obtain copies of vital event certificates, is available on the internet at http://health.hss.state.ak.us/dph/bvs/bvs\_home.htm. The Research Unit is also available for special research projects on vital statistics data by special request. For non-governmental organizations the fee for research is \$70/hour. Please contact the Research Unit at:

Phone: (907) 465-8602 Fax: (907) 465-3618 Email: BVSResearch@health.state.ak.us

#### **ACKNOWLEDGMENTS**

Most of the data and health indicators presented in this report are based upon information supplied by many people throughout the state. Birth mothers, doctors, midwives, other birth attendants, medical facilities, medical examiners, magistrates, funeral directors, and a host of other individuals complete information on vital records.

The staff of the Bureau of Vital Statistics extends our gratitude to each person who participated in our data gathering effort. Accurate data are essential to the Bureau's efforts to report reliable vital event information. We appreciate the assistance of others in maintaining the integrity of our data.

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# **EXECUTIVE SUMMARY**

## SUMMARY OF POPULATION AND VITAL STATISTICS INFORMATION

| Alaska's Population   |  |
|---|--|
| Total Population 617,082 ¹  |  |
| White       456,271         Native       103,361 <sup>2</sup> African American       27,460         Asian and Pacific Islander       29,990         Male       321,184         Female       295,898 |  |
| Natural Increase  |  |

| Deaths                                       |   |
|--|---|
| Total Deaths 2,579                           |   |
| Crude Death Rate 417.9                       | 5 |
| Age-Adjusted Death Rate 460.1                | 6 |
| Male Age-Adjusted Death Rate 549.1           |   |
| Female Age-Adjusted Death Rate 366.8         |   |
| Age-Adjusted Cancer Death Rate 120.3         |   |
| Age-Adjusted Heart Disease Death Rate. 100.2 |   |
| Age-Adjusted Accidental Death Rate 42.0      |   |
| Age-Adjusted Suicide Death Rate 23.7         |   |
| Infant Mortality Rate 7.4                    | 7 |
| White Infant Mortality Rate 5.9              |   |
| Native Infant Mortality Rate 10.4            |   |
|  |   |

| Births                                     |
|--|
| Total Births 9,920                         |
| Crude Birth Rate 16.3 4                    |
| White Birth Rate 14.5                      |
| Native Birth Rate 23.4                     |
| African American Birth Rate 14.4           |
| Asian/Pacific Islander Birth Rate 16.1     |
| Teen Birth Rate 48.4 8                     |
| Fertility Rate 71.6 <sup>9</sup>           |
| White Fertility Rate 65.1                  |
| Native Fertility Rate 105.3                |
| African American Fertility Rate 60.1       |
| Asian/Pacific Islander Fertility Rate 67.0 |
| Low Birth Weight Percentage 5.6 10         |
| White Low Birth Weight Percentage 5.2      |
| Native Low Birth Weight Percentage 5.6     |
| Afr/Am Low Birth Weight Percentage 11.4    |
| Teenage Low Birth Weight Percentage 6.3 11 |

| Other Vital E       | vents |
|---------------------|-------|
| Fetal Deaths        | 40    |
| Fetal Death Rate    | 4.1 7 |
| Adoptions           | 777   |
| Crude Adoption Rate | 1.3 4 |
| Marriages           | 5,105 |
| Crude Marriage Rate | 8.3 4 |
| Divorces            | 3,329 |
| Crude Divorce Rate  | 5.4 4 |
|                     |       |

#### Notes

- 1. Alaska population data from the Alaska Department of Labor, Research and Analysis Section, Demographics Unit.
- 2. For purposes of this report, Native includes any person indigenous to the Western Hemisphere: Alaska Native, Native mixed, Aleut, Eskimo, Canadian Eskimo and Indian, and American Indian.
- 3. Natural Increase is the difference between live births and deaths. Natural Increase does not include migration.
- 4. Natural Increase, Birth, Marriage, Divorce, and Adoption Rates are events per 1,000 population.
- 5. Crude Death Rates are deaths per 100,000 population.
- 6. Age-Adjusted Death Rates are adjusted to the 1940 U.S. standard million population. (See Appendix A.)
- 7. Infant Mortality and Fetal Death Rates are 5-year averages (1994-1998) of infant deaths (death cohort) and fetal deaths per 1.000 live births.
- 8. Teen Birth Rate is the number of births to teens per 1,000 females 15-19 years of age. This does not include births to females under 15 years of age.
- 9. Fertility Rates are births per 1,000 females 15-44 years of age.
- 10. Low Birth Weight Percentages are 5-year averages per 100 live births.
- 11. Teenage Low Birth Weight Percentages include births to all mothers less than 20 years of age.

# INTRODUCTION

#### **ABOUT ALASKA**

Alaska is the largest of the 50 states and contains approximately 16% of the country's land mass. Because of its size, Alaska has 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, 1997, was 611,300, 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, of which the Yukon is the third longest river in the United States. 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 74.2 percent of the total population; Natives<sup>1</sup>, 16.7 percent, African American, 4.5 percent; and Asian and Pacific Islanders, 4.6 percent. Males comprise 52.1 percent and females, 47.9 percent of the population.<sup>2</sup>

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 Native Health Corporations, the Alaska Compact between the Indian Health Service and individual tribes, 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 1998 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.

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.

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.

- 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, Juneau, Alaska.

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 to the Alaska Bureau of Vital Statistics. This cooperative arrangement allows us to include all births and deaths involving Alaskan residents wherever they occur within the country.

In the past, the Alaska Court System issued a license and filed a certificate for each marriage performed in the state. The certificate was filed with the local recording office of the Court System within seven days of the marriage (AS 18.50.270). The local recording office then forwarded the certificate to the Bureau for registration and permanent retention. In 1997 the Bureau of Vital Statistics began issuing marriage licenses in Juneau, Anchorage, and Fairbanks, as well as registering and providing permanent retention of documents. Marriage licenses in other parts of the state continue to be issued by the Court System under the bureau's oversight.

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 and acts on that state's report of adoption.

#### POPULATION ESTIMATES

Population estimates used in this report were 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 1998 estimated Alaskan population was 617,082 persons, with 321,184 males and 295,898 females. During 1998 there were 108.5 males for every 100 females in Alaska.

The Alaska Department of Labor updates its population estimates annually. The estimate of 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.

In Alaska during 1998, 456,271 persons were white, 103,361 were Native, 27,460 were African American, and 29,990 were Asian and Pacific Islander. Residents of the Anchorage census area comprised 41.7 percent of the state's population during 1998. About 78.9 percent of Alaska's population was concentrated in six census areas: Anchorage, Fairbanks, Juneau, Kenai, Ketchikan, and Matanuska-Susitna.

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. The median age for Alaskan males during 1999 was 32.8 years; for females it was 32.3 years; and for all Alaskans it was 32.5 years. There was a difference of more than ten years in the median age of whites (34.8) and Alaska Natives (23.2).<sup>3</sup> The overall median age in the United States during 1998 was 35.2 years. The median age for males in the United States was 34.1 years and for females it was 36.3 years<sup>4</sup>. The median age for U.S. whites was 36.3 and for Native Americans it was 27.5. 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 "How to Use Vital Statistics" in Appendix B.

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<sup>3</sup> Ibid

<sup>4</sup> 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, February, 1996, p. 46 (Alaska State Library U.S. Government Publications, reference C3.186).

#### 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 1998, almost 97% of all births occurring in Alaska 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.

Causes of death are determined by a physician or medical examiner and narrative descriptions are entered on the death certificate. The narrative causes of death are typed into a computer file by Bureau staff. SuperMICAR, a program produced, maintained, and provided by National Center for Health Statistics (NCHS), codes 75-80 percent of causes of death according to ICD-9 standards. (See Appendix C for groupings of ICD-9 causes of death.) The bureau transmits the computer file by diskette or e-mail to NCHS. NCHS completes coding for the remainder of the records. This coding is then returned to the bureau and transmitted into its data base.

#### **HOW THIS REPORT WAS PREPARED**

After documents have been entered into the Bureau's data base, research staff perform computer checks to test for missing, out-of-range, and duplicate data. Because this report is based not only on events which occur in Alaska, but also events which occur in other states to Alaska residents, there may be a significant lag time before data is received. One of the important checks made by research staff is for duplicate entries of events. Waiting for all data to arrive and eliminating duplicate entries are both important steps for ensuring the most accurate report possible. After we believe the data is both accurate and complete, data programs can be run to generate information from which the tables, charts, and narrative analyses can be written for this report.

There are a number of ways to report vital events including numbers of events, rates based on total populations, or rates based on specific populations. For a discussion of the use of vital statistics and a comparison of different populations, see Appendix B.

## **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.

# **BIRTH**



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#### INTRODUCTION

There were 9,920 Alaska resident live births in 1998 (5,036 boys and 4,884 girls). This is a decrease of 0.4 percent from the 9,956 births recorded in 1997. The 1998 crude birth rate of 16.1 per 1,000 population (see Table 1.1A on page 12) represents a 1.2 percent decrease from the 1997 crude birth rate of 16.3 per 1,000 population, and an 19.5 percent decrease from the 1992 crude birth rate of 20.0 per 1,000 population. The 1998 crude birth rate for the United States was 14.6 live births per 1,000 population. The U.S. rate has declined from 16.7 in 1990 to the current rate of 14.6 per 1,000 population, and the Alaska rate has declined from 21.6 in 1990 to 16.1 per 1,000 population in 1998.

- 1 Crondahl, J., Mitchell, P., Zenk, A, and Walden, S. Department of Health and Social Services, Division of Public Health, *Alaska Bureau of Vital Statistics 1997 Annual Report*, Juneau, Alaska. December 1998, p. 9.
- Zenk, A.E., Skagerberg, V.R., Withington, R.P., and Walden, S.L. Department of Health and Social Services, Division of Public Health, Alaska Bureau of Vital Statistics 1992 Annual Report, Juneau, Alaska. January 1996, p. 9. Rates have been recalculated according to population estimates shown in Appendix I.
- 3 National Center for Health Statistics, U.S. Department of Health and Human Services, "Births and Deaths: Preliminary Data for 1998," *National Vital Statistics Report*, Vol. 47, No. 25, October 5, 1999, p. 3.
- 4 National Center for Health Statistics, U.S. Department of Health and Human Services, "Report of Final Natality Statistics, 1996," *Monthly Vital Statistics Report*, Vol. 46, No. 11(S), June 30, 1998, Table 6, p. 35.
- Zenk, A.E., and Withington, R.P. Department of Health and Social Services, Division of Public Health, Alaska Bureau of Vital Statistics 1990 Annual Report, Juneau, Alaska, April 1993, p.16.

25.0 20.0 17.5 15.0 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 ALASKA

Births per 1,000 population

CHART 1.1A CRUDE BIRTH RATES, UNITED STATES AND ALASKA, 1980-1998

There were 114 multiple births with 111 sets of twins and 3 sets of triplets in 1998.

The most popular boy's name in 1998 was Michael and the most popular girl's name was Emily. The table below shows the ten most popular boys' and girls' names for the years 1988, 1993, and 1998.

|      | B           | OYS' NAMES  |         | G         | IRLS' NAME | S        |
|------|-------------|-------------|---------|-----------|------------|----------|
| RANK | 1988        | 1993        | 1998    | 1988      | 1993       | 1998     |
| 1    | Michael     | Michael     | Michael | Jessica   | Jessica    | Emily    |
| 2    | Christopher | Tyler       | Jacob   | Amanda    | Ashley     | Hannah   |
| 3    | Joshua      | Joshua      | Joshua  | Ashley    | Sarah      | Sarah    |
| 4    | James       | Jacob       | David   | Jennifer  | Samantha   | Megan    |
| 5    | Matthew     | Matthew     | Joseph  | Sarah     | Amanda     | Alyssa   |
| 6    | David       | David       | Brandon | Elizabeth | Taylor     | Ashley   |
| 7    | Joseph      | John        | James   | Stephanie | Stephanie  | Samantha |
| 8    | Andrew      | James       | Matthew | Samantha  | Hannah     | Jessica  |
| 9    | Kyle        | Christopher | Andrew  | Megan     | Kelsey     | Madison  |
| 10   | Robert      | Daniel      | Daniel  | Brittany  | Elizabeth  | Taylor   |

The incidence of low birth weight babies (under 2500 grams or 5 pounds 8 ounces and under) born in the five-year period from 1994 through 1998 was 5.6 percent of total live births, up from 5.4 percent from 1993 through 1997. The incidence of low birth weight has increased by 16.7% since 1987-1991 when it was 4.8 percent of live births.

During 1998, 18.4 percent of mothers reported using tobacco at some time during their pregnancies, and 3.7 percent reported using alcohol. The trend is toward use of tobacco and alcohol by fewer mothers. In 1997, 19.3 percent of all mothers reported using tobacco and 3.8 reported using alcohol. From 1994-1998, mothers under the legal age of smoking (19 years) were 1.9 times more likely to use tobacco than mothers of legal smoking age (30.8 percent of mothers under 19 compared with 18.9 percent of mothers ages 19 and over). Mothers under the legal drinking age of 21 were less likely to use alcohol during pregnancy than mothers age 21 and over (3.9 percent under 21 compared to 4.7 percent ages 21 and over).

The natural increase in population (the increase of births over deaths) was 7,341 persons, representing a natural increase rate of 11.9 persons per 1,000 population. This is a 1.7 percent decrease from the 12.1 persons per 1,000 population natural increase rate in 1997.

July had the most births with 909 or 9.2 percent of the total; February had the fewest births with 703, 7.1 percent of the total.

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### **BIRTHS BY RESIDENCE AND OCCURRENCE**

In order to calculate birth rates, fertility rates, or any of the other rates used in this report, estimates of the population must be made. Population estimates are provided by the Department of Labor, Research and Analysis Section, Demographics Unit. Please refer to Appendix I for population estimates used in this report.

The fertility rate is a more meaningful measure than crude birth rate since it is a measure of the number of births compared to the number of women of normal child-bearing age (15-44 years). Table 1.1A shows the total births, crude birth rates, and fertility rates by census area. The 1998 fertility rate for Alaska was 71.6 births per 1,000 women of child-bearing age. This is a slight decrease from the 1997 fertility rate of 71.9; and is 9.1 percent above the 1998 United States' fertility rate of 65.6. The Alaska fertility rate peaked in 1982 at 91.9 births per 1,000 women ages 15-44. For a more detailed explanation of birth rates and fertility rates, see "Comparing Different Populations" in Appendix B.

## CHART 1.1B FERTILITY RATES, UNITED STATES AND ALASKA, 1990-1998

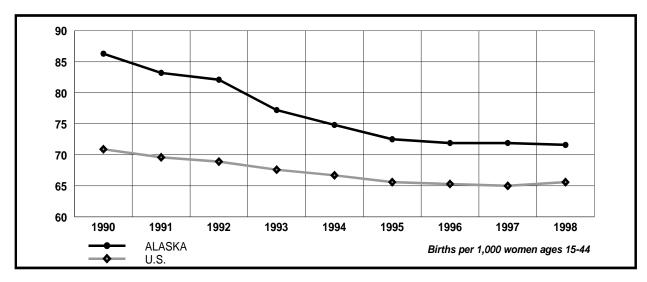


Table 1.1A provides the number of births occurring, resident births, population, birth rate, female population of child-bearing age, and fertility rate by census area in Alaska. Please note that "births occurring" indicates the census area where the child was born and includes out of state occurrences for Alaskan residents, and births occurring in Alaska to non-resident mothers. The "resident" column indicates the number of births to resident mothers of each census area regardless of where the birth took place. Birth and fertility rates are based on numbers of resident births and estimated population by census area.

<sup>6</sup> National Center for Health Statistics, U.S. Department of Health and Human Services, "Births and Deaths: Preliminary Data for 1998," National Vital Statistics Report, Vol. 47, No. 25, October 5, 1999, p. 14.

TABLE 1.1A

BIRTH OCCURRENCES, RESIDENT BIRTHS, ESTIMATED
POPULATIONS, RESIDENT CRUDE BIRTH RATES, FEMALE
POPULATION AGES 15-44, AND FERTILITY RATES BY CENSUS
AREA, ALASKA, 1998

|                                 | BIRT      | HS       |         | BIRTH | FEMALES | FERTILITY |
|---------------------------------|-----------|----------|---------|-------|---------|-----------|
| CENSUS AREA                     | OCCURRING | RESIDENT | POP     | RATE  | 15-44   | RATE      |
| ALEUTIANS EAST                  |           | 17       | 2,145   | 7.9   | 429     | 39.6      |
| ALEUTIANS WEST                  | 1         | 43       | 5,346   | 8.0   | 1,071   | 40.1      |
| ANCHORAGE BOROUGH               | 5,236     | 4,182    | 257,260 | 16.3  | 60,112  | 69.6      |
| BETHEL                          | 414       | 409      | 15,935  | 25.7  | 3,238   | 126.3     |
| BRISTOL BAY BOROUGH             |           | 17       | 1,291   | 13.2  | 268     | 63.4      |
| DENALI BOROUGH                  |           | 19       | 1,868   | 10.2  | 418     | 45.5      |
| DILLINGHAM                      | 69        | 106      | 4,686   | 22.6  | 945     | 112.2     |
| FAIRBANKS NORTH STAR BOROUGH    | 1,632     | 1,439    | 83,045  | 17.3  | 19,483  | 73.9      |
| HAINES BOROUGH                  |           | 21       | 2,461   | 8.5   | 513     | 40.9      |
| JUNEAU BOROUGH                  | 408       | 394      | 30,021  | 13.1  | 6,769   | 58.2      |
| KENAI PENINSULA BOROUGH         | 560       | 653      | 48,532  | 13.5  | 10,429  | 62.6      |
| KETCHIKAN GATEWAY BOROUGH       | 298       | 190      | 14,143  | 13.4  | 3,008   | 63.2      |
| KODIAK ISLAND BOROUGH           | 239       | 260      | 13,716  | 19.0  | 2,917   | 89.1      |
| LAKE AND PENINSULA              |           | 27       | 1,842   | 14.7  | 372     | 72.6      |
| MATANUSKA-SUSITNA BOROUGH       | 465       | 707      | 54,153  | 13.1  | 12,235  | 57.8      |
| NOME                            | 120       | 207      | 9,341   | 22.2  | 1,887   | 109.7     |
| NORTH SLOPE BOROUGH             | 48        | 146      | 7,268   | 20.1  | 1,511   | 96.6      |
| NORTHWEST ARCTIC BOROUGH        | 114       | 181      | 6,817   | 26.6  | 1,336   | 135.5     |
| PRINCE OF WALES-OUTER KETCHIKAN | 4         | 94       | 6,830   | 13.8  | 1,384   | 67.9      |
| SITKA BOROUGH                   | 127       | 106      | 8,722   | 12.2  | 1,855   | 57.1      |
| SKAGWAY-HOONAH-ANGOON           | 1         | 32       | 3,642   | 8.8   | 744     | 43.0      |
| SOUTHEAST FAIRBANKS             | 2         | 106      | 6,349   | 16.7  | 1,325   | 80.0      |
| VALDEZ-CORDOVA                  | 50        | 133      | 10,274  | 12.9  | 2,203   | 60.4      |
| WADE HAMPTON                    | 11        | 222      | 7,044   | 31.5  | 1,313   | 169.1     |
| WRANGELL-PETERSBURG             | 32        | 95       | 7,165   | 13.3  | 1,434   | 66.2      |
| YAKUTAT                         |           | 3        | 775     | 3.9   | 151     | 19.9      |
| YUKON-KOYUKUK                   | 3         | 111      | 6,411   | 17.3  | 1,208   | 91.9      |
| OUTSIDE ALASKA                  | 107       |          |         |       |         |           |
| TOTAL                           | 9,941     | 9,920    | 617,082 | 16.1  | 138,558 | 71.6      |

Table 1.1B shows birth occurrences and resident births by Native Regional Corporation areas. For a map showing Native Regional Corporation boundaries, see page .

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MAP 1.1 CRUDE BIRTH RATE BY CENSUS AREA OF THE MOTHER'S RESIDENCE, ALASKA, 1998

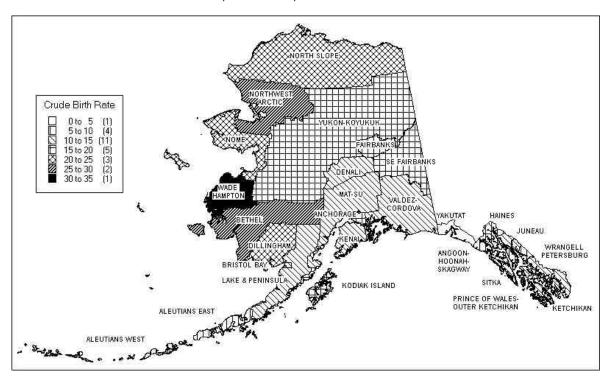


TABLE 1.1B BIRTH OCCURRENCES AND RESIDENT BIRTHS BY NATIVE REGIONAL CORPORATION AREA, ALASKA, 1998

| NATIVE REGIONAL      | BIRT      | HS       |
|----------------------|-----------|----------|
| CORPORATION          | OCCURRING | RESIDENT |
| AHTNA INC.           | 3         | 47       |
| ALEUT CORP.          | 1         | 60       |
| ARCTIC SLOPE CORP.   | 48        | 146      |
| BERING STRAITS CORP. | 120       | 207      |
| BRISTOL BAY CORP.    | 69        | 148      |
| CALISTA CORP.        | 425       | 631      |
| CHUGACH NATIVES INC. | 47        | 187      |
| COOK INLET REG CORP. | 6,261     | 5,444    |
| DOYON LTD.           | 1,637     | 1,674    |
| KONIAG INC.          | 239       | 260      |
| NANA REGIONAL CORP.  | 114       | 181      |
| SEALASKA CORP.       | 870       | 935      |
| OUTSIDE ALASKA       | 107       |          |
| TOTAL                | 9,941     | 9,920    |

CHART 1.2A FERTILITY RATES WITH 95% CONFIDENCE INTERVALS BY CENSUS AREA, ALASKA, 1998

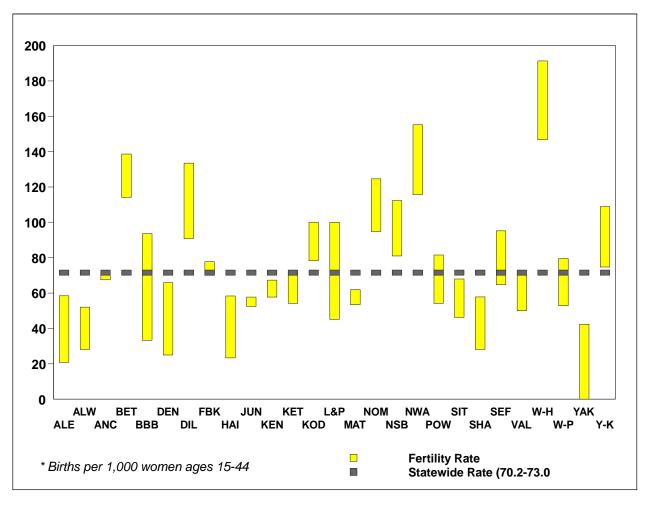


Chart 1.2A provides the 95% confidence interval ranges for fertility rates by census area. Census areas in this chart are in the same order as they are listed in Tables 1.1A and 1.2A. For a key to the abbreviations used in Chart 1.2A please refer to either of those tables.

Confidence intervals are used to provide an indicator of statistical significance when analyzing small populations. Generally, smaller populations result in wider confidence intervals and less reliable rates. The calculated fertility rate occurs at the exact midpoint of the interval. If the statewide confidence interval falls within the band for a census area, this suggests the difference between the two is not statistically significant. For a more detailed discussion of confidence intervals and statistical significance, refer to Appendix B.

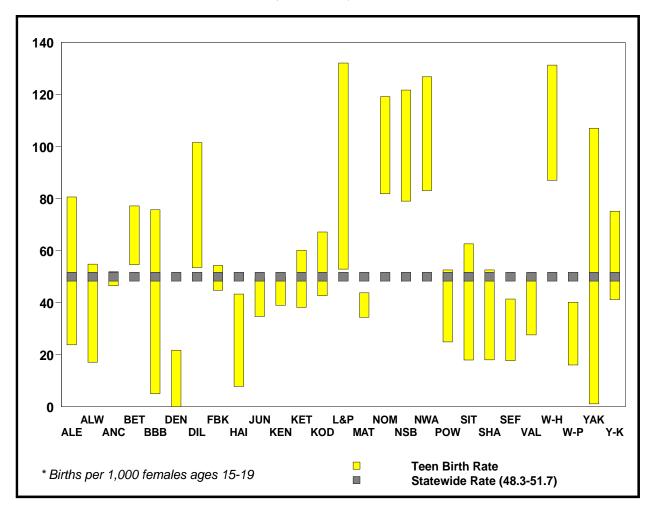
Chart 1.2A shows that the fertility rates for Aleutians East, Aleutians West, Denali, Haines, Juneau, Kenai, Matanuska-Susitna, Sitka, Skagway-Hoonah-Angoon, and Yakutat are significantly lower than the statewide rates. On the other hand, the fertility rates for Bethel, Dillingham, Kodiak, Nome, North Slope, Northwest Arctic, Wade-Hampton, and Yukon-Koyukuk are significantly higher than the statewide rates.

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BIRTHS BY CENSUS AREA OF MOTHER'S RESIDENCE AND BY CENSUS AREA OF OCCURRENCE, ALASKA, 1998 TABLE 1.2A

|                    |         |       |     |          |       |       |     | CENSI | SARI | CENSUS AREA OF OCCURRENCE |     | RRE   | ICE |     |     |     |       |         |    |     |     |       |
|--------------------|---------|-------|-----|----------|-------|-------|-----|-------|------|---------------------------|-----|-------|-----|-----|-----|-----|-------|---------|----|-----|-----|-------|
| MOTHER'S RESIDENCE | ALW ANC | BET   | Т   | L FBK    | JUN.  | KPB   | KET |       | MSB  | KOD MSB NOM NSB NAB POW   | NSB | VAB P |     | SIT | SHA | SEF | VAL V | WAH WRP |    | YUK | soo | TOTAL |
| ALEUTIANS EAST     |         | 16    |     |          |       |       |     |       |      |                           |     |       |     |     |     |     |       |         |    |     | 1   | 17    |
| ALEUTIANS WEST     | 1       | 23    |     |          | _     | 1     |     |       |      |                           |     |       |     | _   |     |     |       |         |    |     | 91  | 43    |
| ANCHORAGE          | 4.147   | 47    |     |          | 3     | 2     |     | 2     | 16   |                           |     |       |     |     |     |     |       |         |    |     | 12  | 4.182 |
| BETHEL             |         | 131 2 | 274 | _        |       |       |     |       |      |                           |     |       |     |     |     |     |       | 2       |    |     | -   | 409   |
| BRISTOL BAY        |         | 16    |     |          |       |       |     |       |      |                           |     |       |     |     |     |     |       |         |    |     | _   | 17    |
| DENALI             |         | 1     |     |          | 17    |       |     |       | 1    |                           |     |       |     |     |     |     |       |         |    |     |     | 19    |
| DILLINGHAM         |         | 39    | _   | 65       |       |       |     |       |      |                           |     |       |     |     |     |     |       |         |    |     | _   | 106   |
| FAIRBANKS NSB      |         | 24    |     | 1,405    | 2     |       |     |       |      |                           |     |       |     |     |     |     |       |         |    |     | 6   | 1,439 |
| HAINES BOROUGH     |         | _     |     | `        | =     |       |     |       |      |                           |     |       |     | v   |     |     |       |         |    |     | 4   | , 21  |
| JUNEAU BOROUGH     |         | 22    |     |          | 365   |       |     |       |      | -                         |     |       |     | -   |     |     |       |         | -  |     | 4   | 394   |
| KENAI PENINSULA    |         | 93    |     |          | _     | 551   |     |       | 2    |                           |     |       |     |     |     |     |       |         |    |     | 9   | 653   |
| KETCHIKAN          |         |       |     |          |       |       | 186 |       |      |                           |     |       |     |     |     |     |       |         |    |     | 4   | 190   |
| KODIAK ISLAND      |         | 15    |     |          |       | 2     |     | 237   | _    |                           |     |       |     |     |     |     |       |         |    |     | 5   | 260   |
| LAKE-PENINSULA     |         | 24    |     | ε        |       |       |     |       |      |                           |     |       |     |     |     |     |       |         |    |     |     | 27    |
| MATANUSKA-SUSITNA  | 2       | 269   |     |          |       | 2     |     |       | 434  |                           |     |       |     |     |     |     |       |         |    |     | 2   | 707   |
| NOME               |         | 81    |     |          |       |       |     |       | ٦    | 118                       |     |       |     |     |     |     |       |         |    |     | 9   | 207   |
| NORTH SLOPE        |         | 70    |     |          | 3     |       |     |       |      |                           | 47  | 10    |     |     |     |     |       |         |    |     | 9   | 146   |
| NORTHWEST ARCTIC   |         | 75    |     |          | 2     |       |     |       |      |                           |     | 103   |     |     |     |     |       |         |    |     | _   | 181   |
| PRINCE OF WALES    |         | 2     |     |          |       |       | 83  |       |      |                           |     |       | 4   | -   |     |     |       |         |    |     | С   | 94    |
| SITKA BOROUGH      |         | 4     |     |          |       |       |     |       |      |                           |     |       |     | 96  |     |     |       |         |    |     | v   | 106   |
| SKGWAY-HOONAH-ANG  |         | 2     |     |          | 20    |       |     |       |      |                           |     |       |     | ∞   | -   |     |       |         |    |     | -   | 32    |
| SE FAIRBANKS       |         | 2     |     | 100      | 0     |       |     |       | _    |                           |     |       |     |     |     | 2   |       |         |    |     | _   | 106   |
| VALDEZ-CORDOVA     |         | 99    |     |          | 9     |       |     |       | ∞    |                           |     |       |     |     |     |     | 49    |         |    |     | 4   | 133   |
| WADE HAMPTON       |         | 71 1  | 137 |          |       |       |     |       |      | _                         |     |       |     |     |     |     |       | 6       |    |     | С   | 222   |
| WRANGELL-PETERSBG  |         | _     |     |          | 80    |       | 29  |       |      |                           |     |       |     | 15  |     |     |       |         | 31 |     | Ξ   | 95    |
| YAKUTAT            |         |       |     |          | 3     |       |     |       |      |                           |     |       |     |     |     |     |       |         |    |     |     |       |
| YUKON-KOYUKUK      |         | 24    | 7   | 8        |       |       |     |       |      |                           | -   |       |     |     |     |     |       |         |    | 2   |     | Ξ     |
| TOTAL              | 1 5,219 |       | 414 | 69 1,630 | 0 407 | 7 560 | 298 | 239   | 465  | 120                       | 48  | 114   | 4   | 127 | -   | 7   | 49    | Ξ       | 32 | æ   | 107 | 9,920 |

CHART 1.2B TEEN BIRTH RATES WITH 95% CONFIDENCE INTERVALS BY CENSUS AREAS, ALASKA, 1996-1998



Since the birth rate for teens deals with smaller numbers than the general fertility rate, teen births and populations for a three year period, from 1996 through 1998, have been used in calculating teen birth rates by census area. The teen birth rate is calculated by dividing the number of births to teens from ages 15-19 in the three-year period by the total estimated female population in that age group for all three years, and multiplying by a constant of proportionality of 1,000. Births to teens younger than 15 are not included when calculating the teen birth rate because there are few births in that population and the rate would not be meaningful when compared to the national teen birth rate.

Chart 1.2B shows that Denali, Haines, Matanuska-Susitna, Sitka, Southeast Fairbanks, and Wrangell-Petersburg had teen birth rates below the statewide rate. Bethel, Dillingham, Lake & Peninsula, Nome, North Slope, Northwest Arctic, and Wade Hampton had teen birth rates above the statewide rate.

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TABLE 1.2B BIRTHS BY NATIVE REGIONAL CORPORATION OF MOTHER'S RESIDENCE AND BY NATIVE REGIONAL CORPORATION OF OCCURRENCE, ALASKA, 1998 (ALASKA RESIDENTS ONLY)

| MOTHER'S       |       |       | NATI | IVE RE | EGION | AL COI | RPORAT | ION O | F OCCU | RREN | CE  |       |     |       |
|----------------|-------|-------|------|--------|-------|--------|--------|-------|--------|------|-----|-------|-----|-------|
| RESIDENCE      | AHTNA | ALEUT |      |        |       |        |        |       |        |      |     | SEAAK | oos | TOTAL |
| AHTNA          | 2     | 2     |      |        |       |        | 5      | 32    | 7      |      |     |       | 1   | 47    |
| ALEUT          |       | 1     |      |        |       |        |        | 40    | 1      |      |     | 1     | 17  | 60    |
| ARCTIC SLOPE   |       |       | 47   |        |       |        |        | 70    | 13     |      | 10  |       | 6   | 146   |
| BERING STRAITS |       |       |      | 118    |       |        |        | 82    |        |      | 1   |       | 6   | 207   |
| BRISTOL BAY    |       |       |      |        | 68    | 1      |        | 77    |        |      |     |       | 2   | 148   |
| CALISTA        |       |       |      | 1      | 1     | 422    |        | 203   |        |      |     |       | 4   | 631   |
| CHUGACH        |       |       |      |        |       |        | 42     | 142   |        |      |     |       | 3   | 187   |
| COOK INLET     |       |       |      |        |       |        |        | 5,418 | 4      | . 2  |     |       | 20  | 5,444 |
| DOYON          |       |       | 1    |        |       | 2      |        | 54    | 1,607  |      |     |       | 10  | 1,674 |
| KONIAG         |       |       |      |        |       |        |        | 18    |        | 237  |     |       | 5   | 260   |
| NANA           |       |       |      |        |       |        |        | 75    | 2      |      | 103 |       | 1   | 181   |
| SEALASKA       |       |       |      | 1      |       |        |        | 33    | 1      |      |     | 868   | 32  | 935   |
| TOTAL          | 2     | 1     | 48   | 120    | 69    | 425    | 47     | 6,244 | 1,635  | 239  | 114 | 869   | 107 | 9,920 |

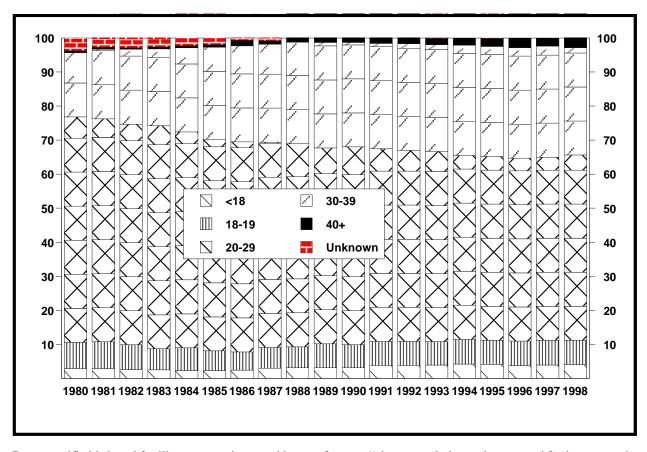
## **BIRTHS BY AGE AND RACE**

A dramatic change in the last two decades has been the shift in the age distribution of mothers. Mothers ages 20-29 accounted for 54.4 percent of all births in 1998, down from 66.2 percent of all births in 1980. Mothers ages 30-39 accounted for 31.6 percent of all births in 1998, up from 18.9 percent in 1980. While there has been some change in the percentage of mothers under 20 and 40 and above, these changes are small compared to the shift in mothers from ages 20-29 to 30-39. (See Chart 1.3.)

TABLE 1.3A RESIDENT BIRTHS AND PERCENTAGE BY AGE OF MOTHER, ALASKA, 1980, 1990, and 1998

| AGE OF  | 198   | 80    | 19     | 90    | 19    | 98       |
|---------|-------|-------|--------|-------|-------|----------|
| MOTHER  | No.   | %     | No.    | %     | No.   | <u>%</u> |
| <18     | 278   | 2.9   | 364    | 3.1   | 397   | 4.0      |
| 18-19   | 728   | 7.7   | 811    | 6.8   | 717   | 7.2      |
| 20-29   | 6,290 | 66.2  | 6,919  | 58.1  | 5,400 | 54.4     |
| 30-39   | 1,797 | 18.9  | 3,651  | 30.7  | 3,132 | 31.6     |
| 40 +    | 57    | 0.6   | 150    | 1.3   | 274   | 2.8      |
| UNKNOWN | 345   | 3.6   | 5      |       |       |          |
| TOTAL   | 9,495 | 100.0 | 11,900 | 100.0 | 9,920 | 100.0    |

CHART 1.3 PERCENTAGE OF BIRTHS BY AGE OF MOTHER, ALASKA, 1980-1998



Race-specific birth and fertility rates are impacted by two factors: 1) base population estimates, and 2) the manner in which race is determined at birth. According to standards set by the National Center for Health Statistics (NCHS), the mother's race determines the child's race. (See Appendix E for more information on determining race and its use in statistical calculations.)

Table 1.3B shows differences in the mother's age by race. In 1998, 9.0 percent of all white infants and 9.6 percent of all Asian/Pacific Islander infants were born to mothers under 20, while 17.5 percent of all Native infants and 13.4 percent of all African-American infants were born to mothers under 20. Even more startling is the difference in age distribution of first-time mothers: 18.7 percent of first-born white infants and 18.9 percent of first-born Asian/Pacific Islander infants were born to mothers under the age of 20; and 47.2 percent of first-born Native infants and 29.2 percent of first-born African-American infants were born to mothers were under the age of 20.

A comparison of total births and first-time births is an indicator of parity (the number of children born to a mother). For instance, 39.0 percent of white infants and 28.5 percent of Native infants were born to first-time mothers. White mothers had an average of 1.1 prior live births; Native mothers had an average of 1.9 prior live births; African-American mothers had an average of 1.3 prior live births, and Asian mothers had an average of 1.1 prior live births.

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TABLE 1.3B RESIDENT BIRTHS AND PERCENTAGE BY AGE AND RACE FOR ALL MOTHERS AND FIRST-TIME MOTHERS, ALASKA, 1998

|       |       |       |       | ALL MO   | THERS  |       |      |       |       |
|-------|-------|-------|-------|----------|--------|-------|------|-------|-------|
|       | WHI   | TE    | NATI  |          | AFR    | /AM   | ASIA | N/PI  |       |
| AGE   | No.   | %     | No.   | %        | No.    | %     | No.  | %     | TOTAL |
| <18   | 183   | 2.8   | 172   | 7.1      | 19     | 4.8   | 23   | 4.8   | 397   |
| 18-19 | 408   | 6.2   | 252   | 10.4     | 34     | 8.6   | 23   | 4.8   | 717   |
| 20-29 | 3,596 | 54.2  | 1,326 | 54.9     | 230    | 58.2  | 248  | 51.5  | 5,400 |
| 30-39 | 2,229 | 33.6  | 620   | 25.7     | 104    | 26.3  | 179  | 37.1  | 3,132 |
| 40 +  | 213   | 3.2   | 44    | 1.8      | 8      | 2.0   | 9    | 1.9   | 274   |
| TOTAL | 6,629 | 100.0 | 2,414 | 100.0    | 395    | 100.0 | 482  | 100.0 | 9,920 |
|       |       |       | FIR   | RST-TIME | MOTHER | RS    |      |       |       |
|       | WHI   | TE    | NATI  |          | AFR    |       | ASIA | N/PI  |       |
| AGE   | No.   | %     | No.   | %        | No.    | %     | No.  | %     | TOTAL |
| <18   | 167   | 6.5   | 150   | 21.8     | 19     | 13.2  | 21   | 10.4  | 357   |
| 18-19 | 315   | 12.2  | 175   | 25.4     | 23     | 16.0  | 17   | 8.5   | 530   |
| 20-29 | 1,470 | 56.8  | 327   | 47.5     | 78     | 54.2  | 110  | 54.7  | 1,985 |
| 30-39 | 590   | 22.8  | 32    | 4.7      | 24     | 16.7  | 52   | 25.9  | 698   |
| 40 +  | 46    | 1.8   | 4     | 0.6      |        |       | 1    | 0.5   | 51    |
| TOTAL | 2,588 | 100.0 | 688   | 100.0    | 144    | 100.0 | 201  | 100.0 | 3,621 |

TABLE 1.3C COMPARISON OF AGE-SPECIFIC BIRTH RATES BY THE MOTHER'S RACE, ALASKA AND THE UNITED STATES, 1993, 1997, 1998

|       |          |       | ,     | ALASKA |       |       |       | UNIT  | ED STAT | ES*   |       |
|-------|----------|-------|-------|--------|-------|-------|-------|-------|---------|-------|-------|
| MO    | THER'S   |       | RATE  |        | CHA   | NGE   |       | RATE  |         | CHA   | NGE   |
| AGE   | RACE     | 1993  | 1997  | 1998   | 93-98 | 97-98 | 1993  | 1997  | 1998    | 93-98 | 97-98 |
| 15-17 | WHITE    | 24.8  | 18.0  | 17.5   | -29.4 | -2.8  | 30.3  | 27.1  | 25.9    | -14.5 | -4.4  |
|       | NATIVE** | 66.4  | 51.2  | 53.7   | -19.1 | 4.9   | 53.7  | 45.3  | 44.3    | -17.5 | -2.2  |
|       | AFR/AM   | 54.0  | 42.3  | 28.9   | -46.5 | -31.7 | 79.8  | 60.8  | 56.8    | -28.8 | -6.6  |
|       | ASIAN/PI | 28.2  | 26.3  | 37.5   | 33.0  | 42.6  | 16.0  | 14.3  | 13.7    | -14.4 | -4.2  |
|       | TOTAL    | 34.2  | 26.2  | 26.4   | -22.8 | 0.8   | 37.8  | 32.1  | 30.4    | -19.6 | -5.3  |
| 18-19 | WHITE    | 90.8  | 76.5  | 73.0   | -19.6 | -4.6  | 82.1  | 75.9  | 74.7    | -9.0  | -1.6  |
|       | NATIVE** | 166.0 | 140.4 | 141.0  | -15.1 | 0.4   | 130.7 | 117.6 | 118.0   | -9.7  | 0.3   |
|       | AFR/AM   | 201.2 | 117.5 | 86.5   | -57.0 | -26.4 | 151.9 | 130.1 | 126.8   | -16.5 | -2.5  |
|       | ASIAN/PI | 91.5  | 126.5 | 65.0   | -29.0 | -48.6 | 43.3  | 39.3  | 38.2    | -11.8 | -2.8  |
|       | TOTAL    | 112.1 | 94.2  | 88.3   | -21.2 | -6.3  | 92.1  | 83.6  | 82.0    | -11.0 | -1.9  |
| 15-19 | WHITE    | 48.0  | 38.5  | 37.0   | -22.9 | -3.9  | 51.1  | 46.3  | 45.4    | -11.2 | -1.9  |
|       | NATIVE** | 104.3 | 83.7  | 86.0   | -17.5 | 2.7   | 83.1  | 71.8  | 71.8    | -13.6 |       |
|       | AFR/AM   | 112.3 | 68.8  | 50.4   | -55.1 | -26.7 | 108.6 | 88.2  | 85.3    | -21.5 | -3.3  |
|       | ASIAN/PI | 51.8  | 63.7  | 47.5   | -8.3  | -25.4 | 27.0  | 23.7  | 23.1    | -14.4 | -2.5  |
|       | TOTAL    | 62.2  | 50.3  | 48.4   | -22.2 | -3.8  | 59.6  | 52.3  | 51.1    | -14.3 | -2.3  |
| 20-24 | WHITE    | 169.3 | 151.0 | 145.8  | -13.9 | -3.4  | 106.9 | 106.7 | 107.3   | 0.4   | 0.6   |
|       | NATIVE** | 213.7 | 199.1 | 204.0  | -4.5  | 2.5   | 139.8 | 134.9 | 139.0   | -0.6  | 3.0   |
|       | AFR/AM   | 155.2 | 153.9 | 135.0  | -13.0 | -12.3 | 152.6 | 139.0 | 141.9   | -7.0  | 2.1   |
|       | ASIAN/PI | 144.3 | 126.7 | 125.8  | -12.8 | -0.7  | 73.3  | 70.5  | 68.3    | -6.8  | -3.1  |
|       | TOTAL    | 175.7 | 160.4 | 156.7  | -10.8 | -2.3  | 112.6 | 110.4 | 111.2   | -1.2  | 0.7   |
| 25-29 | WHITE    | 129.1 | 145.2 | 154.5  | 19.7  | 6.4   | 116.6 | 116.6 | 119.3   | 2.3   | 2.3   |
|       | NATIVE** | 179.9 | 176.6 | 182.0  | 1.2   | 3.1   | 107.6 | 100.8 | 102.0   | -5.2  | 1.2   |
|       | AFR/AM   | 118.7 | 75.0  | 62.0   | -47.8 | -17.3 | 108.4 | 99.5  | 101.9   | -6.0  | 2.4   |
|       | ASIAN/PI | 162.5 | 153.7 | 141.5  | -12.9 | -7.9  | 119.9 | 113.2 | 109.4   | -8.8  | -3.4  |
|       | TOTAL    | 138.0 | 145.4 | 151.3  | 9.6   | 4.1   | 115.5 | 113.8 | 116.0   | 0.4   | 1.9   |
| 30-34 | WHITE    | 75.7  | 81.2  | 87.9   | 16.1  | 8.3   | 82.1  | 87.8  | 90.7    | 10.5  | 3.3   |
|       | NATIVE** | 117.6 | 126.1 | 117.8  | 0.2   | -6.6  | 62.8  | 64.2  | 66.1    | 5.3   | 3.0   |
|       | AFR/AM   | 71.8  | 62.8  | 60.0   | -16.4 | -4.5  | 67.3  | 64.3  | 64.8    | -3.7  | 0.8   |
|       | ASIAN/PI | 111.1 | 107.7 | 91.9   | -17.3 | -14.7 | 103.9 | 110.3 | 104.1   | 0.2   | -5.6  |
|       | TOTAL    | 82.9  | 88.7  | 91.3   | 10.1  | 2.9   | 80.8  | 85.3  | 87.5    | 8.3   | 2.6   |
| 35-39 | WHITE    | 32.4  | 34.3  | 34.3   | 5.9   |       | 32.7  | 36.4  | 37.8    | 15.6  | 3.8   |
|       | NATIVE** | 53.6  | 57.2  | 50.0   | -6.7  | -12.6 | 27.6  | 29.3  | 30.1    | 9.1   | 2.7   |
|       | AFR/AM   | 41.9  | 42.9  | 36.6   | -12.6 | -14.7 | 29.2  | 29.7  | 30.5    | 4.5   | 2.7   |
|       | ASIAN/PI | 49.4  | 42.2  | 38.9   | -21.3 | -7.8  | 50.2  | 54.1  | 52.4    | 4.4   | -3.1  |
|       | TOTAL    | 36.1  | 38.2  | 36.8   | 1.9   | -3.7  | 32.9  | 36.1  | 37.4    | 13.7  | 3.6   |
| 40-44 | WHITE    | 7.9   | 7.7   | 8.6    | 8.9   | 11.7  | 5.9   | 6.9   | 7.2     | 22.0  | 4.3   |
|       | NATIVE** | 10.2  | 9.1   | 11.6   | 13.7  | 27.5  | 5.9   | 6.4   | 6.3     | 6.8   | -1.6  |
|       | AFR/AM   | 8.9   | 4.1   | 8.2    | -7.9  | 100.0 | 5.9   | 6.5   | 6.7     | 13.6  | 3.1   |
|       | ASIAN/PI | 9.1   | 7.6   | 5.9    | -35.2 | -22.4 | 11.3  | 11.9  | 11.9    | 5.3   |       |
|       | TOTAL    | 8.2   | 7.7   | 8.8    | 7.3   | 14.3  | 6.1   | 7.1   | 7.3     | 19.7  | 2.8   |

<sup>\*</sup> U.S. data from National Center for Health Statistics, U.S. Department of Health and Human Services, "Births and Deaths: Preliminary Data for 1998," National Vital Statistics Report, Vol. 47, No. 25, October 5, 1999, Table 1, p. 10.

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<sup>\*\*</sup> US Data is for American Indians

TABLE 1.3D RACE-SPECIFIC BIRTH RATES, FERTILITY RATES, AND TEEN BIRTH RATES, ALASKA, 1998

| MOTHER'S<br>RACE | BIRTHS | TOTAL<br>POPULATION | RACE<br>SPECIFIC<br>RATE | FEMALES<br>15-44 | FERTILITY<br>RATE | TEEN<br>BIRTHS | FEMALES<br>15-19 | TEEN<br>BIRTH<br>RATE |
|------------------|--------|---------------------|--------------------------|------------------|-------------------|----------------|------------------|-----------------------|
| WHITE            | 6,629  | 456,271             | 14.5                     | 101,864          | 65.1              | 589            | 15,923           | 37.0                  |
| NATIVE           | 2,414  | 103,361             | 23.4                     | 22,923           | 105.3             | 415            | 4,824            | 86.0                  |
| AFR/AM           | 395    | 27,460              | 14.4                     | 6,576            | 60.1              | 53             | 1,051            | 50.4                  |
| ASIAN/PI         | 482    | 29,990              | 16.1                     | 7,195            | 67.0              | 46             | 968              | 47.5                  |
| TOTAL            | 9,920  | 617,082             | 16.1                     | 138,558          | 71.6              | 1,103          | 22,766           | 48.4                  |

Race-specific birth rates are the number of live births in a specific race, divided by the estimated population of that race, multiplied by a constant of proportionality of 1,000. Fertility rates are the number of live births, divided by the number of women ages 15 to 44 in the estimated population, multiplied by a constant of proportionality of 1,000. Teen birth rates are the number of births to teens ages 15-19, divided by the estimated population of females ages 15-19, multiplied by a constant of proportionality of 1,000. Unlike Chart 1.2B which shows teen birth rates by census area calculated on a 3-year average, teen birth rates by race have been calculated on a single year basis because of the larger populations. Race-specific birth, fertility, and teen birth rates provide a useful means of comparing two populations.

CHART 1.4 RACE-SPECIFIC FERTILITY RATES, ALASKA, 1994-1998

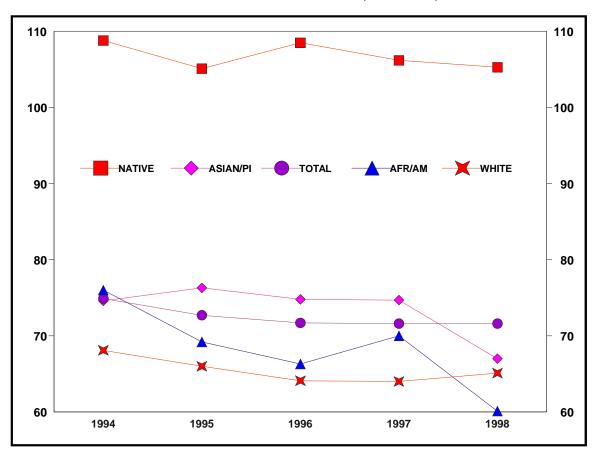
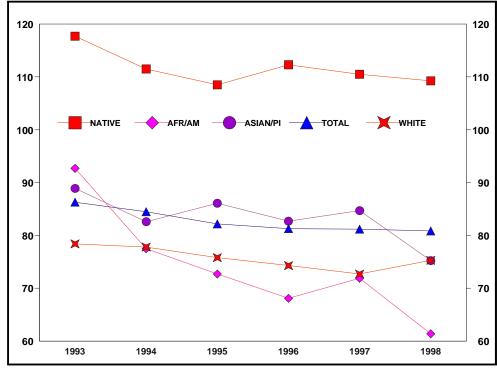
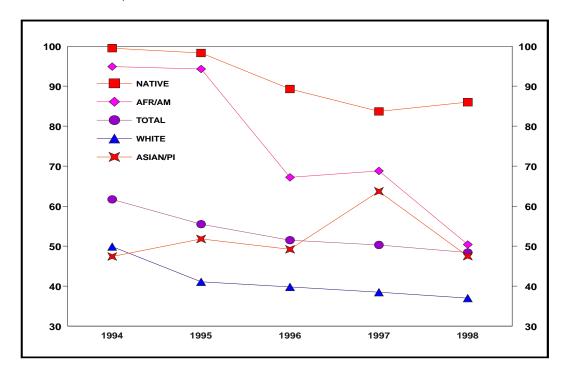


CHART 1.5 AGE-ADJUSTED BIRTH RATES BY RACE, ALASKA, 1994-1998



For this report, age-adjusted rates are birth rates standardized to the 1940 standard million population. This allows comparisons between populations with different age distributions.

CHART 1.6 RACE-SPECIFIC BIRTH RATES FOR TEENS (AGES 15-19), ALASKA, 1994-1998



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TABLE 1.4 PERCENTAGE OF RESIDENT BIRTHS BY AGE AND RACE OF MOTHER AND BY BIRTH WEIGHT OF CHILD, ALASKA, 1998

|          |          |      |          | PERC      | ENTAGE    | OF BIRTH  | IS BY WEI | GHT IN GI | RAMS      |       |      |
|----------|----------|------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|------|
| MOTHER'S |          | <750 | 750-1499 | 1500-1999 | 2400-2499 | 2500-2999 | 3000-3499 | 3500-3999 | 4000-4499 | 4500+ | UNKN |
| AGE      | RACE     | %    | %        | %         | %         | %         | %         | %         | %         | %     | %    |
| <15      | WHITE    |      |          |           |           | 50.0      |           | 50.0      |           |       |      |
|          | NATIVE   |      |          |           | 11.1      | 22.2      | 44.4      | 11.1      | 11.1      |       |      |
| 15-17    | WHITE    |      | 0.6      | 3.3       | 3.9       | 17.7      | 43.6      | 20.4      | 9.9       |       | 0.6  |
|          | NATIVE   |      | 0.6      | 3.1       | 4.3       | 11.7      | 36.2      | 35.0      | 9.2       |       |      |
|          | AFR/AM   |      |          |           | 5.3       | 36.8      | 42.1      | 10.5      | 5.3       |       |      |
|          | ASIAN/PI | 4.3  |          | 4.3       | 4.3       | 47.8      | 30.4      | 8.7       |           |       |      |
| 18-19    | WHITE    |      |          | 1.0       | 2.2       | 17.4      | 39.5      | 32.6      | 5.6       | 1.2   | 0.5  |
|          | NATIVE   | 0.4  | 0.4      | 0.4       | 4.0       | 9.9       | 33.7      | 34.9      | 13.5      | 1.6   | 1.2  |
|          | AFR/AM   | 5.9  | 2.9      |           | 11.8      | 14.7      | 41.2      | 20.6      | 2.9       |       |      |
|          | ASIAN/PI | 4.3  |          |           | 4.3       | 26.1      | 30.4      | 26.1      | 8.7       |       |      |
| 20-24    | WHITE    | 0.2  | 1.6      | 1.2       | 3.4       | 13.6      | 35.5      | 31.2      | 10.6      | 2.2   | 0.4  |
|          | NATIVE   |      | 0.4      | 1.1       | 2.9       | 8.2       | 31.5      | 37.1      | 15.7      | 2.9   | 0.1  |
|          | AFR/AM   | 0.7  | 4.2      | 4.9       | 4.2       | 18.3      | 37.3      | 24.6      | 5.6       |       |      |
|          | ASIAN/PI |      | 0.9      |           | 2.7       | 13.4      | 46.4      | 25.0      | 8.0       | 3.6   |      |
| 25-29    | WHITE    | 0.2  | 0.8      | 1.4       | 3.1       | 11.7      | 31.6      | 35.9      | 12.4      | 2.7   | 0.3  |
|          | NATIVE   |      | 0.9      | 1.0       | 3.1       | 7.7       | 28.0      | 36.9      | 17.2      | 4.7   | 0.3  |
|          | AFR/AM   |      | 2.3      | 1.1       | 3.4       | 12.5      | 42.0      | 26.1      | 10.2      | 2.3   |      |
|          | ASIAN/PI |      |          | 1.5       | 5.1       | 19.9      | 30.9      | 29.4      | 11.0      | 2.2   |      |
| 30-34    | WHITE    | 0.1  | 1.0      | 0.7       | 2.9       | 10.8      | 32.2      | 35.0      | 14.5      | 2.9   |      |
|          | NATIVE   | 0.2  | 1.4      | 1.4       | 4.3       | 12.1      | 26.2      | 36.9      | 13.8      | 3.1   | 0.5  |
|          | AFR/AM   |      |          | 1.4       | 5.6       | 20.8      | 40.3      | 25.0      | 5.6       | 1.4   |      |
|          | ASIAN/PI | 0.8  |          | 1.7       | 5.9       | 15.3      | 34.7      | 26.3      | 12.7      | 2.5   |      |
| 35-39    | WHITE    | 0.1  | 1.2      | 1.1       | 3.9       | 11.2      | 28.5      | 37.3      | 12.7      | 3.9   |      |
|          | NATIVE   |      | 3.5      | 1.0       | 6.0       | 8.5       | 30.0      | 28.0      | 18.5      | 3.5   | 1.0  |
|          | AFR/AM   |      | 3.1      |           | 3.1       | 9.4       | 50.0      | 25.0      | 9.4       |       |      |
|          | ASIAN/PI |      | 3.3      | 1.6       | 4.9       | 11.5      | 34.4      | 21.3      | 19.7      | 1.6   | 1.6  |
| 40-44    | WHITE    | 0.5  |          | 2.0       | 1.5       | 9.5       | 31.2      | 36.7      | 14.6      | 3.5   | 0.5  |
|          | NATIVE   | 2.3  |          | 4.7       | 7.0       | 7.0       | 34.9      | 11.6      | 16.3      | 16.3  |      |
|          | AFR/AM   |      |          |           |           | 37.5      | 37.5      | 25.0      |           |       |      |
|          | ASIAN/PI |      |          |           | 11.1      |           | 33.3      |           |           |       |      |
| 45+      | WHITE    |      | 21.4     | 7.1       | 7.1       | 14.3      | 3 28.6    | 7.1       |           | 7.1   | 7.1  |
| 151      | NATIVE   |      |          |           | ,,,,      |           | 100.0     |           |           |       |      |
| TC       | TAL      | 0.2  | 1.1      | 1.3       | 3.4       | 12.1      | 32.9      |           | 12.5      | 2.7   | 0.3  |

Table 1.4 shows the percentage of resident births by age and race of the mother and by birth weight of the child. Infants under 2,500 grams are considered to be low birth weight. Achieving a low birth weight percentage below 5% is one of the Year 2000 objectives (Appendix F). For more information on birth weight, see page 41.

TABLE 1.5A RESIDENT BIRTHS TO TEENAGE MOTHERS BY CENSUS AREA OF RESIDENCE, AGE AND MARITAL STATUS, ALASKA, 1998

|                    | <15 |      | 15-17   |     | 18-19   |     | TOTAL   |     |       |
|--------------------|-----|------|---------|-----|---------|-----|---------|-----|-------|
| CENSUS AREA OF     | MAR | RIED | MARRIED |     | MARRIED |     | MARRIED |     |       |
| MOTHER'S RESIDENCE | YES | NO   | YES     | NO  | YES     | NO  | YES     | NO  | TOTAL |
| ALEUTIANS EAST     |     |      |         | 1   |         | 1   |         | 2   | 2     |
| ALEUTIANS WEST     |     |      |         | 1   | 2       | 1   | 2       | 2   | 4     |
| ANCHORAGE          |     | 2    | 16      | 149 | 92      | 205 | 108     | 356 | 464   |
| BETHEL             |     |      | 1       | 16  | 4       | 21  | 5       | 37  | 42    |
| BRISTOL BAY        |     |      |         | 1   |         |     |         | 1   | 1     |
| DILLINGHAM         |     |      | 1       | 5   | 1       | 6   | 2       | 11  | 13    |
| FAIRBANKS NSB      |     |      | 5       | 42  | 46      | 49  | 51      | 91  | 142   |
| HAINES BOROUGH     |     |      |         |     | 2       |     | 2       |     | 2     |
| JUNEAU BOROUGH     |     | 2    | 2       | 8   | 5       | 18  | 7       | 28  | 35    |
| KENAI PENINSULA    |     |      | 5       | 17  | 20      | 29  | 25      | 46  | 71    |
| KETCHIKAN          |     |      | 1       | 11  | 5       | 7   | 6       | 18  | 24    |
| KODIAK ISLAND      |     |      | 2       | 8   | 8       | 8   | 10      | 16  | 26    |
| LAKE-PENINSULA     |     |      |         | 1   |         | 3   |         | 4   | 4     |
| MATANUSKA-SUSITNA  |     | 1    | 3       | 18  | 21      | 33  | 24      | 52  | 76    |
| NOME               |     | 4    |         | 10  |         | 25  |         | 39  | 39    |
| NORTH SLOPE        |     | 1    |         | 14  | 2       | 11  | 2       | 26  | 28    |
| NORTHWEST ARCTIC   |     |      |         | 12  | 1       | 16  | 1       | 28  | 29    |
| PRINCE OF WALES    |     |      |         | 2   | 2       | 5   | 2       | 7   | 9     |
| SITKA BOROUGH      |     |      |         | 5   | 1       | 4   | 1       | 9   | 10    |
| SKGWAY-HOONAH-ANG  |     |      |         | 1   |         | 2   |         | 3   | 3     |
| SE FAIRBANKS       |     |      |         | 1   | 4       | 5   | 4       | 6   | 10    |
| VALDEZ-CORDOVA     |     |      | 1       | 4   | 5       | 10  | 6       | 14  | 20    |
| WADE HAMPTON       |     |      | 1       | 10  | 4       | 17  | 5       | 27  | 32    |
| WRANGELL-PETERSBG  |     |      | 1       | 1   | 2       | 3   | 3       | 4   | 7     |
| YUKON-KOYUKUK      |     | 1    |         | 9   |         | 11  |         | 21  | 21    |
| TOTAL              |     | 11   | 39      | 347 | 227     | 490 | 266     | 848 | 1,114 |

TABLE 1.5B RESIDENT BIRTHS TO TEENAGE MOTHERS BY NATIVE REGIONAL CORPORATION OF RESIDENCE, AGE AND MARITAL STATUS, ALASKA, 1998

|                      | <15 |      | 15-17   |     | 18-19   |     | TOTAL   |     |       |
|----------------------|-----|------|---------|-----|---------|-----|---------|-----|-------|
| NRC OF MOTHER'S M    |     | RIED | MARRIED |     | MARRIED |     | MARRIED |     |       |
| RESIDENCE            | YES | NO   | YES     | NO  | YES     | NO  | YES     | NO  | TOTAL |
| AHTNA INC.           |     |      |         |     | 1       | 5   | 1       | 5   | 6     |
| ALEUT CORP.          |     |      |         | 2   | 2       | 2   | 2       | 4   | 6     |
| ARCTIC SLOPE CORP.   |     | 1    |         | 14  | 2       | 11  | 2       | 26  | 28    |
| BERING STRAITS CORP. |     | 4    |         | 10  |         | 25  |         | 39  | 39    |
| BRISTOL BAY CORP.    |     |      | 1       | 7   | 1       | 9   | 2       | 16  | 18    |
| CALISTA CORP.        |     |      | 2       | 26  | 8       | 38  | 10      | 64  | 74    |
| CHUGACH NATIVES INC. |     |      | 1       | 8   | 5       | 10  | 6       | 18  | 24    |
| COOK INLET REG CORP. |     | 3    | 24      | 180 | 132     | 262 | 156     | 445 | 601   |
| DOYON LTD.           |     | 1    | 5       | 52  | 50      | 65  | 55      | 118 | 173   |
| KONIAG INC.          |     |      | 2       | 8   | 8       | 8   | 10      | 16  | 26    |
| NANA REGIONAL CORP.  |     |      |         | 12  | 1       | 16  | 1       | 28  | 29    |
| SEALASKA CORP.       |     | 2    | 4       | 28  | 17      | 39  | 21      | 69  | 90    |
| TOTAL                |     | 11   | 39      | 347 | 227     | 490 | 266     | 848 | 1,114 |

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TABLE 1.6A RESIDENT BIRTHS BY MOTHER'S CENSUS AREA OF RESIDENCE, RACE, AND SEX OF CHILD, ALASKA, 1998

| CENSUS AREA OF     |       | RACE OF | MOTHER |          | SEX OF | CHILD  |       |
|--------------------|-------|---------|--------|----------|--------|--------|-------|
| MOTHER'S RESIDENCE | WHITE | NATIVE  | AFR/AM | ASIAN/PI | MALE   | FEMALE | TOTAL |
| ALEUTIANS EAST     | 4     | 13      |        |          | 8      | 9      | 17    |
| ALEUTIANS WEST     | 27    | 9       |        | 7        | 24     | 19     | 43    |
| ANCHORAGE          | 3,093 | 559     | 247    | 283      | 2,103  | 2,079  | 4,182 |
| BETHEL             | 25    | 379     | 1      | 4        | 231    | 178    | 409   |
| BRISTOL BAY        | 12    | 5       |        |          | 8      | 9      | 17    |
| DENALI             | 17    |         |        | 2        | 10     | 9      | 19    |
| DILLINGHAM         | 9     | 96      |        | 1        | 56     | 50     | 106   |
| FAIRBANKS NSB      | 1,122 | 142     | 132    | 43       | 737    | 702    | 1,439 |
| HAINES BOROUGH     | 16    | 5       |        |          | 10     | 11     | 21    |
| JUNEAU BOROUGH     | 284   | 81      | 3      | 26       | 186    | 208    | 394   |
| KENAI PENINSULA    | 571   | 63      | 2      | 17       | 328    | 325    | 653   |
| KETCHIKAN          | 134   | 42      | 2      | 12       | 93     | 97     | 190   |
| KODIAK ISLAND      | 171   | 44      | 1      | 44       | 125    | 135    | 260   |
| LAKE-PENINSULA     | 6     | 20      |        | 1        | 9      | 18     | 27    |
| MATANUSKA-SUSITNA  | 656   | 38      | 1      | 12       | 376    | 331    | 707   |
| NOME               | 27    | 180     |        |          | 98     | 109    | 207   |
| NORTH SLOPE        | 13    | 126     |        | 7        | 80     | 66     | 146   |
| NORTHWEST ARCTIC   | 9     | 170     | 1      | 1        | 84     | 97     | 181   |
| PRINCE OF WALES    | 51    | 42      | 1      |          | 47     | 47     | 94    |
| SITKA BOROUGH      | 74    | 28      |        | 4        | 55     | 51     | 106   |
| SKGWAY-HOONAH-ANG  | 19    | 13      |        |          | 15     | 17     | 32    |
| SE FAIRBANKS       | 86    | 13      | 4      | 3        | 58     | 48     | 106   |
| VALDEZ-CORDOVA     | 109   | 20      |        | 4        | 72     | 61     | 133   |
| WADE HAMPTON       | 5     | 216     |        | 1        | 118    | 104    | 222   |
| WRANGELL-PETERSBG  | 72    | 19      |        | 4        | 47     | 48     | 95    |
| YAKUTAT            | 1     | 1       |        | 1        | 1      | 2      | 3     |
| YUKON-KOYUKUK      | 16    | 90      |        | 5        | 57     | 54     | 111   |
| TOTAL              | 6,629 | 2,414   | 395    | 482      | 5,036  | 4,884  | 9,920 |

TABLE 1.6B RESIDENT BIRTHS BY MOTHER'S NATIVE REGIONAL CORPORATION OF RESIDENCE, RACE, AND SEX OF CHILD, ALASKA, 1998

| NRC OF MOTHER'S      |       | RACE OF | MOTHER |          | SEX OF | CHILD  |       |
|----------------------|-------|---------|--------|----------|--------|--------|-------|
| RESIDENCE            | WHITE | NATIVE  | AFR/AM | ASIAN/PI | MALE   | FEMALE | TOTAL |
| AHTNA INC.           | 34    | 13      |        |          | 29     | 18     | 47    |
| ALEUT CORP.          | 31    | 22      |        | 7        | 32     | 28     | 60    |
| ARCTIC SLOPE CORP.   | 13    | 126     |        | 7        | 80     | 66     | 146   |
| BERING STRAITS CORP. | 27    | 180     |        |          | 98     | 109    | 207   |
| BRISTOL BAY CORP.    | 25    | 121     |        | 2        | 72     | 76     | 148   |
| CALISTA CORP.        | 30    | 595     | 1      | 5        | 349    | 282    | 631   |
| CHUGACH NATIVES INC. | 125   | 57      |        | 5        | 99     | 88     | 187   |
| COOK INLET REG CORP. | 4,273 | 610     | 250    | 311      | 2,753  | 2,691  | 5,444 |
| DOYON LTD.           | 1,240 | 245     | 136    | 53       | 861    | 813    | 1,674 |
| KONIAG INC.          | 171   | 44      | 1      | 44       | 125    | 135    | 260   |
| NANA REGIONAL CORP.  | 9     | 170     | 1      | 1        | 84     | 97     | 181   |
| SEALASKA CORP.       | 651   | 231     | 6      | 47       | 454    | 481    | 935   |
| TOTAL                | 6,629 | 2,414   | 395    | 482      | 5.036  | 4.884  | 9,920 |

TABLE 1.7A RESIDENT BIRTHS AND PERCENTAGE BY MOTHER'S AGE AND CENSUS AREA OF RESIDENCE, ALASKA, 1998

|                            |     |          |     |     |     |      |       | AG   | E OF M | ЮТН  | ER    |      |       |      |     |      |     |     |       |
|----------------------------|-----|----------|-----|-----|-----|------|-------|------|--------|------|-------|------|-------|------|-----|------|-----|-----|-------|
|                            | <1  |          | 15- |     | 18- |      | 20-   |      | 25-    | _    | 30-   |      | 35-   |      |     | 44   | 45  |     |       |
| CENSUS AREA ALEUTIANS EAST | No. | <u>%</u> | No. | %   | No. | %    | No.   | %    | No.    | %    | No.   | %    | No.   | %    | No. | %    | No. | %   | TOTAL |
|                            |     |          | 1   | 5.9 |     | 5.9  | 8     | 47.1 | 2      | 11.8 | 1     | 5.9  | 4     | 23.5 |     |      |     |     | 17    |
| ALEUTIANS WEST             |     |          | 1   | 2.3 | 3   | 7.0  | 6     | 14.0 | 8      | 18.6 | 13    | 30.2 | 12    | 27.9 |     |      |     |     | 43    |
| ANCHORAGE                  | 2   |          | 165 | 3.9 | 297 | 7.1  | 1,077 | 25.8 | 1,186  | 28.4 | 911   | 21.8 | 437   | 10.4 | 96  | 2.3  | 11  | 0.3 | 4,182 |
| BETHEL                     |     |          | 17  | 4.2 | 25  | 6.1  | 133   | 32.5 | 109    | 26.7 | 77    | 18.8 | 42    | 10.3 | 5   | 1.2  | 1   | 0.2 | 409   |
| BRISTOL BAY                |     |          | 1   | 5.9 |     |      | 2     | 11.8 | 7      | 41.2 | 4     | 23.5 | 3     | 17.6 |     |      |     |     | 17    |
| DENALI                     |     |          |     |     |     |      | 2     | 10.5 | 4      | 21.1 | 6     | 31.6 | 6     | 31.6 | 1   | 5.3  |     |     | 19    |
| DILLINGHAM                 |     |          | 6   | 5.7 | 7   | 6.6  | 35    | 33.0 | 20     | 18.9 | 28    | 26.4 | 8     | 7.5  | 2   | 1.9  |     |     | 106   |
| FAIRBANKS NSB              |     |          | 47  | 3.3 | 95  | 6.6  | 455   | 31.6 | 403    | 28.0 | 286   | 19.9 | 113   | 7.9  | 40  | 2.8  |     |     | 1,439 |
| HAINES BOROUGH             |     |          |     |     | 2   | 9.5  | 6     | 28.6 | 5      | 23.8 | 5     | 23.8 | 3     | 14.3 |     |      |     |     | 21    |
| JUNEAU BOROUGH             | 2   | 0.5      | 10  | 2.5 | 23  | 5.8  | 84    | 21.3 | 107    | 27.2 | 94    | 23.9 | 56    | 14.2 | 18  | 4.6  |     |     | 394   |
| KENAI PENINSULA            |     |          | 22  | 3.4 | 49  | 7.5  | 183   | 28.0 | 182    | 27.9 | 132   | 20.2 | 65    | 10.0 | 19  | 2.9  | 1   | 0.2 | 653   |
| KETCHIKAN                  |     |          | 12  | 6.3 | 12  | 6.3  | 50    | 26.3 | 57     | 30.0 | 33    | 17.4 | 19    | 10.0 | 7   | 3.7  |     |     | 190   |
| KODIAK ISLAND              |     |          | 10  | 3.8 | 16  | 6.2  | 49    | 18.8 | 76     | 29.2 | 68    | 26.2 | 34    | 13.1 | 7   | 2.7  |     |     | 260   |
| LAKE-PENINSULA             |     |          | 1   | 3.7 | 3   | 11.1 | 8     | 29.6 | 7      | 25.9 | 1     | 3.7  | 4     | 14.8 | 3   | 11.1 |     |     | 27    |
| MATANUSKA-SUSITNA          | 1   | 0.1      | 21  | 3.0 | 54  | 7.6  | 182   | 25.7 | 207    | 29.3 | 114   | 16.1 | 101   | 14.3 | 26  | 3.7  | 1   | 0.1 | 707   |
| NOME                       | 4   | 1.9      | 10  | 4.8 | 25  | 12.1 | 56    | 27.1 | 57     | 27.5 | 36    | 17.4 | 19    | 9.2  |     |      |     |     | 207   |
| NORTH SLOPE                | 1   | 0.7      | 14  | 9.6 | 13  | 8.9  | 44    | 30.1 | 34     | 23.3 | 27    | 18.5 | 11    | 7.5  | 2   | 1.4  |     |     | 146   |
| NORTHWEST ARCTIC           |     |          | 12  | 6.6 | 17  | 9.4  | 50    | 27.6 | 44     | 24.3 | 37    | 20.4 | 14    | 7.7  | 7   | 3.9  |     |     | 181   |
| PRINCE OF WALES            |     |          | 2   | 2.1 | 7   | 7.4  | 29    | 30.9 | 29     | 30.9 | 13    | 13.8 | 10    | 10.6 | 3   | 3.2  | 1   | 1.1 | 94    |
| SITKA BOROUGH              |     |          | 5   | 4.7 | 5   | 4.7  | 31    | 29.2 | 17     | 16.0 | 30    | 28.3 | 14    | 13.2 | 4   | 3.8  |     |     | 106   |
| SKGWAY-HOONAH-ANG          |     |          | 1   | 3.1 | 2   | 6.3  | 9     | 28.1 | 9      | 28.1 | 5     | 15.6 | 4     | 12.5 | 2   | 6.3  |     |     | 32    |
| SE FAIRBANKS               |     |          | 1   | 0.9 | 9   | 8.5  | 27    | 25.5 | 24     | 22.6 | 28    | 26.4 | 13    | 12.3 | 4   | 3.8  |     |     | 106   |
| VALDEZ-CORDOVA             |     |          | 5   | 3.8 | 15  | 11.3 | 26    | 19.5 | 28     | 21.1 | 37    | 27.8 | 17    | 12.8 | 5   | 3.8  |     |     | 133   |
| WADE HAMPTON               |     |          | 11  | 5.0 | 21  | 9.5  | 53    | 23.9 | 66     | 29.7 | 47    | 21.2 | 21    | 9.5  | 3   | 1.4  |     |     | 222   |
| WRANGELL-PETERSBG          |     |          | 2   | 2.1 | 5   | 5.3  | 19    | 20.0 | 39     | 41.1 | 18    | 18.9 | 11    | 11.6 | 1   | 1.1  |     |     | 95    |
| YAKUTAT                    |     |          |     |     |     |      | 2     | 66.7 |        |      |       |      | 1     | 33.3 |     |      |     |     | 3     |
| YUKON-KOYUKUK              | 1   | 0.9      | 9   | 8.1 | 11  | 9.9  | 29    | 26.1 | 18     | 16.2 | 27    | 24.3 | 12    | 10.8 | 4   | 3.6  |     |     | 111   |
| TOTAL                      | 11  | 0.1      | 386 | 3.9 | 717 | 7.2  | 2,655 | 26.8 | 2,745  | 27.7 | 2,078 | 20.9 | 1,054 | 10.6 | 259 | 2.6  | 15  | 0.2 | 9,920 |

TABLE 1.7B RESIDENT BIRTHS AND PERCENTAGE BY MOTHER'S AGE AND NATIVE REGIONAL CORPORATION OF RESIDENCE, ALASKA, 1998

|                      |     |     |     |      |     |      |       | A.C. | E OF N | 40TU | IFD   |      |       |      |     |     |     |     |       |
|----------------------|-----|-----|-----|------|-----|------|-------|------|--------|------|-------|------|-------|------|-----|-----|-----|-----|-------|
| NCR OF MOTHER'S      | <   | 15  | 15- | 17   | 18- | 19   | 20-   | _    | 25-    |      | 30-   | 34   | 35-   | 39   | 40- | 44  | 45  | 5+  |       |
| RESIDENCE            | No. | %   | No. | %    | No. | %    | No.   | %    | No.    | %    | No.   | %    | No.   | %    | No. | %   | No. | %   | TOTAL |
| AHTNA INC.           |     |     |     |      | 6   | 13.0 | 6     | 13.0 | 13     | 28.0 | 15    | 32.0 | 3     | 6.0  | 4   | 8.5 |     |     | 47    |
| ALEUT CORP.          |     |     | 2   | 3.0  | 4   | 7.0  | 14    | 23.0 | 10     | 17.0 | 14    | 23.0 | 16    | 27.0 |     |     |     |     | 60    |
| ARCTIC SLOPE CORP.   | 1   | 0.7 | 14  | 10.0 | 13  | 9.0  | 44    | 30.0 | 34     | 23.0 | 27    | 19.0 | 11    | 8.0  | 2   | 1.4 |     |     | 146   |
| BERING STRAITS CORP. | 4   | 1.9 | 10  | 5.0  | 25  | 12.0 | 56    | 27.0 | 57     | 28.0 | 36    | 17.0 | 19    | 9.0  |     |     |     |     | 207   |
| BRISTOL BAY CORP.    |     |     | 8   | 5.0  | 10  | 7.0  | 45    | 30.0 | 34     | 23.0 | 32    | 22.0 | 14    | 10.0 | 5   | 3.4 |     |     | 148   |
| CALISTA CORP.        |     |     | 28  | 4.0  | 46  | 7.0  | 186   | 30.0 | 175    | 28.0 | 124   | 20.0 | 63    | 10.0 | 8   | 1.3 | 1   | 0.2 | 631   |
| CHUGACH NATIVES INC. |     |     | 9   | 5.0  | 15  | 8.0  | 50    | 27.0 | 37     | 20.0 | 43    | 23.0 | 26    | 14.0 | 7   | 3.7 |     |     | 187   |
| COOK INLET REG CORP. | 3   | 0.1 | 204 | 4.0  | 394 | 7.0  | 1,412 | 26.0 | 1,553  | 29.0 | 1,138 | 21.0 | 592   | 11.0 | 135 | 2.5 | 13  | 0.2 | 5,444 |
| DOYON LTD.           | 1   | 0.1 | 57  | 3.0  | 115 | 7.0  | 513   | 31.0 | 449    | 27.0 | 346   | 21.0 | 144   | 9.0  | 49  | 2.9 |     |     | 1,674 |
| KONIAG INC.          |     |     | 10  | 4.0  | 16  | 6.0  | 49    | 19.0 | 76     | 29.0 | 68    | 26.0 | 34    | 13.0 | 7   | 2.7 |     |     | 260   |
| NANA REGIONAL CORP.  |     |     | 12  | 7.0  | 17  | 9.0  | 50    | 28.0 | 44     | 24.0 | 37    | 20.0 | 14    | 8.0  | 7   | 3.9 |     |     | 181   |
| SEALASKA CORP.       | 2   | 0.2 | 32  | 3.0  | 56  | 6.0  | 230   | 25.0 | 263    | 28.0 | 198   | 21.0 | 118   | 13.0 | 35  | 3.7 | 1   | 0.1 | 935   |
| TOTAL                | 11  | 0.1 | 386 | 4.0  | 717 | 7.0  | 2,655 | 27.0 | 2,745  | 28.0 | 2,078 | 21.0 | 1,054 | 11.0 | 259 | 2.6 | 15  | 0.2 | 9,920 |

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TABLE 1.7C RESIDENT BIRTHS AND PERCENTAGE BY MOTHER'S AGE AND RACE, ALASKA, 1998

|          |     |     |     |     |     |      |       | AGI  | E OF N | 10TI | IER   |      |       |      |     |     |     |     |       |
|----------|-----|-----|-----|-----|-----|------|-------|------|--------|------|-------|------|-------|------|-----|-----|-----|-----|-------|
| MOTHER'S | <1  | 5   | 15- | 17  | 18- | 19   | 20-   | 24   | 25-    | 29   | 30-   | 34   | 35-   | 39   | 40- | 44  | 45  | +   |       |
| RACE     | No. | %   | No. | %   | No. | %    | No.   | %    | No.    | %    | No.   | %    | No.   | %    | No. | %   | No. | %   | TOTAL |
| WHITE    | 2   |     | 181 | 3.0 | 408 | 6.0  | 1,649 | 25.0 | 1,947  | 29.0 | 1,468 | 22.0 | 761   | 12.0 | 199 | 3.0 | 14  | 0.2 | 6,629 |
| NATIVE   | 9   | 0.4 | 163 | 7.0 | 252 | 10.0 | 752   | 31.0 | 574    | 24.0 | 420   | 17.0 | 200   | 8.0  | 43  | 1.8 | 1   |     | 2,414 |
| AFR/AM   |     |     | 19  | 5.0 | 34  | 9.0  | 142   | 36.0 | 88     | 22.0 | 72    | 18.0 | 32    | 8.0  | 8   | 2.0 |     |     | 395   |
| ASIAN/PI |     |     | 23  | 5.0 | 23  | 5.0  | 112   | 23.0 | 136    | 28.0 | 118   | 25.0 | 61    | 13.0 | 9   | 1.9 |     |     | 482   |
| TOTAL    | 11  | 0.1 | 386 | 4.0 | 717 | 7.0  | 2,655 | 27.0 | 2,745  | 28.0 | 2,078 | 21.0 | 1,054 | 11.0 | 259 | 2.6 | 15  | 0.2 | 9,920 |

TABLE 1.8 RESIDENT BIRTHS BY MOTHER'S AGE AND NUMBER OF LIVING CHILDREN, ALASKA, 1998

|          |       |       |        |         | CHILDI  |     |     |       |
|----------|-------|-------|--------|---------|---------|-----|-----|-------|
| MOTHER'S |       | (NO   | TINCLU | JDING T | HIS BIR | [H) |     | - I   |
| AGE      | NONE  | ONE   | TWO    | 3-4     | 5-9     | 10+ | UNK | TOTAL |
| <15      | 10    | 1     |        |         |         |     |     | 11    |
| 15-17    | 347   | 38    | 1      |         |         |     |     | 386   |
| 18-19    | 535   | 156   | 24     |         |         |     | 2   | 717   |
| 20-24    | 1,183 | 961   | 386    | 119     | 5       |     | 1   | 2,655 |
| 25-29    | 826   | 898   | 562    | 385     | 69      |     | 5   | 2,745 |
| 30-34    | 509   | 612   | 430    | 372     | 146     | 2   | 7   | 2,078 |
| 35-39    | 196   | 305   | 206    | 238     | 101     | 4   | 4   | 1,054 |
| 40-44    | 49    | 62    | 41     | 66      | 37      | 1   | 3   | 259   |
| 45+      | 2     | 3     | 4      | 2       | 4       |     |     | 15    |
| TOTAL    | 3,657 | 3,036 | 1,654  | 1,182   | 362     | 7   | 22  | 9,920 |

#### **MOTHER'S MARITAL STATUS**

In 1998, the percentage of mothers who were not married rose to 31.1 percent. In 1977 the percentage of births to mothers who were not married was 11.5 percent. This percentage has increased every year except from 1996 to 1997 when the percentage of births to mothers who were not married declined: from 31.0 percent in 1996 to 30.6 percent in 1997. In 1998, 32.8 percent of all births in the United States were to mothers who were not married.<sup>7</sup>

The mother's marital status is used as an indicator of an infant's support system. An infant's support system consists of the immediate family, the extended family, and the community. Generally, the broader the support system, the more secure is the child's physical, emotional, and financial status. The only information available on the birth certificate pertaining to a support structure is the mother's marital status. Having no direct information pertaining to the commitment of the parents, the extended family, or the community to the well-being of the child; the mother's marital status is used as a proxy measure of the infant's support system.

In 1960, 15 percent of births to U.S. mothers under the age of 20 were to mothers who were not married. In 1998, 78.8 percent of births to U.S. mothers under the age of 20 were to mothers who were not married. In Alaska in 1998, 76.1 percent of births to mothers under 20 were to mothers who were not married.

<sup>7</sup> National Center for Health Statistics, U.S. Department of Health and Human Services, "Births and Deaths: Preliminary Data for 1998," *National Vital Statistics Report*, Vol. 47, No. 25, October 5, 1999, Table C, p. 4.

<sup>8</sup> National Center for Health Statistics, U.S. Department of Health and Human Services, "Report of Final Natality Statistics, 1995," Monthly Vital Statistics Report, Vol. 45, No. 11(S), June 10, 1997, pp. 26 and 40.

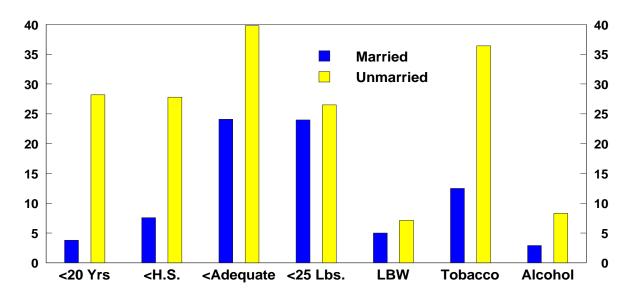
<sup>9</sup> National Center for Health Statistics, U.S. Department of Health and Human Services, "Births and Deaths: Preliminary Data for 1998," *National Vital Statistics Report*, Vol. 47, No. 25, October 5, 1999, p. 4.

Alaskan mothers in all age groups were less likely to be married in 1998 than in 1980. In 1980, 58.0 percent of Alaska resident teen mothers (under 20 years of age) were married. In 1998, 23.9 percent of Alaska resident teen mothers were married. In 1998, 69.7 percent of Alaska resident mothers ages 20-29 were married, down from 87.8 percent in 1980. Data for mothers ages 30-39 shows that 94.3 percent were married in 1980 while 82.3 percent were married in 1998.

Chart 1.7A shows some alarming contrasts between single mothers and married mothers. From 1994-1998, 3.8 percent of married mothers were under 20 years of age while 28.2 percent of unmarried mothers were under 20. Mothers with less than a high school education comprised 7.6 percent of married mothers and 27.8 percent of unmarried mothers. Twenty-four percent of married mothers had less than adequate prenatal care and 39.8 percent of unmarried mothers had less than adequate prenatal care. From 1994-1998, 24.0 percent of married mothers gained less than the recommended minimum of 25 pounds during pregnancy, while 26.5 percent of unmarried mothers gained less than 25 pounds. Unmarried mothers were more likely to deliver low birth weight infants than married mothers (7.1 percent vs. 5.0 percent). Unmarried mothers were much more likely to report using tobacco (36.4% vs. 12.5%) and alcohol (8.3% vs. 2.9%) during pregnancy.

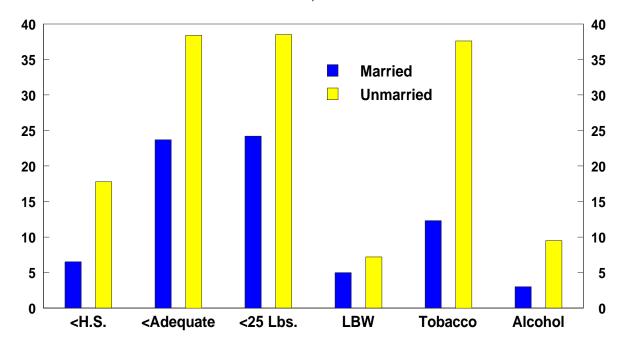
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CHART 1.7A CONTRASTS BETWEEN MARRIED AND UNMARRIED MOTHERS, 1994-1998



While one may assume that the negative outcomes illustrated above are attributable to unmarried mothers being younger than married mothers, the patterns still hold when only mothers ages 20 and older are taken into account. Chart 1.7B shows the same data for married and unmarried mothers ages 20 and older.

CHART 1.7B CONTRASTS BETWEEN MARRIED AND UNMARRIED MOTHERS AGES 20 AND OLDER, 1994-1998



Since unmarried mothers tend to be younger, less educated, less likely to receive adequate prenatal care, more likely to have inadequate weight gain, more likely to deliver low birth weight infants, and more likely to use tobacco and alcohol, their babies are more likely to be physically and economically disadvantaged at birth.

TABLE 1.9A RESIDENT BIRTHS BY THE MOTHER'S CENSUS AREA OF RESIDENCE, MARITAL STATUS, AND EDUCATION, ALASKA, 1998

|              |      | M     | ARRIE | D     |     |      | S     | INGLI |       |     |       | 7     | TOTAL | ,     |     |       |
|--------------|------|-------|-------|-------|-----|------|-------|-------|-------|-----|-------|-------|-------|-------|-----|-------|
|              | YE   | ARS O | F EDU | CATIO | ON  | YE   | ARS O | F EDU | CATIO | ON  | YE    | ARS O | F EDU | CATIO | ON  |       |
| CENSUS AREA  | 0-11 | 12    | 13-15 | 16+   | UNK | 0-11 | 12    | 13-15 | 16+   | UNK | 0-11  | 12    | 13-15 | 16+   | UNK | TOTAL |
| ALEUTN EAST  | 1    | 5     | 1     |       |     | 1    | 7     | 1     |       | 1   | 2     | 12    | 2     |       | 1   | 17    |
| ALEUTN WEST  | 1    | 9     | 9     | 5     | 10  | 1    | 6     | 2     |       |     | 2     | 15    | 11    | 5     | 10  | 43    |
| ANCHORAGE    | 186  | 966   | 991   | 769   | 34  | 331  | 546   | 256   | 56    | 47  | 517   | 1,512 | 1,247 | 825   | 81  | 4,182 |
| BETHEL       | 30   | 160   | 27    | 16    | 3   | 46   | 107   | 10    | 4     | 6   | 76    | 267   | 37    | 20    | 9   | 409   |
| BRISTOL BAY  | 1    | 7     | 4     | 1     | 1   |      | 2     |       |       | 1   | 1     | 9     | 4     | 1     | 2   | 17    |
| DENALI       | 1    | 7     | 5     | 6     |     |      |       |       |       |     | 1     | 7     | 5     | 6     |     | 19    |
| DILLINGHAM   | 10   | 27    | 13    | 6     | 1   | 12   | 31    | 3     | 1     | 2   | 22    | 58    | 16    | 7     | 3   | 106   |
| FAIRBANKS    | 50   | 468   | 336   | 274   | 12  | 78   | 120   | 76    | 16    | 9   | 128   | 588   | 412   | 290   | 21  | 1,439 |
| HAINES       |      | 8     | 3     | 4     | 3   |      | 2     | 1     |       |     |       | 10    | 4     | 4     | 3   | 21    |
| JUNEAU       | 13   | 93    | 76    | 94    | 4   | 24   | 47    | 31    | 5     | 7   | 37    | 140   | 107   | 99    | 11  | 394   |
| KENAI PEN    | 38   | 190   | 123   | 101   | 17  | 39   | 100   | 29    | 13    | 3   | 77    | 290   | 152   | 114   | 20  | 653   |
| KETCHIKAN    | 8    | 56    | 28    | 38    | 8   | 13   | 30    | 3     | 2     | 4   | 21    | 86    | 31    | 40    | 12  | 190   |
| KODIAK       | 11   | 88    | 50    | 51    | 1   | 15   | 32    | 8     | 1     | 3   | 26    | 120   | 58    | 52    | 4   | 260   |
| LAKE-PENIN   | 4    | 7     | 2     | 3     |     | 3    | 5     | 2     |       | 1   | 7     | 12    | 4     | 3     | 1   | 27    |
| MAT-SU       | 35   | 202   | 167   | 105   | 3   | 50   | 100   | 28    | 15    | 2   | 85    | 302   | 195   | 120   | 5   | 707   |
| NOME         | 6    | 50    | 8     | 13    | 3   | 36   | 77    | 7     |       | 7   | 42    | 127   | 15    | 13    | 10  | 207   |
| NORTH SLOPE  | 15   | 28    | 13    | 3     | 3   | 38   | 34    | 9     |       | 3   | 53    | 62    | 22    | 3     | 6   | 146   |
| NW ARCTIC    | 12   | 30    | 14    | 6     | 3   | 34   | 64    | 8     | 1     | 9   | 46    | 94    | 22    | 7     | 12  | 181   |
| PRINCE-WALES | 5    | 31    | 11    | 8     | 2   | 9    | 22    | 4     | 1     | 1   | 14    | 53    | 15    | 9     | 3   | 94    |
| SITKA        | 4    | 22    | 20    | 24    | 5   | 10   | 12    | 5     | 2     | 2   | 14    | 34    | 25    | 26    | 7   | 106   |
| SKG-HNH-ANG  |      | 7     | 7     | 5     |     | 5    | 6     | 2     |       |     | 5     | 13    | 9     | 5     |     | 32    |
| SE FAIRBANKS | 7    | 44    | 20    | 15    | 1   | 6    | 9     | 4     |       |     | 13    | 53    | 24    | 15    | 1   | 106   |
| VALDEZ-CORDV | 4    | 28    | 38    | 26    | 1   | 6    | 19    | 7     | 1     | 3   | 10    | 47    | 45    | 27    | 4   | 133   |
| WADE HAMPTON | 15   | 68    | 7     | 5     | 2   | 42   | 71    | 7     | 1     | 4   | 57    | 139   | 14    | 6     | 6   | 222   |
| WRANGELL-PBG | 4    | 22    | 17    | 17    | 8   | 6    | 12    | 5     |       | 4   | 10    | 34    | 22    | 17    | 12  | 95    |
| YAKUTAT      |      | 1     | 1     |       |     |      | 1     |       |       |     |       | 2     | 1     |       |     | 3     |
| YUKON-KOY    | 5    | 13    | 10    | 10    | 1   | 17   | 45    | 10    |       |     | 22    | 58    | 20    | 10    | 1   | 111   |
| TOTAL        | 466  | 2,637 | 2,001 | 1,605 | 126 | 822  | 1,507 | 518   | 119   | 119 | 1,288 | 4,144 | 2,519 | 1,724 | 245 | 9,920 |

TABLE 1.9B RESIDENT BIRTHS BY THE MOTHER'S NATIVE REGIONAL CORPORATION OF RESIDENCE, MARITAL STATUS, AND EDUCATION, ALASKA, 1998

| NATIVE<br>REGIONAL | YE   | M.    | ARRIE<br>F EDU |       | )N  | YE  | ~     | SINGLI<br>OF EDI | _   | ON  | YF    |       | TOTAI<br>OF EDI |       | ON  |       |
|--------------------|------|-------|----------------|-------|-----|-----|-------|------------------|-----|-----|-------|-------|-----------------|-------|-----|-------|
| CORPORATION        | 0-11 | 12    | 13-15          | 16+   | UNK |     | 12    | 13-15            |     | UNK |       | 12    | 13-15           |       |     | TOTAL |
| AHTNA INC          | 1    | 10    | 14             | 7     |     | 3   | 9     | 1                |     | 2   | 4     | 19    | 15              | 7     | 2   | 47    |
| ALEUT CORP         | 2    | 14    | 10             | 5     | 10  | 2   | 13    | 3                |     | 1   | 4     | 27    | 13              | 5     | 11  | 60    |
| ARCTIC SLO         | 15   | 28    | 13             | 3     | 3   | 38  | 34    | 9                |     | 3   | 53    | 62    | 22              | 3     | 6   | 146   |
| BERING STS         | 6    | 50    | 8              | 13    | 3   | 36  | 77    | 7                |     | 7   | 42    | 127   | 15              | 13    | 10  | 207   |
| BRISTOL BY         | 15   | 41    | 18             | 9     | 2   | 15  | 38    | 5                | 1   | 4   | 30    | 79    | 23              | 10    | 6   | 148   |
| CALISTA CP         | 45   | 228   | 34             | 21    | 5   | 88  | 178   | 17               | 5   | 10  | 133   | 406   | 51              | 26    | 15  | 631   |
| CHUGACH            | 6    | 38    | 48             | 30    | 2   | 12  | 31    | 14               | 1   | 5   | 18    | 69    | 62              | 31    | 7   | 187   |
| COOK INLET         | 256  | 1,338 | 1,259          | 965   | 53  | 411 | 725   | 305              | 84  | 48  | 667   | 2,063 | 1,564           | 1,049 | 101 | 5,444 |
| DOYON LTD          | 63   | 532   | 370            | 305   | 14  | 101 | 174   | 90               | 16  | 9   | 164   | 706   | 460             | 321   | 23  | 1,674 |
| KONIAG INC         | 11   | 88    | 50             | 51    | 1   | 15  | 32    | 8                | 1   | 3   | 26    | 120   | 58              | 52    | 4   | 260   |
| NANA CORP          | 12   | 30    | 14             | 6     | 3   | 34  | 64    | 8                | 1   | 9   | 46    | 94    | 22              | 7     | 12  | 181   |
| SEALASKA           | 34   | 240   | 163            | 190   | 30  | 67  | 132   | 51               | 10  | 18  | 101   | 372   | 214             | 200   | 48  | 935   |
| TOTAL              | 466  | 2.637 | 2.001          | 1.605 | 126 | 822 | 1.507 | 518              | 119 | 119 | 1.288 | 4.144 | 2.519           | 1.724 | 245 | 9.920 |

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TABLE 1.10 RESIDENT BIRTHS BY THE MOTHER'S RACE, MARITAL STATUS, AND EDUCATION, ALASKA, 1998

|          |      | М      | ARRIE | D     |     |      | 5      | SINGLE | 2     |     |       | ,      | ΓΟΤΑL | 1     |     |                                       |
|----------|------|--------|-------|-------|-----|------|--------|--------|-------|-----|-------|--------|-------|-------|-----|---------------------------------------|
| MOTHER'S | YE   | CARS O | F EDU | CATIO | N   | YI   | EARS C | F EDU  | CATIO | N   | YE    | CARS C | F EDU | CATIO | N   |                                       |
| RACE     | 0-11 | 12     | 13-15 | 16+   | UNK | 0-11 | 12     | 13-15  | 16+   | UNK | 0-11  | 12     | 13-15 | 16+   | UNK | TOTAL                                 |
| WHITE    | 250  | 1.792  | 1.601 | 1.456 | 85  | 335  | 661    | 315    | 97    | 37  | 585   | 2,453  | 1.916 | 1.553 | 122 | 6,629                                 |
| NATIVE   | 176  | 612    | 167   | 52    | 34  | 426  | 724    | 133    | 15    | 75  | 602   | 1.336  | 300   | 67    | 109 | · · · · · · · · · · · · · · · · · · · |
| AFR/AM   | 10   | 90     | 103   | 35    |     | 36   | 69     | 47     | 3     | 2   | 46    | 159    | 150   | 38    | 2   | 395                                   |
| ASIAN/PI | 30   | 143    | 130   | 62    | 7   | 25   | 53     | 23     | 4     | 5   | 55    | 196    | 153   | 66    | 12  | 482                                   |
| TOTAL    | 466  | 2,637  | 2.001 | 1,605 | 126 | 822  | 1.507  | 518    | 119   | 119 | 1.288 | 4.144  | 2.519 | 1.724 | 245 | 9,920                                 |

TABLE 1.11 RESIDENT BIRTHS BY THE MOTHER'S AGE, MARITAL STATUS, AND EDUCATION, ALASKA, 1998

|          |      |        | ARRIE |       |     |      |        | SINGLE |       |     |       |        | ГОТАІ |       |      |       |
|----------|------|--------|-------|-------|-----|------|--------|--------|-------|-----|-------|--------|-------|-------|------|-------|
| MOTHER'S | YE   | EARS O | F EDU | CATIO | N   | YI   | EARS C | )F EDU | CATIO | )N  | YF    | EARS C | F EDU | CATIO | )N   |       |
| AGE      | 0-11 | 12     | 13-15 | 16+   | UNK | 0-11 | 12     | 13-15  | _16+_ | UNK | 0-11  | 12     | 13-15 | 16+   | UNK  | TOTAL |
| <15      |      |        |       |       |     | 11   |        |        |       |     | 11    |        |       |       |      | 11    |
| 15-17    | 32   | 7      |       |       |     | 279  | 55     | 2      |       | 11  | 311   | 62     | 2     |       | 11   | 386   |
| 18-19    | 64   | 134    | 22    | 1     | 6   | 155  | 280    | 37     |       | 18  | 219   | 414    | 59    | 1     | 24   | 717   |
| 20-24    | 155  | 890    | 460   | 76    | 19  | 209  | 614    | 181    | 22    | 29  | 364   | 1,504  | 641   | 98    | 48   | 2,655 |
| 25-29    | 107  | 813    | 696   | 518   | 32  | 88   | 285    | 146    | 34    | 26  | 195   | 1,098  | 842   | 552   | 58   | 2,745 |
| 30-34    | 75   | 501    | 501   | 598   | 34  | 51   | 174    | 90     | 36    | 18  | 126   | 675    | 591   | 634   | 52   | 2,078 |
| 35-39    | 28   | 250    | 244   | 324   | 22  | 24   | 82     | 52     | 17    | 11  | 52    | 332    | 296   | 341   | 33   | 1,054 |
| 40-44    | 5    | 38     | 73    | 82    | 13  | 5    | 17     | 10     | 10    | 6   | 10    | 55     | 83    | 92    | . 19 | 259   |
| 45+      |      | 4      | 5     | 6     |     |      |        |        |       |     |       | 4      | 5     | 6     |      | 15    |
| TOTAL    | 466  | 2,637  | 2,001 | 1,605 | 126 | 822  | 1,507  | 518    | 119   | 119 | 1,288 | 4,144  | 2,519 | 1,724 | 245  | 9,920 |

#### AGES OF MOTHERS AND FATHERS

In 1998 there were 266 infants born to married teenage mothers and 77 infants born to mothers married to teenage fathers. Thirty-nine infants were born to married mothers under the age of 18 and five infants were born to mothers married to fathers under the age of 18. Fifty-five percent of all married mothers and 43.5 percent of all married fathers were ages 20-29. Women from ages 30-39 accounted for 37.7 percent of all married mothers, and 43.2 percent of all married fathers were from 30-39 years of age. Only 3.3 percent of married mothers were 40 or over, while 11.9 percent of married fathers were 40 or over.

In Alaska in 1998, there were 151 mothers who were less than 16 years of age at the time of conception. The ages of 80 of these fathers is unknown. Of the 71 fathers whose age is known, 41 were at least 16 years of age and from 3 to 17 years older than the mother.

Table 1.12 shows mothers' and fathers' ages for married mothers in 1998.

TABLE 1.12 RESIDENT BIRTHS TO MARRIED MOTHERS BY THE MOTHER'S AGE AND FATHER'S AGE, ALASKA, 1998

| MOTHER'S |       |       |       | FAT   | HER'S | AGE   |       |     |     |       |
|----------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-------|
| AGE      | 15-17 | 18-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45+ | UNK | TOTAL |
| 15-17    | 2     | 12    | 18    | 4     | 2     | 1     |       |     |     | 39    |
| 18-19    | 2     | 28    | 142   | 39    | 8     | 6     | 1     |     | 1   | 227   |
| 20-24    | 1     | 29    | 747   | 616   | 132   | 44    | 15    | 11  | 5   | 1,600 |
| 25-29    |       | 1     | 139   | 1,016 | 676   | 222   | 71    | 38  | 3   | 2,166 |
| 30-34    |       | 2     | 24    | 194   | 773   | 502   | 151   | 59  | 4   | 1,709 |
| 35-39    |       |       | 2     | 30    | 153   | 371   | 226   | 84  | 2   | 868   |
| 40-44    |       |       |       | 3     | 11    | 51    | 71    | 74  | 1   | 211   |
| 45+      |       |       |       |       |       | 4     | 3     | 8   |     | 15    |
| TOTAL    | 5     | 72    | 1,072 | 1,902 | 1,755 | 1,201 | 538   | 274 | 16  | 6,835 |

#### PRENATAL CARE

Prenatal care is defined as pregnancy-related health care services provided to women between conception and delivery. This care includes monitoring health, encouraging good health habits, and providing information and social and psychological support. The Alaska Bureau of Vital Statistics uses the Kessner Index<sup>7</sup> to evaluate levels of prenatal care. This index is described in Appendix D. In 1998, 68.4 percent of all infants born to Alaska resident mothers received adequate prenatal care, compared to 67.8 percent in 1997.

Another measure of adequacy of prenatal care is the percentage of mothers who receive care within the first trimester of their pregnancy. One of the Year 2000 Health Objectives (see Appendix F) is that 90% of pregnant women receive care within the first trimester. In 1995, 82.5% of women received care within the first trimester; in 1996, that figure dropped to 80.1%; in 1997, only 79.6 percent of women received prenatal care within the first trimester; and in 1998, the figure rose to 80.5 percent of women receiving prenatal care within the first trimester.

In general, infants whose mothers were Native or less than 20 years old received lower levels of prenatal care than other infants. (See Tables 1.15A and 1.15B.)

TABLE 1.13 PRENATAL CARE BY MOTHER'S MARITAL STATUS, ALASKA, 1998

|           |       |      | PRENATA | AL CARE |        |      |       |
|-----------|-------|------|---------|---------|--------|------|-------|
| MARITAL   | ADEQU | JATE | INTERM  | EDIATE  | INADEQ | UATE |       |
| STATUS    | BTHS  | PCT  | BTHS    | PCT     | BTHS   | PCT  | TOTAL |
| MARRIED   | 5,022 | 73.5 | 1,299   | 19.0    | 514    | 7.5  | 6,835 |
| UNMARRIED | 1,793 | 58.1 | 872     | 28.3    | 420    | 13.6 | 3,085 |
| TOTAL     | 6,815 | 68.7 | 2,171   | 21.9    | 934    | 9.4  | 9,920 |

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<sup>7</sup> Kessner, D. "Infant Death: An Analysis by Maternal Risk and Health Care," Institute of Medicine, Contrasts in Health Status, Volume I, 1973. National Academy of Sciences, Washington, DC, pp. 58-60.

TABLE 1.14A PRENATAL CARE BY CENSUS AREA OF MOTHER'S RESIDENCE, ALASKA, 1998

|              |       |      | PRENATA | AL CARE |        |      |       |
|--------------|-------|------|---------|---------|--------|------|-------|
|              | ADEQU | JATE | INTERM  | EDIATE  | INADEQ | UATE |       |
| CENSUS AREA  | BTHS  | PCT  | BTHS    | PCT     | BTHS   | PCT  | TOTAL |
| ALEUTN EAST  | 14    | 82.4 | 3       | 17.6    |        |      | 17    |
| ALEUTN WEST  | 26    | 60.5 | 12      | 27.9    | 5      | 11.6 | 43    |
| ANCHORAGE    | 3,371 | 80.6 | 612     | 14.6    | 199    | 4.8  | 4,182 |
| BETHEL       | 188   | 46.0 | 140     | 34.2    | 81     | 19.8 | 409   |
| BRISTOL BAY  | 15    | 88.2 | 2       | 11.8    |        |      | 17    |
| DENALI       | 9     | 47.4 | 8       | 42.1    | 2      | 10.5 | 19    |
| DILLINGHAM   | 52    | 49.1 | 20      | 18.9    | 34     | 32.1 | 106   |
| FAIRBANKS    | 910   | 63.2 | 379     | 26.3    | 150    | 10.4 | 1,439 |
| HAINES       | 10    | 47.6 | 5       | 23.8    | 6      | 28.6 | 21    |
| JUNEAU       | 283   | 71.8 | 83      | 21.1    | 28     | 7.1  | 394   |
| KENAI PEN    | 435   | 66.6 | 156     | 23.9    | 62     | 9.5  | 653   |
| KETCHIKAN    | 141   | 74.2 | 30      | 15.8    | 19     | 10.0 | 190   |
| KODIAK       | 156   | 60.0 | 82      | 31.5    | 22     | 8.5  | 260   |
| LAKE-PENIN   | 17    | 63.0 | 7       | 25.9    | 3      | 11.1 | 27    |
| MAT-SU       | 496   | 70.2 | 146     | 20.7    | 65     | 9.2  | 707   |
| NOME         | 92    | 44.4 | 67      | 32.4    | 48     | 23.2 | 207   |
| NORTH SLOPE  | 79    | 54.1 | 51      | 34.9    | 16     | 11.0 | 146   |
| NW ARCTIC    | 92    | 50.8 | 64      | 35.4    | 25     | 13.8 | 181   |
| PRINCE-WALES | 47    | 50.0 | 29      | 30.9    | 18     | 19.1 | 94    |
| SITKA        | 78    | 73.6 | 21      | 19.8    | 7      | 6.6  | 106   |
| SKG-HNH-ANG  | 17    | 53.1 | 11      | 34.4    | 4      | 12.5 | 32    |
| SE FAIRBANKS | 38    | 35.8 | 40      | 37.7    | 28     | 26.4 | 106   |
| VALDEZ-CORDV | 81    | 60.9 | 37      | 27.8    | 15     | 11.3 | 133   |
| WADE HAMPTON | 63    | 28.4 | 93      | 41.9    | 66     | 29.7 | 222   |
| WRANGELL-PBG | 64    | 67.4 | 24      | 25.3    | 7      | 7.4  | 95    |
| YAKUTAT      | 1     | 33.3 | 2       | 66.7    |        |      | 3     |
| YUKON-KOY    | 40    | 36.0 | 47      | 42.3    | 24     | 21.6 | 111   |
| TOTAL        | 6,815 | 68.7 | 2,171   | 21.9    | 934    | 9.4  | 9,920 |

TABLE 1.14B PRENATAL CARE BY NATIVE REGIONAL CORPORATION OF MOTHER'S RESIDENCE, ALASKA, 1998

| NATIVE      |       |      | PRENATA | AL CARE |        |      |       |
|-------------|-------|------|---------|---------|--------|------|-------|
| REGIONAL    | ADEQU | JATE | INTERM  | EDIATE  | INADEQ | UATE |       |
| CORPORATION | BTHS  | PCT  | BTHS    | PCT     | BTHS   | PCT  | TOTAL |
| AHTNA INC   | 26    | 55.3 | 15      | 31.9    | 6      | 12.8 | 47    |
| ALEUT CORP  | 40    | 66.7 | 15      | 25.0    | 5      | 8.3  | 60    |
| ARCTIC SLO  | 79    | 54.1 | 51      | 34.9    | 16     | 11.0 | 146   |
| BERING STS  | 92    | 44.4 | 67      | 32.4    | 48     | 23.2 | 207   |
| BRISTOL BY  | 84    | 56.8 | 29      | 19.6    | 35     | 23.6 | 148   |
| CALISTA CP  | 251   | 39.8 | 233     | 36.9    | 147    | 23.3 | 631   |
| CHUGACH     | 123   | 65.8 | 46      | 24.6    | 18     | 9.6  | 187   |
| COOK INLET  | 4,235 | 77.8 | 890     | 16.3    | 319    | 5.9  | 5,444 |
| DOYON LTD   | 996   | 59.5 | 474     | 28.3    | 204    | 12.2 | 1,674 |
| KONIAG INC  | 156   | 60.0 | 82      | 31.5    | 22     | 8.5  | 260   |
| NANA CORP   | 92    | 50.8 | 64      | 35.4    | 25     | 13.8 | 181   |
| SEALASKA    | 641   | 68.6 | 205     | 21.9    | 89     | 9.5  | 935   |
| TOTAL       | 6,815 | 68.7 | 2,171   | 21.9    | 934    | 9.4  | 9,920 |

TABLE 1.15A PRENATAL CARE BY RACE OF MOTHER, ALASKA, 1998

|          |       |      | PRENATA | AL CARE |        |      |       |
|----------|-------|------|---------|---------|--------|------|-------|
| MOTHER'S | ADEQU | JATE | INTERM  | EDIATE  | INADEQ |      |       |
| RACE     | BTHS  | PCT  | BTHS    | PCT     | BTHS   | PCT  | TOTAL |
| WHITE    | 4,984 | 75.2 | 1,209   | 18.2    | 436    | 6.6  | 6,629 |
| NATIVE   | 1,213 | 50.2 | 774     | 32.1    | 427    | 17.7 | 2,414 |
| AFR/AM   | 296   | 74.9 | 69      | 17.5    | 30     | 7.6  | 395   |
| ASIAN/PI | 322   | 66.8 | 119     | 24.7    | 41     | 8.5  | 482   |
| TOTAL    | 6,815 | 68.7 | 2,171   | 21.9    | 934    | 9.4  | 9,920 |

#### TABLE 1.15B PRENATAL CARE BY AGE OF MOTHER, ALASKA, 1998

|          |       |          | PRENATA | AL CARE |        |      |       |
|----------|-------|----------|---------|---------|--------|------|-------|
| MOTHER'S | ADEQU | ADEQUATE |         | EDIATE  | INADEQ |      |       |
| AGE      | BTHS  | PCT      | BTHS    | PCT     | BTHS   | PCT  | TOTAL |
| <15      | 4     | 36.4     | 3       | 27.3    | 4      | 36.4 | 11    |
| 15-17    | 202   | 52.3     | 124     | 32.1    | 60     | 15.5 | 386   |
| 18-19    | 427   | 59.6     | 212     | 29.6    | 78     | 10.9 | 717   |
| 20-24    | 1,797 | 67.7     | 607     | 22.9    | 251    | 9.5  | 2,655 |
| 25-29    | 1,983 | 72.2     | 542     | 19.7    | 220    | 8.0  | 2,745 |
| 30-34    | 1,489 | 71.7     | 409     | 19.7    | 180    | 8.7  | 2,078 |
| 35-39    | 744   | 70.6     | 199     | 18.9    | 111    | 10.5 | 1,054 |
| 40-44    | 159   | 61.4     | 73      | 28.2    | 27     | 10.4 | 259   |
| 45+      | 10    | 66.7     | 2       | 13.3    | 3      | 20.0 | 15    |
| TOTAL    | 6,815 | 68.7     | 2,171   | 21.9    | 934    | 9.4  | 9,920 |

## **BIRTHS BY FACILITY, METHOD, AND ATTENDANT**

In 1998, 84.3 percent of babies were delivered vaginally and 14.8 percent by cesarean-section. The U.S. cesarean delivery rate was 21.2 percent in 1998. Some remote or small hospitals had no c-section births; nor were there any c-section births at home or at birthing centers or clinics. At hospitals which did some c-section births, the rate varied widely, from a low of 1.5% at PHS Kanakanak in Dillingham to a high of 28.4% at Alaska Regional Hospital in Anchorage.

The overwhelming majority of babies delivered at hospitals were delivered by medical doctors (79.7%); however, several hospitals had a significant percentage of births attended by certified nurse midwives and doctors of osteopathy. At South Peninsula Hospital in Homer, 59.6 percent of infants were delivered by Certified Nurse Midwives (CNM); at Elmendorf Air Force Base in Anchorage, 48.2 percent of infants were delivered by CNM; at Bassett Army Hospital at Fort Wainwright in Fairbanks, 28.1 percent of infants were delivered by CNM; at Central Peninsula Hospital in Soldotna, 23.4 percent of infants were delivered by CNM; and at Alaska Native Medical Center in Anchorage, 21.2 percent of infants were delivered by CNM. Doctors of Osteopathy (DO) delivered 35.9 percent of infants at Elmendorf Air Force Base in Anchorage, 34.8 percent of infants at Petersburg Hospital, 29.4 percent of infants at PHS Kanakanak in Dillingham, and 24.3 percent of infants at Valley Hospital in Palmer.

Births at home and in birthing centers and clinics accounted for 4.2 percent of all Alaska births. Some of these births were in urban areas where hospitals are available; others took place in rural villages where clinics are the only medical facilities.

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<sup>8</sup> National Center for Health Statistics, U.S. Department of Health and Human Services, "Births and Deaths: Preliminary Data for 1997," National Vital Statistics Report, Vol. 47, No. 4, October 7, 1998, p. 5.

TABLE 1.16A RESIDENT BIRTHS BY BIRTH METHOD AND FACILITY, ALASKA, 1998

|                        |       |       | MET   | HOD  |      |      |       |
|------------------------|-------|-------|-------|------|------|------|-------|
|                        | VAGI  | NAL   | C-SEC | TION | UNKŅ | OWN  |       |
| FACILITY               | No.   | %     | No.   | %    | No.  | %    | TOTAL |
| PROVIDENCE             | 2,233 | 82.5  | 437   | 16.1 | 36   | 1.3  | 2,706 |
| AK NATIVE MED CTR      | 991   | 88.6  | 127   | 11.3 | 1    | 0.1  | 1,119 |
| FAIRBANKS              | 780   | 81.7  | 175   | 18.3 |      |      | 955   |
| ELMENDORF              | 563   | 83.3  | 110   | 16.3 | 3    | 0.4  | 676   |
| BASSETT                | 526   | 86.9  | 65    | 10.7 | 14   | 2.3  | 605   |
| ALASKA REGIONAL        | 426   | 71.6  | 169   | 28.4 |      |      | 595   |
| YUKON-KUSKOKWIM        | 394   | 96.6  | 14    | 3.4  |      |      | 408   |
| CENTRAL PENINSULA      | 337   | 85.5  | 57    | 14.5 |      |      | 394   |
| VALLEY                 | 296   | 80.9  | 69    | 18.9 | 1    | 0.3  | 366   |
| BARTLETT               | 270   | 74.4  | 93    | 25.6 |      |      | 363   |
| KETCHIKAN              | 260   | 87.2  | 38    | 12.8 |      |      | 298   |
| CLINIC/BIRTHING CENTER | 265   | 99.6  |       |      | 1    | 0.4  | 266   |
| KODIAK                 | 192   | 82.4  | 41    | 17.6 |      |      | 233   |
| HOME                   | 148   | 99.3  |       |      | 1    | 0.7  | 149   |
| SOUTH PENINSULA        | 119   | 87.5  | 17    | 12.5 |      |      | 136   |
| NORTON SOUND           | 98    | 83.8  |       |      | 19   | 16.2 | 117   |
| MANIILAQ               | 111   | 100.0 |       |      |      |      | 111   |
| OUT OF STATE           | 69    | 64.5  | 23    | 21.5 | 15   | 14.0 | 107   |
| PHS KANAKANAK          | 67    | 98.5  | 1     | 1.5  |      |      | 68    |
| SEARHC MT EDGECUMBE    | 49    | 73.1  | 18    | 26.9 |      |      | 67    |
| SITKA                  | 49    | 83.1  | 10    | 16.9 |      |      | 59    |
| PHS BARROW             | 45    | 100.0 |       |      |      |      | 45    |
| VALDEZ                 | 33    | 91.7  | 3     | 8.3  |      |      | 36    |
| PETERSBURG             | 22    | 95.7  | 1     | 4.3  |      |      | 23    |
| CORDOVA                | 9     | 100.0 |       |      |      |      | 9     |
| WRANGELL               | 8     | 100.0 |       |      |      |      | 8     |
| OTHER                  | 1     | 100.0 |       |      |      |      | 1     |
| TOTAL                  | 8,361 | 84.3  | 1,468 | 14.8 | 91   | 0.9  | 9,920 |

TABLE 1.16B RESIDENT BIRTHS BY BIRTH ATTENDANT AND FACILITY, ALASKA, 1998

|                        |       |       |       |          | ATTEN | DANT       |      |      |     |          |       |
|------------------------|-------|-------|-------|----------|-------|------------|------|------|-----|----------|-------|
|                        |       |       | CERT  | IFIED    | DOCT  | OR OF      |      |      |     |          |       |
|                        | MED   | _     | NUI   |          | OSTEO |            |      |      |     |          |       |
|                        | _DOC  |       | MID   |          |       | <b>O</b> ) | MIDV |      | OTE |          |       |
| FACILITY               | No.   | %     | No.   | <u>%</u> | No.   | %          | _No  | %    | No. | <u>%</u> | TOTAL |
| PROVIDENCE             | 2,447 | 90.4  | 257   | 9.5      |       |            |      | 0.0  | 2   | 0.1      | 2,706 |
| AK NATIVE MED CTR      | 855   | 76.4  | 237   | 21.2     | 1.1   | 1.0        | 2    | 0.2  | 25  | 2.2      | 1,119 |
| FAIRBANKS              | 936   | 98.0  |       | 40.5     | 11    | 1.2        |      |      | 8   | 0.8      | 955   |
| ELMENDORF              | 91    | 13.5  | 326   | 48.2     | 243   | 35.9       | _    |      | 16  | 2.4      | 676   |
| BASSETT                | 410   | 67.8  | 170   | 28.1     | 18    | 3.0        | 2    | 0.3  | 5   | 0.8      | 605   |
| ALASKA REGIONAL        | 576   | 96.8  | 19    | 3.2      |       |            |      |      |     |          | 595   |
| YUKON-KUSKOKWIM        | 306   | 75.0  | 102   | 25.0     |       |            |      |      |     |          | 408   |
| CENTRAL PENINSULA      | 294   | 74.6  | 92    | 23.4     | 7     | 1.8        |      |      | 1   | 0.3      | 394   |
| VALLEY                 | 277   | 75.7  |       |          | 89    | 24.3       |      |      |     |          | 366   |
| BARTLETT               | 362   | 99.7  |       |          |       |            |      |      | 1   | 0.3      | 363   |
| KETCHIKAN              | 260   | 87.2  | 37    | 12.4     |       |            |      |      | 1   | 0.3      | 298   |
| CLINIC/BIRTHING CENTER | 21    | 7.9   | 77    | 28.9     | 1     | 0.4        | 144  | 54.1 | 23  | 8.6      | 266   |
| KODIAK                 | 155   | 66.5  |       |          | 78    | 33.5       |      |      |     |          | 233   |
| HOME                   | 7     | 4.7   | 16    | 10.7     |       |            | 93   | 62.4 | 33  | 22.1     | 149   |
| SOUTH PENINSULA        | 55    | 40.4  | 81    | 59.6     |       |            |      |      |     |          | 136   |
| NORTON SOUND           | 91    | 77.8  |       |          | 16    | 13.7       | 8    | 6.8  | 2   | 1.7      | 117   |
| MANIILAQ               | 92    | 82.9  | 11    | 9.9      | 8     | 7.2        |      |      |     |          | 111   |
| OUT OF STATE           | 38    | 35.5  | 4     | 3.7      | 2     | 1.9        | 1    | 0.9  | 62  | 57.9     | 107   |
| PHS KANAKANAK          | 47    | 69.1  | 1     | 1.5      | 20    | 29.4       |      |      |     |          | 68    |
| SEARHC MT EDGECUMBE    | 65    | 97.0  |       |          | 1     | 1.5        |      |      | 1   | 1.5      | 67    |
| SITKA                  | 59    | 100.0 |       |          |       |            |      |      |     |          | 59    |
| PHS BARROW             | 41    | 91.1  |       |          | 4     | 8.9        |      |      |     |          | 45    |
| VALDEZ                 | 36    | 100.0 |       |          |       |            |      |      |     |          | 36    |
| PETERSBURG             | 15    | 65.2  |       |          | 8     | 34.8       |      |      |     |          | 23    |
| CORDOVA                | 9     | 100.0 |       |          |       |            |      |      |     |          | 9     |
| WRANGELL               | 8     | 100.0 |       |          |       |            |      |      |     |          | 8     |
| OTHER                  |       |       |       |          |       |            |      |      | 1   | 100.0    | 1     |
| TOTAL                  | 7,553 | 76.1  | 1,430 | 14.4     | 506   | 5.1        | 250  | 2.5  | 181 | 1.8      | 9,920 |

TABLE 1.17A RESIDENT BIRTHS BY CENSUS AREA OF OCCURRENCE AND BIRTH FACILITY, ALASKA, 1998

|                   |          | PLACI    | E OF BI | RTH    |         |       |
|-------------------|----------|----------|---------|--------|---------|-------|
|                   |          | BIRTHING |         |        |         |       |
| CENSUS AREA WHERE |          | CENTER/  |         | OUT OF | OTHER/  |       |
| BIRTH OCCURRED    | HOSPITAL | CLINIC   | HOME    | STATE  | UNKNOWN | TOTAL |
| ALEUTIANS WEST    |          | 1        |         |        |         | 1     |
| ANCHORAGE         | 5,096    | 74       | 49      |        |         | 5,219 |
| BETHEL            | 408      | 4        | 2       |        |         | 414   |
| DILLINGHAM        | 68       | 1        |         |        |         | 69    |
| FAIRBANKS NSB     | 1,559    | 58       | 13      |        |         | 1,630 |
| JUNEAU BOROUGH    | 363      | 27       | 17      |        |         | 407   |
| KENAI PENINSULA   | 530      | 5        | 24      |        | 1       | 560   |
| KETCHIKAN         | 298      |          |         |        |         | 298   |
| KODIAK ISLAND     | 233      | 1        | 5       |        |         | 239   |
| MATANUSKA-SUSITNA | 366      | 75       | 24      |        |         | 465   |
| NOME              | 117      | 2        | 1       |        |         | 120   |
| NORTH SLOPE       | 45       | 2        | 1       |        |         | 48    |
| NORTHWEST ARCTIC  | 111      | 3        |         |        |         | 114   |
| PRINCE OF WALES   |          |          | 4       |        |         | 4     |
| SITKA BOROUGH     | 126      |          | 1       |        |         | 127   |
| SKGWAY-HOONAH-ANG |          |          | 1       |        |         | 1     |
| SE FAIRBANKS      |          |          | 2       |        |         | 2     |
| VALDEZ-CORDOVA    | 45       |          | 4       |        |         | 49    |
| WADE HAMPTON      |          | 10       | 1       |        |         | 11    |
| WRANGELL-PETERSBG | 31       | 1        |         |        |         | 32    |
| YUKON-KOYUKUK     | 1        | 2        |         |        |         | 3     |
| OUTSIDE ALASKA    |          |          |         | 107    |         | 107   |
| TOTAL             | 9,397    | 266      | 149     | 107    | 1       | 9,920 |

TABLE 1.17B RESIDENT BIRTHS BY NATIVE REGIONAL CORPORATION OF OCCURRENCE AND BIRTH FACILITY, ALASKA, 1998

|                      |          | PLACI    | E OF BI | RTH    |         |       |
|----------------------|----------|----------|---------|--------|---------|-------|
| NATIVE REGIONAL      |          | BIRTHING |         |        |         |       |
| CORPORATION WHERE    |          | CENTER/  |         | OUT OF | OTHER/  |       |
| BIRTH OCCURRED       | HOSPITAL | CLINIC   | HOME    | STATE  | UNKNOWN | TOTAL |
| AHTNA INC.           |          |          | 2       |        |         | 2     |
| ALEUT CORP.          |          | 1        |         |        |         | 1     |
| ARCTIC SLOPE CORP.   | 45       | 2        | 1       |        |         | 48    |
| BERING STRAITS CORP. | 117      | 2        | 1       |        |         | 120   |
| BRISTOL BAY CORP.    | 68       | 1        |         |        |         | 69    |
| CALISTA CORP.        | 408      | 14       | 3       |        |         | 425   |
| CHUGACH NATIVES INC. | 45       |          | 2       |        |         | 47    |
| COOK INLET REG CORP. | 5,992    | 154      | 97      |        | 1       | 6,244 |
| DOYON LTD.           | 1,560    | 60       | 15      |        |         | 1,635 |
| KONIAG INC.          | 233      | 1        | 5       |        |         | 239   |
| NANA REGIONAL CORP.  | 111      | 3        |         |        |         | 114   |
| SEALASKA CORP.       | 818      | 28       | 23      |        |         | 869   |
| OUTSIDE ALASKA       |          |          |         | 107    |         | 107   |
| TOTAL                | 9,397    | 266      | 149     | 107    | 1       | 9,920 |

TABLE 1.18 RESIDENT BIRTHS BY MOTHER'S RACE AND BIRTH FACILITY, ALASKA, 1998

|          |          | PLACI    | E OF BI | RTH    |         |       |
|----------|----------|----------|---------|--------|---------|-------|
|          |          | BIRTHING |         |        |         |       |
| RACE OF  |          | CENTER/  |         | OUT OF | OTHER/  |       |
| MOTHER   | HOSPITAL | CLINIC   | HOME    | STATE  | UNKNOWN | TOTAL |
| WHITE    | 6,175    | 228      | 135     | 90     | 1       | 6,629 |
| NATIVE   | 2,359    | 32       | 10      | 13     |         | 2,414 |
| AFR/AM   | 392      | 1        | 1       | 1      |         | 395   |
| ASIAN/PI | 471      | 5        | 3       | 3      |         | 482   |
| TOTAL    | 9,397    | 266      | 149     | 107    | 1       | 9,920 |

TABLE 1.19 RESIDENT BIRTHS BY MOTHER'S EDUCATION AND BIRTH FACILITY, ALASKA, 1998

|           |          | PLACI               | E OF BII | RTH    |                   |       |
|-----------|----------|---------------------|----------|--------|-------------------|-------|
| MOTHER'S  |          | BIRTHING<br>CENTER/ |          | OUT OF | OTHED!            |       |
| EDUCATION | HOSPITAL |                     |          |        | OTHER/<br>UNKNOWN | TOTAL |
| 0-11      | 1,235    | 25                  | 23       | 5      |                   | 1,288 |
| 12        | 4,005    | 94                  | 37       | 7      | 1                 | 4,144 |
| 13-15     | 2,389    | 71                  | 46       | 13     |                   | 2,519 |
| 16+       | 1,586    | 72                  | 42       | 24     |                   | 1,724 |
| UNK       | 182      | 4                   | 1        | 58     |                   | 245   |
| TOTAL     | 9,397    | 266                 | 149      | 107    | 1                 | 9,920 |

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TABLE 1.20A RESIDENT BIRTHS BY CENSUS AREA OF OCCURRENCE AND BY BIRTH ATTENDANT TYPE, ALASKA, 1998

|                                     |                   | AT                      | TENDANT TY                    | PE      |                   |       |
|-------------------------------------|-------------------|-------------------------|-------------------------------|---------|-------------------|-------|
| CENSUS AREA WHERE<br>BIRTH OCCURRED | MEDICAL<br>DOCTOR | DOCTOR OF<br>OSTEOPATHY | CERTIFIED<br>NURSE<br>MIDWIFE | MIDWIFE | OTHER/<br>UNKNOWN | TOTAL |
| ALEUTIANS WEST                      |                   |                         |                               |         | 1                 | 1     |
| ANCHORAGE                           | 3,972             | 243                     | 907                           | 47      | 50                | 5,219 |
| BETHEL                              | 306               |                         | 102                           |         | 6                 | 414   |
| DILLINGHAM                          | 47                | 20                      | 1                             |         | 1                 | 69    |
| FAIRBANKS NSB                       | 1,366             | 29                      | 172                           | 48      | 15                | 1,630 |
| JUNEAU BOROUGH                      | 363               |                         | 10                            | 32      | 2                 | 407   |
| KENAI PENINSULA                     | 349               | 8                       | 176                           | 18      | 9                 | 560   |
| KETCHIKAN                           | 260               |                         | 37                            |         | 1                 | 298   |
| KODIAK ISLAND                       | 155               | 78                      |                               | 6       |                   | 239   |
| MATANUSKA-SUSITNA                   | 277               | 89                      | 8                             | 87      | 4                 | 465   |
| NOME                                | 91                | 16                      |                               | 8       | 5                 | 120   |
| NORTH SLOPE                         | 42                | 4                       |                               |         | 2                 | 48    |
| NORTHWEST ARCTIC                    | 92                | 8                       | 11                            |         | 3                 | 114   |
| PRINCE OF WALES                     |                   |                         |                               |         | 4                 | 4     |
| SITKA BOROUGH                       | 124               | 1                       |                               |         | 2                 | 127   |
| SKGWAY-HOONAH-ANG                   |                   |                         |                               | 1       |                   | 1     |
| SE FAIRBANKS                        |                   |                         | 1                             |         | 1                 | 2     |
| VALDEZ-CORDOVA                      | 45                |                         | 1                             | 2       | 1                 | 49    |
| WADE HAMPTON                        | 3                 |                         |                               |         | 8                 | 11    |
| WRANGELL-PETERSBG                   | 23                | 8                       |                               |         | 1                 | 32    |
| YUKON-KOYUKUK                       |                   |                         |                               |         | 3                 | 3     |
| OUTSIDE ALASKA                      | 38                | 2                       | 4                             | 1       | 62                | 107   |
| TOTAL                               | 7,553             | 506                     | 1,430                         | 250     | 181               | 9,920 |

TABLE 1.20B RESIDENT BIRTHS BY NATIVE REGIONAL CORPORATION OF OCCURRENCE AND BY BIRTH ATTENDANT TYPE, ALASKA, 1998

|                      |         | AT         | TENDANT TY | PE      |         |       |
|----------------------|---------|------------|------------|---------|---------|-------|
| NATIVE REGIONAL      |         |            | CERTIFIED  |         |         |       |
| CORPORATION WHERE    | MEDICAL | DOCTOR OF  | NURSE      |         | OTHER/  |       |
| BIRTH OCCURRED       | DOCTOR  | OSTEOPATHY | MIDWIFE    | MIDWIFE | UNKNOWN | TOTAL |
| AHTNA INC.           |         |            | 1          | 1       |         | 2     |
| ALEUT CORP.          |         |            |            |         | 1       | 1     |
| ARCTIC SLOPE CORP.   | 42      | 4          |            |         | 2       | 48    |
| BERING STRAITS CORP. | 91      | 16         |            | 8       | 5       | 120   |
| BRISTOL BAY CORP.    | 47      | 20         | 1          |         | 1       | 69    |
| CALISTA CORP.        | 309     |            | 102        |         | 14      | 425   |
| CHUGACH NATIVES INC. | 45      |            |            | 1       | 1       | 47    |
| COOK INLET REG CORP. | 4,598   | 340        | 1,091      | 152     | 63      | 6,244 |
| DOYON LTD.           | 1,366   | 29         | 173        | 48      | 19      | 1,635 |
| KONIAG INC.          | 155     | 78         |            | 6       |         | 239   |
| NANA REGIONAL CORP.  | 92      | 8          | 11         |         | 3       | 114   |
| SEALASKA CORP.       | 770     | 9          | 47         | 33      | 10      | 869   |
| OUTSIDE ALASKA       | 38      | 2          | 4          | 1       | 62      | 107   |
| TOTAL                | 7,553   | 506        | 1,430      | 250     | 181     | 9,920 |

TABLE 1.21 RESIDENT BIRTHS BY RACE OF MOTHER AND BY BIRTH ATTENDANT TYPE, ALASKA, 1998

|          |        | AT         | TENDANT TY | PE      |         |       |
|----------|--------|------------|------------|---------|---------|-------|
|          |        |            | CERTIFIED  |         |         |       |
| MOTHER'S |        | DOCTOR OF  | NURSE      |         | OTHER/  |       |
| RACE     | DOCTOR | OSTEOPATHY | MIDWIFE    | MIDWIFE | UNKNOWN | TOTAL |
| WHITE    | 4,998  | 368        | 932        | 227     | 104     | 6,629 |
| NATIVE   | 1,892  | 67         | 369        | 18      | 68      | 2,414 |
| AFR/AM   | 280    | 33         | 77         |         | 5       | 395   |
| ASIAN/PI | 383    | 38         | 52         | 5       | 4       | 482   |
| TOTAL    | 7,553  | 506        | 1,430      | 250     | 181     | 9,920 |

#### **GESTATION**

Tables 1.22A, 1.22B, 1.22C, and 1.22D show numbers and percentages of pre-term (less than 37 weeks gestation, term (37-41 weeks gestation), and post-term (more than 41 weeks gestation) for the years 1994-1998. Please note that these tables include only single births; multiple births are excluded from these tables.

TABLE 1.22A PRE-TERM, TERM, AND POST-TERM BIRTHS AND PERCENTAGES FOR SINGLE BIRTHS BY MOTHER'S CENSUS AREA, ALASKA, 1994-1998

| CENSUS AREA OF | PRE-J | ERM  | TE     | RM    | POST- | TERM | UNKN | IOWN |        |
|----------------|-------|------|--------|-------|-------|------|------|------|--------|
| MOTHER'S       |       |      |        |       |       |      |      |      |        |
| RESIDENCE      | No.   | %    | No.    | %     | No.   | %    | No.  | %    | TOTAL  |
| ALEUTN EAST    | 8     | 6.8  | 101    | 86.3  | 8     | 6.8  |      |      | 117    |
| ALEUTN WEST    | 16    | 8.1  | 169    | 85.4  | 12    | 6.1  | 1    | 0.5  | 198    |
| ANCHORAGE      | 1,651 | 7.9  | 18,113 | 86.5  | 1,155 | 5.5  | 29   | 0.1  | 20,948 |
| BETHEL         | 251   | 12.7 | 1,606  | 81.1  | 122   | 6.2  | 2    | 0.1  | 1,981  |
| BRISTOL BAY    | 8     | 8.1  | 84     | 84.8  | 7     | 7.1  |      |      | 99     |
| DENALI         | 6     | 5.3  | 98     | 86.0  | 10    | 8.8  |      |      | 114    |
| DILLINGHAM     | 61    | 11.3 | 436    | 80.7  | 41    | 7.6  | 2    | 0.4  | 540    |
| FAIRBANKS      | 551   | 7.7  | 5,887  | 81.9  | 737   | 10.3 | 10   | 0.1  | 7,185  |
| HAINES         | 8     | 8.5  | 76     | 80.9  | 10    | 10.6 |      |      | 94     |
| JUNEAU         | 168   | 8.6  | 1,574  | 80.5  | 213   | 10.9 |      |      | 1,955  |
| KENAI PEN      | 256   | 7.8  | 2,684  | 82.0  | 320   | 9.8  | 12   | 0.4  | 3,272  |
| KETCHIKAN      | 52    | 5.3  | 849    | 86.1  | 85    | 8.6  |      |      | 986    |
| KODIAK         | 124   | 9.5  | 1,073  | 82.2  | 107   | 8.2  | 1    | 0.1  | 1,305  |
| LAKE-PENIN     | 13    | 7.5  | 149    | 85.6  | 12    | 6.9  |      |      | 174    |
| MAT-SU         | 254   | 7.3  | 3,013  | 86.8  | 200   | 5.8  | 4    | 0.1  | 3,471  |
| NOME           | 131   | 13.2 | 797    | 80.5  | 59    | 6.0  | 3    | 0.3  | 990    |
| NORTH SLOPE    | 83    | 12.7 | 508    | 77.9  | 60    | 9.2  | 1    | 0.2  | 652    |
| NW ARCTIC      | 77    | 9.9  | 656    | 84.4  | 43    | 5.5  | 1    | 0.1  | 777    |
| PRINCE-WALES   | 22    | 4.8  | 390    | 85.9  | 37    | 8.1  | 5    | 1.1  | 454    |
| SITKA          | 40    | 6.9  | 476    | 82.5  | 61    | 10.6 |      |      | 577    |
| SKG-HNH-ANG    | 9     | 5.6  | 126    | 78.3  | 26    | 16.1 |      |      | 161    |
| SE FAIRBANKS   | 35    | 6.7  | 436    | 83.4  | 52    | 9.9  |      |      | 523    |
| VALDEZ-CORDV   | 43    | 6.5  | 569    | 86.1  | 48    | 7.3  | 1    | 0.2  | 661    |
| WADE HAMPTON   | 155   | 14.7 | 843    | 79.8  | 57    | 5.4  | 1    | 0.1  | 1,056  |
| WRANGELL-PBG   | 17    | 4.1  | 344    | 82.9  | 54    | 13.0 |      |      | 415    |
| YAKUTAT        | 1     | 2.1  | 45     | 95.7  | 1     | 2.1  |      |      | 47     |
| YUKON-KOY      | 51    | 10.2 | 402    | 80.7  | 45    | 9.0  |      |      | 498    |
| UNKNOWN        |       |      | 2      | 100.0 |       |      |      |      | 2      |
| TOTAL          | 4,091 | 8.3  | 41,506 | 84.3  | 3,582 | 7.3  | 73   | 0.1  | 49,252 |

TABLE 1.22B PRE-TERM, TERM, AND POST-TERM BIRTHS AND PERCENTAGES FOR SINGLE BIRTHS BY MOTHER'S NATIVE REGIONAL CORPORATION, ALASKA, 1994-1998

| NATIVE REGIONAL                   | PRE-T | ERM  | TE     | RM    | POST- | TERM | UNKN | IOWN |        |
|-----------------------------------|-------|------|--------|-------|-------|------|------|------|--------|
| CORPORATION OF MOTHER'S RESIDENCE | No.   | %    | No.    | %     | No.   | %    | No.  | %    | TOTAL  |
| AHTNA INC.                        | 13    | 5.8  | 199    | 89.2  | 11    | 4.9  |      |      | 223    |
| ALEUT CORP.                       | 24    | 7.6  | 270    | 85.7  | 20    | 6.3  | 1    | 0.3  | 315    |
| ARCTIC SLOPE CORP.                | 83    | 12.7 | 508    | 77.9  | 60    | 9.2  | 1    | 0.2  | 652    |
| BERING STRAITS CORP               | 131   | 13.2 | 797    | 80.5  | 59    | 6.0  | 3    | 0.3  | 990    |
| BRISTOL BAY CORP.                 | 81    | 10.2 | 654    | 82.3  | 58    | 7.3  | 2    | 0.3  | 795    |
| CALISTA CORP.                     | 406   | 13.4 | 2,449  | 80.6  | 179   | 5.9  | 3    | 0.1  | 3,037  |
| CHUGACH NATIVES INC               | 54    | 7.3  | 634    | 85.2  | 55    | 7.4  | 1    | 0.1  | 744    |
| COOK INLET REG CORP               | 2,138 | 7.8  | 23,568 | 86.0  | 1,659 | 6.1  | 45   | 0.2  | 27,410 |
| DOYON LTD.                        | 643   | 7.7  | 6,816  | 82.0  | 844   | 10.2 | 10   | 0.1  | 8,313  |
| KONIAG INC.                       | 124   | 9.5  | 1,073  | 82.2  | 107   | 8.2  | 1    | 0.1  | 1,305  |
| NANA REGIONAL CORP.               | 77    | 9.9  | 656    | 84.4  | 43    | 5.5  | 1    | 0.1  | 777    |
| SEALASKA CORP.                    | 317   | 6.8  | 3,880  | 82.7  | 487   | 10.4 | 5    | 0.1  | 4,689  |
| UNKNOWN                           |       |      | 2      | 100.0 |       |      |      |      | 2      |
| TOTAL                             | 4,091 | 8.3  | 41,506 | 84.3  | 3,582 | 7.3  | 73   | 0.1  | 49,252 |

TABLE 1.22C PRE-TERM, TERM, AND POST-TERM BIRTHS AND PERCENTAGES FOR SINGLE BIRTHS BY MOTHER'S RACE, ALASKA, 1994-1998

| MOTHER'S   | PRE-T | ERM  | TE     | RM   | POST- | TERM | UNKN | IOWN |        |
|------------|-------|------|--------|------|-------|------|------|------|--------|
| RACE       | No.   | %    | No.    | %    | No.   | %    | No.  | %    | TOTAL  |
| WHITE      | 2,266 | 6.8  | 28,331 | 85.4 | 2,515 | 7.6  | 48   | 0.1  | 33,160 |
| NATIVE     | 1,374 | 11.9 | 9,361  | 81.1 | 790   | 6.8  | 13   | 0.1  | 11,538 |
| AFRICAN/AM | 252   | 11.7 | 1,752  | 81.6 | 139   | 6.5  | 4    | 0.2  | 2,147  |
| ASIAN/PI   | 197   | 8.3  | 2,032  | 85.8 | 136   | 5.7  | 4    | 0.2  | 2,369  |
| UNKNOWN    | 2     | 5.3  | 30     | 78.9 | 2     | 5.3  | 4    | 10.5 | 38     |
| TOTAL      | 4.091 | 8.3  | 41.506 | 84.3 | 3.582 | 7.3  | 73   | 0.1  | 49,252 |

TABLE 1.22D PRE-TERM, TERM, AND POST-TERM BIRTHS AND PERCENTAGES FOR SINGLE BIRTHS BY MOTHER'S AGE, ALASKA, 1994-1998

| MOTHER'S | PRE-TERM |      | TE     | RM   | POST- | TERM | UNKN | OWN |        |
|----------|----------|------|--------|------|-------|------|------|-----|--------|
| AGE      | No.      | %    | No.    | %    | No.   | %    | No.  | %   | TOTAL  |
| <20      | 808      | 10.0 | 6,591  | 81.7 | 648   | 8.0  | 19   | 0.2 | 8,066  |
| 20-30    | 2,059    | 7.7  | 22,490 | 84.5 | 2,043 | 7.7  | 27   | 0.1 | 26,619 |
| 30-40    | 1,152    | 8.3  | 11,804 | 85.3 | 853   | 6.2  | 22   | 0.2 | 13,831 |
| 40+      | 70       | 9.8  | 601    | 84.3 | 38    | 5.3  | 4    | 0.6 | 713    |
| UNK      | 2        | 8.7  | 20     | 87.0 |       |      | 1    | 4.3 | 23     |
| TOTAL    | 4,091    | 8.3  | 41,506 | 84.3 | 3,582 | 7.3  | 73   | 0.1 | 49,252 |

#### **BIRTH WEIGHT**

Tables 1.23A, 1.23B, and 1.23C show numbers of births by birth weight. Table 1.23A shows birth weight by census area, Table 1.23B shows birth weight by Native regional corporation, and Table 1.23C shows birth weight by mother's race. Infants weighing less than 2,500 grams (5 pounds 8 ounces) are defined as low birth weight babies.

Infants weighing less than 1,500 grams (3 pounds, 5 ounces) are considered very low birth weight. The National Center for Health Statistics is concerned with low birth weight rates because low birth weight infants are at much greater risk of mortality and long-term disability.<sup>9</sup>

TABLE 1.23A RESIDENT BIRTHS BY CENSUS AREA OF MOTHER'S RESIDENCE AND BY BIRTH WEIGHT OF CHILD, ALASKA, 1998

|                    | BIRTH WEIGHT IN GRAMS |      |       |       |       |       |       |      |       |  |  |
|--------------------|-----------------------|------|-------|-------|-------|-------|-------|------|-------|--|--|
| CENSUS AREA OF     |                       | 750- | 1500- | 2500- | 3000- | 3500- |       |      |       |  |  |
| MOTHER'S RESIDENCE | <750                  | 1499 | 2499  | 2999  | 3499  | 4499  | 4500+ | UNKN | TOTAL |  |  |
| ALEUTIANS EAST     |                       |      | 1     | 1     | 6     | 9     |       |      | 17    |  |  |
| ALEUTIANS WEST     | 1                     |      | 2     | 6     | 15    | 19    |       |      | 43    |  |  |
| ANCHORAGE          | 11                    | 56   | 207   | 543   | 1,457 | 1,806 | 96    | 6    | 4,182 |  |  |
| BETHEL             |                       | 3    | 16    | 30    | 115   | 229   | 16    |      | 409   |  |  |
| BRISTOL BAY        |                       | 1    |       | 1     | 9     | 5     | 1     |      | 17    |  |  |
| DENALI             |                       |      | 1     | 2     | 9     | 6     | 1     |      | 19    |  |  |
| DILLINGHAM         | 1                     | 1    | 5     | 11    | 28    | 55    | 4     | 1    | 106   |  |  |
| FAIRBANKS NSB      | 2                     | 18   | 70    | 176   | 472   | 659   | 35    | 7    | 1,439 |  |  |
| HAINES BOROUGH     |                       |      |       |       | 5     | 12    | 1     | 3    | 21    |  |  |
| JUNEAU BOROUGH     | 1                     | 2    | 14    | 54    | 113   | 197   | 13    |      | 394   |  |  |
| KENAI PENINSULA    |                       | 3    | 36    | 86    | 229   | 277   | 20    | 2    | 653   |  |  |
| KETCHIKAN          |                       |      | 3     | 27    | 63    | 90    | 7     |      | 190   |  |  |
| KODIAK ISLAND      | 1                     | 1    | 13    | 32    | 79    | 125   | 8     | 1    | 260   |  |  |
| LAKE-PENINSULA     |                       |      | 2     | 1     | 7     | 15    | 2     |      | 27    |  |  |
| MATANUSKA-SUSITNA  | 1                     | 8    | 31    | 93    | 200   | 354   | 17    | 3    | 707   |  |  |
| NOME               |                       | 3    | 9     | 16    | 64    | 102   | 8     | 5    | 207   |  |  |
| NORTH SLOPE        |                       | 1    | 10    | 20    | 47    | 65    | 3     |      | 146   |  |  |
| NORTHWEST ARCTIC   |                       | 2    | 6     | 17    | 62    | 87    | 7     |      | 181   |  |  |
| PRINCE OF WALES    |                       | 1    | 2     | 10    | 34    | 42    | 4     | 1    | 94    |  |  |
| SITKA BOROUGH      |                       | 2    | 5     | 10    | 29    | 56    | 4     |      | 106   |  |  |
| SKGWAY-HOONAH-ANG  |                       |      |       | 2     | 12    | 18    |       |      | 32    |  |  |
| SE FAIRBANKS       |                       |      | 6     | 10    | 26    | 60    | 3     | 1    | 106   |  |  |
| VALDEZ-CORDOVA     |                       |      | 10    | 12    | 43    | 65    | 3     |      | 133   |  |  |
| WADE HAMPTON       |                       | 3    | 10    | 14    | 69    | 119   | 7     |      | 222   |  |  |
| WRANGELL-PETERSBG  |                       |      | 1     | 13    | 27    | 53    | 1     |      | 95    |  |  |
| YAKUTAT            |                       |      |       |       | 3     |       |       |      | 3     |  |  |
| YUKON-KOYUKUK      |                       |      | 7     | 11    | 39    | 47    | 5     | 2    | 111   |  |  |
| TOTAL              | 18                    | 105  | 467   | 1,198 | 3,262 | 4,572 | 266   | 32   | 9,920 |  |  |

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<sup>9</sup> National Center for Health Statistics, U.S. Department of Health and Human Services, "Report of Final Natality Statistics, 1995," *Monthly Vital Statistics Report*, Vol. 45, No. 11(S), June 10, 1997, p. 16.

TABLE 1.23B RESIDENT BIRTHS BY NATIVE REGIONAL CORPORATION OF MOTHER'S RESIDENCE AND BY BIRTH WEIGHT OF CHILD, ALASKA, 1998

| NATIVE REGIONAL      |      |      | BIRTE | WEIG  | HT IN G | RAMS  |       |      |       |
|----------------------|------|------|-------|-------|---------|-------|-------|------|-------|
| CORPORATION OF       |      | 750- | 1500- | 2500- | 3000-   | 3500- |       |      |       |
| MOTHER'S RESIDENCE   | <750 | 1499 | 2499  | 2999  | 3499    | 4499  | 4500+ | UNKN | TOTAL |
| AHTNA INC.           |      |      | 6     | 4     | 15      | 20    | 2     |      | 47    |
| ALEUT CORP.          | 1    |      | 3     | 7     | 21      | 28    |       |      | 60    |
| ARCTIC SLOPE CORP.   |      | 1    | 10    | 20    | 47      | 65    | 3     |      | 146   |
| BERING STRAITS CORP. |      | 3    | 9     | 16    | 64      | 102   | 8     | 5    | 207   |
| BRISTOL BAY CORP.    | 1    | 2    | 7     | 13    | 44      | 74    | 6     | 1    | 148   |
| CALISTA CORP.        |      | 6    | 26    | 44    | 184     | 348   | 23    |      | 631   |
| CHUGACH NATIVES INC. |      | 1    | 14    | 18    | 51      | 98    | 4     | 1    | 187   |
| COOK INLET REG CORP. | 12   | 66   | 264   | 712   | 1,863   | 2,385 | 132   | 10   | 5,444 |
| DOYON LTD.           | 2    | 18   | 84    | 199   | 546     | 772   | 43    | 10   | 1,674 |
| KONIAG INC.          | 1    | 1    | 13    | 32    | 79      | 125   | 8     | 1    | 260   |
| NANA REGIONAL CORP.  |      | 2    | 6     | 17    | 62      | 87    | 7     |      | 181   |
| SEALASKA CORP.       | 1    | 5    | 25    | 116   | 286     | 468   | 30    | 4    | 935   |
| TOTAL                | 18   | 105  | 467   | 1,198 | 3,262   | 4,572 | 266   | 32   | 9,920 |

TABLE 1.23C RESIDENT BIRTHS BY RACE OF MOTHER AND BY BIRTH WEIGHT OF CHILD, ALASKA, 1998

|                  |      |              | BIRTH         | WEIGH         | HT IN G       | RAMS          |               |      |       |
|------------------|------|--------------|---------------|---------------|---------------|---------------|---------------|------|-------|
| MOTHER'S<br>RACE | <750 | 750-<br>1499 | 1500-<br>2499 | 2500-<br>2999 | 3000-<br>3499 | 3500-<br>4499 | <b>4500</b> + | UNKN | TOTAL |
| WHITE            | 9    | 69           | 289           | 821           | 2,197         | 3,051         | 173           | 20   | 6,629 |
| NATIVE           | 3    | 23           | 121           | 223           | 732           | 1,222         | 80            | 10   | 2,414 |
| AFR/AM           | 3    | 10           | 28            | 70            | 160           | 121           | 2             | 1    | 395   |
| ASIAN/PI         | 3    | 3            | 29            | 84            | 173           | 178           | 11            | 1    | 482   |
| TOTAL            | 18   | 105          | 467           | 1,198         | 3,262         | 4,572         | 266           | 32   | 9,920 |

#### LOW BIRTH WEIGHT PERCENTAGES

In Alaska, low birth weight percentages are calculated for a five-year period to reduce the possibility of year-to-year random variation. From 1994 through 1998, 5.6 percent of all Alaska resident births resulted in low birth weight babies. During 1998 the U.S. low birth weight percentage was 7.6 percent.<sup>10</sup> Of all multiple birth infants from 1994-1998 (i.e. twins, etc.), 51.8 percent were characterized by low birth weight.

Tables 1.24A and 1.24B show the number and percent of very low birth weight infants (less than 1500 grams), the number and percent of low birth weight infants (from 1500 to 2499 grams), the number and percent of infants 2500 grams and over, and the number and percent of births where the birth weight is unknown. Note that the total shows that 94.1 percent of all births fall in the 2500+ gram category.

<sup>10</sup> National Center for Health Statistics, U.S. Department of Health and Human Services, "Births and Deaths: Preliminary Data for 1998," National Vital Statistics Report, Vol. 47, No. 25, October 5, 1999, p. 4.

TABLE 1.24A BIRTH WEIGHTS AND PERCENTAGES BY MOTHER'S CENSUS AREA, ALASKA, 1994-1998

|                    |     | CH. | LD'S BI | RTH W | EIGHT  | IN GRA | MS  |      |        |
|--------------------|-----|-----|---------|-------|--------|--------|-----|------|--------|
| CENSUS AREA OF     | <15 | 500 | 1500-   | 2499  | 250    | 0+     | UN  | KN   |        |
| MOTHER'S RESIDENCE | No. | %   | No.     | %     | No.    | %      | No. | %    | TOTAL  |
| ALEUTIANS EAST     |     |     | 7       | 5.6   | 118    | 94.4   |     |      | 125    |
| ALEUTIANS WEST     | 4   | 1.6 | 12      | 4.9   | 226    | 93.0   | 1   | 0.4  | 243    |
| ANCHORAGE          | 266 | 1.2 | 1,060   | 4.9   | 20,178 | 93.6   | 55  | 0.3  | 21,559 |
| BETHEL             | 16  | 0.8 | 72      | 3.6   | 1,914  | 95.5   | 3   | 0.1  | 2,005  |
| BRISTOL BAY        | 1   | 1.0 | 3       | 2.9   | 99     | 96.1   |     |      | 103    |
| DENALI             | 1   | 0.8 | 4       | 3.3   | 115    | 95.8   |     |      | 120    |
| DILLINGHAM         | 12  | 2.2 | 24      | 4.4   | 512    | 92.9   | 3   | 0.5  | 551    |
| FAIRBANKS NSB      | 75  | 1.0 | 316     | 4.3   | 6,945  | 94.5   | 15  | 0.2  | 7,351  |
| HAINES BOROUGH     |     |     | 5       | 4.1   | 92     | 76.0   | 24  | 19.8 | 121    |
| JUNEAU BOROUGH     | 14  | 0.7 | 88      | 4.3   | 1,941  | 95.0   | 1   |      | 2,044  |
| KENAI PENINSULA    | 24  | 0.7 | 160     | 4.8   | 3,161  | 94.3   | 6   | 0.2  | 3,351  |
| KETCHIKAN          | 11  | 1.0 | 27      | 2.6   | 1,015  | 96.3   | 1   | 0.1  | 1,054  |
| KODIAK ISLAND      | 13  | 1.0 | 64      | 4.8   | 1,256  | 93.8   | 6   | 0.4  | 1,339  |
| LAKE-PENINSULA     | 1   | 0.6 | 5       | 2.8   | 171    | 96.6   |     |      | 177    |
| MATANUSKA-SUSITNA  | 42  | 1.2 | 169     | 4.7   | 3,357  | 93.9   | 7   | 0.2  | 3,575  |
| NOME               | 17  | 1.7 | 41      | 4.0   | 957    | 93.6   | 7   | 0.7  | 1,022  |
| NORTH SLOPE        | 5   | 0.7 | 28      | 4.0   | 659    | 95.1   | 1   | 0.1  | 693    |
| NORTHWEST ARCTIC   | 11  | 1.3 | 39      | 4.8   | 768    | 93.9   |     |      | 818    |
| PRINCE OF WALES    | 4   | 0.8 | 20      | 4.2   | 452    | 94.2   | 4   | 0.8  | 480    |
| SITKA BOROUGH      | 3   | 0.5 | 19      | 3.2   | 575    | 96.0   | 2   | 0.3  | 599    |
| SKGWAY-HOONAH-ANG  |     |     | 1       | 0.6   | 164    | 93.2   | 11  | 6.3  | 176    |
| SE FAIRBANKS       | 4   | 0.7 | 26      | 4.8   | 506    | 94.1   | 2   | 0.4  | 538    |
| VALDEZ-CORDOVA     | 4   | 0.6 | 37      | 5.4   | 637    | 93.8   | 1   | 0.1  | 679    |
| WADE HAMPTON       | 5   | 0.5 | 49      | 4.5   | 1,034  | 95.0   |     |      | 1,088  |
| WRANGELL-PETERSBG  | 2   | 0.4 | 13      | 2.8   | 447    | 96.8   |     |      | 462    |
| YAKUTAT            |     |     | 1       | 2.0   | 49     | 98.0   |     |      | 50     |
| YUKON-KOYUKUK      | 4   | 0.8 | 20      | 3.9   | 485    | 94.9   | 2   | 0.4  | 511    |
| UNKNOWN            |     |     |         |       | 2      | 100.0  |     |      | 2      |
| TOTAL              | 539 | 1.1 | 2,310   | 4.5   | 47,835 | 94.1   | 152 | 0.3  | 50,836 |

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TABLE 1.24B BIRTH WEIGHTS AND PERCENTAGES BY MOTHER'S NATIVE REGIONAL CORPORATION, ALASKA, 1994-1998

| NATIVE REGIONAL      |     | СН  | LD'S B | RTH W | EIGHT  | IN GRA | MS  |     |        |
|----------------------|-----|-----|--------|-------|--------|--------|-----|-----|--------|
| CORPORATION OF       | <15 | 500 | 1500-  | 2499  | 250    | 00+    | UN  | KN  |        |
| MOTHER'S RESIDENCE   | No. | %   | No.    | %     | No.    | %      | No. | %   | TOTAL  |
| AHTNA INC.           |     |     | 12     | 5.2   | 219    | 94.4   | 1   | 0.4 | 232    |
| ALEUT CORP.          | 4   | 1.1 | 19     | 5.2   | 344    | 93.5   | 1   | 0.3 | 368    |
| ARCTIC SLOPE CORP.   | 5   | 0.7 | 28     | 4.0   | 659    | 95.1   | 1   | 0.1 | 693    |
| BERING STRAITS CORP. | 17  | 1.7 | 41     | 4.0   | 957    | 93.6   | 7   | 0.7 | 1,022  |
| BRISTOL BAY CORP.    | 14  | 1.7 | 32     | 3.9   | 764    | 94.0   | 3   | 0.4 | 813    |
| CALISTA CORP.        | 21  | 0.7 | 121    | 3.9   | 2,948  | 95.3   | 3   | 0.1 | 3,093  |
| CHUGACH NATIVES INC. | 5   | 0.7 | 44     | 5.8   | 715    | 93.5   | 1   | 0.1 | 765    |
| COOK INLET REG CORP. | 331 | 1.2 | 1,370  | 4.9   | 26,426 | 93.7   | 67  | 0.2 | 28,194 |
| DOYON LTD.           | 84  | 1.0 | 366    | 4.3   | 8,042  | 94.5   | 19  | 0.2 | 8,511  |
| KONIAG INC.          | 13  | 1.0 | 64     | 4.8   | 1,256  | 93.8   | 6   | 0.4 | 1,339  |
| NANA REGIONAL CORP.  | 11  | 1.3 | 39     | 4.8   | 768    | 93.9   |     |     | 818    |
| SEALASKA CORP.       | 34  | 0.7 | 174    | 3.5   | 4,735  | 95.0   | 43  | 0.9 | 4,986  |
| UNKNOWN              |     |     |        |       | 2      | 100.0  |     |     | 2      |
| TOTAL                | 539 | 1.1 | 2,310  | 4.5   | 47,835 | 94.1   | 152 | 0.3 | 50,836 |

TABLE 1.24C BIRTH WEIGHTS AND PERCENTAGES BY MOTHER'S RACE, ALASKA, 1994-1998

|          |     | CHILD'S BIRTH WEIGHT IN GRAMS |       |      |        |      |      |     |        |  |  |  |  |  |
|----------|-----|-------------------------------|-------|------|--------|------|------|-----|--------|--|--|--|--|--|
| MOTHER'S | <15 | 500                           | 1500- | 2499 | 250    | 00+  | UNKN |     |        |  |  |  |  |  |
| RACE     | No. | %                             | No.   | %    | No.    | %    | No.  | %   | TOTAL  |  |  |  |  |  |
| WHITE    | 325 | 0.9                           | 1,448 | 4.2  | 32,420 | 94.5 | 102  | 0.3 | 34,295 |  |  |  |  |  |
| NATIVE   | 129 | 1.1                           | 534   | 4.5  | 11,169 | 94.1 | 37   | 0.3 | 11,869 |  |  |  |  |  |
| AFR/AM   | 62  | 2.8                           | 192   | 8.6  | 1,973  | 88.4 | 4    | 0.2 | 2,231  |  |  |  |  |  |
| ASIAN/PI | 23  | 0.9                           | 136   | 5.6  | 2,273  | 93.1 | 9    | 0.4 | 2,441  |  |  |  |  |  |
| TOTAL    | 539 | 1.1                           | 2,310 | 4.5  | 47,835 | 94.1 | 152  | 0.3 | 50,836 |  |  |  |  |  |

TABLE 1.24D BIRTH WEIGHTS AND PERCENTAGES BY MOTHER'S AGE, ALASKA, 1994-1998

|           |       | CHILD'S BIRTH WEIGHT IN GRAMS |           |      |        |      |      |      |        |  |  |  |  |  |
|-----------|-------|-------------------------------|-----------|------|--------|------|------|------|--------|--|--|--|--|--|
| MOTHER'S  | <1500 |                               | 1500-2499 |      | 250    | 0+   | UNKN |      |        |  |  |  |  |  |
| AGE       | No.   | %                             | No.       | %    | No.    | %    | No.  | %    | TOTAL  |  |  |  |  |  |
| <20 YRS   | 63    | 1.1                           | 299       | 5.2  | 5,333  | 93.3 | 21   | 0.4  | 5,716  |  |  |  |  |  |
| 29-29 YRS | 261   | 1.0                           | 1,180     | 4.3  | 25,933 | 94.5 | 70   | 0.3  | 27,444 |  |  |  |  |  |
| 30-39 YRS | 197   | 1.2                           | 759       | 4.6  | 15,408 | 93.9 | 51   | 0.3  | 16,415 |  |  |  |  |  |
| 40+ YRS   | 18    | 1.5                           | 67        | 5.4  | 1,144  | 92.6 | 6    | 0.5  | 1,235  |  |  |  |  |  |
| UNKNOWN   |       |                               | 5         | 19.2 | 17     | 65.4 | 4    | 15.4 | 26     |  |  |  |  |  |
| TOTAL     | 539   | 1.1                           | 2,310     | 4.5  | 47,835 | 94.1 | 152  | 0.3  | 50,836 |  |  |  |  |  |

Charts 1.8 through 1.10D show pregnancy and birth characteristics for births from 1990 through 1998 for three demographic groups: 1) teens (all mothers under 20 years of age); 2) unmarried mothers age 20 and older; and 3) married mothers age 20 and older.

CHART 1.8 PERCENTAGE OF LOW BIRTH WEIGHT INFANTS FOR TEENS, UNMARRIED MOTHERS 20 AND OVER, AND MARRIED MOTHERS 20 AND OVER, ALASKA, 1990-1998

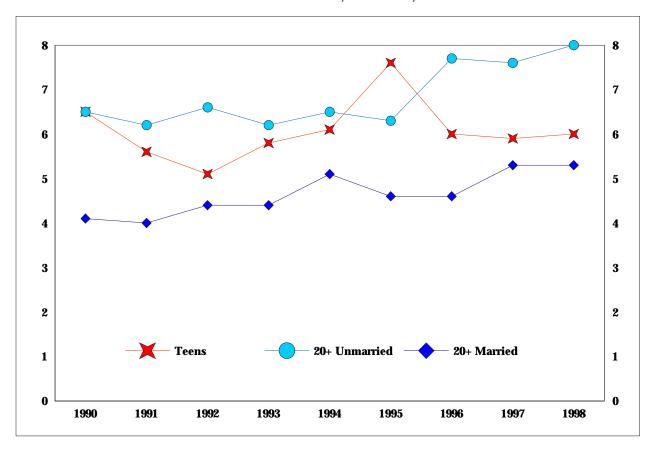


Chart 1.8 shows the percentage of low birth weight infants, by year, born to teens, unmarried mothers 20 and older, and married mothers 20 and older. Married mothers age 20 and over consistently have a lower percentage of low birth weight infants than either unmarried mothers age 20 and over and teen mothers. Teens generally have a lower percentage of low birth weight infants than unmarried older mothers. The low birth weight percentage has risen for all mothers age 20 and over since 1990.

# OTHER DEMOGRAPHIC COMPARISONS

Chart 1.9 shows the incidence of preterm births (less than 37 weeks gestation) by group. There is no consistent difference in percentages of preterm births for teen mothers and older unmarried mothers. Older married mothers had a significantly lower incidence of preterm births than the other two groups.

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CHART 1.9 PERCENTAGE OF PRETERM INFANTS FOR TEENS, UNMARRIED MOTHERS 20 AND OVER, AND MARRIED MOTHERS 20 AND OVER, ALASKA, 1990-1998

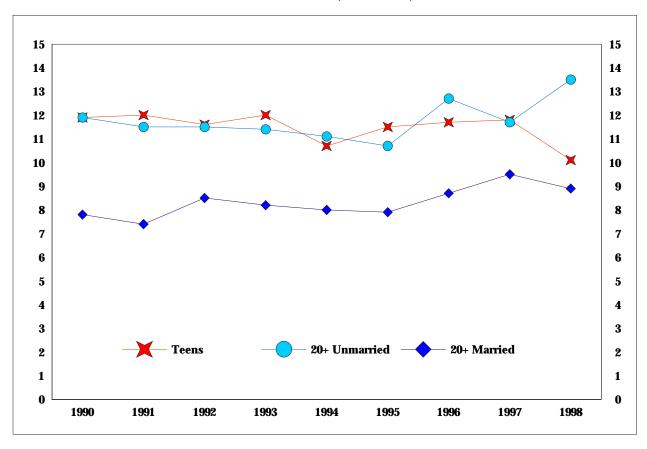


CHART 1.10A PERCENTAGE OF MOTHERS GAINING LESS THAN 25 POUNDS FOR TEENS, UNMARRIED MOTHERS 20 AND OVER, AND MARRIED MOTHERS 20 AND OVER, ALASKA, 1990-1998

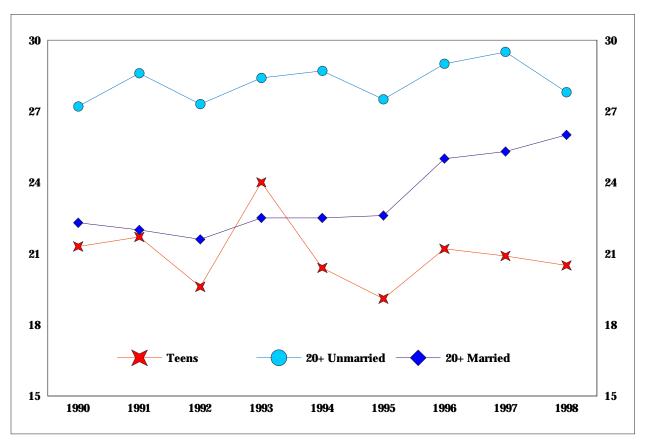


Chart 1.10A shows the percentage of mothers who gained less than 25 pounds during pregnancy. The total weight gained by the mother during pregnancy has been shown to have an independent, positive relationship with the birth weight of the newborn. Chart 1.10A shows that single mothers age 20 and older are more likely to have low weight gain than teens and married mothers age 20 and older.

11 Ibid., p. 9.

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CHART 1.10B PERCENTAGE OF MOTHERS RECEIVING LESS THAN
ADEQUATE PRENATAL CARE FOR TEENS, UNMARRIED
MOTHERS 20 AND OVER, AND MARRIED MOTHERS 20 AND
OVER, ALASKA, 1990-1998

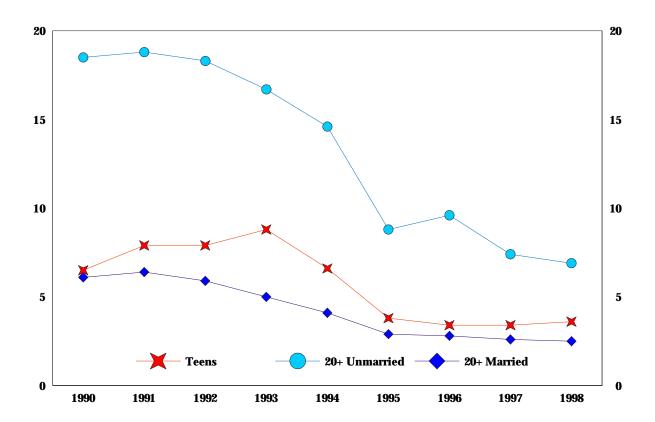


Chart 1.10B shows the percentage of mothers who received less than adequate prenatal care. Teens and unmarried mothers age 20 and older were more likely to receive less than adequate prenatal care than married mothers age 20 and older. In all groups there was a decrease in the percentage of mothers who received adequate prenatal care from 1990 until 1994 or 1995. Since 1995, the percentage of mothers who received less than adequate prenatal care has increased for all groups. Some of the increase in less than adequate prenatal care since 1995 may be due to errors in reporting which occurred in 1995.

CHART 1.10C PERCENTAGE OF MOTHERS USING TOBACCO FOR TEENS, UNMARRIED MOTHERS 20 AND OVER, AND MARRIED MOTHERS 20 AND OVER, ALASKA, 1990-1998

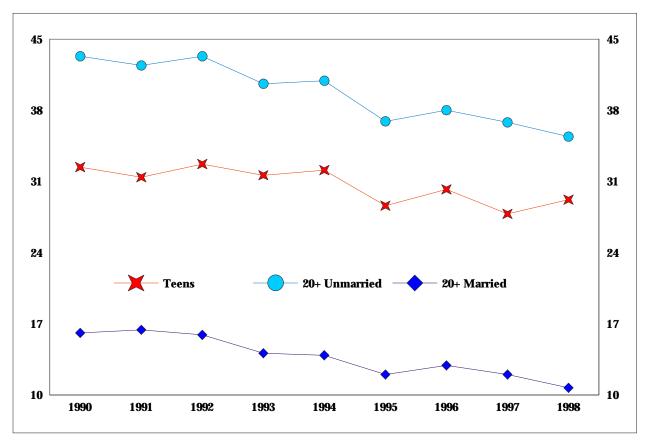


Chart 1.10C shows the percentage of mothers who report using tobacco during their pregnancy. Unmarried women age 20 and older have a significantly higher rate of tobacco use than teen mothers who, in turn, have a significantly higher rate of tobacco use than married mothers age 20 and older. This chart does show a general decline in the reported use of tobacco for these three groups from 1990 to 1998. Maternal smoking contributes to low birth weight, perinatal morbidity, mortality and Sudden Infant Death Syndrome (SIDS), and persistent deficits in learning and behavior. <sup>12</sup>

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<sup>12</sup> Slotkin, Theodore A., "Fetal Nicotine or Cocaine Exposure: Which One is Worse?" *Journal of Pharmacology and Experimental Therapeutics*, Vol. 285, Issue 3, 931-945, June 1998.

CHART 1.10D PERCENTAGE OF MOTHERS USING ALCOHOL FOR TEENS, UNMARRIED MOTHERS 20 AND OVER, AND MARRIED MOTHERS 20 AND OVER, ALASKA, 1990-1998

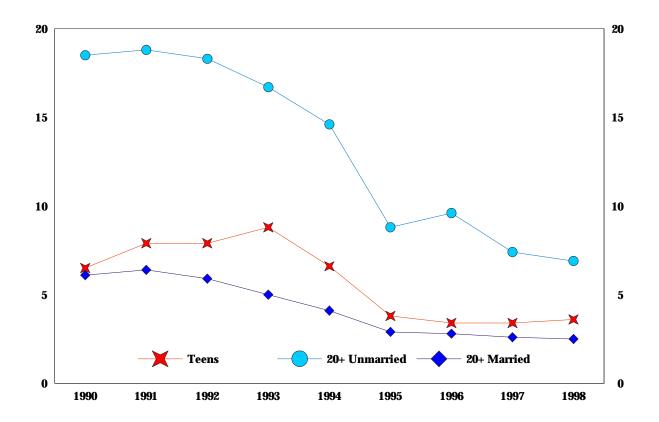


Chart 1.10D shows the percentage of mothers who reported using alcohol during pregnancy. The most severe adverse effect of excessive drinking is Fetal Alcohol Syndrome (FAS) which results in disorders such as mental retardation. The highest rate of reported alcohol use during pregnancy is among unmarried mothers age 20 and older, although all groups have shown a significant decrease in reported use of alcohol from 1990 to 1998.

<sup>13</sup> National Center for Health Statistics, U.S. Department of Health and Human Services, "Report of Final Natality Statistics, 1996," *Monthly Vital Statistics Report*, Vol. 45, No. 11(S), June 10, 1997, p.12.

# **FETAL & INFANT DEATHS**



"Priest, Yukon River" copyright Rie MuZoz. Ltd.

#### **FETAL DEATHS**

A fetal death is defined as the death of a fetus after the eighth week of gestation and before delivery. Alaska Statute 18.50.240 requires the filing of a fetal death certificate for each fetal death that occurs in the state when the pregnancy has lasted at least 20 weeks. The filing of certificates for fetal deaths which occur prior to the twentieth week of pregnancy is optional. This report includes information only for fetal deaths in which either the estimated gestation or the calculated gestation (last menstrual date subtracted from the date of delivery) is at least twenty weeks.

# TABLE 2.1A FETAL DEATHS BY CENSUS AREA OF MOTHER'S RESIDENCE, ALASKA, 1998

| CENSUS AREA OF MOTHER'S<br>RESIDENCE | DEATHS |
|--------------------------------------|--------|
| ANCHORAGE BOROUGH                    | 16     |
| BETHEL                               | 2      |
| DILLINGHAM                           | 1      |
| FAIRBANKS NORTH STAR BOROUGH         | 6      |
| HAINES BOROUGH                       | 1      |
| JUNEAU BOROUGH                       | 2      |
| KENAI PENINSULA BOROUGH              | 3      |
| KODIAK ISLAND BOROUGH                | 3      |
| MATANUSKA-SUSITNA BOROUGH            | 1      |
| NOME                                 | 1      |
| PRINCE OF WALES-OUTER KETCHIKAN      | 1      |
| WRANGELL-PETERSBURG                  | 2      |
| YUKON-KOYUKUK                        | 1      |
| TOTAL                                | 40     |

TABLE 2.1B FETAL DEATHS BY NATIVE REGIONAL CORPORATION OF MOTHER'S RESIDENCE, ALASKA, 1998

| NATIVE REGIONAL CORPORATION<br>OF MOTHER'S RESIDENCE | DEATHS |
|--|--------|
| BERING STRAITS CORP.                                 | 1      |
| BRISTOL BAY CORP.                                    | 1      |
| CALISTA CORP.  | 2      |
| CHUGACH NATIVES INC.                                 | 1      |
| COOK INLET REG CORP.                                 | 19     |
| DOYON LTD.   | 7      |
| KONIAG INC.  | 3      |
| SEALASKA CORP.                                       | 6      |
| TOTAL  | 40     |

TABLE 2.1C FETAL DEATHS AND FETAL DEATH RATE BY MOTHER'S RACE, ALASKA, 1994-1998

| MOTHER'S |      | FETAL DEATHS |      |      |      |       |        | 1994-98 |
|----------|------|--------------|------|------|------|-------|--------|---------|
| RACE     | 1994 | 1995         | 1996 | 1997 | 1998 | TOTAL | BIRTHS | RATE    |
| WHITE    | 30   | 25           | 25   | 26   | 23   | 129   | 34,295 | 3.8     |
| NATIVE   | 9    | 12           | 15   | 8    | 9    | 53    | 11,869 | 4.5     |
| AFR/AM   | 4    | 5            | 5    | 3    | 6    | 23    | 2,231  | 10.3    |
| ASIAN/PI | 1    |              | 1    | 1    | 2    | 5     | 2,441  | 2.0     |
| TOTAL    | 44   | 42           | 46   | 38   | 40   | 210   | 50,836 | 4.1     |

## TABLE 2.2 FETAL DEATHS BY AGE AND RACE OF MOTHER, ALASKA, 1998

| MOTHER'S |       |        |        |          |       |
|----------|-------|--------|--------|----------|-------|
| AGE      | WHITE | NATIVE | AFR/AM | ASIAN/PI | TOTAL |
| 18-19    | 2     | 1      |        |          | 3     |
| 20-24    | 7     | 4      | 4      | 1        | 16    |
| 25-29    | 7     | 1      | 1      | 1        | 10    |
| 30-34    | 4     | 1      |        |          | 5     |
| 35-39    | 2     | 1      | 1      |          | 4     |
| 40-44    | 1     | 1      |        |          | 2     |
| TOTAL    | 23    | 9      | 6      | 2        | 40    |

TABLE 2.3 FETAL DEATHS BY LENGTH OF GESTATION AND WEIGHT, ALASKA, 1998

|             | WEIGHT IN GRAMS |      |       |       |       |       |       |     |       |
|-------------|-----------------|------|-------|-------|-------|-------|-------|-----|-------|
|             |                 | 500- | 1000- | 1599- | 2000- | 2500- |       |     |       |
| GESTATION   | < 500           | 900  | 1499  | 1999  | 2499  | 4000  | 4000+ | UNK | TOTAL |
| 20-24 WEEKS | 7               | 2    |       |       |       |       | 1     | 2   | 12    |
| 25-28 WEEKS | 2               | 2    | 1     |       |       |       |       |     | 5     |
| 29-32 WEEKS |                 | 2    |       | 1     |       |       |       | 2   | 5     |
| 33-36 WEEKS |                 |      | 1     | 2     | 1     | 1     |       |     | 5     |
| 37-41 WEEKS |                 |      |       |       | 1     | 10    |       | 1   | 12    |
| 42+ WEEKS   |                 |      |       |       | 1     |       |       |     | 1     |
| TOTAL       | 9               | 6    | 2     | 3     | 3     | 11    | 1     | 5   | 40    |

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#### FETAL AND INFANT DEATHS (continued) Alaska Bureau of Vital Statistics

#### **INFANT DEATHS**

Infant deaths are defined as deaths which occur after a live birth and before an individual's first birthday. Infant mortality may be calculated by either of two methods: birth cohort or death cohort. The birth cohort method is calculated based on a comparison of the number of infants born in a calendar year with the number of those infants who die before reaching their first birthday. The death cohort method is calculated by dividing the number of infants who die in a calendar year by the number of infants born in that same year.

The birth cohort method is more relevant for calculating infant mortality rates because it calculates a rate for a specific group of infants, whereas the death cohort method calculates a rate based on comparing deaths in one year against births in that same year. The death cohort calculation includes infants who died in the report year (1998) but were born in the previous year, and excludes infants who were born in the report year but die in the next year. In this report, the birth cohort method is calculated on births from calendar year 1997. Birth cohort calculations are not included for 1998 in this report because not all 1999 death records were complete at the time this report was compiled.

The death cohort method is used in this report for calendar year 1998. This method compares the number of deaths of infants who died during 1998 prior to their first birthday with the number of infants who were born in 1998.

### **Infant Mortality Rates**

Using the death cohort, the total number of infant deaths during 1998 was 59. This is a 22.4 percent decrease from 76 infant deaths during 1997. Since relatively small changes in infant deaths can cause large fluctuations in the infant mortality rate (IMR) from one year to the next, Alaska's annual IMR is calculated on a five-year moving average. The 1994-1998 five-year average infant mortality rate was 7.4 deaths per 1,000 live births, down from 7.8 deaths per 1,000 live births for 1993-1997. The U.S. infant mortality rate of 7.2 deaths per 1,000 live births in 1998 is the same as in 1997. Both the U.S. and Alaska infant mortality rates have been steadily decreasing in recent years, and both are now at the lowest rates ever recorded.

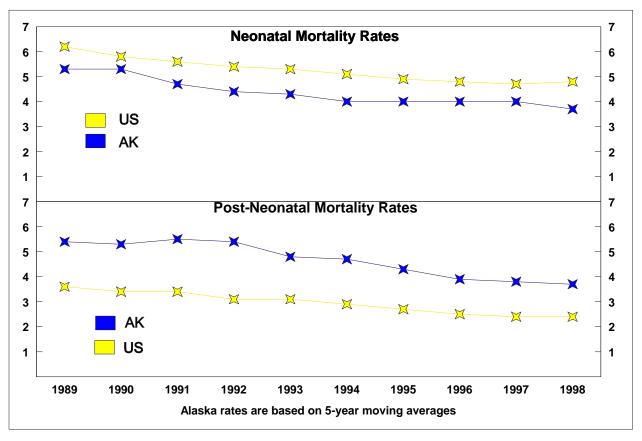
In discussing infant mortality, a distinction is made between neonatal mortality (deaths prior to the 28th day of life) and postneonatal mortality (deaths from the 28th day up to one year). Neonatal deaths are frequently associated with circumstances related to pregnancy and delivery while postneonatal deaths are often associated with living conditions. Alaska's neonatal mortality rate has generally been lower than the neonatal mortality rate for the United States, while its postneonatal mortality rate has been higher. Chart 2.1 provides a graphic comparison of the neonatal and postneonatal rates for Alaska and the United States.

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<sup>1</sup> Crondahl, J., Mitchell, P., Zenk, A., and Walden, S. Department of Health and Social Services, Division of Public Health, *Alaska Bureau of Vital Statistics 1997 Annual Report*, Juneau, Alaska.December 1998, p.53.

National Center for Health Statistics, U.S. Department of Health and Human Services, "Births and Deaths: Preliminary Data for 1998," National Vital Statistics Report, Vol. 47, No. 25, October 5, 1999, Table 15, p. 32.

CHART 2.1 NEONATAL AND POSTNEONATAL MORTALITY RATES PER 1,000 LIVE BIRTHS, ALASKA AND THE UNITED STATES, 1989-1998 (DEATH COHORT METHOD)



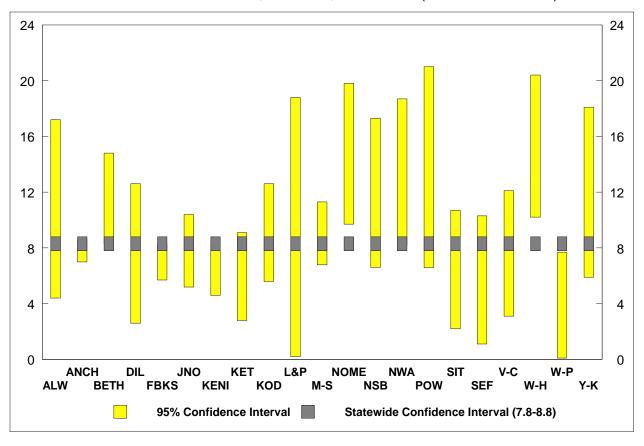
United States rates are single year rates and are provided by the National Center for Health Statistics.<sup>3</sup> Alaska infant mortality rates are calculated using five-year moving averages per 1,000 live births and are based on the death-cohort method.

Chart 2.2 compares confidence intervals for infant mortality in individual census areas against the statewide average. When smaller populations, such as individual census areas, are analyzed, ten-year averages and 95 percent confidence intervals are used. The calculated infant mortality rate occurs at the midpoint of the confidence interval. The smaller the population, the larger the confidence interval. (For a detailed discussion of confidence intervals and statistical significance, refer to Appendix B.)

Several census areas (Aleutians East, Bristol Bay, Denali, Haines Borough, Skagway-Hoonah-Angoon, and Yakutat) have been omitted from Chart 2.2 because occurrences of infant mortality are too few for rates to be reliable. Those census areas which have infant mortality rates significantly above the statewide 95% confidence interval of 7.8 to 8.8 deaths per 1,000 live births are Nome and Wade Hampton. Only Wrangell-Petersburg had a rate significantly below the statewide 95% confidence interval. The confidence intervals for all other areas fell at least partly within the range of the statewide average. The evidence suggests no difference in those cases.

3 Ibid., Table 14, p. 31.

CHART 2.2 95% CONFIDENCE INTERVALS FOR INFANT MORTALITY BY CENSUS AREA, ALASKA, 1989-1998 (DEATH COHORT)



#### Key for Chart 2.2

ALW Aleutians West ANCH Anchorage BETH Bethel DIL Dillingham FBKS Fairbanks JNO Juneau KENI Kenai KET Ketchikan KOD Kodiak L&P Lake & Peninsula M-S Matanuska-Susitna NOME Nome NSB North Slope Borough NWA Northwest Arctic POW Prince of Wales/Outer Ketchikan SIT Sitka SEF Southeast Fairbanks V-C Valdez/Cordova W-H Wade Hampton W-P Wrangell/Petersburg Y-K Yukon Koyukuk

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# **Infant Deaths by Age**

TABLE 2.4A

INFANT DEATHS BY CENSUS AREA OF DECEDENT'S RESIDENCE AND AGE, ALASKA, 1998 (DEATH COHORT METHOD)

|                                 | DECEDE   |          |       |
|---------------------------------|----------|----------|-------|
| CENSUS AREA OF DECEDENT'S       |          | POST-    |       |
| RESIDENCE                       | NEONATAL | NEONATAL | TOTAL |
| ALEUTIANS WEST                  | 2        |          | 2     |
| ANCHORAGE BOROUGH               | 14       | 15       | 29    |
| BETHEL                          | 1        | 1        | 2     |
| DILLINGHAM                      | 1        |          | 1     |
| FAIRBANKS NORTH STAR BOROUGH    | 1        | 2        | 3     |
| JUNEAU BOROUGH                  | 2        |          | 2     |
| KENAI PENINSULA BOROUGH         | 1        | 3        | 4     |
| KODIAK ISLAND BOROUGH           | 1        | 3        | 4     |
| MATANUSKA-SUSITNA BOROUGH       | 1        | 1        | 2     |
| NOME                            | 1        | 2        | 3     |
| NORTH SLOPE BOROUGH             | 1        |          | 1     |
| NORTHWEST ARCTIC BOROUGH        | 1        | 1        | 2     |
| PRINCE OF WALES-OUTER KETCHIKAN |          | 1        | 1     |
| SKAGWAY-HOONAH-ANGOON           | 1        |          | 1     |
| WADE HAMPTON                    | 1        | 1        | 2     |
| TOTAL                           | 29       | 30       | 59    |

TABLE 2.4B

INFANT DEATHS BY NATIVE REGIONAL CORPORATION OF DECEDENT'S RESIDENCE AND AGE, ALASKA, 1998 (DEATH COHORT METHOD)

|                                | DECEDENT'S AGE |          |       |
|--------------------------------|----------------|----------|-------|
| NATIVE REGIONAL CORPORATION OF |                | POST-    |       |
| DECEDENT'S RESIDENCE           | NEONATAL       | NEONATAL | TOTAL |
| ALEUT CORP.                    | 2              |          | 2     |
| ARCTIC SLOPE CORP.             | 1              |          | 1     |
| BERING STRAITS CORP.           | 1              | 2        | 3     |
| BRISTOL BAY CORP.              | 1              |          | 1     |
| CALISTA CORP.                  | 2              | 2        | 4     |
| COOK INLET REG CORP.           | 16             | 19       | 35    |
| DOYON LTD.                     | 1              | 2        | 3     |
| KONIAG INC.                    | 1              | 3        | 4     |
| NANA REGIONAL CORP.            | 1              | 1        | 2     |
| SEALASKA CORP.                 | 3              | 1        | 4     |
| TOTAL                          | 29             | 30       | 59    |

TABLE 2.4C INFANT DEATHS BY RACE, SEX, AND AGE OF DECEDENT, ALASKA, 1998 (DEATH COHORT METHOD)

|            | DECEDE   |          |       |
|------------|----------|----------|-------|
| DECEDENT'S |          | POST-    |       |
| RACE       | NEONATAL | NEONATAL | TOTAL |
| WHITE      | 19       | 13       | 32    |
| NATIVE     | 8        | 10       | 18    |
| AFR/AM     |          | 6        | 6     |
| ASIAN/PI   | 2        | 1        | 3     |
| TOTAL      | 29       | 30       | 59    |
| DECEDENT'S |          | POST-    |       |
| SEX        | NEONATAL | NEONATAL | TOTAL |
| FEMALE     | 7        | 10       | 17    |
| MALE       | 22       | 20       | 42    |
| TOTAL      | 29       | 30       | 59    |

TABLE 2.5A INFANT DEATHS BY CENSUS AREA OF DECEDENT'S RESIDENCE AND AGE, ALASKA, BIRTH YEAR 1997 (BIRTH COHORT METHOD)

|                                 | DECEDE   | NT'S AGE |       |
|---------------------------------|----------|----------|-------|
| CENSUS AREA OF DECEDENT'S       |          | POST-    |       |
| RESIDENCE                       | NEONATAL | NEONATAL | TOTAL |
| ANCHORAGE BOROUGH               | 13       | 13       | 26    |
| BETHEL                          | 3        | 3        | 6     |
| FAIRBANKS NORTH STAR BOROUGH    | 7        | 3        | 10    |
| JUNEAU BOROUGH                  | 1        | 1        | 2     |
| KENAI PENINSULA BOROUGH         | 2        | 1        | 3     |
| KETCHIKAN GATEWAY BOROUGH       |          | 2        | 2     |
| KODIAK ISLAND BOROUGH           | 1        |          | 1     |
| MATANUSKA-SUSITNA BOROUGH       | 3        | 4        | 7     |
| NOME                            | 2        | 3        | 5     |
| PRINCE OF WALES-OUTER KETCHIKAN | 1        | 1        | 2     |
| SOUTHEAST FAIRBANKS             | 1        |          | 1     |
| WADE HAMPTON                    | 1        | 2        | 3     |
| WRANGELL-PETERSBURG             | 1        |          | 1     |
| TOTAL                           | 36       | 33       | 69    |

# TABLE 2.5B INFANT DEATHS BY NATIVE REGIONAL CORPORATION OF DECEDENT'S RESIDENCE AND AGE, ALASKA, BIRTH YEAR 1997 (BIRTH COHORT METHOD)

|                                | DECEDENT'S AGE |          |       |
|--------------------------------|----------------|----------|-------|
| NATIVE REGIONAL CORPORATION OF |                | POST-    |       |
| DECEDENT'S RESIDENCE           | NEONATAL       | NEONATAL | TOTAL |
| BERING STRAITS CORP.           | 2              | 3        | 5     |
| CALISTA CORP.                  | 4              | 5        | 9     |
| COOK INLET REG CORP.           | 18             | 18       | 36    |
| DOYON LTD.                     | 8              | 3        | 11    |
| KONIAG INC.                    | 1              |          | 1     |
| SEALASKA CORP.                 | 3              | 4        | 7     |
| TOTAL                          | 36             | 33       | 69    |

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TABLE 2.5C INFANT DEATHS BY RACE, SEX, AND AGE OF DECEDENT, ALASKA, BIRTH YEAR 1997 (BIRTH COHORT METHOD)

|            | DECEDE   |          |       |
|------------|----------|----------|-------|
| DECEDENT'S |          | POST-    |       |
| RACE       | NEONATAL | NEONATAL | TOTAL |
| WHITE      | 20       | 15       | 35    |
| NATIVE     | 11       | 16       | 27    |
| AFR/AM     | 3        |          | 3     |
| ASIAN/PI   | 2        | 2        | 4     |
| TOTAL      | 36       | 33       | 69    |
| DECEDENT'S |          | POST-    |       |
| RACE       | NEONATAL | NEONATAL | TOTAL |
| FEMALE     | 12       | 17       | 29    |
| MALE       | 24       | 16       | 40    |
| TOTAL      | 36       | 33       | 69    |

# **Infant Mortality Rates by Race**

Table 2.6A shows 5-year moving average infant mortality rates by race for the years 1994 through 1998. To ensure consistent reporting and calculation of rates by race, 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.

TABLE 2.6A

BIRTHS AND INFANT DEATHS (DEATH COHORT METHOD) BY DEATH YEAR AND FIVE-YEAR MOVING AVERAGE INFANT MORTALITY RATES BY RACE, ALASKA, 1994-1998

|          | 1994   |      |                       | 1995   |      |                       | 1996   |      |                       | 1997  |      |                       | 1998  |      |                       |
|----------|--------|------|-----------------------|--------|------|-----------------------|--------|------|-----------------------|-------|------|-----------------------|-------|------|-----------------------|
|          |        |      | 5-YR<br>RATE<br>1990- |        |      | 5-YR<br>RATE<br>1991- |        |      | 5-YR<br>RATE<br>1992- |       |      | 5-YR<br>RATE<br>1993- |       |      | 5-YR<br>RATE<br>1994- |
| RACE     | BTHS   | DTHS | 1994                  | BTHS   | DTHS | 1995                  | BTHS   | DTHS | 1996                  | BTHS  | DTHS | 1997                  | BTHS  | DTHS | 1998                  |
| WHITE    | 7,371  | 44   | 6.9                   | 6,985  | 43   | 6.6                   | 6,713  | 40   | 6.3                   | 6,597 | 42   | 6.1                   | 6,629 | 32   | 5.9                   |
| NATIVE   | 2,346  | 28   | 14.0                  | 2,304  | 26   | 12.6                  | 2,407  | 25   | 11.9                  | 2,398 | 27   | 11.7                  | 2,414 | 18   | 10.4                  |
| AFR/AM   | 497    | 5    | 10.5                  | 449    | 6    | 10.8                  | 435    | 5    | 11.2                  | 455   | 4    | 11.2                  | 395   | 6    | 11.7                  |
| ASIAN/PI | 468    | 5    | 9.3                   | 485    | 8    | 10.0                  | 494    | 3    | 9.9                   | 512   | 4    | 10.5                  | 482   | 3    | 9.4                   |
| TOTAL    | 10,682 | 82   | 8.8                   | 10,223 | 83   | 8.3                   | 10.049 | 73   | 8.0                   | 9,962 | 77   | 7.8                   | 9,920 | 59   | 7.4                   |

TABLE 2.6B

INFANT DEATHS (DEATH COHORT METHOD) BY DEATH YEAR, BIRTH WEIGHT, AND AGE AT DEATH (NEONATAL OR POST-NEONATAL), AND INFANTS SURVIVING FIRST YEAR OF LIFE BY BIRTH YEAR AND BIRTH WEIGHT, 1989-1998

|      |     |       |     |    |       |     |           | BIRT | TH WI | EIGH      | ΓING | RAM       | S ANI | ) AGF |       |    |         |       |    |     |     |        |
|------|-----|-------|-----|----|-------|-----|-----------|------|-------|-----------|------|-----------|-------|-------|-------|----|---------|-------|----|-----|-----|--------|
|      |     | < 500 |     | 5  | 00-99 | 9   | 1000-1499 |      | 15    | 1500-2499 |      | 2500-3999 |       | 4000± |       |    | UNKNOWN |       |    |     |     |        |
| YEAR | NN* | PNN   | SUR | NN | PNN   | SUR | NN        | PNN  | SUR   | NN        | PNN  | SUR       | NN    | PNN   | SUR   | NN | PNN     | SUR   | NN | PNN | SUR | TOTAL  |
| 1989 | 7   |       |     | 14 | 2     | 25  | 9         | 4    | 40    | 6         | 7    | 459       | 12    | 38    | 9,179 |    | 5       | 1,827 | 3  | 2   | 21  | 11,660 |
| 1990 | 5   |       |     | 17 | 1     | 38  | 8         | 1    | 43    | 9         | 9    | 444       | 20    | 48    | 9,393 |    | 3       | 1,856 | 1  | 3   | 1   | 11,900 |
| 1991 | 13  |       | 2   | 9  | 2     | 22  | 3         |      | 44    | 7         | 8    | 432       | 8     | 41    | 9,227 | 1  | 9       | 1,853 | 1  | 4   | 2   | 11,688 |
| 1992 | 3   |       |     | 13 | 1     | 28  | 6         | 2    | 57    | 5         | 6    | 453       | 18    | 38    | 9,207 |    | 5       | 1,871 | 1  | 2   | 11  | 11,727 |
| 1993 | 5   |       |     | 15 | 1     | 21  | 3         | 3    | 52    | 8         | 5    | 434       | 12    | 29    | 8,729 | 4  | 1       | 1,744 | 3  | 1   | 19  | 11,089 |
| 1994 | 5   |       | 2   | 9  | 2     | 28  | 4         | 1    | 57    | 2         | 5    | 473       | 9     | 36    | 8,303 |    | 4       | 1,705 | 5  |     | 32  | 10,682 |
| 1995 | 8   |       | 1   | 14 |       | 18  | 6         | 3    | 46    | 6         | 4    | 436       | 13    | 22    | 8,057 | 2  |         | 1,553 | 2  | 3   | 29  | 10,223 |
| 1996 | 8   |       |     | 11 | 1     | 28  |           | 1    | 44    | 5         | 3    | 446       | 9     | 24    | 7,901 | 2  | 6       | 1,541 | 1  | 2   | 16  | 10,049 |
| 1997 | 7   |       | 3   | 10 | 6     | 33  | 2         | 1    | 57    | 4         | 6    | 453       | 9     | 23    | 7,815 | 2  | 4       | 1,493 | 2  | 1   | 31  | 9,962  |
| 1998 | 4   |       | 3   | 11 | 2     | 27  | 6         |      | 70    | 3         | 4    | 460       | 4     | 20    | 7,765 |    | 2       | 1,510 | 1  | 2   | 26  | 9,920  |

<sup>\*</sup> NN = Neonatal death; PNN = Post-neonatal death; SUR = survived first year of life.

### Infant Deaths by Cause of Death

Although the same coding system (ICD9) is used in reporting causes of death for infants and the general population, the codes are grouped differently since causes of death for infants up to one year of age differ from those in the general population. For specific causes of death for infant mortality refer to Appendix C, Table C.3.

Certain causes of death are associated with factors such as age and birth weight. For instance, Sudden Infant Death Syndrome (SIDS) almost always occurrs in the postneonatal period. Respiratory Distress Syndrome generally occurs in low birth weight infants. The single greatest cause of infant death in Alaska is Sudden Infant Death Syndrome. In the five-year period from 1994 through 1998, 89 infants were reported to have died of SIDS, a rate of 1.8 per thousand live births. This is the same as 1993-1997. This compares with a rate of 0.6 per thousand live births for the United States in 1998. The United States rate for SIDS deaths dropped 45.5% since 1994 when the rate was 1.1 deaths per thousand live births.

Because of its mysterious nature, Sudden Infant Death Syndrome can never be positively determined; rather, it is a diagnosis which occurs after other causes of death have been ruled out. What we can say about SIDS is that it affects normally healthy, sleeping infants under one year of age. One potential risk factor for SIDS is putting infants to sleep on their stomachs (the prone position).<sup>5</sup>

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<sup>4</sup> Ibid., Table 15, p.32.

<sup>5</sup> Willinger, Marian, Ph.D., Hoffman, H., M.A., and Hartford, R., Ph.D., "Infant Sleep Position and Risk for Sudden Infant Death Syndrome: Report of Meeting Held January 13 and 14, 1994," National Institutes of Health, Bethesda, MD, *Pediatrics*, Vol. 93, No. 5, May 1994, p. 814.

TABLE 2.7 INFANT DEATHS BY SELECTED CAUSES OF DEATH AND AGE, ALASKA, 1998 (DEATH COHORT METHOD)

|   | AGE AT DEATH POST- |          |       |
|---|--------------------|----------|-------|
| CAUSE OF DEATH  | NEONATAL           | NEONATAL | TOTAL |
| SEPTICEMIA  |                    | 1        | 1     |
| BLOOD AND BLOOD-FORMING ORGAN DISEASES                        | 1                  |          | 1     |
| BRONCHITIS AND BRONCHIOLITIS                                  | 1                  |          | 1     |
| GASTRITIS, DUODENITIS, AND NONINFECTIVE ENTERITIS AND COLITIS |                    | 1        | 1     |
| CONGENITAL ANOMALIES  | 9                  | 4        | 13    |
| MATERNAL COMPLICATIONS OF PREGNANCY                           | 1                  |          | 1     |
| PLACENTA, CORD, AND MEMBRANE COMPLICATIONS                    | 3                  |          | 3     |
| LABOR & DELIVERY: OTHER COMPLICATIONS                         | 1                  |          | 1     |
| SHORT GESTATION & LOW BIRTHWEIGHT RELATED DISORDERS           | 4                  |          | 4     |
| INTRAUTERINE HYPOXIA & BIRTH ASPHYXIA                         | 2                  |          | 2     |
| RESPIRATORY DISTRESS SYNDROME                                 | 2                  |          | 2     |
| HEMOLYTIC DISEASE OF NEWBORN                                  | 1                  |          | 1     |
| SIDS  |                    | 18       | 18    |
| ACCIDENTS & ADVERSE EFFECTS                                   |                    | 2        | 2     |
| ALL OTHER CAUSES  | 4                  | 4        | 8     |
| TOTAL   | 29                 | 30       | 59    |

TABLE 2.8 INFANT DEATHS BY SELECTED CAUSES OF DEATH AND RACE, ALASKA, 1998 (DEATH COHORT METHOD)

|   |       | R      | ACE    |          |       |
|---|-------|--------|--------|----------|-------|
| CAUSE OF DEATH  | WHITE | NATIVE | AFR/AM | ASIAN/PI | TOTAL |
| SEPTICEMIA  |       |        | 1      |          | 1     |
| BLOOD AND BLOOD-FORMING ORGAN DISEASES                        | 1     |        |        |          | 1     |
| BRONCHITIS AND BRONCHIOLITIS                                  |       | 1      |        |          | 1     |
| GASTRITIS, DUODENITIS, AND NONINFECTIVE ENTERITIS AND COLITIS |       | 1      |        |          | 1     |
| CONGENITAL ANOMALIES  | 10    | 3      |        |          | 13    |
| MATERNAL COMPLICATIONS OF PREGNANCY                           |       |        |        | 1        | 1     |
| PLACENTA, CORD, AND MEMBRANE COMPLICATIONS                    | 1     | 1      |        | 1        | 3     |
| LABOR & DELIVERY: OTHER COMPLICATIONS                         |       | 1      |        |          | 1     |
| SHORT GESTATION & LOW BIRTHWEIGHT RELATED DISORDERS           | 3     | 1      |        |          | 4     |
| INTRAUTERINE HYPOXIA & BIRTH ASPHYXIA                         | 2     |        |        |          | 2     |
| RESPIRATORY DISTRESS SYNDROME                                 |       | 2      |        |          | 2     |
| HEMOLYTIC DISEASE OF NEWBORN                                  | 1     |        |        |          | 1     |
| SIDS  | 9     | 5      | 4      |          | 18    |
| ACCIDENTS & ADVERSE EFFECTS                                   | 1     |        |        | 1        | 2     |
| ALL OTHER CAUSES  | 4     | 3      | 1      |          | 8     |
| TOTAL   | 32    | 18     | 6      | 3        | 59    |

# **CHILDHOOD DEATHS**



"Kittiwakes, St. George" copyright Rie MuZoz, Ltd.

This chapter provides information on deaths to children from 1 year through 17 years. Deaths for children have been separated into three age groups: 1-4 years, 5-9 years, and 10-17 years. For infant deaths (under 1 year) see the section on Infant Deaths in the Fetal and Infant Deaths chapter. Tables 3.1A and 3.1B show deaths by residence (census area or Native regional corporation) and by age group.

TABLE 3.1A CHILDHOOD DEATHS BY CENSUS AREA OF RESIDENCE, ALASKA, 1998

|                              |     | AGE |       |       |
|------------------------------|-----|-----|-------|-------|
| CENSUSA AREA OF RESIDENCE    | 1-4 | 5-9 | 10-17 | TOTAL |
| ANCHORAGE BOROUGH            | 7   | 6   | 8     | 21    |
| BETHEL                       | 1   |     | 3     | 4     |
| DILLINGHAM                   |     |     | 1     | 1     |
| FAIRBANKS NORTH STAR BOROUGH | 1   | 2   | 5     | 8     |
| KENAI PENINSULA BOROUGH      | 2   | 1   | 3     | 6     |
| LAKE AND PENINSULA           | 1   |     |       | 1     |
| MATANUSKA-SUSITNA BOROUGH    | 2   |     | 5     | 7     |
| NOME                         |     | 2   | 1     | 3     |
| NORTH SLOPE BOROUGH          |     |     | 1     | 1     |
| NORTHWEST ARCTIC BOROUGH     |     |     | 1     | 1     |
| SITKA BOROUGH                |     |     | 2     | 2     |
| VALDEZ-CORDOVA               |     | 1   | 1     | 2     |
| WADE HAMPTON                 | 1   | 1   | 3     | 5     |
| WRANGELL-PETERSBURG          |     |     | 1     | 1     |
| YUKON-KOYUKUK                |     |     | 3     | 3     |
| TOTAL                        | 15  | 13  | 38    | 66    |

TABLE 3.1B CHILDHOOD DEATHS BY NATIVE REGIONAL CORPORATION OF RESIDENCE, ALASKA, 1998

| NATIVE REGIONAL CORPORATION | AGE |     |       |       |
|-----------------------------|-----|-----|-------|-------|
| OF RESIDENCE                | 1-4 | 5-9 | 10-17 | TOTAL |
| ARCTIC SLOPE                |     |     | 1     | 1     |
| BERING STRAITS              |     | 2   | 1     | 3     |
| BRISTOL BAY                 | 1   |     | 1     | 2     |
| CALISTA                     | 2   | 1   | 6     | 9     |
| CHUGACH                     |     | 1   | 2     | 3     |
| COOK INLET                  | 11  | 7   | 15    | 33    |
| DOYON                       | 1   | 2   | 8     | 11    |
| NANA                        |     |     | 1     | 1     |
| SEALASKA                    |     |     | 3     | 3     |
| TOTAL                       | 15  | 13  | 38    | 66    |

Tables 3.2A, 3.2B, and 3.2C show deaths by census area or Native regional corporation where the injury or death occurred. If the death certificate shows a place of injury, then that is used. If the death certificate does not show a place of injury, the location of death is used. For accidents, suicides or homicides, it is more relevant to know the location of the injury rather than where the decedent died if he or she was transferred to a hospital in another area. Table 3.2C shows the manner of death (natural causes, accidents, suicides, homicides, or unknown).

TABLE 3.2A CHILDHOOD DEATHS BY CENSUS AREA WHERE INJURY OR DEATH OCCURRED, ALASKA, 1998

|                              |     | AGE |       |       |
|------------------------------|-----|-----|-------|-------|
| CENSUS AREA OF OCCURRENCE    | 1-4 | 5-9 | 10-17 | TOTAL |
| ANCHORAGE BOROUGH            | 6   | 5   | 6     | 17    |
| BETHEL                       | 1   |     | 3     | 4     |
| DILLINGHAM                   | 1   |     | 1     | 2     |
| FAIRBANKS NORTH STAR BOROUGH | 1   | 2   | 3     | 6     |
| KENAI PENINSULA BOROUGH      | 2   |     | 5     | 7     |
| MATANUSKA-SUSITNA BOROUGH    | 2   |     | 4     | 6     |
| NOME                         |     | 1   | 1     | 2     |
| NORTH SLOPE BOROUGH          |     |     | 1     | 1     |
| NORTHWEST ARCTIC BOROUGH     |     |     | 1     | 1     |
| SITKA BOROUGH                |     |     | 1     | 1     |
| VALDEZ-CORDOVA               |     | 1   | 1     | 2     |
| WADE HAMPTON                 | 1   | 1   | 3     | 5     |
| WRANGELL-PETERSBURG          |     |     | 1     | 1     |
| YUKON-KOYUKUK                |     |     | 3     | 3     |
| CENSUS AREA UNKNOWN          |     | 1   |       | 1     |
| OUTSIDE ALASKA               | 1   | 2   | 4     | 7     |
| TOTAL                        | 15  | 13  | 38    | 66    |

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TABLE 3.2B CHILDHOOD DEATHS BY NATIVE REGIONAL CORPORATION WHERE INJURY OR DEATH OCCURRED, ALASKA, 1998

| NATIVE REGIONAL CORPORATION |     |     |       |       |
|-----------------------------|-----|-----|-------|-------|
| OF OCCURRENCE               | 1-4 | 5-9 | 10-17 | TOTAL |
| ARCTIC SLOPE                |     |     | 1     | 1     |
| BERING STRAITS              |     | 1   | 1     | 2     |
| BRISTOL BAY                 | 1   |     | 1     | 2     |
| CALISTA                     | 2   | 1   | 6     | 9     |
| CHUGACH                     |     | 1   | 3     | 4     |
| COOK INLET                  | 10  | 5   | 13    | 28    |
| DOYON                       | 1   | 2   | 6     | 9     |
| NANA                        |     |     | 1     | 1     |
| SEALASKA                    |     |     | 2     | 2     |
| OUTSIDE ALASKA              | 1   | 2   | 4     | 7     |
| UNKNOWN                     |     | 1   |       | 1     |
| TOTAL                       | 15  | 13  | 38    | 66    |

Table 3.2C shows manner of death by census area. Accidents, suicides, homicides and "other" are external causes (sometimes called "violent deaths"). The "other" category includes violent deaths for which the manner is unknown; they could be homicides, suicides, or accidents. Natural causes are internal causes (from within the body), such as cancer, heart disease, etc.

TABLE 3.2C CHILDHOOD DEATHS BY CENSUS AREA WHERE INJURY OR DEATH OCCURRED AND MANNER OF DEATH, ALASKA, 1998

|                              | NATURAL |          |          |          | OTHER/  |       |
|------------------------------|---------|----------|----------|----------|---------|-------|
| CENSUS AREA OF OCCURRENCE    | CAUSE   | ACCIDENT | SUICIDE  | HOMICIDE | UNKNOWN | TOTAL |
| ANCHORAGE BOROUGH            | 7       | 8        |          | 1        | 1       | 17    |
| BETHEL                       | 2       | 2        |          |          |         | 4     |
| DILLINGHAM                   |         | 1        |          | 1        |         | 2     |
| FAIRBANKS NORTH STAR BOROUGH | 3       | 2        | 1        |          |         | 6     |
| KENAI PENINSULA BOROUGH      | 4       | 2        |          | 1        |         | 7     |
| MATANUSKA-SUSITNA BOROUGH    | 1       | 5        |          |          |         | 6     |
| NOME                         |         | 1        | 1        |          |         | 2     |
| NORTH SLOPE BOROUGH          |         |          | 1        |          |         | 1     |
| NORTHWEST ARCTIC BOROUGH     |         |          | 1        |          |         | 1     |
| SITKA BOROUGH                |         | 1        |          |          |         | 1     |
| VALDEZ-CORDOVA               |         | 2        |          |          |         | 2     |
| WADE HAMPTON                 |         | 1        | 3        | 1        |         | 5     |
| WRANGELL-PETERSBURG          |         | 1        |          |          |         | 1     |
| YUKON-KOYUKUK                |         | 1        | 2        |          |         | 3     |
| CENSUS AREA UNKNOWN          |         | 1        |          |          |         | 1     |
| OUTSIDE ALASKA               | 3       | 3        |          | 1        |         | 7     |
| TOTAL                        | 20      | 31       | <u> </u> | 5        | 1       | 66    |

Table 3.3 shows age of death, and the race and sex of decedent. Deaths to boys outnumbered deaths to girls with the difference being the greatest in the 10-17 age group where deaths to boys outnumbered deaths to girls by more than 2:1. While whites outnumber Natives in the 1-17 year age group by more than three to one, deaths to Natives almost equal deaths to whites in this same age group.

TABLE 3.3 CHILDHOOD DEATHS BY AGE, RACE, AND SEX, ALASKA, 1998

|       | WHITE |       | NATIVE |      |       | OTHER |      |       | TOTAL |      |       |       |
|-------|-------|-------|--------|------|-------|-------|------|-------|-------|------|-------|-------|
| AGE   | BOYS  | GIRLS | TOTAL  | BOYS | GIRLS | TOTAL | BOYS | GIRLS | TOTAL | BOYS | GIRLS | TOTAL |
| 1-4   | 4     | 3     | 7      | 4    | 2     | 6     |      | 2     | 2     | 8    | 7     | 15    |
| 5-9   | 5     | 4     | . 9    | 2    | 2     | 4     |      |       |       | 7    | 6     | 13    |
| 10-17 | 14    | 4     | 18     | 11   | 6     | 17    | 2    | 1     | 3     | 27   | 11    | 38    |
| TOTAL | 23    | 11    | 34     | 17   | 10    | 2.7   | 2    | 3     | 5     | 42   | 24    | 66    |

Tables 3.4A shows manner of death by age. For groupings of ICD-9 codes used in Tables 3.4A and 3.4B, please see Table C.2 in Appendix C.

In children from 1-17, accidents account for the largest number of deaths. In fact, in the 5-9 age group half of all deaths were due to accidents. In the 10-17 age group, suicides are the second leading cause of death after accidents.

TABLE 3.4A CHILDHOOD DEATHS BY MANNER OF DEATH AND AGE, ALASKA, 1998

| MANNER OF     |     |     |       |       |
|---------------|-----|-----|-------|-------|
| DEATH         | 1-4 | 5-9 | 10-17 | TOTAL |
| NATURAL CAUSE | 7   | 5   | 8     | 20    |
| ACCIDENT      | 5   | 7   | 19    | 31    |
| SUICIDE       |     |     | 9     | 9     |
| HOMICIDE      | 2   | 1   | 2     | 5     |
| OTHER         | 1   |     |       | 1     |
| TOTAL         | 15  | 13  | 38    | 66    |

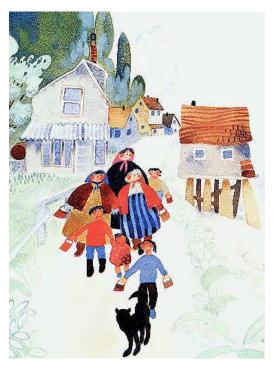
Table 3.4B shows cause of death by age group. In this table causes of death combine different manners of death and are grouped by external factors such as drowning, firearms, motor vehicles, etc. Motor vehicles accounted for the largest number of deaths in the 1-4 age group (four deaths); and firearms accounted for the largest number of deaths in the 10-17 age group (eight deaths). There were six deaths in this age group attributable to motor vehicles.

TABLE 3.4B CHILDHOOD DEATHS BY SELECTED CAUSE AND AGE, ALASKA, 1998

|                          |     | AGE |       |       |
|--------------------------|-----|-----|-------|-------|
| CAUSE OF DEATH           | 1-4 | 5-9 | 10-17 | TOTAL |
| CANCER                   |     | 1   | 3     | 4     |
| NERVOUS SYSTEM DISORDERS | 3   | 1   | 2     | 6     |
| HEART DISEASE            |     | 1   | 1     | 2     |
| CONGENITAL ANOMALIES     | 1   |     | 1     | 2     |
| OTHER NATURAL CAUSES     | 3   | 2   | 1     | 6     |
| MOTOR VEHICLE            | 4   | 2   | 6     | 12    |
| DROWNING                 |     | 1   | 5     | 6     |
| WATER TRANSPORT          |     | 1   | 1     | 2     |
| FALLS                    |     |     | 1     | 1     |
| FIRE/BURNS               | 1   | 1   | 3     | 5     |
| EXPOSURE                 |     | 1   | 1     | 2     |
| SUFFOCATION              |     |     | 1     | 1     |
| STRANGULATION            | 1   |     | 4     | 5     |
| FIREARMS                 |     | 2   | 8     | 10    |
| CUTTING/PIERCING         | 1   |     |       | 1     |
| CHILD BATTERING          | 1   |     |       | 1     |
| TOTAL                    | 15  | 13  | 38    | 66    |

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# **ADOPTION**



"Going Berry Picking, Hoonah" copyright Rie MuZoz, Ltd.

Superior courts in Alaska granted 529 adoptions in 1998. That is a 2.9 percent decrease from the 545 superior court adoptions granted during 1997. In addition, 162 cultural adoptions and 86 out of state adoptions were recorded. Not all adoptions involve children. Of the 777 total adoptions in 1998, 26 involved the adoption of adults 18 years of age and over. The total number of adoptions resulted in an adoption rate of 1.3 adoptions per 1,000 population.

In 1990, under the Indian Child Welfare Act 25 USC 1903(4), Alaska began issuing substitute birth certificates for cultural adoptions of Native children. Under the Bureau of Vital Statistics' regulations, a substitute birth certificate may be issued when a Native child is culturally adopted into a family where at least one of the adoptive parents is Native. The 162 cultural adoptions which occurred in 1998 represented a 10.2 percent increase from 147 in 1997. There were 86 children born in Alaska who were adopted out of state during 1998, compared with 88 out-of-state adoptions in 1997. Table 4.1 below lists numbers of adoptions by type and year for 1994 through 1998.

TABLE 4.1 ADOPTIONS BY TYPE, ALASKA, 1994-1998

|      |        | TYPE OF ADOPTION |          |       |       |  |  |  |  |
|------|--------|------------------|----------|-------|-------|--|--|--|--|
|      |        | ALASKA OUT OF    |          |       |       |  |  |  |  |
| YEAR | COURTS | CULTURAL         | SUBTOTAL | STATE | TOTAL |  |  |  |  |
| 1994 | 559    | 184              | 743      | 114   | 857   |  |  |  |  |
| 1995 | 548    | 206              | 754      | 110   | 864   |  |  |  |  |
| 1996 | 476    | 189              | 665      | 101   | 766   |  |  |  |  |
| 1997 | 545    | 147              | 692      | 88    | 780   |  |  |  |  |
| 1998 | 529    | 162              | 691      | 86    | 777   |  |  |  |  |

TABLE 4.2A ADOPTIONS BY CENSUS AREA WHERE DECREE WAS GRANTED AND BY AGE OF ADOPTEE, ALASKA, 1998

| CENSUS AREA WHERE   |         |       |       |       |       |       |
|---------------------|---------|-------|-------|-------|-------|-------|
| ADOPTION DECREE WAS |         | 1-4   | 5-9   | 10-17 | 18+   |       |
| GRANTED             | <1 YEAR | YEARS | YEARS | YEARS | YEARS | TOTAL |
| ALEUTIANS EAST      |         | 1     |       |       |       | 1     |
| ALEUTIANS WEST      |         |       | 1     |       |       | 1     |
| ANCHORAGE           | 48      | 85    | 87    | 51    | 8     | 279   |
| BETHEL              | 28      | 14    | 12    | 8     |       | 62    |
| BRISTOL BAY         |         | 1     |       |       |       | 1     |
| DILLINGHAM          |         | 2     |       | 4     |       | 6     |
| FAIRBANKS NSB       | 8       | 27    | 27    | 21    | 4     | 87    |
| JUNEAU BOROUGH      | 3       | 7     | 12    | 9     | 3     | 34    |
| KENAI PENINSULA     | 3       | 8     | 11    | 14    |       | 36    |
| KETCHIKAN           |         | 5     | 6     | 3     | 1     | 15    |
| KODIAK ISLAND       | 1       | 6     | 5     |       | 1     | 13    |
| LAKE-PENINSULA      |         | 1     | 1     | 2     |       | 4     |
| MATANUSKA-SUSITNA   | 1       | 4     | 9     | 5     | 1     | 20    |
| NOME                | 11      | 2     | 4     | 6     |       | 23    |
| NORTH SLOPE         | 8       | 4     | 2     | 5     |       | 19    |
| NORTHWEST ARCTIC    | 9       | 3     | 6     | 3     |       | 21    |
| SITKA BOROUGH       |         | 3     | 2     | 1     |       | 6     |
| VALDEZ-CORDOVA      | 1       | 2     | 1     | 1     | 1     | 6     |
| WADE HAMPTON        | 28      | 14    | 2     | 6     |       | 50    |
| WRANGELL-PETERSBG   |         |       | 3     | 1     |       | 4     |
| YUKON-KOYUKUK       | 1       |       |       | 2     |       | 3     |
| OUTSIDE ALASKA      | 6       | 15    | 24    | 34    | 7     | 86    |
| TOTAL               | 156     | 204   | 215   | 176   | 26    | 777   |

Tables 4.2A and 4.2C show adoptions by the age of the adoptee; Tables 4.2B and 4.2D show adoptions by the race of the adoptee. In these tables, race of the adoptee is determined by the race of the natural mother. For those in which the race of the adoptee is unknown, all were born outside of Alaska. (For more information on determining the race of the child by the race of the mother, see Appendix E.)

TABLE 4.2B ADOPTIONS BY NATIVE REGIONAL CORPORATION WHERE DECREE WAS GRANTED AND BY AGE OF ADOPTEE, ALASKA, 1998

|                      |         | AGE   | OF ADO | PTEE  |       |       |
|----------------------|---------|-------|--------|-------|-------|-------|
| NRC WHERE ADOPTION   |         | 1-4   | 5-9    | 10-17 | 18+   |       |
| DECREE WAS GRANTED   | <1 YEAR | YEARS | YEARS  | YEARS | YEARS | TOTAL |
| AHTNA INC.           |         |       | 1      |       |       | 1     |
| ALEUT CORP.          |         | 1     | 1      |       |       | 2     |
| ARCTIC SLOPE CORP.   | 8       | 4     | 2      | 5     |       | 19    |
| BERING STRAITS CORP. | 11      | 2     | 4      | 6     |       | 23    |
| BRISTOL BAY CORP.    |         | 4     | 1      | 6     |       | 11    |
| CALISTA CORP.        | 56      | 28    | 14     | 14    |       | 112   |
| CHUGACH NATIVES INC. | 1       | 2     |        | 1     | 1     | 5     |
| COOK INLET REG CORP. | 52      | 97    | 107    | 70    | 9     | 335   |
| DOYON LTD.           | 9       | 27    | 27     | 23    | 4     | 90    |
| KONIAG INC.          | 1       | 6     | 5      |       | 1     | 13    |
| NANA REGIONAL CORP.  | 9       | 3     | 6      | 3     |       | 21    |
| SEALASKA CORP.       | 3       | 15    | 23     | 14    | 4     | 59    |
| OUTSIDE ALASKA       | 6       | 15    | 24     | 34    | 7     | 86    |
| TOTAL                | 156     | 204   | 215    | 176   | 26    | 777   |

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TABLE 4.2C ADOPTIONS BY CENSUS AREA WHERE DECREE WAS GRANTED AND BY RACE OF ADOPTEE, ALASKA, 1998

| CENSUS AREA WHERE ADOPTION |       |        |        |          |     |       |
|----------------------------|-------|--------|--------|----------|-----|-------|
| DECREE WAS GRANTED         | WHITE | NATIVE | AFR/AM | ASIAN/PI | UNK | TOTAL |
| ALEUTIANS EAST             |       | 1      |        |          |     | 1     |
| ALEUTIANS WEST             |       | 1      |        |          |     | 1     |
| ANCHORAGE                  | 142   | 67     | 16     | 8        | 46  | 279   |
| BETHEL                     |       | 62     |        |          |     | 62    |
| BRISTOL BAY                |       | 1      |        |          |     | 1     |
| DILLINGHAM                 | 2     | 4      |        |          |     | 6     |
| FAIRBANKS NSB              | 64    | 10     | 6      | 3        | 4   | 87    |
| JUNEAU BOROUGH             | 21    | 6      |        | 1        | 6   | 34    |
| KENAI PENINSULA            | 24    | 6      |        | 2        | 4   | 36    |
| KETCHIKAN                  | 10    | 4      |        |          | 1   | 15    |
| KODIAK ISLAND              | 6     | 5      | 1      | 1        |     | 13    |
| LAKE-PENINSULA             |       | 4      |        |          |     | 4     |
| MATANUSKA-SUSITNA          | 14    |        |        |          | 6   | 20    |
| NOME                       | 1     | 22     |        |          |     | 23    |
| NORTH SLOPE                |       | 19     |        |          |     | 19    |
| NORTHWEST ARCTIC           |       | 20     |        |          | 1   | 21    |
| SITKA BOROUGH              | 4     |        |        |          | 2   | 6     |
| VALDEZ-CORDOVA             | 3     | 1      |        |          | 2   | 6     |
| WADE HAMPTON               |       | 50     |        |          |     | 50    |
| WRANGELL-PETERSBG          | 2     | 2      |        |          |     | 4     |
| YUKON-KOYUKUK              |       | 3      |        |          |     | 3     |
| OUTSIDE ALASKA             | 76    | 7      | 3      |          |     | 86    |
| TOTAL                      | 369   | 295    | 26     | 15       | 72  | 777   |

TABLE 4.2D ADOPTIONS BY NATIVE REGIONAL CORPORATION WHERE DECREE WAS GRANTED, AND BY RACE OF ADOPTEE, ALASKA, 1998

| NRC WHERE ADOPTION   |       | RACE OF ADOPTEE |        |          |     |       |  |  |
|----------------------|-------|-----------------|--------|----------|-----|-------|--|--|
| DECREE WAS GRANTED   | WHITE | NATIVE          | AFR/AM | ASIAN/PI | UNK | TOTAL |  |  |
| AHTNA INC.           |       | 1               |        |          |     | 1     |  |  |
| ALEUT CORP.          |       | 2               |        |          |     | 2     |  |  |
| ARCTIC SLOPE CORP.   |       | 19              |        |          |     | 19    |  |  |
| BERING STRAITS CORP. | 1     | 22              |        |          |     | 23    |  |  |
| BRISTOL BAY CORP.    | 2     | 9               |        |          |     | 11    |  |  |
| CALISTA CORP.        |       | 112             |        |          |     | 112   |  |  |
| CHUGACH NATIVES INC. | 3     |                 |        |          | 2   | 5     |  |  |
| COOK INLET REG CORP. | 180   | 73              | 16     | 10       | 56  | 335   |  |  |
| DOYON LTD.           | 64    | 13              | 6      | 3        | 4   | 90    |  |  |
| KONIAG INC.          | 6     | 5               | 1      | 1        |     | 13    |  |  |
| NANA REGIONAL CORP.  |       | 20              |        |          | 1   | 21    |  |  |
| SEALASKA CORP.       | 37    | 12              |        | 1        | 9   | 59    |  |  |
| OUTSIDE ALASKA       | 76    | 7               | 3      |          |     | 86    |  |  |
| TOTAL                | 369   | 295             | 26     | 15       | 72  | 777   |  |  |

Adoptions may occur under several different circumstances. A child may be adopted by the spouse of a natural parent; a child may be adopted into a two-parent family; or a child may be adopted by a single parent. Of the 777

adoptions granted during 1998, 36.6% of the children were adopted by the spouse of a natural parent, 50.6% of the children were adopted by two parents, and 12.9% were adopted by single parents.

Table 4.3A shows races of natural and adoptive parents and the birth place of the child when the adopting parent is married to a natural parent. Table 4.3B shows races of adopting parents when neither parent is the natural parent. In those cases where either the mother or father is indicated by "NONE," the child was adopted by a single parent.

TABLE 4.3A ADOPTIONS BY RACES OF PARENTS (WHEN ADOPTIVE PARENT IS MARRIED TO NATURAL PARENT) AND BY CHILD'S PLACE OF BIRTH, ALASKA, 1998

| RACE O  | F PARENTS | CHILD'S | PLACE | OF BIRTH |       |
|---------|-----------|---------|-------|----------|-------|
| NATURAL | ADOPTIVE  | ALASKA  | USA   | FOREIGN  | TOTAL |
| WHITE   | WHITE     | 108     | 96    | 12       | 216   |
|         | NATIVE    | 3       |       | 1        | 4     |
|         | AFR/AM    | 4       | 3     |          | 7     |
|         | ASIAN     |         | 2     |          | 2     |
|         | UNKN      | 16      |       |          | 16    |
|         | TOTAL     | 131     | 101   | 13       | 245   |
| NATIVE  | WHITE     | 7       |       |          | 7     |
|         | NATIVE    | 13      |       |          | 13    |
|         | AFR/AM    | 1       |       |          | 1     |
|         | UNKN      | 2       |       |          | 2     |
|         | TOTAL     | 23      |       |          | 23    |
| AFR/AM  | AFR/AM    | 2       | 2     | 2        | 6     |
|         | UNKN      | 1       |       |          | 1     |
|         | TOTAL     | 3       | 2     | 2        | 7     |
| ASIAN   | WHITE     | 3       | 1     |          | 4     |
|         | ASIAN     | 1       | 1     |          | 2     |
|         | TOTAL     | 4       | 2     |          | 6     |
| UNKN    | WHITE     |         | 3     |          | 3     |
|         | TOTAL     |         | 3     |          | 3     |
| TOTAL   |           | 161     | 108   | 15       | 284   |

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TABLE 4.3B ADOPTIONS BY RACES OF ADOPTIVE PARENTS (WHEN NEITHER PARENT IS THE NATURAL PARENT) AND CHILD'S PLACE OF BIRTH, ALASKA, 1998

| RACE OF ADOPTIVE<br>PARENTS |        | CHILD'S | PLACE | OF BIRTH |       |  |
|-----------------------------|--------|---------|-------|----------|-------|--|
| MOTHER                      | FATHER | ALASKA  | USA   | FOREIGN  | TOTAL |  |
| WHITE                       | WHITE  | 118     | 31    | 53       | 202   |  |
|                             | NATIVE | 10      |       |          | 10    |  |
|                             | AFR/AM | 1       |       |          | 1     |  |
|                             | ASIAN  |         |       | 2        | 2     |  |
|                             | NONE   | 22      | 3     | 13       | 38    |  |
|                             | TOTAL  | 151     | 34    | 68       | 253   |  |
| NATIVE                      | WHITE  | 13      | 5     |          | 18    |  |
|                             | NATIVE | 132     |       |          | 132   |  |
|                             | AFR/AM | 1       |       |          | 1     |  |
|                             | NONE   | 41      | 1     |          | 42    |  |
|                             | TOTAL  | 187     | 6     |          | 193   |  |
| AFR/AM                      | WHITE  | 1       | 2     |          | 3     |  |
|                             | AFR/AM | 11      | 2     |          | 13    |  |
|                             | NONE   | 1       | 2     |          | 3     |  |
|                             | TOTAL  | 13      | 6     |          | 19    |  |
| ASIAN                       | WHITE  | 2       |       | 2        | 4     |  |
|                             | ASIAN  | 3       |       |          | 3     |  |
|                             | TOTAL  | 5       |       | 2        | 7     |  |
| UNKN                        | UNKN   | 3       |       |          | 3     |  |
|                             | NONE   | 4       |       |          | 4     |  |
|                             | TOTAL  | 7       |       |          | 7     |  |
| NONE                        | WHITE  | 5       | 1     |          | 6     |  |
|                             | NATIVE | 4       |       |          | 4     |  |
|                             | AFR/AM | 1       |       |          | 1     |  |
|                             | UNKN   | 2       |       |          | 2     |  |
|                             | NONE   | 1       |       |          | 1     |  |
|                             | TOTAL  | 13      | 1     |          | 14    |  |
| TOTAL                       |        | 376     | 47    | 70       | 493   |  |

TABLE 4.3C ADOPTIONS BY RACES OF ADOPTIVE PARENTS (WHEN NEITHER PARENT IS THE NATURAL PARENT) AND CHILD'S RACE, ALASKA, 1998

|        | F ADOPTIVE<br>RENTS |       | RACE OF ADOPTEE |        |          |     |       |  |  |
|--------|---------------------|-------|-----------------|--------|----------|-----|-------|--|--|
| MOTHER |                     | WHITE | NATIVE          | AFR/AM | ASIAN/PI | UNK | TOTAL |  |  |
| WHITE  | WHITE               | 94    | 50              | 5      | 6        | 47  | 202   |  |  |
|        | NATIVE              | 1     | 9               |        |          |     | 10    |  |  |
|        | AFR/AM              |       |                 | 1      |          |     | 1     |  |  |
|        | ASIAN               |       |                 |        | 1        | 1   | 2     |  |  |
|        | NONE                | 6     | 16              | 2      |          | 14  | 38    |  |  |
|        | TOTAL               | 101   | 75              | 8      | 7        | 62  | 253   |  |  |
| NATIVE | WHITE               | 1     | 14              |        |          | 3   | 18    |  |  |
|        | NATIVE              |       | 132             |        |          |     | 132   |  |  |
|        | AFR/AM              | 1     |                 |        |          |     | 1     |  |  |
|        | NONE                |       | 41              |        |          | 1   | 42    |  |  |
|        | TOTAL               | 2     | 187             |        |          | 4   | 193   |  |  |
| AFR/AM | WHITE               | 2     |                 |        |          | 1   | 3     |  |  |
|        | AFR/AM              | 2     | 2               | 9      |          |     | 13    |  |  |
|        | NONE                | 1     |                 | 1      |          | 1   | 3     |  |  |
|        | TOTAL               | 5     | 2               | 10     |          | 2   | 19    |  |  |
| ASIAN  | WHITE               | 1     | 1               |        | 2        |     | 4     |  |  |
|        | ASIAN               |       | 1               |        | 2        |     | 3     |  |  |
|        | TOTAL               | 1     | 2               |        | 4        |     | 7     |  |  |
| UNKN   | UNKN                | 3     |                 |        |          |     | 3     |  |  |
|        | NONE                | 1     | 2               | 1      |          |     | 4     |  |  |
|        | TOTAL               | 4     | 2               | 1      |          |     | 7     |  |  |
| NONE   | WHITE               | 4     | 2               |        |          |     | 6     |  |  |
|        | NATIVE              |       | 4               |        |          |     | 4     |  |  |
|        | AFR/AM              |       | 1               |        |          |     | 1     |  |  |
|        | UNKN                | 1     | 1               |        |          |     | 2     |  |  |
|        | NONE                | 1     |                 |        |          |     | 1     |  |  |
|        | TOTAL               | 6     | 8               |        |          |     | 14    |  |  |
| TOTAL  |                     | 119   | 276             | 19     | 11       | 68  | 493   |  |  |

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TABLE 4.4A ADOPTIONS BY CENSUS AREA WHERE ADOPTION DECREE WAS GRANTED, AND BY PARENT ADOPTING CHILD, ALASKA, 1998

| CENSUS AREA WHERE DECREE WAS GRANTED | MOTHER AND<br>FATHER | ADOPTING PARENT<br>MARRIED TO<br>NATURAL PARENT | SINGLE<br>PARENT | TOTAL |
|--------------------------------------|----------------------|---|------------------|-------|
| ALEUTIANS EAST                       | 1                    |   |                  | 1     |
| ALEUTIANS WEST                       |                      | 1   |                  | 1     |
| ANCHORAGE                            | 146                  | 101   | 32               | 279   |
| BETHEL                               | 49                   |   | 13               | 62    |
| BRISTOL BAY                          | 1                    |   |                  | 1     |
| DILLINGHAM                           | 3                    | 2   | 1                | 6     |
| FAIRBANKS NSB                        | 31                   | 48  | 8                | 87    |
| JUNEAU BOROUGH                       | 15                   | 15  | 4                | 34    |
| KENAI PENINSULA                      | 11                   | 23  | 2                | 36    |
| KETCHIKAN                            | 6                    | 8   | 1                | 15    |
| KODIAK ISLAND                        | 10                   | 2   | 1                | 13    |
| LAKE-PENINSULA                       | 2                    |   | 2                | 4     |
| MATANUSKA-SUSITNA                    | 4                    | 14  | 2                | 20    |
| NOME                                 | 21                   | 2   |                  | 23    |
| NORTH SLOPE                          | 12                   | 4   | 3                | 19    |
| NORTHWEST ARCTIC                     | 11                   | 1   | 9                | 21    |
| SITKA BOROUGH                        | 2                    | 4   |                  | 6     |
| VALDEZ-CORDOVA                       | 1                    | 4   | 1                | 6     |
| WADE HAMPTON                         | 37                   |   | 13               | 50    |
| WRANGELL-PETERSBG                    | 2                    | 2   |                  | 4     |
| YUKON-KOYUKUK                        | 2                    |   | 1                | 3     |
| OUTSIDE ALASKA                       | 26                   | 53  | 7                | 86    |
| TOTAL                                | 393                  | 284   | 100              | 777   |

TABLE 4.4B ADOPTIONS BY NATIVE REGIONAL CORPORATION WHERE DECREE WAS GRANTED, AND BY PARENT ADOPTING CHILD, ALASKA, 1998

| NRC WHERE DECREE WAS |        | ADOPTING PARENT<br>MARRIED TO | SINGLE |         |
|----------------------|--------|-------------------------------|--------|---------|
| GRANTED              | FATHER | NATURAL PARENT                | PARENT | _TOTAL_ |
| AHTNA INC.           |        | 1                             |        | 1       |
| ALEUT CORP.          | 1      | 1                             |        | 2       |
| ARCTIC SLOPE CORP.   | 12     | 4                             | 3      | 19      |
| BERING STRAITS CORP. | 21     | 2                             |        | 23      |
| BRISTOL BAY CORP.    | 6      | 2                             | 3      | 11      |
| CALISTA CORP.        | 86     |                               | 26     | 112     |
| CHUGACH NATIVES INC. | 1      | 3                             | 1      | 5       |
| COOK INLET REG CORP. | 161    | 138                           | 36     | 335     |
| DOYON LTD.           | 33     | 48                            | 9      | 90      |
| KONIAG INC.          | 10     | 2                             | 1      | 13      |
| NANA REGIONAL CORP.  | 11     | 1                             | 9      | 21      |
| SEALASKA CORP.       | 25     | 29                            | 5      | 59      |
| OUTSIDE ALASKA       | 26     | 53                            | 7      | 86      |
| TOTAL                | 393    | 284                           | 100    | 777     |

## MARRIAGE AND DIVORCE



"Tenakee Wedding" copyright Rie MuAoz, Ltd.

#### **MARRIAGES**

There were 5,105 marriages performed in Alaska in 1998, involving 4,553 Alaska resident brides and 4,542 Alaska resident grooms. This is a decrease of 3.4% from the 5,283 marriages which occurred in 1997. The crude marriage rate in 1998 was 8.3 marriages per 1,000 residents, down from 8.6 marriages per 1,000 in 1997.

Crude marriage rates varied widely between census areas in Alaska. For instance, the lowest rate of 1.3 marriages per 1,000 residents was in the Yakutat census area. The highest rate of 11.8 marriages per 1,000 residents was in the Denali Borough census area. Crude marriage rates represent the number of marriages occurring in a census area per 1,000 residents. Some of the more popular tourist destinations will have unusually high marriage rates because they are also popular places to get married; e.g. Denali National Park. Sex-specific marriage rates, also shown on Table 5.1A, reflect the number of resident grooms (or brides) per 1,000 resident males (or females) and more accurately reflect real rates because non-resident marriages are not included.

The average age for brides was 30.5 and the average age for grooms was 33.0. It was the first marriage for 56.1 percent of brides and 59.6 percent of grooms. The average age for first-time brides was 24.9 and the average age for first-time grooms was 27.6.

June, July, and August were the months with the most marriages with 619, 619, and 668 marriages respectively. February had the fewest marriages with 288.

1 Crondahl, J., Mitchell, P., Zenk, A., and Walden, S. Department of Health and Social Services, Division of Public Health, *Alaska Bureau of Vital Statistics 1997 Annual Report*, Juneau, Alaska, December 1998, p. 77.

There were 422 marriages in which neither the bride nor the groom was a resident of Alaska, a decrease from the 438 non-resident marriages in 1997. The Anchorage census area had the greatest number of non-resident marriages with 122; Juneau had the second largest number of non-resident marriages with 100, one-third of all marriages occurring in Juneau.

TABLE 5.1A MARRIAGES AND CRUDE MARRIAGE RATES BY CENSUS AREA OF OCCURRENCE, ALASKA, 1998

|                                 | OCCURRENCES |            | RESIDEN | r GROOMS     | RESIDENT BRIDES |              |  |
|---------------------------------|-------------|------------|---------|--------------|-----------------|--------------|--|
|                                 |             |            |         | SEX-SPECIFIC |                 | SEX-SPECIFIC |  |
| CENSUS AREA                     |             | CRUDE RATE |         | RATE         | MARRIAGES       | RATE         |  |
| ALEUTIANS EAST                  | 3           | 1.4        | 3       | 2.5          | 3               | 3.1          |  |
| ALEUTIANS WEST                  | 18          | 3.4        | 20      | 6.3          | 20              | 9.2          |  |
| ANCHORAGE BOROUGH               | 2,179       | 8.5        | 2,032   | 15.4         | 2,078           | 16.6         |  |
| BETHEL                          | 98          | 6.1        | 91      | 11.0         | 97              | 12.7         |  |
| BRISTOL BAY BOROUGH             | 10          | 7.7        | 8       | 11.7         | 8               | 13.1         |  |
| DENALI BOROUGH                  | 22          | 11.8       | 16      | 15.3         | 14              | 17.0         |  |
| DILLINGHAM                      | 38          | 8.1        | 40      | 16.2         | 41              | 18.4         |  |
| FAIRBANKS NORTH STAR BOROUGH    | 734         | 8.8        | 669     | 15.3         | 640             | 16.3         |  |
| HAINES BOROUGH                  | 18          | 7.3        | 15      | 11.7         | 15              | 12.7         |  |
| JUNEAU BOROUGH                  | 302         | 10.1       | 201     | 13.2         | 199             | 13.5         |  |
| KENAI PENINSULA BOROUGH         | 456         | 9.4        | 363     | 14.3         | 360             | 15.5         |  |
| KETCHIKAN GATEWAY BOROUGH       | 156         | 11.0       | 116     | 15.8         | 117             | 17.2         |  |
| KODIAK ISLAND BOROUGH           | 120         | 8.7        | 117     | 15.8         | 110             | 17.4         |  |
| LAKE AND PENINSULA              | 3           | 1.6        | 5       | 5.1          | 4               | 4.6          |  |
| MATANUSKA-SUSITNA BOROUGH       | 451         | 8.3        | 399     | 14.1         | 405             | 15.6         |  |
| NOME                            | 45          | 4.8        | 41      | 8.3          | 40              | 9.1          |  |
| NORTH SLOPE BOROUGH             | 28          | 3.9        | 30      | 7.9          | 29              | 8.4          |  |
| NORTHWEST ARCTIC BOROUGH        | 40          | 5.9        | 41      | 11.6         | 40              | 12.2         |  |
| PRINCE OF WALES-OUTER KETCHIKAN | 36          | 5.3        | 36      | 9.6          | 35              | 11.4         |  |
| SITKA BOROUGH                   | 86          | 9.9        | 67      | 15.0         | 69              | 16.2         |  |
| SKAGWAY-HOONAH-ANGOON           | 29          | 8.0        | 21      | 10.8         | 21              | 12.4         |  |
| SOUTHEAST FAIRBANKS             | 45          | 7.1        | 41      | 12.3         | 42              | 13.9         |  |
| VALDEZ-CORDOVA                  | 81          | 7.9        | 64      | 11.6         | 62              | 13.0         |  |
| WADE HAMPTON                    | 29          | 4.1        | 33      | 9.0          | 30              | 8.9          |  |
| WRANGELL-PETERSBURG             | 43          | 6.0        | 39      | 10.3         | 42              | 12.5         |  |
| YAKUTAT                         | 1           | 1.3        | 1       | 2.3          | 1               | 3.0          |  |
| YUKON-KOYUKUK                   | 34          | 5.3        | 33      | 9.4          | 31              | 10.7         |  |
| TOTAL                           | 5,105       | 8.3        | 4,542   | 14.1         | 4,553           | 15.4         |  |

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TABLE 5.1B MARRIAGES BY NATIVE REGIONAL CORPORATION OF OCCURRENCE, GROOM'S RESIDENCE, AND BRIDE'S RESIDENCE, ALASKA, 1998

| NATIVE REGIONAL<br>CORPORATION | OCCURRENCES | RESIDENT<br>GROOMS | RESIDENT<br>BRIDES |
|--------------------------------|-------------|--------------------|--------------------|
| AHTNA INC.                     | 26          | 20                 | 22                 |
| ALEUT CORP.                    | 21          | 23                 | 23                 |
| ARCTIC SLOPE CORP.             | 28          | 30                 | 29                 |
| BERING STRAITS CORP.           | 45          | 41                 | 40                 |
| BRISTOL BAY CORP.              | 51          | 53                 | 52                 |
| CALISTA CORP.                  | 127         | 124                | 127                |
| CHUGACH NATIVES INC.           | 104         | 74                 | 69                 |
| COOK INLET REG CORP.           | 3,040       | 2,768              | 2,819              |
| DOYON LTD.                     | 832         | 755                | 723                |
| KONIAG INC.                    | 120         | 117                | 110                |
| NANA REGIONAL CORP.            | 40          | 41                 | 40                 |
| SEALASKA CORP.                 | 671         | 496                | 499                |
| TOTAL                          | 5,105       | 4,542              | 4,553              |

TABLE 5.2 MARRIAGES BY CENSUS AREA OF BRIDE'S RESIDENCE, AND BY CENSUS AREA OF GROOM'S RESIDENCE, ALASKA, 1998

| BRIDE'S      |     | GROOM'S RESIDENCE |       |     |     |     |     |     |     |     |     |     |     |     |
|--------------|-----|-------------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RESIDENCE    | ALE | ALW               | ANC   | BET | BBB | DEN | DIL | FBK | HNS | JUN | KPB | KET | KOD | LKP |
| ALEUTN EAST  | 3   |                   |       |     |     |     |     |     |     |     |     |     |     |     |
| ALEUTN WEST  |     | 18                |       |     |     |     |     |     |     |     | 1   |     |     |     |
| ANCHORAGE    |     |                   | 1,960 | 1   |     |     | 1   | 10  |     | 2   | 9   | 1   | 1   | 1   |
| BETHEL       |     |                   | 2     | 88  |     |     |     |     |     |     |     | 1   |     |     |
| BRISTOL BAY  |     |                   |       |     | 8   |     |     |     |     |     |     |     |     |     |
| DENALI       |     |                   |       |     |     | 14  |     |     |     |     |     |     |     |     |
| DILLINGHAM   |     |                   | 2     |     |     |     | 39  |     |     |     |     |     |     |     |
| FAIRBANKS    |     |                   | 3     |     |     |     |     | 615 |     | 1   |     |     |     |     |
| HAINES       |     |                   |       |     |     |     |     |     | 15  |     |     |     |     |     |
| JUNEAU       |     |                   |       |     |     |     |     | 1   |     | 189 | 1   |     |     |     |
| KENAI PEN    |     |                   | 2     |     |     |     |     | 1   |     |     | 342 |     | 1   |     |
| KETCHIKAN    |     |                   |       |     |     |     |     |     |     |     |     | 112 |     |     |
| KODIAK       |     |                   |       |     |     |     |     |     |     |     |     |     | 110 |     |
| LAKE-PENIN   |     |                   |       |     |     |     |     |     |     |     |     |     |     | 3   |
| MAT-SU       |     |                   | 12    | 1   |     | 1   |     | 2   |     | 1   | 2   |     |     |     |
| NOME         |     |                   |       |     |     |     |     | 1   |     |     |     |     |     |     |
| NORTH SLOPE  |     |                   |       |     |     |     |     |     |     |     |     |     |     |     |
| NW ARCTIC    |     |                   |       |     |     |     |     | 1   |     |     |     |     |     |     |
| PRINCE-WALES |     |                   | 1     |     |     |     |     |     |     |     |     |     |     |     |
| SITKA        |     |                   |       |     |     |     |     |     |     |     |     |     |     |     |
| SKG-HNH-ANG  |     |                   |       |     |     |     |     |     |     |     |     |     |     |     |
| SE FAIRBANKS |     |                   | 1     |     |     |     |     |     |     |     |     |     |     |     |
| VALDEZ-CORDV |     | 1                 |       |     |     |     |     | 1   |     |     |     |     |     |     |
| WADE HAMPTON |     |                   |       |     |     |     |     |     |     |     |     |     |     |     |
| WRANGELL-PBG |     |                   |       |     |     |     |     |     |     |     |     |     |     |     |
| YAKUTAT      |     |                   |       |     |     |     |     |     |     |     |     |     |     |     |
| YUKON-KOY    |     |                   |       |     |     |     |     | 1   |     |     |     |     |     |     |
| OUTSIDE AK   |     | 1                 | 49    | 1   |     | 1   |     | 36  |     | 8   | 8   | 2   | 5   | 1   |
| TOTAL        | 3   | 20                | 2,032 | 91  | 8   | 16  | 40  | 669 | 15  | 201 | 363 | 116 | 117 | 5   |

**Continued** ⇒

TABLE 5.2 CONTINUED

| BRIDE'S      |     |     |     |     |     | GRO | OM'S F | RESIDE | NCE |     |     |     |     |     |       |
|--------------|-----|-----|-----|-----|-----|-----|--------|--------|-----|-----|-----|-----|-----|-----|-------|
| RESIDENCE    | MSB | NOM | NSB | NAB | POW | SIT | SHA    |        |     | WAH | WRP | YAK | YUK | oos | TOTAL |
| ALEUTN EAST  |     |     |     |     |     |     |        |        |     |     |     |     |     |     | 3     |
| ALEUTN WEST  |     |     |     |     |     |     |        |        | 1   |     |     |     |     |     | 20    |
| ANCHORAGE    | 10  | 1   |     |     |     | 1   |        | 1      | 2   |     |     |     | 3   | 74  | 2,078 |
| BETHEL       |     |     |     |     |     |     |        |        |     | 2   |     |     | 1   | 3   | 97    |
| BRISTOL BAY  |     |     |     |     |     |     |        |        |     |     |     |     |     |     | 8     |
| DENALI       |     |     |     |     |     |     |        |        |     |     |     |     |     |     | 14    |
| DILLINGHAM   |     |     |     |     |     |     |        |        |     |     |     |     |     |     | 41    |
| FAIRBANKS    | 1   |     |     |     |     |     |        |        |     |     |     |     |     | 20  | 640   |
| HAINES       |     |     |     |     |     |     |        |        |     |     |     |     |     |     | 15    |
| JUNEAU       |     |     |     | 1   |     |     |        |        | 1   |     |     |     |     | 6   | 199   |
| KENAI PEN    |     |     |     |     |     |     |        |        | 1   |     |     |     |     | 13  | 360   |
| KETCHIKAN    |     |     |     |     | 1   |     | 1      |        |     |     |     |     |     | 3   | 117   |
| KODIAK       |     |     |     |     |     |     |        |        |     |     |     |     |     |     | 110   |
| LAKE-PENIN   |     |     |     |     |     |     |        |        |     |     |     |     |     | 1   | 4     |
| MAT-SU       | 378 |     |     |     |     |     |        |        |     |     |     |     |     | 8   | 405   |
| NOME         |     | 38  |     |     |     |     |        |        |     | 1   |     |     |     |     | 40    |
| NORTH SLOPE  |     |     | 29  |     |     |     |        |        |     |     |     |     |     |     | 29    |
| NW ARCTIC    |     |     |     | 39  |     |     |        |        |     |     |     |     |     |     | 40    |
| PRINCE-WALES |     |     |     |     | 34  |     |        |        |     |     |     |     |     |     | 35    |
| SITKA        | 1   |     |     |     |     | 65  |        |        |     |     |     |     |     | 3   | 69    |
| SKG-HNH-ANG  |     |     |     |     |     |     | 20     |        |     |     |     |     |     | 1   | 21    |
| SE FAIRBANKS | 1   |     |     |     |     |     |        | 37     | 1   |     |     |     |     | 2   | 42    |
| VALDEZ-CORDV |     |     |     |     |     |     |        | 1      | 56  |     |     |     |     | 3   | 62    |
| WADE HAMPTON |     | 1   |     |     |     |     |        |        |     | 29  |     |     |     |     | 30    |
| WRANGELL-PBG |     |     |     |     |     |     |        |        |     |     | 39  |     |     | 3   | 42    |
| YAKUTAT      |     |     |     |     |     |     |        |        |     |     |     | 1   |     |     | 1     |
| YUKON-KOY    |     |     |     |     |     |     |        |        |     |     |     |     | 29  | 1   | 31    |
| OUTSIDE AK   | 8   | 1   | 1   | 1   | 1   | 1   |        | 2      | 2   | 1   |     |     |     | 422 | 552   |
| TOTAL        | 399 | 41  | 30  | 41  | 36  | 67  | 21     | 41     | 64  | 33  | 39  | 1   | 33  | 563 | 5,105 |

TABLE 5.3 MARRIAGES BY AGE OF GROOM AND AGE OF BRIDE, ALASKA, 1998

| AGE OF |       |       |       | AGE   | OF GRO | OM    |       |       |     |       |
|--------|-------|-------|-------|-------|--------|-------|-------|-------|-----|-------|
| BRIDE  | 15-19 | 20-24 | 25-29 | 30-34 | 35-39  | 40-44 | 45-49 | 50-54 | 55+ | TOTAL |
| 15-19  | 160   | 316   | 66    | 9     | 7      | 1     | 1     |       |     | 560   |
| 20-24  | 40    | 648   | 417   | 100   | 43     | 12    | 3     | 3     | 1   | 1,267 |
| 25-29  | 5     | 151   | 384   | 244   | 127    | 38    | 17    | 12    | 3   | 981   |
| 30-34  | 4     | 31    | 111   | 222   | 193    | 94    | 35    | 13    | 13  | 716   |
| 35-39  | 1     | 9     | 54    | 87    | 161    | 146   | 73    | 33    | 9   | 573   |
| 40-44  | 2     | 2     | 15    | 32    | 84     | 137   | 104   | 43    | 28  | 447   |
| 45-49  |       |       | 7     | 15    | 33     | 63    | 65    | 60    | 50  | 293   |
| 50-54  | 1     | 1     | 2     | 3     | 6      | 13    | 33    | 43    | 45  | 147   |
| 55+    |       | 1     |       | 4     | 1      | 3     | 5     | 10    | 97  | 121   |
| TOTAL  | 213   | 1,159 | 1,056 | 716   | 655    | 507   | 336   | 217   | 246 | 5,105 |

#### **DIVORCES**

There are three administrative methods for terminating a marriage in Alaska:

- **Divorce** is an adversarial process in which the terms of the decree are decided by the courts based upon evidence, testimony, and in accordance with Alaska statutes. These terms include disposition of property, living arrangements, and custody and support for any minor children involved. In 1998, there were 1,091 divorces granted in Alaska. This is a 4.9 percent increase from 1,040 divorces granted in 1997.
- A dissolution of marriage is a cooperative agreement between the husband and wife in which both parties agree to the terms for distribution of property, living arrangements, and support and custody of minor children. The agreement is reviewed by the court, which can amend it if it determines the terms are not

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equitable. In 1998, there were 2,218 dissolutions of marriage in Alaska. This is a 7.4 percent increase from the 2,065 dissolutions in 1997.

• An **annulment** is a judicial pronouncement declaring a marriage never existed. In 1998, there were 9 annulments granted in Alaska; the same number as in 1997.

There were 11 instances in which the type of decree was not specified. When not otherwise stated, the term *divorce* refers to all methods collectively.

In 1997, the total of 3,329 divorces, dissolutions, and annulments resulted in a crude divorce rate of 5.4 divorces per 1,000 population, compared with 5.1 in 1997.

Because divorces are granted by the courts, Table 5.4A shows the number of decrees by judicial district. For a map showing the locations of each judicial district, see page .

TABLE 5.4A DIVORCES, DISSOLUTIONS AND ANNULMENTS BY JUDICIAL DISTRICT, ALASKA, 1998

| JUDICIAL DISTRICT |         | TYPE OF DECREE                           |   |    |       |  |  |  |  |  |
|-------------------|---------|--|---|----|-------|--|--|--|--|--|
| OF DECREE         | DIVORCE | DIVORCE DISSOLUTION ANNULMENT NOT STATED |   |    |       |  |  |  |  |  |
| 01-FIRST          | 131     | 218                                      | 2 | 3  | 354   |  |  |  |  |  |
| 02-SECOND         | 13      | 22                                       |   |    | 35    |  |  |  |  |  |
| 03-THIRD          | 736     | 1,526                                    | 3 | 5  | 2,270 |  |  |  |  |  |
| 04-FOURTH         | 211     | 452                                      | 4 | 3  | 670   |  |  |  |  |  |
| TOTAL             | 1,091   | 2,218                                    | 9 | 11 | 3,329 |  |  |  |  |  |

TABLE 5.4B DIVORCES BY NUMBER OF MARRIAGES FOR WIFE AND HUSBAND, ALASKA, 1998

| WIFE'S MARRIAGE |       | HUSB | AND'S M | ARRIAGE | NUMBER |      |       |
|-----------------|-------|------|---------|---------|--------|------|-------|
| NUMBER          | ONE   | TWO  | THREE   | FOUR    | FIVE+  | UNKN | TOTAL |
| ONE             | 1,671 | 296  | 55      | 7       | 1      | 8    | 2,038 |
| TWO             | 356   | 307  | 83      | 25      | 4      | 6    | 781   |
| THREE           | 84    | 137  | 44      | 19      | 8      | 4    | 296   |
| FOUR            | 15    | 25   | 23      | 12      | 1      |      | 76    |
| FIVE OR MORE    | 5     | 8    | 9       | 4       | 1      |      | 27    |
| UNKNOWN         | 17    | 7    | 4       |         |        | 83   | 111   |
| TOTAL           | 2,148 | 780  | 218     | 67      | 15     | 101  | 3,329 |

TABLE 5.5 DIVORCES AND DIVORCE RATES FOR WOMEN AND MEN BY CENSUS AREA OF RESIDENCE, ALASKA, 1998

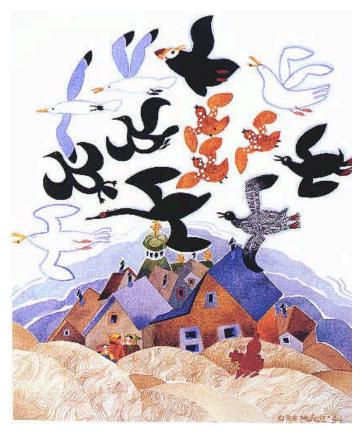
|                                 | WOME   | EN   | MEN    | -    |
|---------------------------------|--------|------|--------|------|
| CENSUS AREA                     | NUMBER | RATE | NUMBER | RATE |
| ALEUTIANS EAST                  | 4      | 4.2  | 2      | 1.7  |
| ALEUTIANS WEST                  | 15     | 6.9  | 22     | 6.9  |
| ANCHORAGE BOROUGH               | 1,395  | 11.1 | 1,282  | 9.7  |
| BETHEL                          | 7      | 0.9  | 8      | 1.0  |
| BRISTOL BAY BOROUGH             | 1      | 1.6  | 4      | 5.9  |
| DENALI BOROUGH                  | 10     | 12.2 | 10     | 9.6  |
| DILLINGHAM                      | 9      | 4.0  | 5      | 2.0  |
| FAIRBANKS NORTH STAR BOROUGH    | 466    | 11.8 | 470    | 10.8 |
| HAINES BOROUGH                  | 7      | 5.9  | 8      | 6.3  |
| JUNEAU BOROUGH                  | 123    | 8.3  | 129    | 8.5  |
| KENAI PENINSULA BOROUGH         | 188    | 8.1  | 178    | 7.0  |
| KETCHIKAN GATEWAY BOROUGH       | 68     | 10.0 | 73     | 9.9  |
| KODIAK ISLAND BOROUGH           | 75     | 11.9 | 74     | 10.0 |
| LAKE AND PENINSULA              | 2      | 2.3  | 4      | 4.1  |
| MATANUSKA-SUSITNA BOROUGH       | 236    | 9.1  | 220    | 7.8  |
| NOME                            | 19     | 4.3  | 16     | 3.2  |
| NORTH SLOPE BOROUGH             | 13     | 3.8  | 18     | 4.7  |
| NORTHWEST ARCTIC BOROUGH        | 6      | 1.8  | 5      | 1.4  |
| PRINCE OF WALES-OUTER KETCHIKAN | 23     | 7.5  | 23     | 6.1  |
| SITKA BOROUGH                   | 44     | 10.3 | 39     | 8.7  |
| SKAGWAY-HOONAH-ANGOON           | 8      | 4.7  | 12     | 6.2  |
| SOUTHEAST FAIRBANKS             | 29     | 9.6  | 25     | 7.5  |
| VALDEZ-CORDOVA                  | 45     | 9.4  | 52     | 9.5  |
| WADE HAMPTON                    | 3      | 0.9  | 1      | 0.3  |
| WRANGELL-PETERSBURG             | 29     | 8.6  | 29     | 7.6  |
| YAKUTAT                         | 5      | 14.9 | 4      | 9.1  |
| YUKON-KOYUKUK                   | 12     | 4.1  | 12     | 3.4  |
| CENSUS AREA UNKNOWN             | 16     |      | 23     |      |
| TOTAL                           | 2,858  | 9.7  | 2,748  | 8.6  |

## TABLE 5.6 DIVORCES INVOLVING CHILDREN UNDER THE AGE OF 18 YEARS BY JUDICIAL DISTRICT, ALASKA, 1998

|          | CHILDREN UNDER 18 |         |        |         |  |  |  |  |  |  |  |
|----------|-------------------|---------|--------|---------|--|--|--|--|--|--|--|
| JUDICIAL | NO.               | 0       | YES    |         |  |  |  |  |  |  |  |
| DISTRICT | DIVORCES          | PERCENT | NUMBER | PERCENT |  |  |  |  |  |  |  |
| FIRST    | 148               | 41.8    | 206    | 58.2    |  |  |  |  |  |  |  |
| SECOND   | 16                | 45.7    | 19     | 54.3    |  |  |  |  |  |  |  |
| THIRD    | 1,093             | 48.1    | 1,177  | 51.9    |  |  |  |  |  |  |  |
| FOURTH   | 303               | 45.2    | 367    | 54.8    |  |  |  |  |  |  |  |
| TOTAL    | 1,560             | 46.9    | 1,769  | 53.1    |  |  |  |  |  |  |  |

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### **DEATH**



"Seabirds, St. George" copyright Rie MuZoz, Ltd.

In 1998, 2,579 Alaskan residents died; 1,508 males and 1,071 females. Of this number, 168 Alaska residents died out of state. A total of 2,546 deaths occurred in Alaska. Of this number, 2,411 were Alaska residents and 135 were from out of state. (See Tables 6.1A and 6.1B.) The total number of resident deaths (2,579) is a decrease from the 2,582 resident deaths in 1997.

April, November, and December were the months with the highest number of deaths (232, 234, and 231, respectively) and August had the fewest deaths with 190. Twenty-nine percent of decedents were born in Alaska; however only 8.6 percent of white decedents were born in Alaska, while 95.4 percent of Native decedents were born in Alaska.

Over thirty-one percent of decedents age 18 and over were veterans (51.8 percent of males and 2.8 percent of females).

Twenty-four percent of decedents age 18 and over were widowed; 15.3 had never married; 41.5 percent were married at the time of death; and 17.8 percent were divorced. Statistics for men and women varied significantly:

- 47.3 percent of males were married and 33.6 percent of females were married;
- 11.0 percent of males were widowed and 41.9 percent of females were widowed;
- 20.8 percent of males had never married while only 7.7 percent of females had never married;
- 19.0 percent of males were divorced and 16.3 percent of females were divorced.

Cremation was the most common disposition of remains (51.2 percent); burial the second (38.3 percent); and 9.2 percent were transferred out of state.

#### **CRUDE DEATH RATES**

The crude death rate is the number of deaths in a year divided by the estimated population and multiplied by a constant of proportionality, in this case, 100,000. In 1998, there were 2,579 Alaska resident deaths and an estimated population of 617,082 as of July 1. The 1998 crude death rate calculation is (2,579/617,082)\*100,000=417.9.

TABLE 6.1A RESIDENT DEATHS, ESTIMATED POPULATIONS, AND CRUDE DEATH RATES BY CENSUS AREA, AND PLACE OF DEATH BY CENSUS AREA, ALASKA, 1998

|                                 | DEATHS    | RESIDENT |            | CRUDE |
|---------------------------------|-----------|----------|------------|-------|
| CENSUS AREA                     | OCCURRING | DEATHS   | POPULATION | RATE  |
| ALEUTIANS EAST                  | 6         | 10       | 2.145      | 466.2 |
| ALEUTIANS WEST                  | 11        | 11       | 5,346      | 205.8 |
| ANCHORAGE BOROUGH               | 1,163     | 985      | 257,260    | 382.9 |
| BETHEL                          | 60        | 76       | 15,935     | 476.9 |
| BRISTOL BAY BOROUGH             | 7         | 6        | 1,291      | 464.8 |
| DENALI BOROUGH                  | 14        | 4        | 1,868      | 214.1 |
| DILLINGHAM                      | 21        | 26       | 4,686      | 554.8 |
| FAIRBANKS NORTH STAR BOROUGH    | 294       | 288      | 83,045     | 346.8 |
| HAINES BOROUGH                  | 13        | 15       | 2,461      | 609.5 |
| JUNEAU BOROUGH                  | 118       | 120      | 30,021     | 399.7 |
| KENAI PENINSULA BOROUGH         | 207       | 234      | 48,532     | 482.2 |
| KETCHIKAN GATEWAY BOROUGH       | 95        | 90       | 14,143     | 636.4 |
| KODIAK ISLAND BOROUGH           | 37        | 49       | 13,716     | 357.2 |
| LAKE AND PENINSULA              | 16        | 15       | 1,842      | 814.3 |
| MATANUSKA-SUSITNA BOROUGH       | 175       | 221      | 54,153     | 408.1 |
| NOME                            | 51        | 69       | 9,341      | 738.7 |
| NORTH SLOPE BOROUGH             | 22        | 30       | 7,268      | 412.8 |
| NORTHWEST ARCTIC BOROUGH        | 24        | 36       | 6,817      | 528.1 |
| PRINCE OF WALES-OUTER KETCHIKAN | 11        | 22       | 6,830      | 322.1 |
| SITKA BOROUGH                   | 50        | 41       | 8,722      | 470.1 |
| SKAGWAY-HOONAH-ANGOON           | 16        | 22       | 3,642      | 604.1 |
| SOUTHEAST FAIRBANKS             | 16        | 27       | 6,349      | 425.3 |
| VALDEZ-CORDOVA                  | 40        | 54       | 10,274     | 525.6 |
| WADE HAMPTON                    | 24        | 37       | 7,044      | 525.3 |
| WRANGELL-PETERSBURG             | 23        | 33       | 7,165      | 460.6 |
| YAKUTAT                         | 2         | 4        | 775        | 516.1 |
| YUKON-KOYUKUK                   | 30        | 53       | 6,411      | 826.7 |
| CENSUS AREA UNKNOWN             |           | 1        |            |       |
| OUTSIDE ALASKA                  | 168       |          |            |       |
| TOTAL                           | 2,714     | 2,579    | 617,082    | 417.9 |

The 1998 crude death rate for Alaska of 417.9 compares with a crude death rate of 422.4 in 1997, 430.3 in 1996, and 423.9 in 1995. The 1998 crude death rate for the United States was 865.0 per 100,000 population. Table 6.1A provides numbers of deaths, estimated population, crude death rates, and place of death by census area throughout the state. Note that the 'Deaths Occurring' column includes non-residents who died in Alaska and residents who died outside the state.

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National Center for Health Statistics, U.S. Department of Health and Human Services, "Births and Deaths: Preliminary Data for 1998," National Vital Statistics Report, Vol. 47, No. 25, October 5, 1999, Table 11, page 27.

TABLE 6.1B DEATHS BY NATIVE REGIONAL CORPORATION OF RESIDENCE AND BY PLACE OF DEATH, ALASKA, 1998

| NATIVE REGIONAL | DEATHS    | RESIDENT      |
|-----------------|-----------|---------------|
| CORPORATION     | OCCURRING | <b>DEATHS</b> |
| AHTNA           | 18        | 17            |
| ALEUT           | 17        | 21            |
| ARCTIC SLOPE    | 22        | 30            |
| BERING STRAITS  | 51        | 69            |
| BRISTOL BAY     | 43        | 46            |
| CALISTA         | 84        | 113           |
| CHUGACH         | 50        | 66            |
| COOK INLET      | 1,519     | 1,411         |
| DOYON           | 352       | 372           |
| KONIAG          | 38        | 50            |
| NANA            | 24        | 36            |
| SEALASKA        | 328       | 347           |
| OUTSIDE ALASKA  | 168       |               |
| UNKNOWN         |           | 1             |
| TOTAL           | 2,714     | 2,579         |

#### DEATHS BY RACE AND SEX

As individual groups, males and Natives account for a disproportionate number of deaths. Males made up 52.0 percent of the population in Alaska but accounted for 58.5 percent (1,508) of all deaths in 1998. Natives constituted 16.7 percent of the population and accounted for 23.4 percent of all deaths in 1998. The median age for all deaths was 66 years. The median age of death for males was 62 and for females was 71. The median age of death for whites was 67 and for Natives was 61.

The total number of deaths for whites in 1998 was 1,827 compared with 1,817 in 1997. The total number of deaths for Natives in 1998 was 603 compared with 617 in 1997, a decrease of 2.3 percent. The total number of deaths for all other races in 1998 was 149, compared with 148 in 1997.

To ensure more consistent reporting and calculation of rates by race in this report, the race on the death certificate has been compared with the race on the birth certificate for all decedents who were born in Alaska in 1989 or later. (1989 was the first year in which the child's race at birth was determined by the mother's race.) For those showing different races on the death and birth certificates, the race as shown on the birth certificate is used for purposes of analysis in this report.

TABLE 6.2A DEATHS BY THE DECEDENT'S CENSUS AREA OF RESIDENCE, RACE AND SEX, ALASKA, 1998

| CENSUS AREA OF    |       | RACE AND SEX OF DECEDENT |     |     |       |       |      |      |      |     |       |
|-------------------|-------|--------------------------|-----|-----|-------|-------|------|------|------|-----|-------|
| DECEDENT'S        | WH    | ITE                      | NAT | IVE | AFRIC | AN/AM | ASIA | N/PI | UNKN | OWN |       |
| RESIDENCE         | M     | F                        | M   | F   | M     | F     | M    | F    | M    | F   | TOTAL |
| ALEUTIANS EAST    |       |                          | 5   | 4   |       |       |      | 1    |      |     | 10    |
| ALEUTIANS WEST    | 2     |                          | 4   | 4   |       |       |      | 1    |      |     | 11    |
| ANCHORAGE         | 453   | 317                      | 63  | 55  | 28    | 19    | 24   | 23   | 2    | 1   | 985   |
| BETHEL            | 1     | 3                        | 42  | 30  |       |       |      |      |      |     | 76    |
| BRISTOL BAY       |       | 2                        | 1   | 3   |       |       |      |      |      |     | 6     |
| DENALI            | 4     |                          |     |     |       |       |      |      |      |     | 4     |
| DILLINGHAM        | 1     | 4                        | 12  | 9   |       |       |      |      |      |     | 26    |
| FAIRBANKS NSB     | 141   | 93                       | 13  | 14  | 11    | 6     | 4    | 4    | 2    |     | 288   |
| HAINES BOROUGH    | 9     | 5                        | 1   |     |       |       |      |      |      |     | 15    |
| JUNEAU BOROUGH    | 48    | 45                       | 16  | 6   |       |       | 2    | 3    |      |     | 120   |
| KENAI PENINSULA   | 124   | 89                       | 9   | 8   | 1     | 1     | 1    |      |      | 1   | 234   |
| KETCHIKAN         | 38    | 35                       | 7   | 8   |       |       |      | 2    |      |     | 90    |
| KODIAK ISLAND     | 21    | 11                       | 6   | 7   |       |       | 3    |      | 1    |     | 49    |
| LAKE-PENINSULA    | 2     | 2                        | 8   | 3   |       |       |      |      |      |     | 15    |
| MATANUSKA-SUSITNA | 127   | 83                       | 6   | 3   |       |       |      | 1    | 1    |     | 221   |
| NOME              | 6     |                          | 38  | 25  |       |       |      |      |      |     | 69    |
| NORTH SLOPE       | 2     |                          | 16  | 11  |       |       | 1    |      |      |     | 30    |
| NORTHWEST ARCTIC  | 1     | 2                        | 18  | 15  |       |       |      |      |      |     | 36    |
| PRINCE OF WALES   | 8     | 3                        | 7   | 4   |       |       |      |      |      |     | 22    |
| SITKA BOROUGH     | 17    | 14                       | 5   | 3   |       |       | 2    |      |      |     | 41    |
| SKGWAY-HOONAH-ANG | 12    | 2                        | 2   | 6   |       |       |      |      |      |     | 22    |
| SE FAIRBANKS      | 12    | 7                        | 4   | 3   |       | 1     |      |      |      |     | 27    |
| VALDEZ-CORDOVA    | 27    | 14                       | 7   | 5   |       |       |      |      |      | 1   | 54    |
| WADE HAMPTON      |       |                          | 23  | 14  |       |       |      |      |      |     | 37    |
| WRANGELL-PETERSBG | 16    | 12                       | 2   | 3   |       |       |      |      |      |     | 33    |
| YAKUTAT           |       | 2                        | 1   | 1   |       |       |      |      |      |     | 4     |
| YUKON-KOYUKUK     | 7     | 3                        | 29  | 14  |       |       |      |      |      |     | 53    |
| UNKNOWN           |       |                          |     |     | 1     |       |      |      |      |     | 1     |
| TOTAL             | 1,079 | 748                      | 345 | 258 | 41    | 27    | 37   | 35   | 6    | 3   | 2,579 |

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TABLE 6.2B DEATHS BY THE DECEDENT'S NATIVE REGIONAL CORPORATION OF RESIDENCE, RACE AND SEX, ALASKA, 1998

|                      |       |     | R/  | ACE A | ND SEX     | OF DEC | CEDEN    | T  |      |     |       |
|----------------------|-------|-----|-----|-------|------------|--------|----------|----|------|-----|-------|
| NRC OF DECEDENT'S    | WH    | ITE | NAT |       | AFRICAN/AM |        | ASIAN/PI |    | UNKN | OWN |       |
| RESIDENCE            | M     | F   | M   | F     | M          | F      | M        | F  | M    | F   | TOTAL |
| AHTNA INC.           | 8     | 4   | 3   | 2     |            |        |          |    |      |     | 17    |
| ALEUT CORP.          | 2     |     | 9   | 8     |            |        |          | 2  |      |     | 21    |
| ARCTIC SLOPE CORP.   | 2     |     | 16  | 11    |            |        | 1        |    |      |     | 30    |
| BERING STRAITS CORP. | 6     |     | 38  | 25    |            |        |          |    |      |     | 69    |
| BRISTOL BAY CORP.    | 2     | 8   | 21  | 15    |            |        |          |    |      |     | 46    |
| CALISTA CORP.        | 1     | 3   | 65  | 44    |            |        |          |    |      |     | 113   |
| CHUGACH NATIVES INC. | 32    | 17  | 9   | 6     | 1          |        |          |    |      | 1   | 66    |
| COOK INLET REG CORP. | 691   | 482 | 73  | 63    | 28         | 20     | 25       | 24 | 3    | 2   | 1,411 |
| DOYON LTD.           | 164   | 103 | 46  | 31    | 11         | 7      | 4        | 4  | 2    |     | 372   |
| KONIAG INC.          | 22    | 11  | 6   | 7     |            |        | 3        |    | 1    |     | 50    |
| NANA REGIONAL CORP.  | 1     | 2   | 18  | 15    |            |        |          |    |      |     | 36    |
| SEALASKA CORP.       | 148   | 118 | 41  | 31    |            |        | 4        | 5  |      |     | 347   |
| UNKNOWN              |       |     |     |       | 1          |        |          |    |      |     | 1     |
| TOTAL                | 1,079 | 748 | 345 | 258   | 41         | 27     | 37       | 35 | 6    | 3   | 2,579 |

### **DEATHS BY AGE**

TABLE 6.3A DEATHS BY THE DECEDENT'S CENSUS AREA OF RESIDENCE AND AGE, ALASKA, 1998

| CENSUS AREA OF    |    |      |       | A     | GE AT | DEAT  | H     |       |       |             |       |
|-------------------|----|------|-------|-------|-------|-------|-------|-------|-------|-------------|-------|
| DECEDENT'S        |    |      |       |       |       |       |       |       |       |             |       |
| RESIDENCE         | <5 | 5-14 | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75-84 | <b>85</b> + | TOTAL |
| ALEUTIANS EAST    |    |      |       | 1     |       | 4     | 3     |       | 2     |             | 10    |
| ALEUTIANS WEST    | 2  |      | 1     |       | 1     |       | 2     | 1     | 3     | 1           | 11    |
| ANCHORAGE         | 36 | 11   | 26    | 33    | 82    | 134   | 145   | 208   | 205   | 105         | 985   |
| BETHEL            | 3  | 3    | 6     | 8     | 7     | 3     | 8     | 14    | 12    | 12          | 76    |
| BRISTOL BAY       |    |      |       |       | 2     |       | 1     | 2     |       | 1           | 6     |
| DENALI            |    |      | 1     |       |       | 1     | 1     | 1     |       |             | 4     |
| DILLINGHAM        | 1  | 1    | 1     | 3     | 2     | 1     | 5     | 5     | 2     | 5           | 26    |
| FAIRBANKS NSB     | 4  | 5    | 14    | 22    | 29    | 44    | 44    | 51    | 45    | 30          | 288   |
| HAINES BOROUGH    |    |      |       |       |       | 3     | 3     | 3     | 5     | 1           | 15    |
| JUNEAU BOROUGH    | 2  |      | 2     | 4     | 14    | 10    | 15    | 24    | 29    | 20          | 120   |
| KENAI PENINSULA   | 6  | 3    | 2     | 4     | 15    | 30    | 33    | 53    | 55    | 33          | 234   |
| KETCHIKAN         |    |      |       |       | 3     | 11    | 14    | 23    | 26    | 13          | 90    |
| KODIAK ISLAND     | 4  |      | 6     | 3     | 4     | 6     | 8     | 9     | 4     | 5           | 49    |
| LAKE-PENINSULA    | 1  |      | 1     | 1     | 3     |       | 5     | 2     | 1     | 1           | 15    |
| MATANUSKA-SUSITNA | 4  | 3    | 8     | 10    | 21    | 25    | 31    | 55    | 42    | 22          | 221   |
| NOME              | 3  | 2    | 7     | 4     | 12    | 9     | 6     | 13    | 10    | 3           | 69    |
| NORTH SLOPE       | 1  |      | 1     | 1     | 10    | 4     | 6     | 5     | 1     | 1           | 30    |
| NORTHWEST ARCTIC  | 2  |      | 3     | 3     | 3     | 4     | 5     | 8     | 6     | 2           | 36    |
| PRINCE OF WALES   | 1  |      |       |       |       | 6     | 3     | 8     | 1     | 3           | 22    |
| SITKA BOROUGH     |    |      | 3     |       | 5     | 4     |       | 7     | 7     | 15          | 41    |
| SKGWAY-HOONAH-ANG | 1  |      |       |       | 3     | 6     | 5     | 2     | 4     | 1           | 22    |
| SE FAIRBANKS      |    |      | 5     | 1     |       | 2     | 4     | 6     | 4     | 5           | 27    |
| VALDEZ-CORDOVA    |    | 2    | 2     | 1     | 5     | 8     | 8     | 10    | 11    | 7           | 54    |
| WADE HAMPTON      | 3  | 1    | 6     | 3     | 2     | 1     | 4     | 4     | 9     | 4           | 37    |
| WRANGELL-PETERSBG |    |      | 1     | 1     |       | 4     | 3     | 9     | 11    | 4           | 33    |
| YAKUTAT           |    |      |       |       |       |       |       | 1     | 2     | 1           | 4     |
| YUKON-KOYUKUK     |    |      | 11    | 1     | 3     | 3     | 7     | 7     | 14    | 7           | 53    |
| UNKNOWN           |    |      |       |       |       |       |       | 1     |       |             | 1     |
| TOTAL             | 74 | 31   | 107   | 104   | 226   | 323   | 369   | 532   | 511   | 302         | 2,579 |

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TABLE 6.3B DEATHS BY THE DECEDENT'S NATIVE REGIONAL CORPORATION OF RESIDENCE AND AGE, ALASKA, 1998

| NRC OF DECEDENT'S |    |      |       | A     | GE AT | DEAT  | H     |       |       |     |       |
|-------------------|----|------|-------|-------|-------|-------|-------|-------|-------|-----|-------|
| RESIDENCE         | <5 | 5-14 | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75-84 | 85+ | TOTAL |
| AHTNA             |    |      |       | 1     | 1     | 3     | 4     | 3     | 2     | 3   | 17    |
| ALEUT             | 2  |      | 1     | 1     | 1     | 4     | 5     | 1     | 5     | 1   | 21    |
| ARCTIC SLOPE      | 1  |      | 1     | 1     | 10    | 4     | 6     | 5     | 1     | 1   | 30    |
| BERING STRAITS    | 3  | 2    | 7     | 4     | 12    | 9     | 6     | 13    | 10    | 3   | 69    |
| BRISTOL BAY       | 2  | 1    | 2     | 4     | 7     | 1     | 10    | 9     | 3     | 7   | 46    |
| CALISTA           | 6  | 4    | 12    | 11    | 9     | 4     | 12    | 18    | 21    | 16  | 113   |
| CHUGACH           |    | 2    | 3     |       | 8     | 11    | 7     | 11    | 15    | 9   | 66    |
| COOK INLET        | 46 | 17   | 35    | 47    | 114   | 183   | 206   | 312   | 296   | 155 | 1,411 |
| DOYON             | 4  | 5    | 31    | 24    | 32    | 50    | 56    | 65    | 63    | 42  | 372   |
| KONIAG            | 4  |      | 6     | 3     | 4     | 6     | 9     | 9     | 4     | 5   | 50    |
| NANA              | 2  |      | 3     | 3     | 3     | 4     | 5     | 8     | 6     | 2   | 36    |
| SEALASKA          | 4  |      | 6     | 5     | 25    | 44    | 43    | 77    | 85    | 58  | 347   |
| UNKNOWN           |    |      |       |       |       |       |       | 1     |       |     | 1     |
| TOTAL             | 74 | 31   | 107   | 104   | 226   | 323   | 369   | 532   | 511   | 302 | 2,579 |

Death rates vary widely by race and sex. Males and Natives have significantly higher death rates than other groups. Whites had a race-specific death rate of 400.4 per 100,000 white population, and Natives had a race-specific death rate of 583.4 per 100,000 Native population (Table 6.4A). The sex-specific death rate for Alaskan males was 469.5 deaths per 100,000 male population, and was 361.9 per 100,000 female population (Table 6.4B). Native males had a race/sex-specific death rate almost twice that of white females (Table 6.5). Rates calculated on a small number of events are not reliable. For this reason rates have been blanked out for population segments with fewer than three deaths.

TABLE 6.4A RACE-SPECIFIC DEATH RATES AND PERCENTAGES BY AGE GROUP, ALASKA, 1998

|        |       |       |          | RACE | OF DEC | CEDENT   |           |       |         |  |
|--------|-------|-------|----------|------|--------|----------|-----------|-------|---------|--|
| AGE AT |       | WHITE | E        |      | NATIV  | E        | ALL OTHER |       |         |  |
| DEATH  | DTHS  | PCT   | RATE     | DTHS | PCT    | RATE     | DTHS      | PCT   | RATE    |  |
| <5     | 39    | 2.1   | 111.2    | 24   | 4.0    | 207.7    | 11        | 7.4   | 209.3   |  |
| 5-14   | 19    | 1.0   | 25.0     | 9    | 1.5    | 35.8     | 3         | 2.0   | 28.6    |  |
| 15-24  | 56    | 3.1   | 101.4    | 44   | 7.3    | 251.0    | 7         | 4.7   | 77.2    |  |
| 25-34  | 58    | 3.2   | 92.0     | 36   | 6.0    | 257.0    | 10        | 6.7   | 87.7    |  |
| 35-44  | 122   | 6.7   | 127.4    | 92   | 15.3   | 622.5    | 12        | 8.1   | 122.5   |  |
| 45-54  | 248   | 13.6  | 335.3    | 52   | 8.6    | 551.3    | 23        | 15.4  | 369.7   |  |
| 55-64  | 272   | 14.9  | 829.1    | 77   | 12.8   | 1,386.4  | 20        | 13.4  | 764.8   |  |
| 65-74  | 391   | 21.4  | 2,470.8  | 112  | 18.6   | 3,368.4  | 29        | 19.5  | 1,637.5 |  |
| 75-84  | 396   | 21.7  | 5,490.1  | 92   | 15.3   | 6,013.1  | 23        | 15.4  | 3,299.9 |  |
| 85+    | 226   | 12.4  | 17,121.2 | 65   | 10.8   | 13,569.9 | 11        | 7.4   | 8,593.8 |  |
| TOTAL  | 1,827 | 100.0 | 400.4    | 603  | 100.0  | 583.4    | 149       | 100.0 | 259.4   |  |

TABLE 6.4B SEX-SPECIFIC DEATH RATES AND PERCENTAGES BY AGE GROUP, ALASKA, 1998

|       |       |       | SEX OF D |       |       |          |       |       |          |  |
|-------|-------|-------|----------|-------|-------|----------|-------|-------|----------|--|
|       |       | MALE  |          |       | FEMAL | E        | TOTAL |       |          |  |
| AGE   | DTHS  | PCT   | RATE     | DTHS  | PCT   | RATE     | DTHS  | PCT   | RATE     |  |
| <5    | 50    | 3.3   | 188.9    | 24    | 2.2   | 94.5     | 74    | 2.9   | 142.6    |  |
| 5-14  | 18    | 1.2   | 31.4     | 13    | 1.2   | 23.9     | 31    | 1.2   | 27.7     |  |
| 15-24 | 89    | 5.9   | 211.4    | 18    | 1.7   | 45.3     | 107   | 4.1   | 130.8    |  |
| 25-34 | 71    | 4.7   | 149.3    | 33    | 3.1   | 80.7     | 104   | 4.0   | 117.6    |  |
| 35-44 | 144   | 9.5   | 230.9    | 82    | 7.7   | 141.5    | 226   | 8.8   | 187.8    |  |
| 45-54 | 228   | 15.1  | 472.8    | 95    | 8.9   | 229.5    | 323   | 12.5  | 360.4    |  |
| 55-64 | 229   | 15.2  | 1,045.5  | 140   | 13.1  | 734.0    | 369   | 14.3  | 900.5    |  |
| 65-74 | 313   | 20.8  | 3,008.5  | 219   | 20.4  | 2,082.3  | 532   | 20.6  | 2,542.9  |  |
| 75-84 | 261   | 17.3  | 6,260.5  | 250   | 23.3  | 4,742.9  | 511   | 19.8  | 5,413.1  |  |
| 85+   | 105   | 7.0   | 14,522.8 | 197   | 18.4  | 16,362.1 | 302   | 11.7  | 15,672.0 |  |
| TOTAL | 1,508 | 100.0 | 469.5    | 1,071 | 100.0 | 361.9    | 2,579 | 100.0 | 417.9    |  |

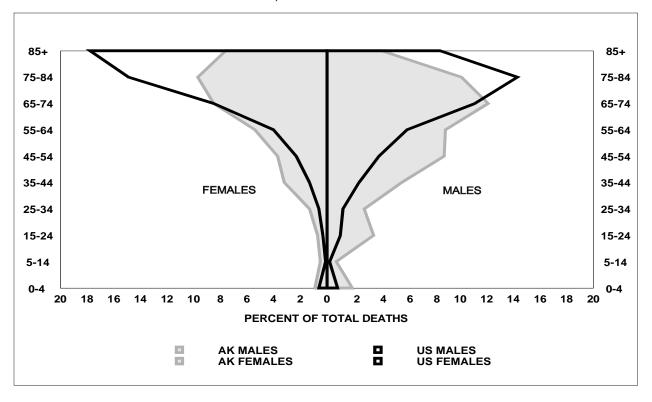
TABLE 6.5 RACE/SEX-SPECIFIC DEATH RATES AND PERCENTAGES BY AGE GROUP, ALASKA, 1998

|       |       |       | WH       | TE  |       |          |     |       | NAT      | IVE | ,     |          | ALL OTHER |       |         |     |       |          |
|-------|-------|-------|----------|-----|-------|----------|-----|-------|----------|-----|-------|----------|-----------|-------|---------|-----|-------|----------|
|       |       | MAL   | Æ        | F   | 'EMA  | LE       |     | MAI   | LE       | F   | EMA   | LE       |           | MAI   | Æ       | F   | 'EMA  | LE       |
| AGE   | DTH   | PCT   | RATE     | DTH | PCT   | RATE     | DTH | PCT   | RATE     | DTH | PCT   | RATE     | DTH       | PCT   | RATE    | DTH | PCT   | RATE     |
| <5    | 27    | 2.5   | 151.2    | 12  | 1.6   | 69.7     | 16  | 4.6   | 269.3    | 8   | 3.1   | 142.5    | 7         | 8.3   | 262.2   | 4   | 6.2   | 154.7    |
| 5-14  | 11    | 1.0   | 28.1     | 8   | 1.1   | 21.7     | 5   | 1.4   | 39.0     | 4   | 1.6   | 32.4     | 2         | 2.4   |         | 1   | 1.5   |          |
| 15-24 | 49    | 4.5   | 175.1    | 7   | 0.9   | 25.7     | 33  | 9.6   | 365.8    | 11  | 4.3   | 129.2    | 7         | 8.3   | 137.1   |     |       |          |
| 25-34 | 39    | 3.6   | 115.6    | 19  | 2.5   | 64.8     | 24  | 7.0   | 329.2    | 12  | 4.7   | 178.6    | 8         | 9.5   | 122.3   | 2   | 3.1   |          |
| 35-44 | 78    | 7.2   | 154.7    | 44  | 5.9   | 97.1     | 57  | 16.5  | 804.4    | 35  | 13.6  | 455.0    | 9         | 10.7  | 185.4   | 3   | 4.6   | 60.7     |
| 45-54 | 176   | 16.3  | 435.0    | 72  | 9.6   | 214.9    | 34  | 9.9   | 735.0    | 18  | 7.0   | 374.5    | 18        | 21.4  | 572.7   | 5   | 7.7   | 162.4    |
| 55-64 | 183   | 17.0  | 1,009.4  | 89  | 11.9  | 606.3    | 36  | 10.4  | 1,380.9  | 41  | 15.9  | 1,391.2  | 10        | 11.9  | 857.6   | 10  | 15.4  | 690.1    |
| 65-74 | 237   | 22.0  | 2,889.9  | 154 | 20.6  | 2,019.9  | 60  | 17.4  | 3,965.6  | 52  | 20.2  | 2,869.8  | 16        | 19.0  | 2,318.8 | 13  | 20.0  | 1,202.6  |
| 75-84 | 200   | 18.5  | 6,015.0  | 196 | 26.2  | 5,041.2  | 55  | 15.9  | 9,182.0  | 37  | 14.3  | 3,974.2  | 6         | 7.1   | 2,449.0 | 17  | 26.2  | 3,761.1  |
| 85+   | 79    | 7.3   | 17,211.3 | 147 | 19.7  | 17,073.2 | 25  | 7.2   | 13,297.9 | 40  | 15.5  | 13,745.7 | 1         | 1.2   |         | 10  | 15.4  | 19,230.8 |
| TOTAL | 1,079 | 100.0 | 450.1    | 748 | 100.0 | 345.4    | 345 | 100.0 | 667.3    | 258 | 100.0 | 499.4    | 84        | 100.0 | 282.4   | 65  | 100.0 | 234.6    |

Chart 6.1 shows the percent of total deaths for Alaska and the United States by age group and sex. The percentage of U.S. residents dying after age 75 is higher than for Alaska, while the percentage of total deaths for Alaskans dying before age 75 is more than for the United States.

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CHART 6.1 PERCENT OF DEATHS BY AGE AND SEX, ALASKA AND THE UNITED STATES, 1998<sup>2</sup>



#### **AGE-ADJUSTED DEATH RATES**

Since the population of Alaska is younger than the population of the country as a whole, crude death rates and percentages by age do not provide a valid comparison between the two populations. In this case, age-adjusted death rates are used. Please refer to Appendix B for an explanation of how age-adjusted death rates are calculated. Table 6.6 shows age adjusted death rates for Alaska and the United States<sup>3</sup> for certain populations.

Chart 6.2 compares age-adjusted death rates for the populations of Alaska and the United States from 1990 through 1998. Rates are per 100,000 population, adjusted to the 1940 U.S. standard million population. (See Appendix A for the definition of *standard million population*.)

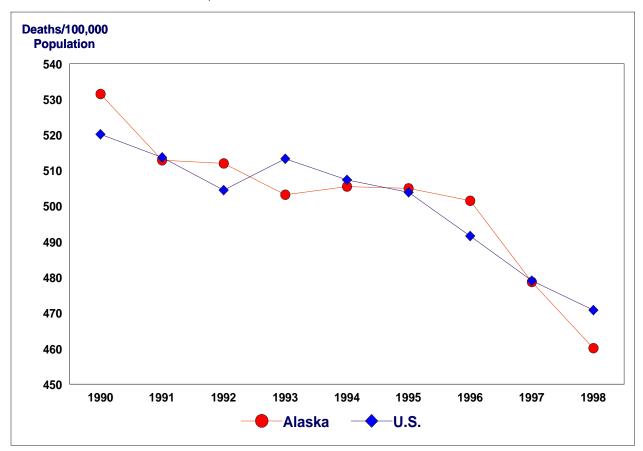
National Center for Health Statistics, U.S. Department of Health and Human Services, "Births and Deaths: Preliminary Data for 1998" National Vital Statistics Report, Vol. 47, No. 25, October 5, 1999, Table 10, p. 20.

<sup>3</sup> Ibid., Table 10, pp. 19-22.

TABLE 6.6 AGE-ADJUSTED DEATH RATES FOR CERTAIN POPULATIONS, ALASKA AND UNITED STATES, 1992-1998

| POPULATION           | 1992  | 1993  | 1994  | 1995  | 1996  | 1997  | 1998  |
|----------------------|-------|-------|-------|-------|-------|-------|-------|
| Alaska Males         | 627.4 | 622.2 | 623.4 | 629.0 | 604.7 | 587.0 | 549.1 |
| U.S. Males           | 656.0 | 664.9 | 654.6 | 646.3 | 623.7 | 602.8 | 587.9 |
| Alaska Females       | 395.6 | 382.3 | 385.8 | 376.1 | 394.6 | 366.9 | 366.8 |
| U.S. Females         | 380.3 | 388.3 | 385.2 | 385.2 | 381.0 | 375.7 | 372.3 |
| Alaska Whites        | 467.7 | 458.8 | 466.2 | 481.2 | 468.0 | 446.3 | 432.4 |
| U.S. Whites          | 477.5 | 485.1 | 479.8 | 476.9 | 466.8 | 456.5 | 450.4 |
| Alaska Natives       | 791.9 | 764.3 | 793.0 | 686.2 | 734.4 | 715.5 | 677.7 |
| U.S. American Indian | 453.1 | 468.9 | 460.7 | 468.5 | 456.7 | 465.3 | 458.6 |
| Alaska Other Races   | 376.6 | 403.5 | 332.0 | 397.7 | 391.2 | 353.9 | 332.1 |
| Alaska Total         | 512.0 | 503.2 | 505.5 | 505.0 | 501.5 | 478.7 | 460.1 |
| U.S. Total           | 504.5 | 513.3 | 507.4 | 503.9 | 491.6 | 479.1 | 470.8 |

CHART 6.2 AGE-ADJUSTED DEATH RATES, ALASKA AND THE UNITED STATES, 1990-1998



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#### **EXPECTATION OF LIFE**

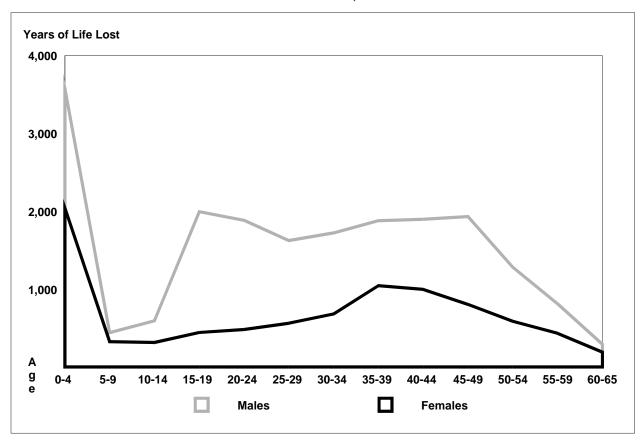
The expectation of life at birth for 1998 is the average number of years that infants born during 1998 could expect to live if they were to experience the same age-specific death rates experienced during 1998. The expectation of life for the United States during 1998 was 76.7, surpassing the previous record high of 76.5 years in 1997. In Alaska, expectation of life is calculated using five years of data to reduce the possibility of year-to-year random fluctuations. From 1994-1998, the expectation of life in Alaska was 74.7, 0.2 years more than in the five years from 1993-1997. Females generally have a longer life expectancy than males. For Alaskan females, the 1994-1998 expectation of life was 77.5, 0.1 years more than the five years from 1993-1997, and for males it was 72.3, a 0.2 year increase from the previous period; whites had a life expectancy of 75.7, a 0.1 year increase; and Natives had a life expectancy of 69.4 years, up from 69.0 from 1993-1997. For an explanation of how expectation of life is calculated, see Appendix B.

#### YEARS OF LIFE LOST

Years of Life Lost (YLL) emphasizes mortality in younger populations and is calculated by multiplying the number of deaths within an age group by the number of years of productive life lost. (For more information on calculation of Years of Life Lost, see Appendix B.)

Chart 6.3 shows YLL for males and females in Alaska. For calculation purposes, deaths were assumed to occur at the midpoint of the age interval. Data in Chart 6.3 are based upon a standard definition of 65 years of productive life for males and females and was derived by averaging data for a three-year period, from 1996 to 1998.

CHART 6.3 YEARS OF LIFE LOST IN ALASKA BY FIVE-YEAR AGE GROUPS, 3-YEAR AVERAGE VALUES, 1996-1998



4 Ibid., page 5.

#### CAUSES OF DEATH IN ALASKA

As used in this report, *cause of death* is the underlying cause of death shown on the death certificate. The underlying cause of death is defined by the World Health Organization's International Classification of Diseases, Ninth Revision (ICD-9) as the disease or injury which initiated the sequence of morbid events leading directly to the death, or the circumstances of the accident or violence which produced the fatal injury. The National Center for Health Statistics has categorized causes of death for the purpose of uniform analyses in all 50 states. For statistical purposes, causes of death are generally grouped into 72 selected categories. For special analyses, causes of death have been broken into other categories. Appendix C lists the selected causes of death used in the following tables and specifies the ICD-9 codes associated with each.

Table 6.7A lists the age-adjusted death rates for Alaska and the United States for the total population, males, and females, for the ten leading causes of death in Alaska. United States' rankings are given in parentheses. Chart 6.4 is a graph of the age-adjusted death rates for the United States and Alaska (with confidence intervals) for Alaska's ten leading causes of death. This chart shows that the age-adjusted death rates for accidents and suicides in Alaska are significantly higher than the U.S. rates; however, the U.S. rates for heart disease, cancer, and pneumonia and influenza are significantly higher than the Alaska rates. (For an explanation of confidence intervals, see Appendix B.)

TABLE 6.7A COMPARISON OF AGE-ADJUSTED DEATH RATES FOR THE TEN LEADING CAUSES OF DEATH IN ALASKA, ALASKA AND THE UNITED STATES, 1998 (US RANKINGS IN PARENTHESES)<sup>6</sup>

|  | TOT    | ΓAL   | ALA   | SKA    |
|--|--------|-------|-------|--------|
| CAUSE OF DEATH                               | ALASKA | U.S.  | MALE  | FEMALE |
| 1 (2) CANCER                                 | 120.3  | 122.9 | 134.2 | 108.2  |
| 2 (1) HEART DISEASE                          | 100.2  | 126.0 | 138.4 | 61.9   |
| 3 (6) ACCIDENTS & ADVERSE EFFECTS            | 42.0   | 28.5  | 58.7  | 23.5   |
| 4 (3) CEREBROVASCULAR DISEASES               | 26.6   | 25.0  | 22.6  | 29.2   |
| 5 (8) SUICIDE                                | 23.7   | 10.0  | 36.7  | 9.6    |
| 6 (4) CHRONIC OBSTRUCTIVE PULMONARY DISEASES | 21.5   | 21.6  | 21.3  | 22.2   |
| 7 (7) DIABETES MELLITUS                      | 12.4   | 13.6  | 11.5  | 13.1   |
| 8 (5) PNEUMONIA & INFLUENZA                  | 9.1    | 13.5  | 9.2   | 8.9    |
| 9 (10) CHRONIC LIVER DISEASE & CIRRHOSIS     | 8.2    | 7.1   | 9.7   | 6.4    |
| 10 (13) HOMICIDE & LEGAL INTERVENTION        | 7.6    | 6.9   | 10.4  | 4.4    |
| ALL CAUSES                                   | 460.1  | 470.6 | 549.1 | 366.8  |

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<sup>5</sup> National Center for Health Statistics, Public Health Service, U.S. Department of Health and Human Services, "Vital Statistics: ICD-9 Underlying Cause-of-Death Lists for Tabulating Mortality Statistics," *Instruction Manual, Part 9, Tabulation*, Effective 1979.

<sup>6</sup> National Center for Health Statistics, U.S. Department of Health and Human Services, "Births and Deaths: Preliminary Data for 1998," *National Vital Statistics Report*, Vol. 47, No. 25, October 5, 1999, Table E, p. 6.

CHART 6.4 AGE-ADJUSTED DEATH RATES WITH 95 PERCENT
CONFIDENCE INTERVALS FOR ALASKA, AND RATES FOR THE
UNITED STATES, BY CAUSE, 1998

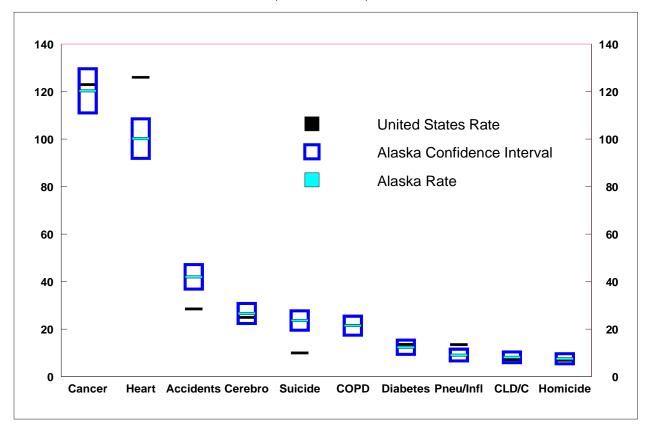


TABLE 6.7B DEATHS, DEATH RATES AND PERCENTAGES FOR THE FIFTEEN LEADING CAUSES OF DEATH IN THE U.S. AND ALASKA, 1998 (ALASKA RANK IN PARENTHESES)

|   |        | ALASKA | U.S.  |        |       |
|---|--------|--------|-------|--------|-------|
| 15 LEADING CAUSES OF DEATH IN THE U.S. (AND       | ALASKA |        |       | ALASKA | U.S.  |
| ALASKA)   | DEATHS | RATE   | RATE  | PCT    | PCT_  |
| 01 (02) HEART DISEASE                             | 560    | 90.7   | 268.0 | 21.7   | 31.0  |
| 02 (01) CANCER                                    | 648    | 105.0  | 199.4 | 25.1   | 23.1  |
| 03 (04) CEREBROVASCULAR DISEASES                  | 153    | 24.8   | 58.5  | 5.9    | 6.8   |
| 04 (06) CHRONIC OBSTRUCTIVE PULMONARY DISEASES    | 111    | 18.0   | 42.3  | 4.3    | 4.9   |
| 05 (08) PNEUMONIA & INFLUENZA                     | 53     | 8.6    | 35.1  | 2.1    | 4.1   |
| 06 (03) ACCIDENTS & ADVERSE EFFECTS               | 256    | 41.5   | 34.5  | 9.9    | 4.0   |
| 07 (07) DIABETES MELLITUS                         | 65     | 10.5   | 23.9  | 2.5    | 2.8   |
| 08 (05) SUICIDE                                   | 131    | 21.2   | 10.8  | 5.1    | 1.2   |
| 09 (16) NEPHRITIS, NEPHROTIC SYNDROME & NEPHROSIS | 12     | 1.9    | 9.7   | 0.5    | 1.1   |
| 10 (09) CHRONIC LIVER DISEASE & CIRRHOSIS         | 50     | 8.1    | 9.2   | 1.9    | 1.1   |
| 11 (14) SEPTICEMIA                                | 15     | 2.4    | 8.7   | 0.6    | 1.0   |
| 12 (15) ALZHEIMER'S DISEASE                       | 14     | 2.3    | 8.4   | 0.5    | 1.0   |
| 13 (10) HOMICIDE & LEGAL INTERVENTION             | 48     | 7.8    | 6.4   | 1.9    | 0.7   |
| 14 (18) ATHEROSCLEROSIS                           | 11     | 1.8    | 5.7   | 0.4    | 0.7   |
| 15 (19) HYPERTENSION                              | 7      | 1.1    | 5.3   | 0.3    | 0.6   |
| ALL OTHER CAUSES                                  | 445    | 72.1   | 139.1 | 17.3   | 16.1  |
| ALL CAUSES  | 2,579  | 417.9  | 865.0 | 100.0  | 100.0 |

Tables 6.7A and 6.7B and Chart 6.4 show different rankings for the leading causes of death in Alaska and the United States. There is also a difference in the rankings of the leading causes of death in Alaska for males and females, and for whites and Natives. Table 6.7C shows the rankings of the leading causes of death for each group.

TABLE 6.7C RANK OF LEADING CAUSES OF DEATH IN ALASKA AND THE UNITED STATES, 1998

|  | RAN    | K    |      | ALASKA I | RANKINO | S      |
|--|--------|------|------|----------|---------|--------|
| 15 LEADING CAUSES OF DEATH IN ALASKA   | ALASKA | U.S. | MALE | FEMALE   | WHITE   | NATIVE |
| CANCER                                 | 1      | 2    | 2    | 1        | 1       | 1      |
| HEART DISEASE                          | 2      | 1    | 1    | 2        | 2       | 2      |
| ACCIDENTS & ADVERSE EFFECTS            | 3      | 6    | 3    | 4        | 3       | 3      |
| CEREBROVASCULAR DISEASES               | 4      | 3    | 5    | 3        | 4       | 5      |
| SUICIDE                                | 5      | 8    | 4    | 8        | 6       | 4      |
| CHRONIC OBSTRUCTIVE PULMONARY DISEASES | 6      | 4    | 6    | 5        | 5       | 6      |
| DIABETES MELLITUS                      | 7      | 7    | 8    | 6        | 7       | 10     |
| PNEUMONIA & INFLUENZA                  | 8      | 5    | 10   | 7        | 9       | 7      |
| CHRONIC LIVER DISEASE & CIRRHOSIS      | 9      | 10   | 8    | 9        | 8       | 9      |
| HOMICIDE & LEGAL INTERVENTION          | 10     | 13   | 7    | 10       | 10      | 8      |
| CONGENITAL ANOMALIES                   | 11     | N/A  | 12   | 11       | 11      | 14     |
| SIDS                                   | 12     | N/A  | 11   | 21       | 14      | 11     |
| PERINATAL PERIOD CONDITIONS            | 13     | N/A  | 13   | 15       | 14      | 11     |
| SEPTICEMIA                             | 14     | 11   | 14   | 15       | 18      | 11     |
| ALZHEIMER'S DISEASE                    | 15     | 12   | 16   | 12       | 12      | N/A    |

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CHART 6.5 AGE-ADJUSTED DEATH RATES WITH 95 PERCENT CONFIDENCE INTERVALS BY SEX FOR THE TEN LEADING CAUSES OF DEATH IN ALASKA, 1998

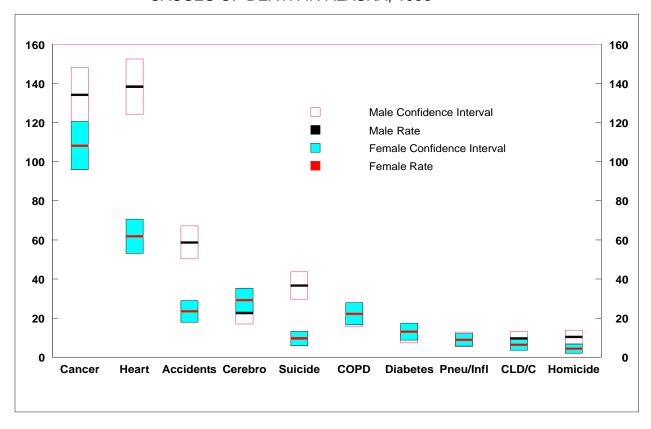
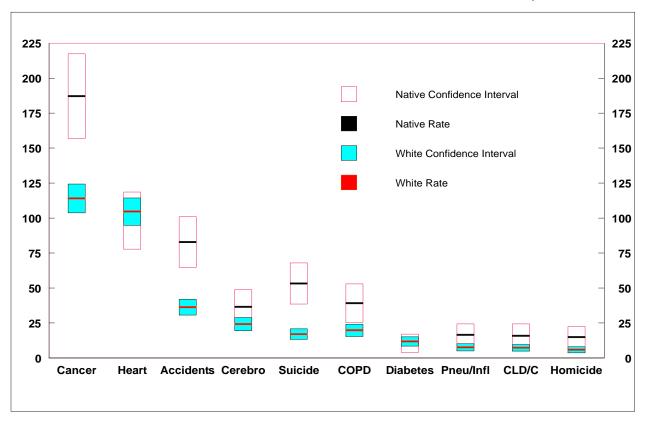


CHART 6.6 AGE-ADJUSTED DEATH RATES WITH 95 PERCENT CONFIDENCE INTERVALS FOR WHITES AND NATIVES FOR THE TEN LEADING CAUSES OF DEATH IN ALASKA, 1998



Charts 6.4 through 6.6 show comparisons of the age-adjusted death rates for the leading causes of death for the United States and Alaska (Chart 6.4), for Alaskan males and females (Chart 6.5), and for Alaskan whites and Natives (Chart 6.6). Except for U.S. rates in Chart 6.4, all charts include specific rates with 95 percent confidence intervals for each rate. (See Appendix B for an explanation of confidence intervals.) Also refer to Table 6.7C for rankings for specific populations. Table 6.7D shows the age-adjusted death rates by cause for Alaska for the years 1994-1998, and for the United States for 1997 and 1998.

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TABLE 6.7D

AGE-ADJUSTED DEATH RATES FOR THE TEN LEADING CAUSES OF DEATH IN ALASKA, 1994-1998, AND UNITED STATES, 1997-1998<sup>7</sup>

|  |       | AGE-  | ADJUS | TED DI | EATH R | RATE  |       |
|--|-------|-------|-------|--------|--------|-------|-------|
|  |       | Α     | LASK  | 4      |        | U,    | S.    |
| CAUSE OF DEATH                         | 1994  | 1995  | 1996  | 1997   | 1998   | 1997  | 1998  |
| CANCER                                 | 124.7 | 120.4 | 131.3 | 120.8  | 120.3  | 125.6 | 122.9 |
| HEART DISEASE                          | 116.3 | 114.7 | 103.5 | 103.9  | 100.2  | 130.5 | 126.0 |
| ACCIDENTS & ADVERSE EFFECTS            | 55.4  | 56.0  | 56.5  | 46.3   | 42.0   | 30.1  | 28.5  |
| CEREBROVASCULAR DISEASES               | 26.6  | 29.6  | 26.8  | 24.1   | 26.6   | 25.9  | 25.0  |
| SUICIDE                                | 26.6  | 21.0  | 22.8  | 21.7   | 23.7   | 10.6  | 10.0  |
| CHRONIC OBSTRUCTIVE PULMONARY DISEASES | 22.9  | 23.5  | 24.4  | 23.8   | 21.5   | 21.1  | 21.6  |
| DIABETES MELLITUS                      | 10.8  | 11.6  | 13.2  | 16.1   | 12.4   | 13.5  | 13.6  |
| PNEUMONIA & INFLUENZA                  | 11.1  | 11.2  | 6.5   | 8.7    | 9.1    | 12.9  | 13.5  |
| CHRONIC LIVER DISEASE & CIRRHOSIS      | 7.9   | 10.9  | 9.2   | 8.0    | 8.2    | 7.4   | 7.1   |
| HOMICIDE & LEGAL INTERVENTION          | 8.6   | 10.1  | 7.3   | 8.6    | 7.6    | 8.0   | 6.9   |
| ALL CAUSES                             | 505.5 | 505.0 | 501.5 | 478.7  | 460.1  | 479.1 | 470.6 |

## **Smoking Related Deaths**

While not listed as the underlying cause of death, smoking kills more Alaskans than accidents, suicides, and homicides combined (the third, fourth, and eighth leading causes of death in Alaska). Using software provided by the Centers for Disease Control, the Section of Epidemiology estimates that 26.5 percent of all cardiovascular deaths (ICD-9 codes 390-448), 33.0 percent of all cancer deaths (ICD-9 codes 140-208), 51.7 percent of all respiratory disease deaths (ICD-9 codes 460-519), and 6.9 percent of infant deaths for ICD-9 codes 740-779 (congenital anomalies and perinatal period conditions) and 798.0 (sudden infant death syndrome) are smoking related. Using these estimates, 581 cardiovascular deaths, 631 cancer deaths, 296 respiratory deaths, and 10 infant deaths were attributable to smoking from 1996 to 1998. In addition, ICD-9 code 305.1 refers directly to tobacco dependence which resulted in another five deaths in the three-year period. This brings the total of smoking-related deaths to 1,523. In comparison, the total number of deaths from 1996 to 1998 due to accidents, suicides and homicides was 1,350.

### INTERNAL CAUSES OF DEATH

#### Cancer

Cancer ranked as the leading cause of death in Alaska in 1998 with a total of 648 deaths compared with 616 deaths in 1997. The age-adjusted cancer death rate fell from an all-time high of 131.3 deaths per 100,000 population in 1996 to 120.8 in 1998. Cancer ranked as the leading cause of death in Alaska for the first time in 1990, and has been the leading cause of death every year since with one exception: heart disease was the leading cause of death in 1992.

The Section of Epidemiology estimates that 1/3 of all cancer deaths are related to smoking. (Refer to "Smoking Related Deaths" on page 97.)

When calculating Years of Life Lost (YLL) by cause of death, cancer results in the third greatest number of years of life lost (3,636).

<sup>7</sup> National Center for Health Statistics, U.S. Department of Health and Human Services, "Births and Deaths: Preliminary Data for 1998," *National Vital Statistics Reports*, Vol. 47, number 25, October 5, 1999, Table E, p. 6.

<sup>8</sup> Schumacher, Catherine, MD, MSPH, Department of Health and Social Services, Division of Public Health, Section of Epidemiology, *Bulletin*, No. 1, January 12, 1996.

#### **Heart Disease**

Heart disease ranked as the second leading cause of death in 1998 with 560 deaths. This is a 2.0 percent decrease from the 549 deaths from heart disease in 1997. The age-adjusted death rate for heart disease decreased to 100.2 from 103.9 per 100,000 population in 1997. Heart disease is ranked fourth in years of life lost (2,373 years). The age-adjusted death rate from heart disease for whites and Natives is not significantly different.

The Section of Epidemiology estimates that 26.5 percent of all deaths from cardiovascular disease (heart disease, hypertension, cerebrovascular disease, and atherosclerosis) are related to smoking.

Heart disease is the leading cause of death in the United States. Heart disease was the leading cause of death in Alaska from 1986 through 1989, and in 1992.

#### Cerebrovascular Disease

Cerebrovascular disease was the fourth leading cause of death in Alaska in 1998 as in the previous three years. There were 153 deaths from cerebrovascular disease in 1998, compared with 132 deaths in 1997, a 15.9 percent increase. People age 65 and over accounted for 72.5 percent of all cerebrovascular deaths. The age adjusted death rate for cerebrovascular disease was 26.6, up from 24.1 in 1997.

## **Chronic Obstructive Pulmonary Diseases (COPD)**

Chronic Obstructive Pulmonary Disease was the sixth leading cause of death in Alaska in 1998. There were 111 deaths from chronic obstructive pulmonary disease in 1998, down from 120 deaths in 1997. People aged 65 and over accounted for 78.4 percent of all COPD deaths. The Section of Epidemiology estimates that 51.7 percent of all COPD deaths are related to smoking. The age adjusted death rate for COPD in 1998 was 21.5, down from 23.8 in 1997.

#### **Diabetes Mellitus**

Diabetes Mellitus was the seventh leading cause of death in Alaska in 1998 with 65 deaths, down from 79 deaths in 1997 and 64 deaths in 1996. There is no significant difference between the age-adjusted death rates for diabetes between whites and Natives.

# **Human Immunodeficiency Virus (HIV) infections**

Deaths to Alaskans from human immunodeficiency virus (HIV) infections decreased to 6 deaths in 1998 from 10 deaths in 1997. Total deaths from HIV in 1998 is the lowest since before 1986 when the first deaths from HIV were recorded in Alaska.

#### **EXTERNAL CAUSES OF DEATH**

External causes of death, i.e. violent deaths, include four causes: accidents, suicide, homicide, and "other". "Other" includes violent deaths for which the manner of death is unknown; it could be accidental, suicide, or homicide. Young people are more likely to die of external causes than older people. While 17.0 percent of all deaths were from external causes, 53.6 percent of all deaths to people from birth to age 44 were from external causes. Males experienced a crude death rate from external causes almost three times that of females (102.1 per 100,000 population compared to 37.5 for females). Natives experienced a crude death rate from external causes more than double that of whites (140.3 per 100,000 compared to 58.5 for whites). In the United States in 1998, 6.1 percent of all deaths were due to external causes compared to 17.0 percent of all deaths in Alaska.

#### **Accidents and Adverse Effects**

Accidents and adverse effects ranked as the third leading cause of death in Alaska in 1998 with 256 deaths, down from 268 accidental deaths in 1997. The age-adjusted death rate for accidents and adverse effects was 42.0 deaths per 100,000 population in 1998, down from 46.3 in 1997. Accidents and adverse effects have been the third leading cause of death in Alaska every year since 1986. From 1980 through 1985, accidents was the leading cause of death every year except for 1981 and 1982 when it was the second leading cause of death.

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When Years of Life Lost (YLL) is calculated by cause of death, accidents and adverse effects results in the greatest number of Years of Life Lost (8,067 years).

From 1986 through to 1994, accidents and adverse effects was the leading cause of death for Alaska Natives every year except for 1989 and 1993 when it was the second leading cause of death. From 1995 through 1998, accidents and adverse effects has been the third leading cause of death for Alaska Natives. In 1998 accidents and adverse effects was the second leading cause of death for Alaska Native males.

Accidents and adverse effects was the leading cause of death for all age groups from one year up to 45 years. Accidents and adverse effects ranked as the fifth leading cause of death in the United States in 1998.

#### Suicide

Suicide ranked as the fifth leading cause of death in Alaska in 1998 with 131 deaths, up from 129 suicide deaths in 1997. The age-adjusted suicide death rate for 1998 was 23.7 deaths per 100,000 population, up from 21.7 in 1997.

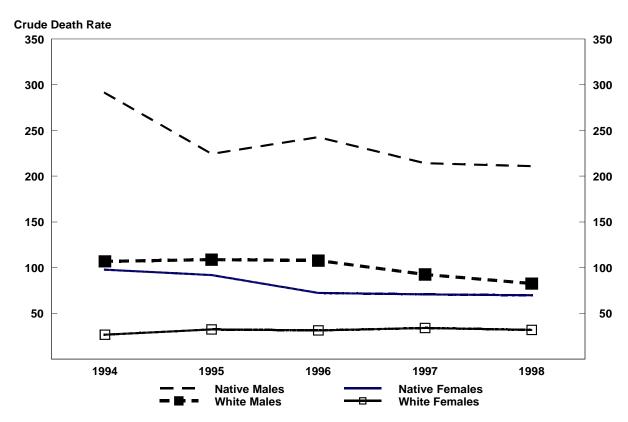
In the 15-24 year age group, there were 44 deaths from suicide, and in the 25-34 year age group there were 23 suicide deaths in 1998, making suicide the second leading cause of death in these age groups. Together, accidents and suicides accounted for 71.6 percent of all deaths in the 15-34 age group. After accidents and adverse effects, suicide results in the greatest number of years of life lost (3,696).

#### **Homicide**

Homicide and legal intervention decreased by 21.8 percent, from 55 deaths in 1997 to 48 deaths in 1998. Males made up 70.8 percent of homicide victims. Whites constituted 58.3 percent of homicide victims; Natives 31.3 percent. Eighty-five percent of all homicide victims were between the ages of 15 and 54.

Homicide was the tenth leading cause of death in 1998, down from the eighth leading cause of death in 1997. It was the fifth leading cause of death in years of life lost (1,512).

CHART 6.7 CRUDE DEATH RATES FOR EXTERNAL CAUSES OF DEATH FOR ALASKA WHITE AND NATIVE RESIDENTS BY SEX, 1992-1998



### SPECIFIC DEATH RATES BY CAUSE OF DEATH

Tables 6.8A through 6.10B provide numbers and percentages of deaths by cause for specific populations (by sex, race, and age). Sex-specific, race-specific, sex/race-specific, and age-specific rates are also given. In cases where there were fewer than three deaths, the rates have been blanked out since rates based on small numbers are not meaningful.

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TABLE 6.8A ALASKA RESIDENT DEATHS, PERCENT, AND SEX-SPECIFIC DEATH RATES FOR THE FIFTEEN LEADING CAUSES OF DEATH IN THE UNITED STATES, 1998

|   |       | MALE  | E     | F     | EMAL  | Æ     |       |
|---|-------|-------|-------|-------|-------|-------|-------|
| 15 LEADING CAUSES OF DEATH IN THE U.S.      | DEA'  | THS   |       | DEA'  |       |       |       |
| BY RANK                                     | NO.   | PCT   | RATE  | NO.   | PCT   | RATE  | TOTAL |
| 1 HEART DISEASE                             | 368   | 24.4  | 114.6 | 192   | 17.9  | 64.9  | 560   |
| 2 CANCER                                    | 353   | 23.4  | 109.9 | 295   | 27.5  | 99.7  | 648   |
| 3 CEREBROVASCULAR DISEASES                  | 62    | 4.1   | 19.3  | 91    | 8.5   | 30.8  | 153   |
| 4 CHRONIC OBSTRUCTIVE PULMONARY DISEASES    | 52    | 3.4   | 16.2  | 59    | 5.5   | 19.9  | 111   |
| 5 PNEUMONIA & INFLUENZA                     | 23    | 1.5   | 7.2   | 30    | 2.8   | 10.1  | 53    |
| 6 ACCIDENTS & ADVERSE EFFECTS               | 187   | 12.4  | 58.2  | 69    | 6.4   | 23.3  | 256   |
| 7 DIABETES MELLITUS                         | 30    | 2.0   | 9.3   | 35    | 3.3   | 11.8  | 65    |
| 8 SUICIDE                                   | 105   | 7.0   | 32.7  | 26    | 2.4   | 8.8   | 131   |
| 9 NEPHRITIS, NEPHROTIC SYNDROME & NEPHROSIS | 8     | 0.5   | 2.5   | 4     | 0.4   | 1.4   | 12    |
| 10 CHRONIC LIVER DISEASE & CIRRHOSIS        | 30    | 2.0   | 9.3   | 20    | 1.9   | 6.8   | 50    |
| 11 SEPTICEMIA                               | 10    | 0.7   | 3.1   | 5     | 0.5   | 1.7   | 15    |
| 12 ALZHEIMER'S DISEASE                      | 6     | 0.4   | 1.9   | 8     | 0.7   | 2.7   | 14    |
| 13 HOMICIDE & LEGAL INTERVENTION            | 34    | 2.3   | 10.6  | 14    | 1.3   | 4.7   | 48    |
| 14 ATHEROSCLEROSIS                          | 5     | 0.3   | 1.6   | 6     | 0.6   | 2.0   | 11    |
| 15 HYPERTENSION                             | 2     | 0.1   |       | 5     | 0.5   | 1.7   | 7     |
| ALL OTHER CAUSES                            | 233   | 15.5  | 72.5  | 212   | 19.8  | 71.6  | 445   |
| TOTAL                                       | 1,508 | 100.0 | 468.9 | 1,071 | 100.0 | 361.9 | 2,579 |

TABLE 6.8B ALASKA RESIDENT DEATHS, PERCENT, AND RACE-SPECIFIC DEATH RATES FOR THE FIFTEEN LEADING CAUSES OF DEATH IN THE UNITED STATES, 1998

|  |       | WHITI | E     |     | NATIV | E     | A   | LL OTH | ER    |       |
|--|-------|-------|-------|-----|-------|-------|-----|--------|-------|-------|
| 15 LEADING CAUSES OF DEATH IN THE              | DEA   | THS   |       | DEA | THS   |       | DEA | THS    |       |       |
| U.S. BY RANK                                   | NO.   | PCT   | RATE  | NO. | PCT   | RATE  | NO. | PCT    | RATE  | TOTAL |
| 1 HEART DISEASE                                | 442   | 24.2  | 96.9  | 89  | 14.8  | 86.1  | 29  | 19.5   | 50.5  | 560   |
| 2 CANCER                                       | 473   | 25.9  | 103.7 | 147 | 24.4  | 142.2 | 28  | 18.8   | 48.7  | 648   |
| 3 CEREBROVASCULAR DISEASES                     | 105   | 5.7   | 23.0  | 33  | 5.5   | 31.9  | 15  | 10.1   | 26.1  | 153   |
| 4 CHRONIC OBSTRUCTIVE PULMONARY DISEASES       | 77    | 4.2   | 16.9  | 31  | 5.1   | 30.0  | 3   | 2.0    | 5.2   | 111   |
| 5 PNEUMONIA & INFLUENZA                        | 33    | 1.8   | 7.2   | 17  | 2.8   | 16.4  | 3   | 2.0    | 5.2   | 53    |
| 6 ACCIDENTS & ADVERSE EFFECTS                  | 161   | 8.8   | 35.3  | 79  | 13.1  | 76.4  | 16  | 10.7   | 27.9  | 256   |
| 7 DIABETES MELLITUS                            | 47    | 2.6   | 10.3  | 10  | 1.7   | 9.7   | 8   | 5.4    | 13.9  | 65    |
| 8 SUICIDE                                      | 75    | 4.1   | 16.4  | 50  | 8.3   | 48.4  | 6   | 4.0    | 10.4  | 131   |
| 9 NEPHRITIS, NEPHROTIC SYNDROME &<br>NEPHROSIS | 9     | 0.5   | 2.0   | 2   | 0.3   |       | 1   | 0.7    |       | 12    |
| 10 CHRONIC LIVER DISEASE & CIRRHOSIS           | 36    | 2.0   | 7.9   | 13  | 2.2   | 12.6  | 1   | 0.7    |       | 50    |
| 11 SEPTICEMIA                                  | 7     | 0.4   | 1.5   | 5   | 0.8   | 4.8   | 3   | 2.0    | 5.2   | 15    |
| 12 ALZHEIMER'S DISEASE                         | 14    | 0.8   | 3.1   |     |       |       |     |        |       | 14    |
| 13 HOMICIDE & LEGAL INTERVENTION               | 29    | 1.6   | 6.4   | 15  | 2.5   | 14.5  | 4   | 2.7    | 7.0   | 48    |
| 14 ATHEROSCLEROSIS                             | 9     | 0.5   | 2.0   | 2   | 0.3   |       |     |        |       | 11    |
| 15 HYPERTENSION                                | 5     | 0.3   | 1.1   | 1   | 0.2   |       | 1   | 0.7    |       | 7     |
| ALL OTHER CAUSES                               | 306   | 16.7  | 67.1  | 108 | 17.9  | 104.5 | 31  | 20.8   | 54.0  | 445   |
| TOTAL  | 1,828 | 100.0 | 400.6 | 602 | 100.0 | 577.6 | 149 | 100.0  | 254.1 | 2,579 |

TABLE 6.8C ALASKA RESIDENT DEATHS, PERCENT, AND SEX-SPECIFIC DEATH RATES FOR THE FIFTEEN LEADING CAUSES OF DEATH IN ALASKA, 1998

|   |       | MALE  | C.    | F     | EMAI  | Æ     |       |
|---|-------|-------|-------|-------|-------|-------|-------|
| 15 LEADING CAUSES OF DEATH IN ALASKA      | DEA'  | THS   |       | DEA'  | THS   |       |       |
| BY RANK                                   | NO.   | PCT   | RATE  | NO.   | PCT   | RATE  | TOTAL |
| 01 CANCER                                 | 353   | 23.4  | 109.9 | 295   | 27.5  | 99.7  | 648   |
| 02 HEART DISEASE                          | 368   | 24.4  | 114.6 | 192   | 17.9  | 64.9  | 560   |
| 03 ACCIDENTS & ADVERSE EFFECTS            | 187   | 12.4  | 58.2  | 69    | 6.4   | 23.3  | 256   |
| 04 CEREBROVASCULAR DISEASES               | 62    | 4.1   | 19.3  | 91    | 8.5   | 30.8  | 153   |
| 05 SUICIDE                                | 105   | 7.0   | 32.7  | 26    | 2.4   | 8.8   | 131   |
| 06 CHRONIC OBSTRUCTIVE PULMONARY DISEASES | 52    | 3.4   | 16.2  | 59    | 5.5   | 19.9  | 111   |
| 07 DIABETES MELLITUS                      | 30    | 2.0   | 9.3   | 35    | 3.3   | 11.8  | 65    |
| 08 PNEUMONIA & INFLUENZA                  | 23    | 1.5   | 7.2   | 30    | 2.8   | 10.1  | 53    |
| 09 CHRONIC LIVER DISEASE & CIRRHOSIS      | 30    | 2.0   | 9.3   | 20    | 1.9   | 6.8   | 50    |
| 10 HOMICIDE & LEGAL INTERVENTION          | 34    | 2.3   | 10.6  | 14    | 1.3   | 4.7   | 48    |
| 11 CONGENITAL ANOMALIES                   | 14    | 0.9   | 4.4   | 12    | 1.1   | 4.1   | 26    |
| 12 SIDS                                   | 15    | 1.0   | 4.7   | 3     | 0.3   | 1.0   | 18    |
| 13 PERINATAL PERIOD CONDITIONS            | 11    | 0.7   | 3.4   | 5     | 0.5   | 1.7   | 16    |
| 14 SEPTICEMIA                             | 10    | 0.7   | 3.1   | 5     | 0.5   | 1.7   | 15    |
| 15 ALZHEIMER'S DISEASE                    | 6     | 0.4   | 1.9   | 8     | 0.7   | 2.7   | 14    |
| ALL OTHER CAUSES                          | 208   | 13.8  | 64.8  | 207   | 19.3  | 70.0  | 415   |
| TOTAL                                     | 1,508 | 100.0 | 469.5 | 1,071 | 100.0 | 361.9 | 2,579 |

TABLE 6.8D RESIDENT DEATHS, PERCENT, AND RACE-SPECIFIC DEATH RATES FOR THE FIFTEEN LEADING CAUSES OF DEATH IN ALASKA, 1998

|   |       | WHIT  | E     |     | NATIV | E     | AJ  | L OTI | IER   |       |
|---|-------|-------|-------|-----|-------|-------|-----|-------|-------|-------|
| 15 LEADING CAUSES OF DEATH IN             | DEA   | THS   |       | DEA | THS   |       | DEA | THS   |       |       |
| ALASKA BY RANK                            | NO.   | PCT   | RATE  | NO. | PCT   | RATE  | NO. | PCT   | RATE  | TOTAL |
| 01 CANCER                                 | 473   | 25.9  | 103.7 | 147 | 24.4  | 142.2 | 28  | 18.8  | 48.7  | 648   |
| 02 HEART DISEASE                          | 442   | 24.2  | 96.9  | 89  | 14.8  | 86.1  | 29  | 19.5  | 50.5  | 560   |
| 03 ACCIDENTS & ADVERSE EFFECTS            | 160   | 8.8   | 35.1  | 80  | 13.3  | 77.4  | 16  | 10.7  | 27.9  | 256   |
| 04 CEREBROVASCULAR DISEASES               | 105   | 5.7   | 23.0  | 33  | 5.5   | 31.9  | 15  | 10.1  | 26.1  | 153   |
| 05 SUICIDE                                | 75    | 4.1   | 16.4  | 50  | 8.3   | 48.4  | 6   | 4.0   | 10.4  | 131   |
| 06 CHRONIC OBSTRUCTIVE PULMONARY DISEASES | 77    | 4.2   | 16.9  | 31  | 5.1   | 30.0  | 3   | 2.0   | 5.2   | 111   |
| 07 DIABETES MELLITUS                      | 47    | 2.6   | 10.3  | 10  | 1.7   | 9.7   | 8   | 5.4   | 13.9  | 65    |
| 08 PNEUMONIA & INFLUENZA                  | 33    | 1.8   | 7.2   | 17  | 2.8   | 16.4  | 3   | 2.0   | 5.2   | 53    |
| 09 CHRONIC LIVER DISEASE &<br>CIRRHOSIS   | 36    | 2.0   | 7.9   | 13  | 2.2   | 12.6  | 1   | 0.7   |       | 50    |
| 10 HOMICIDE & LEGAL INTERVENTION          | 28    | 1.5   | 6.1   | 15  | 2.5   | 14.5  | 5   | 3.4   | 8.7   | 48    |
| 11 CONGENITAL ANOMALIES                   | 21    | 1.1   | 4.6   | 4   | 0.7   | 3.9   | 1   | 0.7   |       | 26    |
| 12 SIDS                                   | 9     | 0.5   | 2.0   | 5   | 0.8   | 4.8   | 4   | 2.7   | 7.0   | 18    |
| 13 PERINATAL PERIOD CONDITIONS            | 9     | 0.5   | 2.0   | 5   | 0.8   | 4.8   | 2   | 1.3   |       | 16    |
| 14 SEPTICEMIA                             | 7     | 0.4   | 1.5   | 5   | 0.8   | 4.8   | 3   | 2.0   | 5.2   | 15    |
| 15 ALZHEIMER'S DISEASE                    | 14    | 0.8   | 3.1   |     |       |       |     |       |       | 14    |
| ALL OTHER CAUSES                          | 291   | 15.9  | 63.8  | 99  | 16.4  | 95.8  | 25  | 16.8  | 43.5  | 415   |
| TOTAL                                     | 1,827 | 100.0 | 400.4 | 603 | 100.0 | 583.4 | 149 | 100.0 | 252.4 | 2.579 |

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TABLE 6.9A RESIDENT DEATHS, PERCENT, AND RACE/SEX-SPECIFIC DEATH RATES FOR THE FIFTEEN LEADING CAUSES OF DEATH IN THE UNITED STATES, ALASKA, 1998

|  |     |      | WH    | ITE |      |      |     |      | NAT   | IVE |      |       |     | F    | LL O | THE | R    |      |
|--|-----|------|-------|-----|------|------|-----|------|-------|-----|------|-------|-----|------|------|-----|------|------|
| 15 LEADING CAUSES OF DEATH IN THE U.S.         | L_N | MALE | :     |     | EMAI |      |     | MAL  | E     | F   | EMAI | Æ     |     | MAL  | E    | F   | EMAI | Æ    |
| BY RANK  | No. | %    | Rate  | No. | %    | Rate | No. | %    | Rate  | No. | %    | Rate  | No. | %    | Rate | No. | %    | Rate |
| 1 HEART DISEASE                                | 300 | 27.8 | 125.1 | 142 | 19.0 | 65.6 | 52  | 15.1 | 100.6 | 37  | 14.3 | 71.6  | 16  | 19.0 | 53.8 | 13  | 20.0 | 46.9 |
| 2 CANCER                                       | 264 | 24.5 | 110.1 | 209 | 27.9 | 96.5 | 76  | 22.0 | 147.0 | 71  | 27.5 | 137.4 | 13  | 15.5 | 43.7 | 15  | 23.1 | 54.1 |
| 3 CEREBROVASCULAR DISEASES                     | 45  | 4.2  | 18.8  | 60  | 8.0  | 27.7 | 10  | 2.9  | 19.3  | 23  | 8.9  | 44.5  | 7   | 8.3  | 23.5 | 8   | 12.3 | 28.9 |
| 4 CHRONIC OBSTRUCTIVE PULMONARY<br>DISEASES    | 35  | 3.2  | 14.6  | 42  | 5.6  | 19.4 | 17  | 4.9  | 32.9  | 14  | 5.4  | 27.1  |     |      |      | 3   | 4.6  | 10.8 |
| 5 PNEUMONIA & INFLUENZA                        | 16  | 1.5  | 6.7   | 17  | 2.3  | 7.9  | 6   | 1.7  | 11.6  | 11  | 4.3  | 21.3  | 1   | 1.2  |      | 2   | 3.1  |      |
| 6 ACCIDENTS & ADVERSE EFFECTS                  | 116 | 10.8 | 48.4  | 44  | 5.9  | 20.3 | 58  | 16.8 | 112.2 | 22  | 8.5  | 42.6  | 13  | 15.5 | 43.7 | 3   | 4.6  | 10.8 |
| 7 DIABETES MELLITUS                            | 22  | 2.0  | 9.2   | 25  | 3.3  | 11.5 | 5   | 1.4  | 9.7   | 5   | 1.9  | 9.7   | 3   | 3.6  | 10.1 | 5   | 7.7  | 18.0 |
| 8 SUICIDE                                      | 62  | 5.7  | 25.9  | 13  | 1.7  | 6.0  | 38  | 11.0 | 73.5  | 12  | 4.7  | 23.2  | 5   | 6.0  | 16.8 | 1   | 1.5  |      |
| 9 NEPHRITIS, NEPHROTIC SYNDROME &<br>NEPHROSIS | 6   | 0.6  | 2.5   | 3   | 0.4  | 1.4  | 2   | 0.6  |       |     |      |       |     |      |      | 1   | 1.5  |      |
| 10 CHRONIC LIVER DISEASE & CIRRHOSIS           | 24  | 2.2  | 10.0  | 12  | 1.6  | 5.5  | 6   | 1.7  | 11.6  | 7   | 2.7  | 13.6  |     |      |      | 1   | 1.5  |      |
| 11 SEPTICEMIA                                  | 4   | 0.4  | 1.7   | 3   | 0.4  | 1.4  | 3   | 0.9  | 5.8   | 2   | 0.8  |       | 3   | 3.6  | 10.1 |     |      | 1    |
| 12 ALZHEIMER'S DISEASE                         | 6   | 0.6  | 2.5   | 8   | 1.1  | 3.7  |     |      |       |     |      |       |     |      |      |     |      |      |
| 13 HOMICIDE & LEGAL INTERVENTION               | 18  | 1.7  | 7.5   | 10  | 1.3  | 4.6  | 13  | 3.8  | 25.1  | 2   | 0.8  |       | 3   | 3.6  | 10.1 | 2   | 3.1  |      |

TABLE 6.9B RESIDENT DEATHS, PERCENT, AND RACE/SEX-SPECIFIC DEATH RATES FOR THE FIFTEEN LEADING CAUSES OF DEATH IN ALASKA, 1998

|  |          |             | WH    | ITE |      |      |     |      | NAT   | IVE |      |       |     | A    | LL O | THE | R    |      |
|--|----------|-------------|-------|-----|------|------|-----|------|-------|-----|------|-------|-----|------|------|-----|------|------|
| 15 LEADING CAUSES OF DEATH IN ALASKA         | <u> </u> | <b>IALE</b> |       | FI  | EMAI | E    |     | MALI | E     | F   | EMAI | Æ     |     | MAL  | E    | F   | EMAI | Æ    |
| BY RANK                                      | No.      | %           | Rate  | No. | %    | Rate | No. | %    | Rate  | No. | %    | Rate  | No. | %    | Rate | No. | %    | Rate |
| 01 CANCER                                    | 264      | 24.5        | 110.1 | 209 | 27.9 | 96.5 | 76  | 22.0 | 147.0 | 71  | 27.5 | 137.4 | 13  | 15.5 | 43.7 | 15  | 23.1 | 54.1 |
| 02 HEART DISEASE                             | 300      | 27.8        | 125.1 | 142 | 19.0 | 65.6 | 52  | 15.1 | 100.6 | 37  | 14.3 | 71.6  | 16  | 19.0 | 53.8 | 13  | 20.0 | 46.9 |
| 03 ACCIDENTS & ADVERSE EFFECTS               | 116      | 10.8        | 48.4  | 44  | 5.9  | 20.3 | 58  | 16.8 | 112.2 | 22  | 8.5  | 42.6  | 13  | 15.5 | 43.7 | 3   | 4.6  | 10.8 |
| 04 CEREBROVASCULAR DISEASES                  | 45       | 4.2         | 18.8  | 60  | 8.0  | 27.7 | 10  | 2.9  | 19.3  | 23  | 8.9  | 44.5  | 7   | 8.3  | 23.5 | 8   | 12.3 | 28.9 |
| 05 SUICIDE                                   | 62       | 5.7         | 25.9  | 13  | 1.7  | 6.0  | 38  | 11.0 | 73.5  | 12  | 4.7  | 23.2  | 5   | 6.0  | 16.8 | 1   | 1.5  |      |
| 06 CHRONIC OBSTRUCTIVE PULMONARY<br>DISEASES | 35       | 3.2         | 14.6  | 42  | 5.6  | 19.4 | 17  | 4.9  | 32.9  | 14  | 5.4  | 27.1  |     |      |      | 3   | 4.6  | 10.8 |
| 07 DIABETES MELLITUS                         | 22       | 2.0         | 9.2   | 25  | 3.3  | 11.5 | 5   | 1.4  | 9.7   | 5   | 1.9  | 9.7   | 3   | 3.6  | 10.1 | 5   | 7.7  | 18.0 |
| 08 PNEUMONIA & INFLUENZA                     | 16       | 1.5         | 6.7   | 17  | 2.3  | 7.9  | 6   | 1.7  | 11.6  | 11  | 4.3  | 21.3  | 1   | 1.2  |      | 2   | 3.1  |      |
| 09 CHRONIC LIVER DISEASE & CIRRHOSIS         | 24       | 2.2         | 10.0  | 12  | 1.6  | 5.5  | 6   | 1.7  | 11.6  | 7   | 2.7  | 13.6  |     |      |      | 1   | 1.5  |      |
| 10 HOMICIDE & LEGAL INTERVENTION             | 18       | 1.7         | 7.5   | 10  | 1.3  | 4.6  | 13  | 3.8  | 25.1  | 2   | 0.8  |       | 3   | 3.6  | 10.1 | 2   | 3.1  |      |
| 11 CONGENITAL ANOMALIES                      | 12       | 1.1         | 5.0   | 9   | 1.2  | 4.2  | 2   | 0.6  |       | 2   | 0.8  |       |     |      |      | 1   | 1.5  |      |
| 12 SIDS                                      | 7        | 0.6         | 2.9   | 2   | 0.3  |      | 5   | 1.4  | 9.7   |     |      |       | 3   | 3.6  | 10.1 | 1   | 1.5  |      |

TABLE 6.10A RESIDENT DEATHS, PERCENT, AND AGE-SPECIFIC DEATH RATES FOR THE FIFTEEN LEADING CAUSES OF DEATH IN THE UNITED STATES, ALASKA, 1998

|   |     |       |       |     | DEC   | CEDEN | NT'S A | GE    |       |     |       |       |
|---|-----|-------|-------|-----|-------|-------|--------|-------|-------|-----|-------|-------|
| 15 LEADING CAUSES OF DEATH IN THE U.S. BY   |     | 0-4   |       |     | 5-14  |       |        | 15-24 |       |     | 25-34 |       |
| RANK  | No. | %     | Rate  | No. | %     | Rate  | No.    | %     | Rate  | No. | %     | Rate  |
| 1 HEART DISEASE                             | 2   | 2.7   |       | 1   | 3.2   |       | 1      | 0.9   |       | 8   | 7.7   | 9.0   |
| 2 CANCER                                    |     |       |       | 4   | 12.9  | 3.6   | 1      | 0.9   |       | 5   | 4.8   | 5.7   |
| 3 CEREBROVASCULAR DISEASES                  |     |       |       |     |       |       |        |       |       | 1   | 1.0   |       |
| 4 CHRONIC OBSTRUCTIVE PULMONARY DISEASES    |     |       |       |     |       |       | 1      | 0.9   |       |     |       |       |
| 5 PNEUMONIA & INFLUENZA                     |     |       |       |     |       |       |        |       |       | 2   | 1.9   |       |
| 6 ACCIDENTS & ADVERSE EFFECTS               | 7   | 9.5   | 13.5  | 18  | 58.1  | 16.1  | 45     | 42.1  | 55.0  | 39  | 37.5  | 44.1  |
| 7 DIABETES MELLITUS                         |     |       |       |     |       |       |        |       |       | 1   | 1.0   |       |
| 8 SUICIDE                                   |     |       |       |     |       |       | 44     | 41.1  | 53.8  | 23  | 22.1  | 26.0  |
| 9 NEPHRITIS, NEPHROTIC SYNDROME & NEPHROSIS |     |       |       |     |       |       |        |       |       |     |       |       |
| 10 CHRONIC LIVER DISEASE & CIRRHOSIS        |     |       |       |     |       |       | 1      | 0.9   |       |     |       |       |
| 11 SEPTICEMIA                               | 1   | 1.4   |       |     |       |       |        |       |       |     |       |       |
| 12 ALZHEIMER'S DISEASE                      |     |       |       |     |       |       |        |       |       |     |       |       |
| 13 HOMICIDE & LEGAL INTERVENTION            | 2   | 2.7   |       | 1   | 3.2   |       | 6      | 5.6   | 7.3   | 11  | 10.6  | 12.4  |
| 14 ATHEROSCLEROSIS                          |     |       |       |     |       |       |        |       |       |     |       |       |
| 15 HYPERTENSION                             |     |       |       |     |       |       |        |       |       |     |       |       |
| ALL OTHER CAUSES                            | 62  | 83.8  | 119.5 | 7   | 22.6  | 6.3   | 8      | 7.5   | 9.8   | 14  | 13.5  | 15.8  |
| TOTAL                                       | 74  | 100.0 | 133.0 | 31  | 100.0 | 26.0  | 107    | 100.0 | 125.9 | 104 | 100.0 | 113.1 |

### TABLE 6.10A CONTINUED

|   |     |       |       |     | DI    | ECEDI | ENT'S | AGE   |         |     |       |         |
|---|-----|-------|-------|-----|-------|-------|-------|-------|---------|-----|-------|---------|
| 15 LEADING CAUSES OF DEATH IN THE U.S. BY   |     | 45-54 |       |     | 55-64 |       |       | 65-74 |         |     | 75-84 |         |
| RANK  | No. | %     | Rate  | No. | %     | Rate  | No.   | %     | Rate    | No. | %     | Rate    |
| 1 HEART DISEASE                             | 77  | 23.8  | 85.9  | 83  | 22.5  | 202.6 | 122   | 22.9  | 583.1   | 147 | 28.8  | 1,557.0 |
| 2 CANCER                                    | 91  | 28.2  | 101.5 | 146 | 39.6  | 356.3 | 190   | 35.7  | 908.2   | 127 | 24.9  | 1,345.0 |
| 3 CEREBROVASCULAR DISEASES                  | 12  | 3.7   | 13.4  | 18  | 4.9   | 43.9  | 24    | 4.5   | 114.7   | 49  | 9.6   | 519.1   |
| 4 CHRONIC OBSTRUCTIVE PULMONARY DISEASES    | 10  | 3.1   | 11.2  | 13  | 3.5   | 31.7  | 41    | 7.7   | 196.0   | 33  | 6.5   | 349.6   |
| 5 PNEUMONIA & INFLUENZA                     | 2   | 0.6   |       | 4   | 1.1   | 9.8   | 8     | 1.5   | 38.2    | 16  | 3.1   | 169.5   |
| 6 ACCIDENTS & ADVERSE EFFECTS               | 41  | 12.7  | 45.8  | 15  | 4.1   | 36.6  | 10    | 1.9   | 47.8    | 11  | 2.2   | 116.5   |
| 7 DIABETES MELLITUS                         | 6   | 1.9   | 6.7   | 16  | 4.3   | 39.0  | 22    | 4.1   | 105.2   | 9   | 1.8   | 95.3    |
| 8 SUICIDE                                   | 24  | 7.4   | 26.8  | 15  | 4.1   | 36.6  | 5     | 0.9   | 23.9    | 2   | 0.4   |         |
| 9 NEPHRITIS, NEPHROTIC SYNDROME & NEPHROSIS | 2   | 0.6   |       |     |       |       | 4     | 0.8   | 19.1    | 5   | 1.0   | 53.0    |
| 10 CHRONIC LIVER DISEASE & CIRRHOSIS        | 16  | 5.0   | 17.9  | 13  | 3.5   | 31.7  | 6     | 1.1   | 28.7    | 4   | 0.8   | 42.4    |
| 11 SEPTICEMIA                               | 1   | 0.3   |       |     |       |       | 5     | 0.9   | 23.9    | 5   | 1.0   | 53.0    |
| 12 ALZHEIMER'S DISEASE                      |     |       |       | 1   | 0.3   |       | 2     | 0.4   |         | 7   | 1.4   | 74.2    |
| 13 HOMICIDE & LEGAL INTERVENTION            | 10  | 3.1   | 11.2  | 1   | 0.3   |       | 2     | 0.4   |         | 1   | 0.2   |         |
| 14 ATHEROSCLEROSIS                          | 1   | 0.3   |       | 1   | 0.3   |       | 4     | 0.8   | 19.1    | 3   | 0.6   | 31.8    |
| 15 HYPERTENSION                             |     |       |       |     |       |       | 3     | 0.6   | 14.3    | 3   | 0.6   | 31.8    |
| ALL OTHER CAUSES                            | 30  | 9.3   | 33.5  | 43  | 11.7  | 104.9 | 84    | 15.8  | 401.5   | 89  | 17.4  | 942.8   |
| TOTAL                                       | 323 | 100.0 | 353.7 | 369 | 100.0 | 893.2 | 532   | 100.0 | 2.524.0 | 511 | 100.0 | 5,381.0 |

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TABLE 6.10B RESIDENT DEATHS, PERCENT, AND AGE-SPECIFIC DEATH RATES FOR THE FIFTEEN LEADING CAUSES OF DEATH IN ALASKA, 1998

|   |     |       |       |     | DEC   | CEDEN | NT'S A | GE    |       |     |       |       |
|---|-----|-------|-------|-----|-------|-------|--------|-------|-------|-----|-------|-------|
| 15 LEADING CAUSES OF DEATH IN ALASKA BY   |     | 0-4   |       |     | 5-14  |       |        | 15-24 |       |     | 25-34 |       |
| RANK                                      | No. | %     | Rate  | No. | %     | Rate  | No.    | %     | Rate  | No. | %     | Rate  |
| 01 CANCER                                 |     |       |       | 4   | 12.9  | 3.6   | 1      | 0.9   |       | 5   | 4.8   | 5.7   |
| 02 HEART DISEASE                          | 2   | 2.7   |       | 1   | 3.2   |       | 1      | 0.9   |       | 8   | 7.7   | 9.0   |
| 03 ACCIDENTS & ADVERSE EFFECTS            | 7   | 9.5   | 13.5  | 18  | 58.1  | 16.1  | 45     | 42.1  | 55.0  | 39  | 37.5  | 44.1  |
| 04 CEREBROVASCULAR DISEASES               |     |       |       |     |       |       |        |       |       | 1   | 1.0   |       |
| 05 SUICIDE                                |     |       |       |     |       |       | 44     | 41.1  | 53.8  | 23  | 22.1  | 26.0  |
| 06 CHRONIC OBSTRUCTIVE PULMONARY DISEASES |     |       |       |     |       |       | 1      | 0.9   |       |     |       |       |
| 07 DIABETES MELLITUS                      |     |       |       |     |       |       |        |       |       | 1   | 1.0   |       |
| 08 PNEUMONIA & INFLUENZA                  |     |       |       |     |       |       |        |       |       | 2   | 1.9   |       |
| 09 CHRONIC LIVER DISEASE & CIRRHOSIS      |     |       |       |     |       |       | 1      | 0.9   |       |     |       |       |
| 10 HOMICIDE & LEGAL INTERVENTION          | 2   | 2.7   |       | 1   | 3.2   |       | 6      | 5.6   | 7.3   | 11  | 10.6  | 12.4  |
| 11 CONGENITAL ANOMALIES                   | 14  | 18.9  | 27.0  | 1   | 3.2   |       | 1      | 0.9   |       | 1   | 1.0   |       |
| 12 SIDS                                   | 18  | 24.3  | 34.7  |     |       |       |        |       |       |     |       |       |
| 13 PERINATAL PERIOD CONDITIONS            | 16  | 21.6  | 30.8  |     |       |       |        |       |       |     |       |       |
| 14 SEPTICEMIA                             | 1   | 1.4   |       |     |       |       |        |       |       |     |       |       |
| 15 ALZHEIMER'S DISEASE                    |     |       |       |     |       |       |        |       |       |     |       |       |
| ALL OTHER CAUSES                          | 14  | 18.9  | 27.0  | 6   | 19.4  | 5.4   | 7      | 6.5   | 8.6   | 13  | 12.5  | 14.7  |
| TOTAL                                     | 74  | 100.0 | 133.0 | 31  | 100.0 | 25.1  | 107    | 100.0 | 124.7 | 104 | 100.0 | 111.9 |

### TABLE 6.10B CONTINUED

|   | Ι   |       |       |     |       |       |      |       |         |     |       |         |
|---|-----|-------|-------|-----|-------|-------|------|-------|---------|-----|-------|---------|
|   |     |       |       |     | DF    | CEDE  | NT'S | AGE_  |         |     |       |         |
| 15 LEADING CAUSES OF DEATH IN ALASKA BY   |     | 45-54 |       |     | 55-64 |       |      | 65-74 |         |     | 75-84 |         |
| RANK                                      | No. | %     | Rate  | No. | %     | Rate  | No.  | %     | Rate    | No. | %     | Rate    |
| 01 CANCER                                 | 91  | 28.2  | 101.5 | 146 | 39.6  | 356.3 | 190  | 35.7  | 908.2   | 127 | 24.9  | 1,345.3 |
| 02 HEART DISEASE                          | 77  | 23.8  | 85.9  | 83  | 22.5  | 202.6 | 122  | 22.9  | 583.1   | 147 | 28.8  | 1,557.2 |
| 03 ACCIDENTS & ADVERSE EFFECTS            | 41  | 12.7  | 45.8  | 15  | 4.1   | 36.6  | 10   | 1.9   | 47.8    | 11  | 2.2   | 116.5   |
| 04 CEREBROVASCULAR DISEASES               | 12  | 3.7   | 13.4  | 18  | 4.9   | 43.9  | 24   | 4.5   | 114.7   | 49  | 9.6   | 519.1   |
| 05 SUICIDE                                | 24  | 7.4   | 26.8  | 15  | 4.1   | 36.6  | 5    | 0.9   | 23.9    | 2   | 0.4   |         |
| 06 CHRONIC OBSTRUCTIVE PULMONARY DISEASES | 10  | 3.1   | 11.2  | 13  | 3.5   | 31.7  | 41   | 7.7   | 196.0   | 33  | 6.5   | 349.6   |
| 07 DIABETES MELLITUS                      | 6   | 1.9   | 6.7   | 16  | 4.3   | 39.0  | 22   | 4.1   | 105.2   | 9   | 1.8   | 95.3    |
| 08 PNEUMONIA & INFLUENZA                  | 2   | 0.6   |       | 4   | 1.1   | 9.8   | 8    | 1.5   | 38.2    | 16  | 3.1   | 169.5   |
| 09 CHRONIC LIVER DISEASE & CIRRHOSIS      | 16  | 5.0   | 17.9  | 13  | 3.5   | 31.7  | 6    | 1.1   | 28.7    | 4   | 0.8   | 42.4    |
| 10 HOMICIDE & LEGAL INTERVENTION          | 10  | 3.1   | 11.2  | 1   | 0.3   |       | 2    | 0.4   |         | 1   | 0.2   |         |
| 11 CONGENITAL ANOMALIES                   |     |       |       | 2   | 0.5   |       | 1    | 0.2   |         | 4   | 0.8   | 42.4    |
| 12 SIDS                                   |     |       |       |     |       |       |      |       |         |     |       |         |
| 13 PERINATAL PERIOD CONDITIONS            |     |       |       |     |       |       |      |       |         |     |       |         |
| 14 SEPTICEMIA                             | 1   | 0.3   |       |     |       |       | 5    | 0.9   | 23.9    | 5   | 1.0   | 53.0    |
| 15 ALZHEIMER'S DISEASE                    |     |       |       | 1   | 0.3   |       | 2    | 0.4   |         | 7   | 1.4   | 74.2    |
| ALL OTHER CAUSES                          | 33  | 10.2  | 36.8  | 42  | 11.4  | 102.5 | 94   | 17.7  | 449.3   | 96  | 18.8  | 1,016.9 |
| TOTAL                                     | 323 | 100.0 | 357.1 | 369 | 100.0 | 890.7 | 532  | 100.0 | 2.519.0 | 511 | 100.0 | 5.381.4 |

## SELECTED CAUSES OF DEATH BY RESIDENCE

TABLE 6.11A RESIDENT DEATHS BY SELECTED CAUSES OF DEATH AND BY CENSUS AREA OF DECEDENT'S RESIDENCE, NATIVES ONLY, ALASKA, 1998

|   | L   | C   | ENSI | US A     | REA | OF | DEC | EDF | ENT' | SRF | ESID | ENC |              |          |
|---|-----|-----|------|----------|-----|----|-----|-----|------|-----|------|-----|--------------|----------|
| CAUSE OF DEATH  | ALE | ALW |      |          |     |    |     |     |      |     |      |     |              | MSB      |
| TUBERCULOSIS  |     |     |      |          |     |    |     |     |      |     |      |     | Ш            |          |
| SEPTICEMIA  |     |     |      |          |     | 1  | 1   |     |      |     |      |     | Ш            |          |
| VIRAL HEPATITIS   |     |     |      |          |     |    |     |     |      |     |      |     |              | 1        |
| CANCER  | 5   | 3   | 26   | 13       |     | 4  | 2   | 1   | 5    | 5   | 6    | 4   | 3            | 1        |
| DIABETES MELLITUS   |     |     | 2    | 2        |     | 1  |     |     |      |     |      | 1   |              |          |
| NUTRITIONAL DEFICIENCIES  |     |     |      |          |     |    |     |     |      |     |      |     |              |          |
| MENINGITIS  |     |     |      |          |     |    |     |     |      |     |      |     | 1            |          |
| HEART DISEASE   | 1   | 2   | 17   | 12       | 1   | 5  | 2   |     | 3    | 4   | 2    | 2   | 1            |          |
| HYPERTENSION  |     |     |      |          |     |    |     |     |      | 1   |      |     |              |          |
| CEREBROVASCULAR DISEASES  | 1   |     | 13   | 5        |     | 2  | 2   |     |      |     |      |     | 1            | 1        |
| ATHEROSCLEROSIS   |     |     |      |          |     |    |     |     |      |     |      | 1   |              |          |
| ACUTE BRONCHITIS & BRONCHIOLITIS  |     |     |      |          |     |    |     |     |      |     |      |     |              |          |
| PNEUMONIA & INFLUENZA   | 1   |     | 1    | 2        |     |    | 3   |     | 1    | 1   | 1    |     | 1            |          |
| CHRONIC OBSTRUCTIVE PULMONARY DISEASES                                  |     | 2   | 4    | 5        | 2   | 1  | 1   |     |      |     | 2    |     |              |          |
| APPENDICITIS  |     |     |      | 1        |     |    |     |     |      |     |      |     |              |          |
| HERNIA OF ABDOMINAL CAVITY OR INTESTINAL                                |     |     |      |          |     |    |     |     |      |     |      |     | i l          |          |
| OBSTRUCTION WITHOUT MENTION OF HERNIA CHRONIC LIVER DISEASE & CIRRHOSIS |     |     | 1    |          |     |    |     |     |      |     |      |     | $\vdash$     | -        |
| DISORDERS OF GALLBLADDER  |     |     | 1    |          |     |    |     |     |      |     |      |     | $\vdash$     | -        |
|   |     |     | 1    |          |     |    |     |     | 1    |     |      |     | $\vdash$     | $\dashv$ |
| NEPHRITIS, NEPHROTIC SYNDROME & NEPHROSIS INFECTIONS OF KIDNEY          |     |     |      |          |     |    |     |     | 1    |     |      |     | $\vdash$     | -        |
| CONGENITAL ANOMALIES  |     |     |      |          |     |    |     |     |      |     |      |     | $\vdash$     | $\dashv$ |
|   |     |     | 2    |          |     |    |     |     |      |     |      |     | $\vdash$     | $\dashv$ |
| PERINATAL PERIOD CONDITIONS   |     |     |      | 1        |     | 1  |     |     |      |     |      |     | $\vdash$     | $\dashv$ |
| SIDS  |     |     | 2    |          | 1   |    | _   |     |      |     |      | 1   | $\vdash$     | _        |
| ALCOHOL USE/ABUSE   | I   |     | 9    | <u> </u> | 1   |    | 5   | _   | _    |     | 2    |     |              | 1        |
| ALL OTHER INTERNAL CAUSES   |     |     | 19   | _        |     | 2  | 2   |     | 2    | _   | 2    | 2   | 1            | _        |
| MOTOR VEHICLE ACCIDENTS   |     | _   | 6    |          |     | 1  |     |     | 3    |     |      |     | 1            | 1        |
| OTHER ACCIDENTS   |     | 1   | 11   | 7        | -   | 2  |     | _   | 6    | 2   |      | 1   |              | 1        |
| SUICIDES  |     |     |      | 11       |     | 1  | 3   |     | 1    |     |      | 1   | $\frac{2}{}$ | 1        |
| HOMICIDES   |     |     | 4    |          |     |    | 2   | _   |      |     |      |     | $\square$    | 2        |
| TOTAL   | g   | 8   | 118  | 72       | 4   | 21 | 27  | 1   | 22   | 17  | 1.5  | 13  | 11           | 9        |

**Continued** ⇒

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## TABLE 6.11A CONTINUED

|   |     | CEI | NSUS | ARE | A OF | DEC | EDE | NT'S | RESI | DEN | CE  |     |       |
|---|-----|-----|------|-----|------|-----|-----|------|------|-----|-----|-----|-------|
| CAUSE OF DEATH                            | NOM | NSB | NAB  | POW | SIT  | SHA | SEF | VAL  | WAH  | WRP | YAK | YUK | TOTAL |
| TUBERCULOSIS                              |     |     |      |     |      |     |     | 2    |      |     |     |     | 2     |
| SEPTICEMIA                                |     |     |      |     | 1    | 1   |     | 1    |      |     |     |     | 5     |
| VIRAL HEPATITIS                           |     |     |      |     |      |     |     |      |      |     |     |     | 1     |
| CANCER                                    | 17  | 6   |      | _   | 4    | 1   | 1   | 7    | 11   | 2   | 1   | 13  |       |
| DIABETES MELLITUS                         |     |     | 2    | 1   |      |     |     |      |      |     |     | 1   | 10    |
| NUTRITIONAL DEFICIENCIES                  |     |     |      |     |      |     |     |      | 1    |     |     |     | 1     |
| MENINGITIS                                |     |     |      |     |      |     |     |      |      |     |     |     | 1     |
| HEART DISEASE                             | 4   | 4   | - 1  | 2   | 1    | 2   |     | 5    | 5    | 3   | 1   | . 6 | 86    |
| HYPERTENSION                              |     |     |      |     |      |     |     |      |      |     |     |     | 1     |
| CEREBROVASCULAR DISEASES                  | 2   | 1   | 1    |     |      | 1   |     | 1    | 1    |     |     | 1   | 33    |
| ATHEROSCLEROSIS                           |     |     |      |     |      |     |     |      |      |     |     | 1   | 2     |
| ACUTE BRONCHITIS & BRONCHIOLITIS          | 1   |     |      |     |      |     |     |      |      |     |     |     | 1     |
| PNEUMONIA & INFLUENZA                     | 1   |     |      |     |      |     | 3   | 1    | 1    |     |     |     | 17    |
| CHRONIC OBSTRUCTIVE PULMONARY DISEASES    | 4   | 1   |      |     |      |     | 1   | 4    | 2    |     |     | 2   | 31    |
| APPENDICITIS                              |     |     |      |     |      |     |     |      |      |     |     |     | 1     |
| HERNIA OF ABDOMINAL CAVITY OR INTESTINAL  |     |     |      |     |      |     | 2   |      |      |     |     |     | 2     |
| OBSTRUCTION WITHOUT MENTION OF HERNIA     |     |     |      |     |      |     |     |      |      |     |     |     |       |
| CHRONIC LIVER DISEASE & CIRRHOSIS         |     |     |      |     | 1    |     |     |      |      |     |     |     | 2     |
| DISORDERS OF GALLBLADDER                  |     | 1   |      |     |      |     |     |      |      |     |     |     | 2     |
| NEPHRITIS, NEPHROTIC SYNDROME & NEPHROSIS |     |     |      |     |      |     |     | 1    |      |     |     |     | 2     |
| INFECTIONS OF KIDNEY                      |     |     |      |     |      |     |     |      | 1    |     |     |     | 1     |
| CONGENITAL ANOMALIES                      | 2   |     |      |     |      |     |     |      |      |     |     |     | 4     |
| PERINATAL PERIOD CONDITIONS               |     | 1   |      |     |      |     |     | 1    | 1    |     |     |     | 5     |
| SIDS                                      |     |     |      |     |      |     |     | 1    |      |     |     |     | 5     |
| ALCOHOL USE/ABUSE                         | 4   | 4   | 1    |     |      |     | 1   | 2    | 1    |     |     | 2   | 38    |
| ALL OTHER INTERNAL CAUSES                 | 8   | 5   | 2    |     | 1    |     | 1   | 1    | 2    |     |     | 4   | 65    |
| MOTOR VEHICLE ACCIDENTS                   | 1   |     |      | 1   |      |     | 1   | 1    |      |     |     |     | 17    |
| OTHER ACCIDENTS                           | 9   | 1   |      | 1   |      |     | 2   | 1    | 3    |     |     | 4   | 56    |
| SUICIDES                                  | 7   | 3   |      | 1   |      | 1   |     | 7    | 4    |     |     | 7   | 50    |
| HOMICIDES                                 | 3   |     |      |     |      | 1   |     | 1    |      |     |     | 2   | 15    |
| TOTAL                                     | 63  | 27  | 11   | 8   | 8    | 7   | 12  | 37   | 33   | 5   | 2   | 43  | 603   |

TABLE 6.11B RESIDENT DEATHS BY SELECTED CAUSES OF DEATH AND BY CENSUS AREA OF DECEDENT'S RESIDENCE, NON-NATIVES ONLY, ALASKA, 1998

|  |     | C   | ENS | US A | REA | OF  | DEC | EDE   | NT'S  | RE  | SIDI | ENC | E     |     |
|--|-----|-----|-----|------|-----|-----|-----|-------|-------|-----|------|-----|-------|-----|
| CAUSE OF DEATH   | ALE | ALW | ANC | BET  | BBB | DEN | DIL | FBK I | INS . | JUN | KPB  | KET | KOD I | .KP |
| MENINGOCOCCAL INFECTION  |     |     |     |      |     |     |     |       |       |     | 1    |     |       |     |
| SEPTICEMIA   |     |     | 6   | 5    |     |     |     | 1     |       | 1   |      | 1   |       |     |
| VIRAL HEPATITIS  |     |     | 2   | 2    |     |     |     | 1     |       |     | 1    | 1   |       |     |
| HIV INFECTION  |     |     | 4   | H    |     |     |     | 1     |       |     | 1    |     |       |     |
| CANCER   |     |     | 219 | )    | 1   | 1   |     | 58    | 6     | 29  | 69   | 13  | 7     | 2   |
| BENIGN NEOPLASMS   |     |     | 4   | ļ    |     |     |     | 3     |       | 1   | 1    | 1   | 2     |     |
| DIABETES MELLITUS  |     |     | 26  | 5    |     |     |     | 7     |       | 2   | 6    | 2   |       |     |
| NUTRITIONAL DEFICIENCIES   |     |     |     |      |     |     |     |       |       |     |      | 1   | 1     |     |
| ANEMIAS  |     |     | 1   |      |     |     |     |       |       | 1   | 1    |     |       |     |
| HEART DISEASE  |     |     | 196 | 5    |     | 1   |     | 64    | 4     | 23  | 47   | 24  | 4     | 2   |
| HYPERTENSION   |     |     | 2   |      |     |     |     | 1     |       |     | 1    | 2   |       |     |
| CEREBROVASCULAR DISEASES   |     |     | 61  |      |     |     |     | 8     | 1     | 8   | 10   | 7   | 2     |     |
| ATHEROSCLEROSIS  |     |     | 4   | ļ    |     |     |     |       |       |     | 2    |     |       |     |
| PNEUMONIA & INFLUENZA  |     |     | 10  |      |     |     |     | 5     |       | 3   | 7    | 3   |       |     |
| CHRONIC OBSTRUCTIVE PULMONARY DISEASES   | 1   |     | 34  | H    |     |     | 1   | 11    |       | 2   | 10   | 3   |       |     |
| ULCER OF STOMACH & DUODENUM  |     |     | 2   |      |     |     |     |       |       |     |      |     |       |     |
| HERNIA OF ABDOMINAL CAVITY OR INTESTINAL OBSTRUCTION WITHOUT MENTION OF HERNIA |     |     | 1   |      |     |     |     | 2     |       | 1   |      |     |       |     |
| CHRONIC LIVER DISEASE & CIRRHOSIS  |     |     | 5   | ;    |     |     |     |       |       | 1   | 4    |     |       |     |
| DISORDERS OF GALLBLADDER   |     |     | 1   |      |     |     |     | 1     |       |     | 1    |     |       |     |
| NEPHRITIS, NEPHROTIC SYNDROME & NEPHROSIS                                      |     |     | 6   | 5    |     |     |     |       |       | 1   |      | 1   |       |     |
| INFECTIONS OF KIDNEY   |     |     |     |      |     |     |     |       |       |     |      | 1   |       |     |
| HYPERPLASIA OF PROSTATE  |     |     |     |      |     |     |     |       |       |     |      |     |       |     |
| CONGENITAL ANOMALIES   |     | 1   | 8   | 1    |     |     |     | 2     |       | 1   | 4    |     |       |     |
| PERINATAL PERIOD CONDITIONS  |     | 1   | 7   |      |     |     |     |       |       | 1   |      |     | 1     |     |
| SIDS   |     |     | 7   | ,    |     |     |     | 1     |       |     | 3    |     | 1     |     |
| ALCOHOL USE/ABUSE  |     |     | 22  |      |     |     |     | 12    |       | 3   | 2    | 2   |       |     |
| ALZHEIMER'S DISEASE  |     |     | 10  |      |     |     |     | 1     |       |     |      |     |       |     |
| ALL OTHER INTERNAL CAUSES  |     |     | 110 |      |     | 2   | 1   | 25    |       | 11  | 22   | 10  | 5     |     |
| MOTOR VEHICLE ACCIDENTS  |     |     | 16  |      |     | _   |     | 11    |       | 1   | 5    |     | 1     |     |
| OTHER ACCIDENTS  |     |     | 50  | ) 1  |     |     | 3   | 17    | 3     | 4   | 12   | 2   | 8     |     |
| SUICIDES   |     | 1   | 31  | 1    | 1   |     |     | 21    |       | 4   | 5    | 1   | 3     |     |
| HOMICIDES  |     |     | 20  | _    |     |     |     | 8     |       |     | 2    |     |       |     |
| ALL OTHER EXTERNAL CAUSES  |     |     | 2   | _    |     |     |     |       |       |     |      |     | 1     |     |
| TOTAL  | 1   | 3   | 867 | 4    | 2   | 4   | 5   | 261   | 14    | 98  | 217  | 75  | 36    | 4   |

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## TABLE 611B CONTINUED

|  |     | (   | CENS | US_A | REA | OF D | ECE | DENT | r's r | ESIDE | NCF |    |     |       |
|--|-----|-----|------|------|-----|------|-----|------|-------|-------|-----|----|-----|-------|
| CAUSE OF DEATH   | MSB |     |      |      |     |      |     |      |       |       |     |    | UNK | TOTAL |
| MENINGOCOCCAL INFECTION  |     |     |      |      |     |      |     |      |       |       |     |    |     | 1     |
| SEPTICEMIA   | 1   |     |      |      |     |      |     |      |       |       |     |    |     | 10    |
| VIRAL HEPATITIS  | 1   |     |      |      |     |      |     |      |       |       |     |    |     | 6     |
| HIV INFECTION  |     |     |      |      |     |      |     |      |       |       |     |    |     | 6     |
| CANCER   | 58  | 2   |      | 1    | 2   | 3    | 3   | 3    | 10    | 9     | 2   | 3  |     | 501   |
| BENIGN NEOPLASMS   |     |     |      |      |     |      |     |      |       |       |     |    |     | 12    |
| DIABETES MELLITUS  | 5   | i   |      |      | 1   |      | 1   | 2    | 2     | 1     |     |    |     | 55    |
| NUTRITIONAL DEFICIENCIES   | 1   |     |      |      |     |      |     |      |       | 2     |     |    |     | 5     |
| ANEMIAS  | 1   |     |      |      |     |      |     |      |       |       |     |    |     | 4     |
| HEART DISEASE  | 67  | 2   | 1    | 1    | 2   | 11   | 3   | 2    | 4     | 8     |     | 4  |     | 470   |
| HYPERTENSION   |     |     |      |      |     |      |     |      |       |       |     |    |     | 6     |
| CEREBROVASCULAR DISEASES   | 12  |     |      |      |     | 3    | 1   | . 1  | 6     |       |     |    |     | 120   |
| ATHEROSCLEROSIS  | 1   |     |      |      |     |      |     |      | 2     |       |     |    |     | 9     |
| PNEUMONIA & INFLUENZA  |     |     |      |      |     | 5    |     | 1    | 1     | 1     |     |    |     | 36    |
| CHRONIC OBSTRUCTIVE PULMONARY DISEASES   | 5   | ;   |      | 1    | 1   | 2    |     | 2    | 3     | 2     |     | 2  |     | 80    |
| ULCER OF STOMACH & DUODENUM  | 3   | 1   |      |      |     |      |     |      |       | 1     |     |    |     | 7     |
| HERNIA OF ABDOMINAL CAVITY OR INTESTINAL OBSTRUCTION WITHOUT MENTION OF HERNIA | 1   |     |      |      |     |      |     |      |       |       |     |    |     | 5     |
| CHRONIC LIVER DISEASE & CIRRHOSIS  | 1   |     |      |      |     |      |     |      |       |       |     |    |     | 11    |
| DISORDERS OF GALLBLADDER   |     |     |      |      |     |      |     |      |       |       |     |    |     | 3     |
| NEPHRITIS, NEPHROTIC SYNDROME & NEPHROSIS                                      |     |     |      |      | 1   |      |     | 1    |       |       |     |    |     | 10    |
| INFECTIONS OF KIDNEY   |     |     |      |      |     |      |     |      |       |       |     |    |     | 1     |
| HYPERPLASIA OF PROSTATE  | 1   |     |      |      |     |      |     |      |       |       |     |    |     | 1     |
| CONGENITAL ANOMALIES   | 3   |     |      |      | 1   |      |     |      | 1     |       |     |    |     | 22    |
| PERINATAL PERIOD CONDITIONS  |     |     |      |      |     |      | 1   |      |       |       |     |    |     | 11    |
| SIDS   | 1   |     |      |      |     |      |     |      |       |       |     |    |     | 13    |
| ALCOHOL USE/ABUSE  | 1   | 1   |      |      |     | 1    | 1   |      |       |       |     |    | 1   | 46    |
| ALZHEIMER'S DISEASE  | 3   |     |      |      |     |      |     |      |       |       |     |    |     | 14    |
| ALL OTHER INTERNAL CAUSES  | 17  | ,   | 1    |      | 1   | 3    |     | 3    | 4     | 3     |     |    |     | 218   |
| MOTOR VEHICLE ACCIDENTS  | 7   | ,   |      |      | 1   | 1    |     | 3    | 5     |       |     |    |     | 51    |
| OTHER ACCIDENTS  | 14  |     |      |      |     | 2    | 2   | 2    | 4     | 1     |     | 1  |     | 124   |
| SUICIDES   | 6   | 5   | 1    |      | 1   | 2    | 1   | 2    |       |       |     |    |     | 81    |
| HOMICIDES  | 1   |     |      |      |     |      | 1   |      |       |       |     |    |     | 33    |
| ALL OTHER EXTERNAL CAUSES  | 1   |     |      |      |     |      |     |      |       |       |     |    |     | 4     |
| TOTAL  | 212 | . 6 | 3    | 3    | 11  | 33   | 14  | 20   | 42    | 28    | 2   | 10 | 1   | 1,976 |

## **DETAILED CAUSES OF DEATH**

TABLE 6.12 RESIDENT DEATHS BY DETAILED CAUSES OF DEATH AND BY CENSUS REA OF DECEDENT'S RESIDENCE, ALASKA, 1998

|  |      |      | CF   | ENSI | SAR | EA O  | F D | ECEI | ENT    | "S R | ESIT | ENC | <u></u> |          |
|--|------|------|------|------|-----|-------|-----|------|--------|------|------|-----|---------|----------|
| CAUSE OF DEATH                             | ALE  | AI.W |      |      |     |       |     |      |        |      |      |     | KODLI   | PMSB     |
| TUBERCULOSIS                               | 1111 | 111  | ,,,, | DLI  | БББ | D.L., |     |      | 111,15 |      | ш    | 11. |         | II IVIOD |
| SEPTICEMIA                                 |      |      | 6    |      |     |       | 1   | 2    |        | 1    |      | 1   |         | 1        |
| HIV INFECTION                              |      |      | 4    |      |     |       |     | 1    |        |      | 1    |     |         |          |
| CANCER: LIP, ORAL CAVITY & PHARYNX         |      | 1    | 3    |      |     |       | 1   | 1    |        |      |      |     |         | 1 4      |
| CANCER: DIGESTIVE ORGANS & PERITONEUM      | 1    |      | 58   | 6    |     |       | 3   | 13   |        | 9    | 19   | 2   | 2       | 1 13     |
| CANCER: RESPIRATORY & INTRATHORACIC ORGANS | 3    | 1    | 74   | 4    |     | 1     |     | 17   |        | 9    | 27   |     | 4       | 2 19     |
| CANCER: BREAST                             | 1    | 1    | 19   |      |     |       |     | 9    |        | 2    | 7    | 2   | 1       | 4        |
| CANCER: GENITAL ORGANS                     |      | 1    | 22   | 2    |     |       |     | 7    |        | 4    | 6    |     |         | 5        |
| CANCER: URINARY ORGANS                     |      |      | 11   |      |     |       |     | 3    |        | 1    | 1    | 2   | 1       | 4        |
| CANCER: OTHER & UNSPECIFIED SITES          |      |      | 34   |      | 1   |       |     | 6    |        | 4    | 6    | 2   | 2       | 6        |
| CANCER: LEUKEMIA                           |      |      | 7    |      | -   |       |     | 3    |        | 2    | 0    |     |         | 1 2      |
| CANCER: OTHER LYMPHATIC & HEMATOPOIETIC    |      |      |      |      |     |       |     |      |        |      |      |     |         | 1 -      |
| TISSUES                                    |      |      | 17   | 1    |     |       |     | 1    | 2      | 3    | 5    | 2   | 1       | 2        |
| DIABETES MELLITUS                          |      |      | 28   | 2    |     |       | 1   | 7    |        | 2    | 6    |     | 1       | 5        |
| RHEUMATIC FEVER & RHEUMATIC HEART DISEASE  |      |      | 3    | 1    |     |       |     | 1    |        | Ĩ    | 2    |     |         | 1        |
| HYPERTENSIVE HEART DISEASE                 |      |      | 11   | 1    |     |       |     | 2    |        |      |      | 1   |         | 1        |
| HYPERTENSIVE HEART & RENAL DISEASE         |      |      | 1    |      |     |       |     |      |        |      |      | 1   |         | 1        |
| ACUTE MYOCARDIAL INFARCTION                | 1    | 1    | 44   | 1    |     | 1     | 1   | 20   | 1      | 5    | 12   | 5   | 1       | 23       |
| OTHER ACUTE & SUBACUTE FORMS OF ISCHEMIC   |      | '    |      | - '  |     | '     |     |      |        |      |      |     |         |          |
| HEART DISEASE                              |      |      | 1    |      |     |       |     |      |        |      |      |     |         |          |
| OTHER FORMS OF CHRONIC ISCHEMIC HEART      |      |      | •    |      |     |       |     |      |        |      |      |     |         |          |
| DISEASE                                    |      | 1    | 70   | 3    |     |       |     | 22   | 2      | 6    | 20   | 11  | 4       | 2 17     |
| OTHER HEART DISEASE                        |      |      | 83   | 6    | 1   |       | 4   | 21   | 1      | 15   | 17   | 8   | 1       | 25       |
| ALCOHOL USE/ABUSE                          | 1    |      | 31   | 4    | 1   |       |     | 17   |        | 3    | 2    | 4   |         | 2        |
| CEREBROVASCULAR DISEASES                   | 1    |      | 74   | 5    |     |       | 2   | 10   | 1      | 8    | 10   | 7   | 2       | 1 13     |
| ATHEROSCLEROSIS                            |      |      | 4    |      |     |       |     |      |        |      | 2    |     | 1       | 1        |
| ACUTE BRONCHITIS & BRONCHIOLITIS           |      |      |      |      |     |       |     |      |        |      |      |     |         |          |
| PNEUMONIA & INFLUENZA                      | 1    |      | 11   | 2    |     |       |     | 8    |        | 4    | 8    | 4   |         | 1        |
| EMPHYSEMA                                  |      |      | 4    |      |     |       |     | 4    |        | 1    |      |     |         |          |
| ASTHMA                                     | 1    |      | 3    |      |     |       |     |      |        |      |      | 2   |         |          |
| OTHER CHRONIC OBSTRUCTIVE PULMONARY        |      |      |      |      |     |       |     |      |        |      |      |     |         |          |
| DISEASES                                   |      | 2    | 31   | 5    | 2   |       | 2   | 8    |        | 1    | 10   | 3   |         | 5        |
| CHRONIC LIVER DISEASE & CIRRHOSIS          |      |      | 6    |      |     |       |     |      |        | 1    | 4    |     |         | 1        |
| NEPHRITIS, NEPHROTIC SYNDROME & NEPHROSIS  |      |      | 6    |      |     |       |     |      |        | 2    |      | 1   |         |          |
| CONGENITAL ANOMALIES                       |      | 1    | 10   | 1    |     |       |     | 2    |        | 1    | 4    |     |         | 3        |
| PERINATAL PERIOD CONDITIONS                |      | 1    | 7    | 1    |     |       | 1   |      |        | 1    |      |     | 1       |          |
| SIDS                                       |      |      | 9    | 1    |     |       |     | 1    |        |      | 3    |     | 2       | 1        |
| ALZHEIMER'S DISEASE                        |      |      | 10   |      |     |       |     | 1    |        |      |      |     |         | 3        |
| MOTOR VEHICLE ACCIDENTS                    |      |      | 22   | 1    |     |       | 1   | 11   |        | 4    | 5    |     | 1       | 1 8      |
| ALL OTHER ACCIDENTS & ADVERSE EFFECTS      |      | 1    | 61   | 8    |     |       | 5   | 21   | 3      | 10   | 14   | 2   | 9       | 15       |
| SUICIDE                                    |      | 1    | 31   | 12   | 1   |       | 1   | 24   |        | 5    | 5    | 1   | 4       | 2 7      |
| HOMICIDE & LEGAL INTERVENTION              |      |      | 24   | 1    |     |       |     | 10   |        |      | 2    |     |         | 3        |
| ALL OTHER CAUSES                           |      |      | 145  | 8    |     | 2     | 3   | 35   |        | 16   | 33   | 18  | 11      | 2 27     |
| TOTAL                                      | 10   | 11   | 985  |      |     | 4     | 26  | 288  | 15     | 120  | 234  | 90  | 49      | 15 221   |

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TABLE 6.12 CONTINUED

|  |       | С        | ENSI | JS AR | REA (   | OF DI | ECE | DEN' | T'S RE   | ESIDENO | E              |      |       |
|--|-------|----------|------|-------|---------|-------|-----|------|----------|---------|----------------|------|-------|
| CAUSE OF DEATH                             | NOM   |          |      |       |         |       |     |      |          | WRPYAI  |                | IINK | TOTAL |
| TUBERCULOSIS                               | 1     | . 11,012 |      |       |         |       |     |      | 2        |         | 1.0            |      | 2     |
| SEPTICEMIA                                 |       |          |      |       |         | 1     | 1   |      | 1        |         |                |      | 15    |
| HIV INFECTION                              |       |          |      |       |         |       |     |      | 1        |         |                |      | 6     |
| CANCER: LIP, ORAL CAVITY & PHARYNX         | 1     |          |      |       |         |       |     | 1    |          | 1       |                |      | 14    |
| CANCER: DIGESTIVE ORGANS & PERITONEUM      | 10    | 2        | 8    | 2     | 2       | 1     |     | 2    | 2        | 1       | 1 10           |      | 168   |
| CANCER: RESPIRATORY & INTRATHORACIC ORGANS | 5     | 1        | 2    | 1     | 2       | 2     |     | 3    | 3        | 3       | 2 5            |      | 203   |
| CANCER: BREAST                             | 1 7   | 1        | 1    | - 1   |         | 1     |     | ,    | ,        |         | 4              |      | 49    |
| CANCER: GENITAL ORGANS                     |       |          |      | 1     | 1       | 1     | 1   | 1    |          | 2       | 1              |      | 54    |
| CANCER: URINARY ORGANS                     | 1     | 1        |      |       |         | 1     | 1   | 2    | 1        |         | <del>  '</del> |      | 29    |
| CANCER: OTHER & UNSPECIFIED SITES          | +     | 1        | 1    |       |         |       | 1   |      | 1        | 2       |                |      | 67    |
| CANCER: LEUKEMIA                           | 7     |          |      |       |         | 1     | 1   |      | 1        | 1       |                |      | 24    |
| CANCER: OTHER LYMPHATIC & HEMATOPOIETIC    | + - 4 |          |      |       |         |       | - 1 |      |          |         |                |      |       |
| TISSUES                                    |       |          |      | 2     |         | 1     |     | 2    |          | 1       |                |      | 40    |
| DIABETES MELLITUS                          |       |          |      | 3     | 1       | 1     | 2   | 2    |          | 1       | 1              |      | 65    |
| RHEUMATIC FEVER & RHEUMATIC HEART DISEASE  |       | 2        |      |       |         | 1     |     |      |          |         | <b>—</b> '     |      | 10    |
| HYPERTENSIVE HEART DISEASE                 |       |          |      |       | 1       |       |     |      |          |         |                |      | 17    |
| HYPERTENSIVE HEART & RENAL DISEASE         |       |          |      |       |         |       |     |      |          |         |                |      | 3     |
| ACUTE MYOCARDIAL INFARCTION                | 2     | 1        | 2    |       | 6       | 2     |     | 2    | 2        | 2       | 3              |      | 138   |
| OTHER ACUTE & SUBACUTE FORMS OF ISCHEMIC   | + - 4 | 1        |      |       | - 0     |       |     |      | -4       |         |                |      | 130   |
| HEART DISEASE                              |       |          |      |       |         |       |     |      |          |         |                |      | 1     |
| OTHER FORMS OF CHRONIC ISCHEMIC HEART      |       |          |      |       |         |       |     |      |          |         |                |      |       |
| DISEASE                                    | 2     | 1        | 1    |       | 2       | 2     | 2   |      |          | 5       | 1 3            |      | 177   |
| OTHER HEART DISEASE                        | 2     | 1        | 3    | 3     | 4       |       | 2   | 2    | 3        | 4       | 4              |      | 210   |
| ALCOHOL USE/ABUSE                          | 5     | 4        | 1    | 1     | 1       | 1     |     | 1    | 2        |         | 2              | 1    | 84    |
| CEREBROVASCULAR DISEASES                   | 2     | 1        | 1    | 1     | 3       | 1     | 2   | 6    | 1        |         | 1              |      | 153   |
| ATHEROSCLEROSIS                            |       |          |      |       |         |       | - 1 | 2    | -        |         | 1              |      | 11    |
| ACUTE BRONCHITIS & BRONCHIOLITIS           | 1     |          |      |       |         |       |     |      |          |         |                |      | 1     |
| PNEUMONIA & INFLUENZA                      | 1     |          | 1    |       | 5       |       | 1   | 1    | 1        | 1       |                |      | 53    |
| EMPHYSEMA                                  |       | 1        |      |       |         |       | 1   | 1    |          |         | 1              |      | 13    |
| ASTHMA                                     |       | •        | 1    |       | 1       |       | 1   |      |          |         | 1              |      | 0     |
| OTHER CHRONIC OBSTRUCTIVE PULMONARY        |       |          | - 1  |       | - 1     |       | 1   |      |          |         |                |      |       |
| DISEASES                                   | 1     |          | 2    | 1     | 1       |       |     | 3    | 4        | 2       | 3              |      | 89    |
| CHRONIC LIVER DISEASE & CIRRHOSIS          |       |          |      |       |         | 1     |     |      |          | -1      |                |      | 13    |
| NEPHRITIS, NEPHROTIC SYNDROME & NEPHROSIS  |       |          |      | 1     |         |       | 1   |      | 1        |         |                |      | 12    |
| CONGENITAL ANOMALIES                       | 2     |          |      | 1     |         |       | 1   | 1    | <u> </u> |         |                |      | 26    |
| PERINATAL PERIOD CONDITIONS                | 1 -   | 1        | 1    | 1     |         | 1     |     | ,    | 1        |         |                |      | 16    |
| SIDS                                       |       |          |      |       |         |       |     |      | 1        |         |                |      | 18    |
| ALZHEIMER'S DISEASE                        |       |          |      |       |         |       |     |      | <u> </u> |         |                |      | 14    |
| MOTOR VEHICLE ACCIDENTS                    | 1     |          |      | 1     | 2       |       | 3   | 6    | 1        |         |                |      | 68    |
| ALL OTHER ACCIDENTS & ADVERSE EFFECTS      | 9     | 1        | 3    |       | 3       | 2     |     | 6    | _        | 1       | 5              |      | 180   |
| SUICIDE                                    | 7     | 1        | 1    | 1     | 3       | 1     | 3   | 0    | 7        | - 1     | 7              |      | 131   |
| HOMICIDE & LEGAL INTERVENTION              | 3     | 7        |      | - 1   |         | 1     | 1   |      | 1        |         | 7              |      | 48    |
| ALL OTHER CAUSES                           | 9     | 7        | 1    | 3     | 3       | 1     | 3   | 7    | 1        | 6       | 4              |      | 348   |
| TOTAL                                      | 69    | 30       | 36   |       | 3<br>41 | 22    |     | 54   | _        |         | 4 53           |      | 2.579 |

TABLE 6.13 RESIDENT DEATHS BY DETAILED CAUSES OF DEATH AND BY NATIVE REGIONAL CORPORATION OF DECEDENT'S RESIDENCE, ALASKA, 1998

|  | N/         | TIV | E RE | GION | NAL (        | CORP | OF  | DECI  | EDEN   | T'S | RESII | DEN | CE  |       |
|--|------------|-----|------|------|--------------|------|-----|-------|--|-----|-------|-----|-----|-------|
| CAUSE OF DEATH   | AHT        | ALE | ARC  | BER  | BRI          | CAL  | CHU | COO   | DOY  | KON | NAN   | SEA | UNK | TOTAL |
| TUBERCULOSIS   |            |     |      |      |              | 2    |     |       |  |     |       |     |     | 2     |
| SEPTICEMIA   |            |     |      |      | 1            | 1    |     | 7     | -  |     |       | 3   |     | 15    |
| HIV INFECTION  |            |     |      |      |              |      |     | 5     | 1  |     |       |     |     | 6     |
| CANCER: LIP, ORAL CAVITY & PHARYNX                     |            | 1   |      | 1    | 2            | 2    | 1   | 7     | 1  |     |       | 1   |     | 14    |
| CANCER: DIGESTIVE ORGANS & PERITONEUM                  |            | 1   | 2    | 10   | 4            | 8    | 4   | 88    | 23   | 2   | 8     | 18  |     | 168   |
| CANCER: RESPIRATORY & INTRATHORACIC ORGANS             | 1          | 4   | 1    | 5    | 1            | . 7  | 5   | 117   | 23   | 5   | 2     | 32  |     | 203   |
| CANCER: BREAST   |            | 2   | 1    |      |              |      |     | 30    | 9  | 1   | 1     | 5   |     | 49    |
| CANCER: GENITAL ORGANS                                 |            |     |      |      |              | 2    | 1   | 33    | 9  |     |       | 9   |     | 54    |
| CANCER: URINARY ORGANS                                 | 2          |     | 1    | 1    |              | 1    |     | 16    | 4  | 1   |       | 3   |     | 29    |
| CANCER: OTHER & UNSPECIFIED SITES                      |            |     | 1    |      | 1            | 1    | 2   | 44    | 7  | 2   | 1     | 8   |     | 67    |
| CANCER: LEUKEMIA                                       |            |     |      | 2    | 1            |      |     | 12    | 4  |     |       | 5   |     | 24    |
| CANCER: OTHER LYMPHATIC & HEMATOPOIETIC TISSUES        | 2          |     |      |      |              | 1    |     | 24    | 1  | 1   |       | 11  |     | 40    |
| DIABETES MELLITUS                                      |            |     |      |      | 1            | 2    | 2   | 39    | 10   | 1   |       | 10  |     | 65    |
| RHEUMATIC FEVER & RHEUMATIC HEART DISEASE              |            |     | 2    |      |              | 1    |     | 6     | 1  |     |       |     |     | 10    |
| HYPERTENSIVE HEART DISEASE                             |            |     |      |      | 1            | 1    |     | 11    | 2  |     |       | 2   |     | 17    |
| HYPERTENSIVE HEART & RENAL DISEASE                     |            |     |      |      |              |      |     | 2     |  |     |       | 1   |     | 3     |
| ACUTE MYOCARDIAL INFARCTION                            | 1          | 2   | 1    | 2    | 1            | 3    | 3   | 77    | <del>                                     </del> | 1   | 2     | 21  |     | 138   |
| OTHER ACUTE & SUBACUTE FORMS OF ISCHEMIC HEART DISEASE |            |     |      |      |              |      |     | 1     |  |     |       |     |     | 1     |
| OTHER FORMS OF CHRONIC ISCHEMIC HEART DISEASE          |            | 1   | 1    | 2    | 2            | 3    | 3   | 104   | 27   | 4   | 1     | 29  |     | 177   |
| OTHER HEART DISEASE                                    | 2          |     | 1    | 2    |              |      | 1   | 124   |  | 1   |       | 35  |     | 210   |
| ALCOHOL USE/ABUSE                                      | <u> </u>   | 1   | 4    | 5    | -            |      | 1   | 35    |  |     | 1     | 10  |     | 84    |
| CEREBROVASCULAR DISEASES                               |            | 1   | 1    | 2    |              |      | 8   |       |  | 2   | 1     | 21  |     | 153   |
| ATHEROSCLEROSIS  | 1          | _   |      |      |              |      | 2   |       |  | 1   |       |     |     | 11    |
| ACUTE BRONCHITIS & BRONCHIOLITIS                       | +          |     |      | 1    |              |      |     |       |  |     |       |     |     | 1     |
| PNEUMONIA & INFLUENZA                                  | 1          | 1   |      | 1    | 1            | 3    | 6   | 16    | 9  |     | 1     | 14  |     | 53    |
| EMPHYSEMA  | † †        |     | 1    |      |              |      | 1   | 4     |  |     | 1     | 1   |     | 13    |
| ASTHMA   |            | 1   |      |      |              |      |     | 3     | 1  |     | 1     | 3   |     | 9     |
| OTHER CHRONIC OBSTRUCTIVE PULMONARY DISEASES           |            | 2   |      | 4    | 4            | . 9  | 4   |       |  |     | 2     | 8   |     | 89    |
| CHRONIC LIVER DISEASE & CIRRHOSIS                      |            |     |      |      | _            | , ,  |     | 11    |  |     |       | 2   |     | 13    |
| NEPHRITIS, NEPHROTIC SYNDROME & NEPHROSIS              |            |     |      |      |              | 1    |     | 6     |  |     |       | 4   |     | 12    |
| CONGENITAL ANOMALIES                                   |            | 1   |      | 2    |              | 1    | 1   | 17    |  |     |       | 2   |     | 26    |
| PERINATAL PERIOD CONDITIONS                            |            | 1   | 1    |      | 1            |      | - 1 | 7     |  | 1   | 1     | 2   |     | 16    |
| SIDS   |            | 1   | 1    |      | 1            | 2    |     | 13    |  | 2   | -     |     | 1   | 18    |
| ALZHEIMER'S DISEASE                                    |            |     |      |      |              |      |     |       |  |     |       |     |     |       |
| MOTOR VEHICLE ACCIDENTS                                | ١.         |     |      | 1    | <u> </u>     |      | _   | 13    |  | 1   |       | 7   |     | 14    |
| ALL OTHER ACCIDENTS & ADVERSE EFFECTS                  | 1 2        |     | 1    | 9    | 2            |      | 10  |       |  | 1   |       |     |     | 68    |
| SUICIDE  | + 2        | 1   | 1    |      | <del>-</del> |      | 10  |       |  |     |       | 21  |     | 180   |
| HOMICIDE & LEGAL INTERVENTION                          |            | 1   | 4    | 7    |              |      | 1   | 42    |  | 4   | 4     | 11  |     | 131   |
| ALL OTHER CAUSES                                       | <b>+</b> . |     |      | 3    |              | 2    |     | 29    |  |     |       | 1   |     | 48    |
|  | 4          |     | 7    | 9    | -            |      | 5   |       |  | 11  |       | 47  |     | 348   |
| TOTAL  | 17         | 21  | 30   | 69   | 46           | 113  | 66  | 1,411 | 372  | 50  | 36    | 347 | 1   | 2,579 |

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TABLE 6.14 RESIDENT DEATHS BY DETAILED CAUSES OF DEATH, BY SEX AND RACE, ALASKA, 1998

|  | S     | EX     |       |        | RACE       |          |      |       |
|--|-------|--------|-------|--------|------------|----------|------|-------|
| CAUSE OF DEATH   | MALE  | FEMALE | WHITE | NATIVE | AFRICAN/AM | ASIAN/PI | UNKN | TOTAL |
| TUBERCULOSIS   | 1     | 1      |       | 2      |            |          |      | 2     |
| SEPTICEMIA   | 10    | 5      | 7     | 5      | 2          | 1        |      | 15    |
| HIV INFECTION  | 5     | 1      | 5     |        | 1          |          |      | 6     |
| CANCER: LIP, ORAL CAVITY & PHARYNX                     | 10    | 4      | 8     | 5      | 1          |          |      | 14    |
| CANCER: DIGESTIVE ORGANS &<br>PERITONEUM               | 101   | 67     | 94    | 63     | 6          | 4        | 1    | 168   |
| CANCER: RESPIRATORY &<br>INTRATHORACIC ORGANS          | 115   | 88     |       |        |            |          |      | 203   |
| CANCER: BREAST   |       | 49     |       |        | 2          | 2        |      | 49    |
| CANCER: GENITAL ORGANS                                 | 30    | 24     | 47    | 7      |            |          |      | 54    |
| CANCER: URINARY ORGANS                                 | 20    | 9      | 24    | 5      |            |          |      | 29    |
| CANCER: OTHER & UNSPECIFIED SITES                      | 35    | 32     | 55    | 9      |            | 2        | 1    | 67    |
| CANCER: LEUKEMIA                                       | 16    | 8      | 19    | 5      |            |          |      | 24    |
| CANCER: OTHER LYMPHATIC &<br>HEMATOPOIETIC TISSUES     | 26    | 14     | 32    | 6      |            | 2        |      | 40    |
| DIABETES MELLITUS                                      | 30    | 35     | 47    | 10     | 5          | 3        |      | 65    |
| RHEUMATIC FEVER & RHEUMATIC HEART<br>DISEASE           | 3     | 7      | 5     | 5      |            |          |      | 10    |
| HYPERTENSIVE HEART DISEASE                             | 10    | 7      | 12    | 2      | 2          | 1        |      | 17    |
| HYPERTENSIVE HEART & RENAL DISEASE                     | 1     | 2      | 3     |        |            |          |      | 3     |
| ACUTE MYOCARDIAL INFARCTION                            | 103   | 35     | 109   | 19     | 3          | 5        | 2    | 138   |
| OTHER ACUTE & SUBACUTE FORMS OF ISCHEMIC HEART DISEASE | 1     |        | 1     |        |            |          |      | 1     |
| OTHER FORMS OF CHRONIC ISCHEMIC                        | 126   | 51     | 151   | 18     | 2          | 5        | 1    | 177   |
| HEART DISEASE<br>OTHER HEART DISEASE                   | 121   | 89     | 160   | 42     | 4          | 4        |      | 210   |
| ALCOHOL USE/ABUSE                                      | 52    | 32     |       |        | 3          |          |      | 84    |
| CEREBROVASCULAR DISEASES                               | 62    | 91     | 105   |        | Δ          |          | 1    | 153   |
| ATHEROSCLEROSIS  | 5     | 6      | 9     |        |            | 10       |      | 11    |
| ACUTE BRONCHITIS & BRONCHIOLITIS                       | 1     |        |       | 1      |            |          |      | 1     |
| PNEUMONIA & INFLUENZA                                  | 23    | 30     | 33    | 17     | 1          | 2        |      | 53    |
| EMPHYSEMA  | 7     | 6      |       |        | 1          | _        |      | 13    |
| ASTHMA   | 2     | 7      | 8     |        |            | 1        |      | 1.    |
| OTHER CHRONIC OBSTRUCTIVE<br>PULMONARY DISEASES        | 43    | 46     |       | 28     |            | 1        |      | 89    |
| CHRONIC LIVER DISEASE & CIRRHOSIS                      | 8     | 5      | 10    | 2      |            | 1        |      | 13    |
| NEPHRITIS, NEPHROTIC SYNDROME &<br>NEPHROSIS           | 8     | 4      | 9     |        |            | 1        |      | 12    |
| CONGENITAL ANOMALIES                                   | 14    | 12     | 21    | 4      |            |          | 1    | 26    |
| PERINATAL PERIOD CONDITIONS                            | 11    | 5      | 9     | 5      |            | 2        |      | 16    |
| SIDS   | 15    | 3      | 9     | 5      | 4          |          |      | 18    |
| ALZHEIMER'S DISEASE                                    | 6     | 8      | 14    |        |            |          |      | 14    |
| MOTOR VEHICLE ACCIDENTS                                | 50    | 18     |       | 17     | 1          | 7        |      | 68    |
| ALL OTHER ACCIDENTS & ADVERSE<br>EFFECTS               | 131   | 49     |       |        | 5          | 3        |      | 180   |
| SUICIDE  | 105   | 26     | 75    | 50     | 2          | 4        |      | 131   |
| HOMICIDE & LEGAL INTERVENTION                          | 34    | 14     | 28    | 15     | 2          | 3        |      | 48    |
| ALL OTHER CAUSES                                       | 167   | 181    | 253   | 75     | 12         | 6        | 2    | 348   |
| TOTAL  | 1,508 | 1.071  | 1.827 |        |            | ·        | 9    |       |

TABLE 6.15 RESIDENT DEATHS BY DETAILED CAUSES OF DEATH AND AGE, ALASKA, 1998

|   |    |      |       | ECEI  | NENIUS | C A CIE | CDO   |       |       |     |       |
|---|----|------|-------|-------|--------|---------|-------|-------|-------|-----|-------|
| G. 1797 07 77 1                                 |    |      |       |       |        | SAGE    |       |       | 04    | 0=  |       |
| CAUSE OF DEATH                                  | <5 | 5-14 | 15-24 | 25-34 | 35-44  | 45-54   | 55-64 | 65-74 | 75-84 | 85+ | TOTAL |
| TUBERCULOSIS                                    |    |      |       |       |        |         |       | 1     | 1     |     | 2     |
| SEPTICEMIA                                      | 1  |      |       |       |        | 1       |       | 5     | 5     | 3   | 15    |
| HIV INFECTION                                   |    |      |       | 1     | 2      |         | 2     |       |       |     | 6     |
| CANCER: LIP, ORAL CAVITY & PHARYNX              |    |      |       |       | 2      | 2       | 2     | 5     | 2     | 1   | 14    |
| CANCER: DIGESTIVE ORGANS & PERITONEUM           |    |      |       | 2     | 13     | 24      | 40    | 54    | 24    | 11  | 168   |
| CANCER: RESPIRATORY & INTRATHORACIC             |    |      |       | 1     | 8      | 23      | 52    | 74    | 39    | 6   | 203   |
| ORGANS  |    |      |       | 1     |        |         |       |       |       |     |       |
| CANCER: BREAST                                  |    |      |       |       | 9      |         |       | _     | 6     |     | 49    |
| CANCER: GENITAL ORGANS                          |    |      |       | 1     | 1      | 8       |       |       |       | 5   | 54    |
| CANCER: URINARY ORGANS                          |    |      | 1     |       | 1      | 4       | 6     | 5     | 12    |     | 29    |
| CANCER: OTHER & UNSPECIFIED SITES               |    | 2    |       |       | 6      | 11      | 16    | 14    | 16    |     | 67    |
| CANCER: LEUKEMIA                                |    | 2    |       | 1     | 3      | 3       | 2     | 3     | 7     | 3   | 24    |
| CANCER: OTHER LYMPHATIC & HEMATOPOIETIC TISSUES |    |      |       |       | 5      | 8       | 5     | 10    | 8     | 4   | 40    |
| DIABETES MELLITUS                               |    |      |       | 1     | 1      | 6       | 16    | 22    | 9     | 10  | 65    |
| RHEUMATIC FEVER & RHEUMATIC HEART<br>DISEASE    |    |      |       | •     | •      | 1       | 2     |       | 2     |     | 10    |
| HYPERTENSIVE HEART DISEASE                      |    |      |       | 1     | 2      | 4       | 3     | 2     | 3     | 2   | 17    |
| HYPERTENSIVE HEART & RENAL DISEASE              |    |      |       |       |        |         |       | 1     | 1     | 1   | 3     |
| ACUTE MYOCARDIAL INFARCTION                     |    |      | 1     | 1     | 2      | 28      | 21    | 33    | 39    | 13  | 138   |
| OTHER ACUTE & SUBACUTE FORMS OF ISCHEMIC        |    |      | 1     |       |        |         |       |       |       | 1.3 | 1.30  |
| HEART DISEASE                                   |    |      |       |       |        |         |       |       | 1     |     | 1     |
| OTHER FORMS OF CHRONIC ISCHEMIC HEART           |    |      |       |       | 10     | 22      | 20    | 4.5   | 50    | 10  | 177   |
| DISEASE   |    |      |       |       | 10     |         |       |       |       | 18  | 177   |
| OTHER HEART DISEASE                             | 2  | 1    |       | 6     | 7      | 18      | 29    | 37    | 48    | 62  | 210   |
| ALCOHOL USE/ABUSE                               |    |      | 1     | 7     | 25     | 21      | 18    | 9     | 1     | 2   | 84    |
| CEREBROVASCULAR DISEASES                        |    |      |       | 1     | 11     | 12      | 18    | 24    | 49    | 38  | 153   |
| ATHEROSCLEROSIS                                 |    |      |       |       |        | 1       | 1     | 4     | 3     | 2   | 11    |
| ACUTE BRONCHITIS & BRONCHIOLITIS                | 1  |      |       |       |        |         |       |       |       |     | 1     |
| PNEUMONIA & INFLUENZA                           |    |      |       | 2     | 3      | 2       | 4     | 8     | 16    | 18  | 53    |
| EMPHYSEMA                                       |    |      |       |       |        | 1       | 3     | 6     | 1     | 2   | 13    |
| ASTHMA  |    |      | 1     |       |        | 5       |       | 2     |       | 1   | 9     |
| OTHER CHRONIC OBSTRUCTIVE PULMONARY DISEASES    |    |      |       |       |        | 4       | 10    | 33    | 32    | 10  | 89    |
| CHRONIC LIVER DISEASE & CIRRHOSIS               |    |      |       |       | 2      | 4       | 1     | 2     | 4     |     | 13    |
| NEPHRITIS, NEPHROTIC SYNDROME & NEPHROSIS       |    |      |       |       |        | 2       |       | 4     | 5     | 1   | 12    |
| CONGENITAL ANOMALIES                            | 14 | 1    | 1     | 1     |        |         | 2     | 1     | 4     | 2   | 26    |
| PERINATAL PERIOD CONDITIONS                     | 16 | _    | - 1   |       |        |         |       |       | 7     |     | 16    |
| SIDS  | 18 |      |       |       |        |         |       |       |       |     | 18    |
| ALZHEIMER'S DISEASE                             | 10 |      |       |       |        |         | 1     | 2     | 7     | 4   | 14    |
| MOTOR VEHICLE ACCIDENTS                         | 4  | _    | 17    | 13    | 12     | 11      | 3     | _     | - 1   | 4   | 68    |
| ALL OTHER ACCIDENTS & ADVERSE EFFECTS           | 3  |      |       |       |        |         | 12    | _     |       | 11  |       |
|   |    | 12   | 28    | 23    |        |         |       | 8     |       | 11  | 180   |
| SUICIDE & LECAL INTERVENTION                    | 2  |      | 44    | 23    |        |         | 15    |       |       |     | 131   |
| HOMICIDE & LEGAL INTERVENTION                   |    |      | 6     |       |        |         |       | 2     | - 1   |     | 48    |
| ALL OTHER CAUSES                                | 13 |      |       | 8     |        |         | 33    | 80    |       |     | 348   |
| TOTAL   | 74 | 31   | 107   | 104   | 226    | 323     | 369   | 532   | 511   | 302 | 2,579 |

## **EXTERNAL CAUSE OF DEATH TABLES**

Tables 6.16A through 6.20 show external causes of death in greater detail. Unlike previous tables which include resident deaths occurring both in Alaska and out of state, these tables include only deaths occurring in Alaska, both resident and non-resident. In 1998, there were 44 non-resident violent deaths in Alaska and 417 violent deaths occurring in Alaska to Alaska residents.

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## **External Causes of Death by Location**

Tables 6.16A and 6.16B show manner of death by census area and Native regional corporation of residence and race.

TABLE 6.16A EXTERNAL CAUSES OF DEATH BY CENSUS AREA AND RACE, RESIDENTS AND NON-RESIDENTS, ALASKA, 1998

|  |       |      |     |       |           | N     | IANNE | R OF D | EATH |       |     |       |       |               |         |
|--|-------|------|-----|-------|-----------|-------|-------|--------|------|-------|-----|-------|-------|---------------|---------|
|  | AC    | CIDE | NT  |       | S         | UICID |       |        |      | OMICI | рE  |       | ОТ    | HER           |         |
| CENSUS AREA OF DECEDENT'S<br>RESIDENCE | ***** | NAT  | OTH | SUB-  | XX/TIT    | NIAT  | ОТИ   | SUB-   | wan  | NAT   | ОТП | SUB-  | 33711 | SUB-<br>TOTAL | TOTAL   |
| ALEUTIANS WEST                         | WILL  | 1    | OIH | 101AL | <u>wп</u> | INAI  | OIH   | 101AL  | WILL | NAI   | OIH | TOTAL | WILL  | IOIAL         | 101AL 2 |
| ANCHORAGE                              | 55    | 17   | 9   | 81    | 26        |       | 3     | 29     | 13   | 4     | 3   | 20    | 2     | 2 2           | 132     |
| BETHEL                                 | 1     | 9    |     | 10    | 1         | 11    |       | 12     | 1    |       |     | 1     |       |               | 23      |
| BRISTOL BAY                            |       |      |     |       | 1         |       |       | 1      |      |       |     |       |       |               | 1       |
| DILLINGHAM                             | 3     | 3    |     | 6     |           | 1     |       | 1      |      |       |     |       |       |               | 7       |
| FAIRBANKS NSB                          | 21    | 4    | 5   | 30    | 19        | 3     | 2     | 24     | 7    | 2     |     | 9     |       |               | 63      |
| HAINES BOROUGH                         | 3     |      |     | 3     |           |       |       |        |      |       |     |       |       |               | 3       |
| JUNEAU BOROUGH                         | 4     | 9    | 1   | 14    | 4         | 1     |       | 5      |      |       |     |       |       |               | 19      |
| KENAI PENINSULA                        | 15    | 2    |     | 17    | 5         |       |       | 5      | 2    |       |     | 2     |       |               | 24      |
| KETCHIKAN                              | 1     |      |     | 1     | 1         |       |       | 1      |      |       |     |       |       |               | 2       |
| KODIAK ISLAND                          | 9     | 1    |     | 10    | 2         | 1     |       | 3      |      |       |     |       | 1     | . 1           | 14      |
| LAKE-PENINSULA                         |       | 1    |     | 1     |           | 2     |       | 2      |      |       |     |       |       |               | 3       |
| MATANUSKA-SUSITNA                      | 21    | 2    |     | 23    | 6         | 1     |       | 7      | 1    | 2     |     | 3     | 1     | . 1           | 34      |
| NOME                                   |       | 12   |     | 12    |           | 7     |       | 7      |      | 3     |     | 3     |       |               | 22      |
| NORTH SLOPE                            |       | 2    |     | 2     |           | 3     | 1     | 4      |      |       |     |       |       |               | 6       |
| NORTHWEST ARCTIC                       |       | 3    |     | 3     |           | 4     |       | 4      |      |       |     |       |       |               | 7       |
| SITKA BOROUGH                          | 2     | 2    |     | 4     | 2         | 1     |       | 3      |      |       |     |       |       |               | 7       |
| SKGWAY-HOONAH-ANG                      | 2     |      |     | 2     | 1         |       |       | 1      | 1    |       |     | 1     |       |               | 4       |
| SE FAIRBANKS                           | 3     |      |     | 3     | 2         | 1     |       | 3      |      | 1     |     | 1     |       |               | 7       |
| VALDEZ-CORDOVA                         | 9     | 3    |     | 12    |           |       |       |        |      |       |     |       |       |               | 12      |
| WADE HAMPTON                           |       | 4    |     | 4     |           | 6     |       | 6      |      | 1     |     | 1     |       |               | 11      |
| WRANGELL-PETERSBG                      | 1     |      |     | 1     |           |       |       |        |      |       |     |       |       |               | 1       |
| YUKON-KOYUKUK                          |       | 4    |     | 4     |           | 7     |       | 7      |      | 2     |     | 2     |       |               | 13      |
| OUTSIDE ALASKA                         | 36    |      | 2   | 38    | 4         |       | 1     | 5      | 1    |       |     | 1     |       |               | 44      |
| TOTAL                                  | 186   | 79   | 17  | 282   | 75        | 49    | 7     | 131    | 26   | 15    | 3   | 44    | 4     | 4             | 461     |

TABLE 6.16B EXTERNAL CAUSES OF DEATH BY NATIVE REGIONAL CORPORATION OF RESIDENCE AND RACE, RESIDENTS AND NON-RESIDENTS, ALASKA, 1998

| NATIVE REGIONAL |     |      |     |       |     | N     | 1ANNE | R OF D | EATH |      |     |       |     |       |       |
|-----------------|-----|------|-----|-------|-----|-------|-------|--------|------|------|-----|-------|-----|-------|-------|
| CORPORATION OF  | AC  | CIDE | NT  |       | S   | UICID | E     |        | н    | MICI | DE  |       | ОТ  | HER   |       |
| DECEDENT'S      |     |      |     | SUB-  |     |       |       | SUB-   |      |      |     | SUB-  |     | SUB-  |       |
| RESIDENCE       | WHI | NAT  | OTH | TOTAL | WHI | NAT   | OTH   | TOTAL  | WHI  | NAT  | OTH | TOTAL | WHI | TOTAL | TOTAL |
| AHTNA INC       | 1   | 2    |     | 3     |     |       |       |        |      |      |     |       |     |       | 3     |
| ALEUT CORP      |     | 1    |     | 1     | 1   |       |       | 1      |      |      |     |       |     |       | 2     |
| ARCTIC SLO      |     | 2    |     | 2     |     | 3     | 1     | 4      |      |      |     |       |     |       | 6     |
| BERING STS      |     | 12   |     | 12    |     | 7     |       | 7      |      | 3    |     | 3     |     |       | 22    |
| BRISTOL BY      | 3   | 4    |     | 7     | 1   | 3     |       | 4      |      |      |     |       |     |       | 11    |
| CALISTA CP      | 1   | 13   |     | 14    | 1   | 17    |       | 18     | 1    | 1    |     | 2     |     |       | 34    |
| CHUGACH         | 12  | 3    |     | 15    | 1   |       |       | 1      |      |      |     |       |     |       | 16    |
| COOK INLET      | 87  | 19   | 9   | 115   | 36  | 1     | 3     | 40     | 16   | 6    | 3   | 25    | 3   | 3     | 183   |
| DOYON LTD       | 24  | 8    | 5   | 37    | 21  | 11    | 2     | 34     | 7    | 5    |     | 12    |     |       | 83    |
| KONIAG INC      | 9   | 1    |     | 10    | 2   | 1     |       | 3      |      |      |     |       | 1   | 1     | 14    |
| NANA CORP       |     | 3    |     | 3     |     | 4     |       | 4      |      |      |     |       |     |       | 7     |
| SEALASKA        | 13  | 11   | 1   | 25    | 8   | 2     |       | 10     | 1    |      |     | 1     |     |       | 36    |
| OUTSIDE AK      | 36  |      | 2   | 38    | 4   |       | 1     | 5      | 1    |      |     | 1     |     |       | 44    |
| TOTAL           | 186 | 79   | 17  | 282   | 75  | 49    | 7     | 131    | 26   | 15   | 3   | 44    | 4   | 4     | 461   |

Tables 6.17A and 6.17B show external causes of death by census area and Native regional corporation of death and race.

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TABLE 6.17A EXTERNAL DEATHS BY THE CENSUS AREA WHERE DEATH OCCURRED, MANNER OF DEATH AND RACE, RESIDENTS AND NON-RESIDENTS, ALASKA, 1998

|                      |       |      |     |               |        | N     | IANNE | R OF D | EATH |      |           |               |       |               |       |
|----------------------|-------|------|-----|---------------|--------|-------|-------|--------|------|------|-----------|---------------|-------|---------------|-------|
|                      | _AC   | CIDE | NT  |               | S      | UICID | E     |        | Н    | MICI | <b>DE</b> |               | ОТ    | HER           |       |
| CENSUS AREA OF DEATH | ***** | NIAT | ОТИ | SUB-<br>TOTAL | 337111 | NIAT  | ОТП   | SUB-   | wan  | NAT  | ОТИ       | SUB-<br>TOTAL | 33711 | SUB-<br>TOTAL | TOTAL |
| ALEUTIANS EAST       | WIII  | NAI  | OIL | TOTAL         | wп     | NAI   | 1     | 1UIAL  | wn   | NAI  | OIR       | TOTAL         | WILL  | TOTAL         | 101AL |
| ALEUTIANS WEST       | 6     | 1    |     | 7             | 1      |       | _     | 1      |      |      |           |               |       |               | 8     |
| ANCHORAGE            | 59    | 17   | 7   |               | 30     | 2     | 3     | 35     | 13   | 6    | 3         | 22            | 1     | 1             | 141   |
| BETHEL               | 2     | 9    | ,   | 11            |        | 10    |       | 10     | 1    |      |           | 1             | •     | •             | 22    |
| BRISTOL BAY          |       |      |     |               | 1      |       |       | 1      |      |      |           |               |       |               | 1     |
| DENALI               | 10    |      |     | 10            | 1      |       |       | 1      |      |      |           |               |       |               | 11    |
| DILLINGHAM           | 2     | 2    |     | 4             |        | 1     |       | 1      |      | 1    |           | 1             |       |               | 6     |
| FAIRBANKS NSB        | 22    | 6    | 5   | 33            | 18     | 3     | 2     | 23     | 6    | 3    |           | 9             |       |               | 65    |
| HAINES BOROUGH       | 4     |      |     | 4             |        |       |       |        |      |      |           |               |       |               | 4     |
| JUNEAU BOROUGH       | 6     | 6    | 1   | 13            | 4      | 1     |       | 5      |      |      |           |               |       |               | 18    |
| KENAI PENINSULA      | 21    | 2    | 2   | 25            | 4      |       |       | 4      | 3    |      |           | 3             |       |               | 32    |
| KETCHIKAN            | 4     |      |     | 4             | 1      |       |       | 1      |      |      |           |               |       |               | 5     |
| KODIAK ISLAND        | 8     | 2    |     | 10            | 2      | 1     |       | 3      |      |      |           |               | 1     | 1             | 14    |
| LAKE-PENINSULA       | 7     | 1    |     | 8             | 1      | 2     |       | 3      |      |      |           |               |       |               | 11    |
| MATANUSKA-SUSITNA    | 17    | 2    | 1   | 20            | 6      | 1     |       | 7      | 1    | 1    |           | 2             | 2     | 2             | 31    |
| NOME                 |       | 11   |     | 11            |        | 6     |       | 6      |      | 2    |           | 2             |       |               | 19    |
| NORTH SLOPE          | 1     | 2    | 1   | 4             |        | 3     | 1     | 4      |      |      |           |               |       |               | 8     |
| NORTHWEST ARCTIC     | 1     | 3    |     | 4             |        | 4     |       | 4      |      |      |           |               |       |               | 8     |
| SITKA BOROUGH        | 2     | 4    |     | 6             | 2      | 1     |       | 3      |      |      |           |               |       |               | 9     |
| SKGWAY-HOONAH-ANG    | 3     | 1    |     | 4             | 1      |       |       | 1      | 1    |      |           | 1             |       |               | 6     |
| SE FAIRBANKS         |       |      |     |               | 2      | 1     |       | 3      | 1    |      |           | 1             |       |               | 4     |
| VALDEZ-CORDOVA       | 9     | 3    |     | 12            |        |       |       |        |      |      |           |               |       |               | 12    |
| WADE HAMPTON         |       | 4    |     | 4             |        | 6     |       | 6      |      | 1    |           | 1             |       |               | 11    |
| WRANGELL-PETERSBG    | 1     |      |     | 1             |        |       |       |        |      |      |           |               |       |               | 1     |
| YAKUTAT              | 1     |      |     | 1             |        |       |       |        |      |      |           |               |       |               | 1     |
| YUKON-KOYUKUK        |       | 3    |     | 3             | 1      | 7     |       | 8      |      | 1    |           | 1             |       |               | 12    |
| TOTAL                | 186   | 79   | 17  | 282           | 75     | 49    | 7     | 131    | 26   | 15   | 3         | 44            | 4     | 4             | 461   |

TABLE 6.17B EXTERNAL CAUSES OF DEATH BY NATIVE REGIONAL CORPORATION WHERE DEATH OCCURRED, MANNER OF DEATH AND RACE, RESIDENTS AND NON-RESIDENTS, ALASKA, 1998

|                 |     |      |     |       |     | N     | IANNE | R OF D | EATH |              |     |       |     |       |       |
|-----------------|-----|------|-----|-------|-----|-------|-------|--------|------|--------------|-----|-------|-----|-------|-------|
| NATIVE REGIONAL | AC  | CIDE | NT  |       | S   | UICID |       |        |      | <b>PMICI</b> | рE  |       | ОТ  | HER   |       |
| CORPORATION OF  |     |      |     | SUB-  |     |       |       | SUB-   |      |              |     | SUB-  |     | SUB-  |       |
| DEATH           | WHI | NAT  | OTH | TOTAL | WHI | NAT   | OTH   | TOTAL  | WHI  | NAT          | OTH | TOTAL | WHI | TOTAL | TOTAL |
| AHTNA INC       | 6   | 1    |     | 7     |     |       |       |        |      |              |     |       |     |       | 7     |
| ALEUT CORP      | 6   | 1    |     | 7     | 1   |       | 1     | 2      |      |              |     |       |     |       | 9     |
| ARCTIC SLO      | 1   | 2    | 1   | 4     |     | 3     | 1     | 4      |      |              |     |       |     |       | 8     |
| BERING STS      |     | 11   |     | 11    |     | 6     |       | 6      |      | 2            |     | 2     |     |       | 19    |
| BRISTOL BY      | 8   | 3    |     | 11    | 2   | 3     |       | 5      |      | 1            |     | 1     |     |       | 17    |
| CALISTA CP      | 2   | 13   |     | 15    |     | 16    |       | 16     | 1    | 1            |     | 2     |     |       | 33    |
| CHUGACH         | 11  | 4    |     | 15    |     |       |       |        |      |              |     |       |     |       | 15    |
| COOK INLET      | 92  | 19   | 10  | 121   | 40  | 3     | 3     | 46     | 17   | 7            | 3   | 27    | 3   | 3     | 197   |
| DOYON LTD       | 29  | 9    | 5   | 43    | 22  | 11    | 2     | 35     | 7    | 4            |     | 11    |     |       | 89    |
| KONIAG INC      | 9   | 2    |     | 11    | 2   | 1     |       | 3      |      |              |     |       | 1   | 1     | 15    |
| NANA CORP       | 1   | 3    |     | 4     |     | 4     |       | 4      |      |              |     |       |     |       | 8     |
| SEALASKA        | 21  | 11   | 1   | 33    | 8   | 2     |       | 10     | 1    |              |     | 1     |     |       | 44    |
| TOTAL           | 186 | 79   | 17  | 282   | 75  | 49    | 7     | 131    | 26   | 15           | 3   | 44    | 4   | 4     | 461   |

## **External Causes of Death by Method**

Tables 6.18A, 6.18B and 6.20, and Chart 6.8 show external causes of death by cause. Firearms accounted for more than one-quarter of all deaths from external causes (123). The next greatest cause of external causes was motor vehicles with 81 deaths. Firearms accounted for 4 accidental deaths, 89 suicide deaths, and 30 homicide deaths. All motor vehicle deaths were accidental. ICD-9 codes for cause of death are shown in Appendix C, Table C.2.

TABLE 6.18A EXTERNAL CAUSES OF DEATH BY METHOD AND MANNER OF DEATH AND RACE, RESIDENTS AND NON-RESIDENTS, ALASKA, 1998

|                         | MANNER OF DEATH |      |     |       |     |       |     |       |     |      |     |       |        |       |       |
|-------------------------|-----------------|------|-----|-------|-----|-------|-----|-------|-----|------|-----|-------|--------|-------|-------|
|                         | AC              | CIDE | NT  |       | S   | UICID |     |       |     | MICI | DE  |       | OTHER_ |       |       |
|                         |                 |      |     | SUB-  |     |       |     | SUB-  |     |      |     | SUB-  |        | SUB-  |       |
| METHOD OF DEATH RAILWAY | WHI             | NAT  | OTH | TOTAL | WHI | NAT   | OTH | TOTAL | WHI | NAT  | OTH | TOTAL | WHI    | TOTAL | TOTAL |
|                         | 50              | 10   | 10  | 70    |     |       |     |       |     |      |     |       |        |       | 70    |
| MOTOR VEHICLE           | 52              | 16   | 10  |       |     |       |     |       |     |      |     |       |        |       | 78    |
| OTHER ROAD VEHICLE      | 1               |      |     | 1     |     |       |     |       |     |      |     |       |        |       | 1     |
| DROWNING                | 28              | 21   | 3   |       | 1   |       |     | 1     |     |      |     |       | 1      | 1     | 54    |
| WATER TRANSPORT         | 1               | 7    |     | 8     |     |       |     |       |     |      |     |       |        |       | 8     |
| AIR TRANSPORT           | 24              |      |     | 24    |     |       |     |       |     |      |     |       |        |       | 24    |
| MEDICAL                 |                 |      |     |       |     |       |     |       |     |      |     |       |        |       |       |
| COMPLICATIONS           | 2               |      |     | 2     |     |       |     |       |     |      |     |       |        |       | 2     |
| FALLS                   | 23              | 4    |     | 27    |     |       |     |       |     |      |     |       |        |       | 27    |
| FIRE/BURNS              | 16              | 3    |     | 19    |     |       |     |       |     |      |     |       |        |       | 19    |
| EXPOSURE                | 4               | 6    |     | 10    |     |       |     |       |     |      |     |       |        |       | 10    |
| SUFFOCATION             | 6               | 3    |     | 9     |     |       |     |       |     |      |     |       |        |       | 9     |
| POISONING               | 16              | 15   |     | 31    | 16  |       | 2   | 18    |     |      |     |       | 1      | 1     | 50    |
| STRANGULATION           |                 |      |     |       | 7   | 13    | 2   | 22    |     |      |     |       | 1      | 1     | 23    |
| FIREARMS                | 3               | 1    |     | 4     | 49  | 36    | 3   | 88    | 23  | 5    | 1   | . 29  |        |       | 121   |
| CUTTING/PIERCING        |                 |      |     |       |     |       |     |       |     | 4    | 1   | . 5   |        |       | 5     |
| CHILD BATTERING         |                 |      |     |       |     |       |     |       |     | 1    |     | 1     |        |       | 1     |
| OTHER ACCIDENTS         | 10              | 2    | 4   | 16    |     |       |     |       |     |      |     |       |        |       | 16    |
| OTHER SUICIDES          |                 |      |     |       | 2   |       |     | 2     |     |      |     |       |        |       | 2     |
| OTHER HOMICIDES         |                 |      |     |       |     |       |     |       | 3   | 5    | 1   | . 9   |        |       | 9     |
| OTHER EXTERNAL          |                 |      |     |       |     |       |     |       |     |      |     |       |        |       |       |
| CAUSES                  |                 |      |     |       |     |       |     |       |     |      |     |       | 1      | 1     | 1     |
| TOTAL                   | 186             | 79   | 17  | 282   | 75  | 49    | 7   | 131   | 26  | 15   | 3   | 44    | 4      | 4     | 461   |

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CHART 6.8 EXTERNAL CAUSES OF DEATH BY METHOD, ALASKA RESIDENTS AND NON-RESIDENTS, 1998

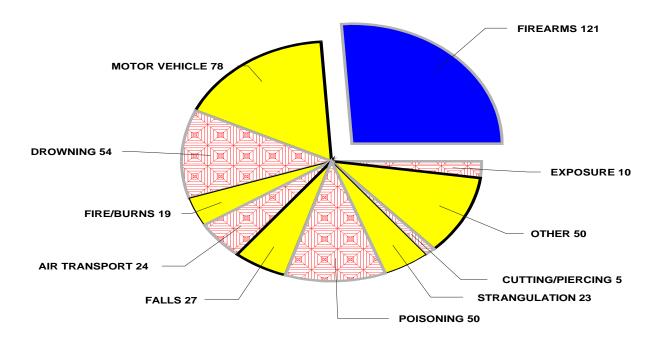


TABLE 6.18B EXTERNAL CAUSES OF DEATH BY METHOD AND MANNER OF DEATH AND SEX, RESIDENTS AND NON-RESIDENTS, ALASKA, 1998

|                    |     |      |       |      | M    | ANNER | OF DE | ATH  |       |     |     |       |       |
|--------------------|-----|------|-------|------|------|-------|-------|------|-------|-----|-----|-------|-------|
|                    |     | DENT |       | SUIC | CIDE | SUB-  | HOM   | CIDE |       |     | IER | SUB-  |       |
| METHOD OF DEATH    | MAL | FEM  | TOTAL | MAL  | FEM  | TOTAL | MAL   | FEM  | TOTAL | MAL | FEM | TOTAL | TOTAL |
| RAILWAY            | 1   |      | 1     |      |      |       |       |      |       |     |     |       | 1     |
| MOTOR VEHICLE      | 57  | 21   | 78    |      |      |       |       |      |       |     |     |       | 78    |
| OTHER ROAD VEHICLE | 1   |      | 1     |      |      |       |       |      |       |     |     |       | 1     |
| DROWNING           | 47  | 5    | 52    | 1    |      | 1     |       |      |       | 1   |     | 1     | 54    |
| WATER TRANSPORT    | 7   | 1    | 8     |      |      |       |       |      |       |     |     |       | 8     |
| AIR TRANSPORT      | 21  | 3    | 24    |      |      |       |       |      |       |     |     |       | 24    |
| MEDICAL            |     |      |       |      |      |       |       |      |       |     |     |       |       |
| COMPLICATIONS      |     | 2    | 2     |      |      |       |       |      |       |     |     |       | 2     |
| FALLS              | 18  | 9    | 27    |      |      |       |       |      |       |     |     |       | 27    |
| FIRE/BURNS         | 11  | 8    | 19    |      |      |       |       |      |       |     |     |       | 19    |
| EXPOSURE           | 7   | 3    | 10    |      |      |       |       |      |       |     |     |       | 10    |
| SUFFOCATION        | 3   | 6    | 9     |      |      |       |       |      |       |     |     |       | 9     |
| POISONING          | 20  | 11   | 31    | 12   | 6    | 18    |       |      |       |     | 1   | 1     | 50    |
| STRANGULATION      |     |      |       | 16   | 6    | 22    |       |      |       |     | 1   | 1     | 23    |
| FIREARMS           | 3   | 1    | 4     | 76   | 12   | 88    | 22    | 7    | 29    |     |     |       | 121   |
| CUTTING/PIERCING   |     |      |       |      |      |       | 5     |      | 5     |     |     |       | 5     |
| CHILD BATTERING    |     |      |       |      |      |       |       | 1    | 1     |     |     |       | 1     |
| OTHER ACCIDENTS    | 12  | 4    | 16    |      |      |       |       |      |       |     |     |       | 16    |
| OTHER SUICIDES     |     |      |       | 2    |      | 2     |       |      |       |     |     |       | 2     |
| OTHER HOMICIDES    |     |      |       |      |      |       | 5     | 4    | 9     |     |     |       | 9     |
| OTHER EXTERNAL     |     |      |       |      |      |       |       |      |       |     |     |       |       |
| CAUSES             |     |      |       |      |      |       |       |      |       | 1   |     | 1     | 1     |
| TOTAL              | 208 | 74   | 282   | 107  | 24   | 131   | 32    | 12   | 44    | 2   | 2   | 4     | 461   |

TABLE 6.19A EXTERNAL CAUSES OF DEATH BY MANNER OF DEATH, AGE AND RACE, RESIDENTS AND NON-RESIDENTS, ALASKA, 1998

|          |     |      |     |       |         | M   | ANNI | ER OF D | EATH     | ī   |     |       |     |       |       |
|----------|-----|------|-----|-------|---------|-----|------|---------|----------|-----|-----|-------|-----|-------|-------|
|          | AC  | CIDE | NT  |       | SUICIDE |     |      |         | HOMICIDE |     |     |       | O   |       |       |
| AGE OF   |     |      |     | SUB-  |         |     |      | SUB-    |          |     |     | SUB-  |     | SUB-  |       |
| DECEDENT | WHI | NAT  | OTH | TOTAL | WHI     | NAT | OTH  | TOTAL   | WHI      | NAT | OTH | TOTAL | WHI | TOTAL | TOTAL |
| <1       | 1   |      | 1   | 2     |         |     |      |         |          |     |     |       |     |       | 2     |
| 1-4      | 2   | 3    |     | 5     |         |     |      |         |          | 1   |     | 1     | 1   | 1     | 7     |
| 5-14     | 10  | 4    | 2   | 16    |         |     |      |         |          | 1   |     | 1     |     |       | 17    |
| 15-24    | 34  | 11   | 5   | 50    | 16      | 28  | 1    | 45      | 2        | 3   | 1   | 6     | 2   | 2     | 103   |
| 25-34    | 30  | 12   | 4   | 46    | 9       | 12  | 3    | 24      | 7        | 1   | 1   | 9     |     |       | 79    |
| 35-44    | 36  | 29   | 1   | 66    | 9       | 7   | 1    | 17      | 6        | 7   |     | 13    | 1   | 1     | 97    |
| 45-54    | 33  | 10   | 1   | 44    | 22      | 1   | 1    | 24      | 8        | 1   | 1   | 10    |     |       | 78    |
| 55-64    | 15  | 3    |     | 18    | 12      |     | 1    | 13      |          | 1   |     | 1     |     |       | 32    |
| 65-74    | 11  | 2    | 1   | 14    | 5       | 1   |      | 6       | 2        |     |     | 2     |     |       | 22    |
| 75-84    | 6   | 4    | 1   | 11    | 2       |     |      | 2       | 1        |     |     | 1     |     |       | 14    |
| 85+      | 8   | 1    | 1   | 10    |         |     |      |         |          |     |     |       |     |       | 10    |
| TOTAL    | 186 | 79   | 17  | 282   | 75      | 49  | 7    | 131     | 26       | 15  | 3   | 44    | 4   | 4     | 461   |

TABLE 6.19B EXTERNAL CAUSES OF DEATH BY MANNER OF DEATH, AGE AND SEX, RESIDENTS AND NON-RESIDENTS, ALASKA, 1998

|          |      |      |       |      | MA   | NNER  | OF DE | ATH  |       |     |     |       |       |
|----------|------|------|-------|------|------|-------|-------|------|-------|-----|-----|-------|-------|
| AGE OF   | ACCI | DENT | SUB-  | SUIC | CIDE | SUB-  | ном   | CIDE | SUB-  | OTI | HER | SUB-  |       |
| DECEDENT | MAL  | FEM  | TOTAL | MAL  | FEM  | TOTAL | MAL   | FEM  | TOTAL | MAL | FEM | TOTAL | TOTAL |
| <1       | 1    | 1    | 2     |      |      |       |       |      |       |     |     |       | 2     |
| 1-4      | 4    | 1    | 5     |      |      |       | 1     |      | 1     |     | 1   | 1     | 7     |
| 5-14     | 9    | 7    | 16    |      |      |       | 1     |      | 1     |     |     |       | 17    |
| 15-24    | 42   | 8    | 50    | 37   | 8    | 45    | 6     |      | 6     | 2   |     | 2     | 103   |
| 25-34    | 37   | 9    | 46    | 20   | 4    | 24    | 6     | 3    | 9     |     |     |       | 79    |
| 35-44    | 57   | 9    | 66    | 12   | 5    | 17    | 7     | 6    | 13    |     | 1   | 1     | 97    |
| 45-54    | 33   | 11   | 44    | 19   | 5    | 24    | 9     | 1    | 10    |     |     |       | 78    |
| 55-64    | 13   | 5    | 18    | 11   | 2    | 13    | 1     |      | 1     |     |     |       | 32    |
| 65-74    | 4    | 10   | 14    | 6    |      | 6     | 1     | 1    | 2     |     |     |       | 22    |
| 75-84    | 6    | 5    | 11    | 2    |      | 2     |       | 1    | 1     |     |     |       | 14    |
| 85+      | 2    | 8    | 10    |      |      |       |       |      |       |     |     |       | 10    |
| TOTAL    | 208  | 74   | 282   | 107  | 24   | 131   | 32    | 12   | 44    | 2   | 2   | 4     | 461   |

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TABLE 6.20 EXTERNAL CAUSES OF DEATH BY MANNER AND METHOD OF DEATH AND AGE, RESIDENTS AND NON-RESIDENTS, ALASKA, 1998

|          |                       |    |     |      |     | AGE O | F DE | CEDEN | JT |       |       |     |       |
|----------|-----------------------|----|-----|------|-----|-------|------|-------|----|-------|-------|-----|-------|
| MANNER   | AND METHOD OF DEATH   | <1 | 1-4 | 5-14 |     |       |      |       |    | 65-74 | 75-84 | 85+ | TOTAL |
| ACCIDENT |                       | 1. |     |      |     |       | 1    |       |    |       |       |     | 1     |
|          | MOTOR VEHICLE         |    | 4   | 5    | 21  | 16    | 14   | . 9   | 4  |       | 5     |     | 78    |
|          | OTHER ROAD VEHICLE    |    | ,   |      | 1   |       |      |       | ,  |       |       |     | 1     |
|          | DROWNING              | 2  |     | 2    | 17  | 5     | 17   | 6     | 1  |       | 2     |     | 52    |
|          | WATER TRANSPORT       |    |     | 1    | 2   | 1     | 3    | 1     |    |       |       |     | 8     |
|          | AIR TRANSPORT         |    |     |      | 1   | 4     | 8    | 7     | 4  |       |       |     | 24    |
|          | MEDICAL COMPLICATIONS |    |     |      |     |       |      |       |    | 1     |       | 1   | 2     |
|          | FALLS                 |    |     | 1    | 2   | 7     |      | 4     | 2  |       | 6     | 5   | 27    |
|          | FIRE/BURNS            |    | 1   | 4    | 1   | 1     | 5    | 2     | 1  | 3     | 1     |     | 19    |
|          | EXPOSURE              |    |     | 1    | 2   | 2     | 2    |       | 2  |       |       | 1   | 10    |
|          | SUFFOCATION           |    |     | 1    |     | 1     | 3    |       |    | 3     | 1     |     | 9     |
|          | POISONING             |    |     |      | 1   | 5     | 12   | 10    | 2  |       |       | 1   | 31    |
|          | FIREARMS              |    |     | 1    | 1   |       |      | 2     |    |       |       |     | 4     |
|          | OTHER ACCIDENTS       |    |     |      | 1   | 4     | 1    | 3     | 2  | 2     | 1     | 2   | 16    |
|          | SUBTOTAL              | 2  | 5   | 16   | 50  | 46    | 66   | 44    | 18 | 14    | 11    | 10  | 282   |
| SUICIDE  | DROWNING              |    |     |      |     |       |      | 1     |    |       |       |     | 1     |
|          | POISONING             |    |     |      | 2   | 4     | 4    | - 6   | 2  |       |       |     | 18    |
|          | STRANGULATION         |    |     |      | 17  | 4     |      | 1     |    |       |       |     | 22    |
|          | FIREARMS              |    |     |      | 26  | 15    | 13   | 16    | 11 | 5     | 2     |     | 88    |
|          | OTHER SUICIDES        |    |     |      |     | 1     |      |       |    | 1     |       |     | 2     |
|          | SUBTOTAL              |    |     |      | 45  | 24    | 17   | 24    | 13 |       | 5 2   |     | 131   |
| HOMICIDE | FIREARMS              |    |     | 1    | 4   | 8     | 6    | 9     |    | 1     |       |     | 29    |
|          | CUTTING/PIERCING      |    | 1   |      | 2   | 1     | 1    |       |    |       |       |     | 5     |
|          | CHILD BATTERING       |    |     |      |     |       | 1    |       |    |       |       |     | 1     |
|          | OTHER HOMICIDES       |    |     |      |     |       | 5    | 1     | 1  |       | 1     |     | 9     |
|          | SUBTOTAL              |    | 1   | 1    | 6   | 9     | 13   | 10    | 1  | 2     | 1     |     | 44    |
| OTHER    | DROWNING              |    |     |      | 1   |       |      |       |    |       |       |     | 1     |
|          | POISONING             |    |     |      |     |       | 1    |       |    |       |       |     | 1     |
|          | STRANGULATION         |    | 1   |      |     |       |      |       |    |       |       |     | 1     |
|          | OTHER EXTERNAL        |    |     |      | 1   |       |      |       |    |       |       |     | 1     |
|          | CAUSES                |    |     |      | 1   |       |      |       |    |       |       |     | 1     |
|          | SUBTOTAL              |    | 1   |      | 2   |       | 1    |       |    |       |       |     | 4     |
| TOTAL    |                       | 2  | 7   | 17   | 103 | 79    | 97   | 78    | 32 | 22    | 14    | 10  | 461   |

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# **APPENDIX A: DEFINITION OF TERMS**

**Age-Adjusted Birth Rate.** A summary of age-specific birth rates standardized to one age distribution (usually 1940 standard million population). This summary allows comparisons to be made between populations with different age distributions. (See Appendix B for specific instructions on calculating age-adjusted rates.)

**Age-Adjusted Death Rate.** A summary of age-specific death rates standardized to one age distribution (usually 1940 standard million population). This summary allows comparisons to be made between populations with different age distributions. (See Appendix B for specific instructions on calculating age-adjusted rates.)

**Age-Specific Birth Rate.** The number of live births for a specific age group divided by the population for the same specific age group, multiplied by a constant of proportionality (usually 1,000).

**Age-Specific Death Rate.** The number of deaths for a specific age group divided by the population for the same specific age group, multiplied by a constant of proportionality (usually 100,000).

**Birth Cohort Infant Mortality Rate.** The birth cohort method of calculating the infant mortality tracks all infants born within a calendar year throughout their first year of life. When calculating 1995 infant mortality, all infants who were born during 1995 and died prior to their first birthday, whether in 1995 or in 1996, are counted in the birth cohort. In this report, birth cohort has been calculated for infants born in 1995, since data on deaths is complete only through 1996. (See also Death Cohort Infant Mortality Rate.)

Birth Weight. Weight of the infant when born, usually reported in grams.

**Cause of Death.** The cause of death reported is the underlying cause of death and is based on information contained on the death certificate, defined by the World Health Organization's *International Classification of Diseases - Ninth Revision* as the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury. See Appendix C for specific categories.

**Cause Specific Death Rate.** The number of deaths due to a specific cause of death divided by the estimated total population, multiplied by a constant of proportionality (usually 100,000).

**Constant of Proportionality.** An arbitrary number (often 1,000 or 100,000) which is used for calculating a rate so that comparisons are possible and more understandable. (It is easier to compare 21.7 to 21.3 than it is to compare 0.0217 to 0.0213.)

**Crude Birth Rate.** The number of live births divided by the estimated population, multiplied by a constant of proportionality (usually 1,000).

**Crude Death Rate.** The number of deaths divided by the estimated population, multiplied by a constant of proportionality (usually 100,000).

**Crude Divorce Rate.** The number of divorces of all types (divorces, dissolutions, and annulments) divided by the estimated population, multiplied by a constant of proportionality (usually 1,000).

**Crude Marriage Rate.** The number of marriages divided by the estimated population, multiplied by a constant of proportionality (usually 1,000).

**Death Cohort Infant Mortality Rate.** The death cohort method is determined by dividing the number of infant deaths by the number of live births in a calendar year. For example, to calculate the death cohort infant mortality rate for 1996, divide the number of infant deaths that occurred in 1996 by the number of live births that occurred during 1996, and multiply the result by a constant of proportionality (usually 1,000). By using the death cohort infant mortality method, some infant deaths will be counted in 1996 when the infant was actually born in 1995. Other deaths to infants born in 1996 who died before their first birthday in 1997 will not be counted. Since the death cohort method of calculating infant mortality does not reflect the number of infant deaths experienced by infants born in a given year, the birth cohort is the preferred calculation method.

**Expectation of Life.** Expectation of life (life expectancy) is the number of years infants born in a specific year can expect to live if they experience the same age-specific death rates experienced during their birth year. (See Appendix B for explanation of calculation.)

**Fertility Rate.** The total number of live births divided by the number of women in the estimated population between ages 15 and 44, multiplied by a constant of proportionality (usually 1,000).

**Gestation.** The period beginning with the first day of the last normal menstrual period and ending with the day of birth. Births occurring between 37 and 41 weeks gestational age are considered full-term.

**ICD-9.** *International Classification of Diseases - Ninth Revision*. The official classification system which codifies all diseases and injuries. ICD-9 has been in use since 1979. All deaths previous to 1979 were coded using ICD-8. (Refer to Appendix C.)

Infant Deaths. Number of infants who died before their first birthday.

**Infant Mortality Rate (IMR).** The number of infant deaths divided by the number of live births, multiplied by a constant of proportionality (usually 1,000). There are two ways of calculating the IMR: birth cohort and death cohort. The infant mortality rate is the same as the sum of the neonatal infant mortality rate and the post-neonatal infant mortality rate.

Life Expectancy. See Expectation of Life.

**Live Birth.** A birth where the baby exhibits signs of life after delivery. These signs include breathing, beating of the heart, pulsation of the umbilical cord and movement of voluntary muscles.

**Location of Occurrence.** The place or location where a vital event occurred.

**Location of Residence.** Most tables report Alaska resident information and are based upon or are categorized by place of residence. The location of actual residence (i.e., census area or Native regional corporation) is not necessarily the same as a person's "legal residence." The location of residence during a tour of military duty or while attending college is considered actual residence.

Low Birth Weight. An infant born weighing less than 2,500 grams. Also see "very low birth weight."

**Low Birth Weight Percentage.** The number of infants born weighing less than 2,500 grams divided by the number of live births, multiplied by 100. In this report, low birth weight percentages are calculated for a five-year period (1992-1996).

Native. Includes Alaska Natives, Native mixed, Aleuts, Eskimos, Canadian Eskimos and Indians, and American Indians.

**Natural Increase.** Population change that results when the number of births exceeds the number of deaths. Natural increase does not include population changes as a result of migration in and out of Alaska.

**Neonatal Infant Mortality Rate.** The number of deaths to infants less than 28 days of age divided by the number of live births, multiplied by a constant of proportionality (usually 1,000). The sum of the neonatal infant mortality rate and the post-neonatal mortality rate is the infant mortality rate.

**Perinatal Period.** The period of time from the 28th week of gestation up to the 28th day after birth.

**Post-neonatal Infant Mortality Rate.** The number of deaths to infants from 28 days to 1 year of age divided by the number of live births, multiplied by a constant of proportionality (usually 1,000). The sum of the neonatal infant mortality rate and the post-neonatal mortality rate is the infant mortality rate.

**Puerperium.** The period after delivery of placenta, which extends until the organs of reproduction have returned to normal, usually 6 to 8 weeks.

**Race of Child.** First reported race of mother is the race of the child. Prior to 1989, races of both parents were taken into consideration when determining the race of the child using a look-up table. Beginning in 1989, the National Centers for Health Statistics (NCHS) recommended that all states adopt the same standard for determining the race of the child at birth. See Appendix E for more detailed information.

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**Race/Sex-Specific Death Rate.** The number of deaths for a specific race and sex group, divided by the population for the same specific race and sex group, multiplied by a constant of proportionality (usually 100,000).

**Race-Specific Death Rate.** The number of deaths for a specific racial group divided by the population for the same specific racial group, multiplied by a constant of proportionality (usually 100,000).

**Ratio.** A ratio is a comparative statistic calculated by dividing the number of events experienced by one group by the number of events experienced by a comparable group (i.e., males to females).

Residence. See "Location of Residence."

**Sex-Specific Death Rate.** The number of deaths for a specific sex (male or female) divided by the population for the same sex, multiplied by a constant of proportionality (usually 100,000).

**Standard Million Population.** The 1940 standard one million population is used in this publication whenever age-adjusting occurs. It is as follows.

TABLE A.1 STANDARD MILLION POPULATION

| AGE          | POPULATION |
|--------------|------------|
| Under 1 year | 15,343     |
| 1-4 years    | 64,718     |
| 5-14 years   | 170,355    |
| 15-24 years  | 181,677    |
| 25-34 years  | 162,066    |
| 35-44 years  | 139,237    |
| 45-54 years  | 117,811    |
| 55-64 years  | 80,294     |
| 65-74 years  | 48,426     |
| 75-84 years  | 17,303     |
| 85 & over    | 2,770      |
| Total        | 1,000,000  |

**Teen Birth Rate.** The number of births to females ages 15-19 divided by the estimated population of females ages 15-19, multiplied by a constant of proportionality (usually 1,000).

Underlying Cause of Death. The disease or injury which initiated the sequence of events that led to death.

Very Low Birth Weight. Infants born weighing less than 1,500 grams.

**Years of Life Lost.** For all deaths occurring before age 65, the difference between 65 (assumed productive life span) and the age at death; sometimes referred to as "years of productive life lost). For calculation of years of life lost, see Appendix B.

# **APPENDIX B: TECHNICAL NOTES**

### **HOW TO USE VITAL STATISTICS**

### **Vital Events**

Vital events registered with the Bureau of Vital Statistics include live births, fetal deaths (after at least 20 weeks gestation), adoptions, marriages, divorces, and deaths. Information on each of these events is provided on standard forms. (See Appendix G.) Vital events do not include fetal deaths prior to the 20th week of gestation; living arrangements not formalized through adoption, marriage or divorce; or illnesses which do not result in death.

## Reliability of the Data

Reliability of information may vary depending on the data collection method. For instance, some information on birth and death certificates is collected and provided by health facilities or medical professionals (birth weight, complications of labor and delivery, cause of death, etc.), while other information is self-reported or reported by relatives (smoking during pregnancy, marital status of deceased, etc.). The Bureau of Vital Statistics makes every effort to complete, verify, and correct information which is missing, invalid, or inconsistent. Ultimately, the reliability of the data depends on everyone who is involved in data collection, storage and retrieval: Bureau staff, medical professionals, magistrates, funeral directors, marriage commissioners, judges, and each individual involved in, or witness to, a vital event.

### **Counting Number of Events**

The most basic data available is the number of events. In any analysis, the most pertinent information must be determined and the limitations of that information must be identified. For instance, if you wanted to predict public school kindergarten enrollment, the most pertinent vital event data would be the number of live births in the period which qualifies children for enrollment. You would want to count only resident births for the geographic area of the appropriate schools. You would also want to consider limitations of this data, such as effects of infant and preschool mortality (this information can be obtained from death data), in-migration and out-migration, and alternatives to public school enrollment.

# **Comparing Different Populations**

Comparing the number of events in two separate locations may not be meaningful. We can guess that Anchorage will have more births than Juneau because Anchorage has a larger population. A more meaningful question is, what is the number of births compared to the size of the population? To make this comparison, we calculate a *ratio* by dividing the number of events by the population for which that event could have occurred. For instance, if there were 4,200 births in Anchorage and a population of 280,000 people, then the ratio of births to population would be 4200/280000 or 0.015 births for every person living in Anchorage. If there were 500 births in Juneau and a population of 30,000 then the ratio of births to population in Juneau would be 500/30000 or 0.0166666 births for every person living in Juneau.

Since small decimal numbers are awkward to interpret, we change the ratio to a *rate* by multiplying it by a *constant* of proportionality. This constant of proportionality can be any number, as long as the same number is used in calculating every rate. To calculate birth rates, we usually use a constant of proportionality of 1,000. Using this method, the birth rate for Anchorage would be 0.015\*1,000 or 15 births per 1,000 population. The birth rate for Juneau would be 0.0166666\*1,000 or 16.6666 births per 1,000 population. This number is usually rounded to the nearest tenth (16.7). We can see that while there are fewer births in Juneau in this example, the rate per 1,000 population is greater.

The birth rates described in the last paragraph are *crude birth rates* because they compare events to total population. A more meaningful comparison would be to include in the population only women of child-bearing ages (15-44 years of age). We call this the *fertility rate*. This allows us to compare populations with different ratios of females of child-bearing ages. Let's assume that the number of women ages 15-44 in Anchorage is 66,500 and in Juneau is

7,300. The Anchorage fertility rate would be (4200/60000)\*1000 or 70.0 births for every 1,000 women of child-bearing age. The Juneau fertility rate would be (500/7300)\*1000 or 68.5 births for every 1,000 women of child-bearing age. While Anchorage would have a lower crude birth rate than Juneau in this example, the Anchorage fertility rate would be higher than for Juneau. This is because the ratio of women of childbearing age to the total population in Anchorage (66500/280000 or .2375) is lower than in Juneau (7300/30000 or .243333).

Please note that all of the numbers in the foregoing examples are hypothetical for purposes of illustration.

## **Constant of Proportionality**

In calculating crude birth rates and fertility rates, we used a constant of proportionality of 1,000. Vital statistics may be reported with different constants of proportionality. Readers should familiarize themselves with how rates are calculated so that validity is maintained when comparing rates. Unless rates are calculated with the same constant of proportionality, comparisons will lead to erroneous conclusions. For instance, in this report we calculate death rates per 100,000 population. If the National Center for Health Statistics (NCHS) reported deaths per 1,000 population, we would have to convert NCHS rates to 100,000 population for a valid comparison.

### **Small Populations and Few Events**

Data based upon small populations and few events require particular care in data analysis. In Alaska, variability is expected when looking at small groups within the population. Precautions are taken to avoid drawing false conclusions from random or unusual events. Two methods are used in this report to provide greater reliability: moving averages and confidence intervals. (For an explanation of each method, see "Vital Statistics Formulas" in Appendix B.

#### VITAL STATISTICS FORMULAS

## **Age-Adjusted Rates**

Age-adjusted rates are calculated so comparisons can be made between populations that have different age distributions. For example, "X" population which has a relatively high proportion of young people, generally will experience a lower crude death rate than "Y" population which is made up of a relatively high percentage of elderly. Age-adjusted rates are more appropriate than crude rates when comparing health indicators for populations that have different age distributions. The age-adjusted rates in this report were calculated using the standard million population based on the decennial U.S. Census of 1940. (See Standard Million Population in Appendix A.)

age-adjusted death rate =  $\hat{\mathbf{A}} m_a (P_a /_{p_1})$ 

where:  $\Sigma$  is sum

 $m_a$  is the age-specific death rate

 $P_a$  is the standard population for the age group

p is the total standard population

#### **Confidence Intervals**

In this report, confidence intervals are used to provide a range within which the true rate will fall with a probability of 95%. The size of the range is determined by the number of occurrences, the base population, and the standard error.

Using teen birth rate by census area as an example, refer to Chart 1.2B:

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3-year births to teens ages 15-19 in 1995-1997 = 3,326 (b)

3-year annual female teen population in 1995-1997 = 63,687 (p)

Annual teen birth rate per 1.000 female teens = (3.326/63.687)\*1.000 = 52.2 (R)

We can say, then, that there is a 95% probability that the interval from 50.4 to 54.0 contains the true teen birth rate for the State of Alaska for the period 1995-1997.

## **Expectation of Life**

Expectation of life is the number of years infants born in a specific year can expect to live if they experience the same age-specific death rates experienced during their birth year. Table B.1 illustrates the calculation of life expectancy for all Alaskans based on data from a five year period.

TABLE B.1 EXPECTATION OF LIFE FOR ALL ALASKANS, 1993-1997

|        |       |         |         | COLUM        | N IDENTIFICAT | ION AND DES | SCRIPTIO | N                                       |           |            |
|--------|-------|---------|---------|--------------|---------------|-------------|----------|---|-----------|------------|
|        | A     | В       | C       | D            | E             | F           | G        | Н                                       | I         | J          |
|        |       |         |         |              |               | NO. LIVING  |          |   |           | YEARS LEFT |
|        |       |         |         |              |               | AT          | NO.      | NUMBER                                  |           | AT         |
|        |       |         |         | PROPORTION   | PROPORTION    | BEGINNING   | DYING    | LIVING IN                               |           | BEGINNING  |
| AGE AT |       |         |         | DYING IN AGE | LIVING IN     | OF AGE      | IN AGE   | AGE                                     | CUM       | OF AGE     |
| DEATH  | DTHS  | POP     | RATIO   | GROUP        | AGE GROUP     | GROUP       | GROUP    | GROUP                                   | POP       | GROUP      |
| <1     | 374   | 51,352  | 0.00728 | 0.00726      | 0.99274       | 100,000     | 726      | 99,383                                  | 7,473,532 | 74.7       |
| 1-4    | 109   | 216,450 | 0.00050 | 0.00201      | 0.99799       | 99,274      | 200      | 396,598                                 | 7,374,149 | 74.3       |
| 5-9    | 66    | 284,233 | 0.00023 | 0.00116      | 0.99884       | 99,075      | 115      | 495,086                                 | 6,977,551 | 70.4       |
| 10-14  | 83    | 267,657 |         | 0.00155      | 0.99845       |             |          | ,                                       | 6,482,465 |            |
| 15-19  | 249   | 221,427 |         |              | 0.99439       |             |          |   | 5,988,050 |            |
| 20-24  | 286   |         |         |              | 0.99153       |             |          | ,,,,,                                   | 5,495,403 |            |
| 25-29  | 315   | -,      | 0.00146 |              | 0.99275       |             | 706      |   | 5,006,221 | 51.4       |
| 30-34  | 419   |         |         | 0.00772      | 0.99228       | 96,714      |          | ,                                       | 4,520,884 |            |
| 35-39  | 533   | 305,995 |         | 0100007      | 0.99133       | 95,967      |          |   | 4,039,180 |            |
| 40-44  | 655   |         | 0.00223 |              | 0.98892       | 95,135      | ,        |   | 3,561,424 |            |
| 45-49  | 733   | 240,645 |         |              | 0.98489       |             |          |   | 3,088,384 |            |
| 50-54  | 734   | 164,067 |         |              | 0.97788       |             | ,        |   | 2,621,534 |            |
| 55-59  | 827   | 108,302 |         |              | 0.96253       | ,           | ,        | ,                                       | 2,163,364 |            |
| 60-64  | 963   | 74,369  |         |              | 0.93729       | 87,214      | ,        | ,                                       | 1,718,805 |            |
| 65-69  | 1,202 | 57,484  |         | 0.09936      |               |             |          |   | 1,296,407 |            |
| 70-74  | 1,399 | 43,005  |         |              | 0.84958       |             |          |   | ,         |            |
| 75-79  | 1,283 | 27,048  |         |              | 0.78797       | - ,         |          | , | ,         |            |
| 80-84  | 1,154 | 14,524  |         |              |               | · / /       |          | ,                                       | ,         |            |
| 85+    | 1.436 | 8.815   | 0.16290 | 0.57880      | 0.42120       | 32,951      | 32,951   | 82.378                                  | 82.378    | 2.5        |

Column A: total deaths during five years.

Column B: sum of population for each of the five years.

Column C: ratio. A/B

Column D: proportion dying in the age group. For less than 1 year: (2\*C)/(2+C); for 1-4 years: (2\*4\*C)/(2+4\*(1.25\*C)); all

others: (2\*5\*C)/(2+5\*C)

Column E: proportion living in age group. 1-D

Column F: number living at beginning of age. For less than 1 year: 100,000; all others: E\*F (both from next younger age

group)

**Column G:** number dying in the age group. F(this age group)–F(next older age group)

**Column H:** number living in the age group. For less than 1 year: F-(.85\*G); for 1-4 years: 4\*F-(2.5\*G); all others:

(5\*F)-(2.5\*G)

Column I: cumulative population. Sum of H for this and all older age groups

Column J: years left at beginning of age. I/F

### **Moving Averages**

Calculations of 3-year, 5-year, and 10-year moving averages are performed when single-year rates are not reliable. Often when small numbers are used for calculations, use of moving averages helps to smooth out rates which vary randomly from one period to another.

For example, single-year infant mortality rates are seldom good indicators of the state of health within populations because rates can fluctuate dramatically from year to year. In Alaska, 132 infants died during 1988 and 108 infants died during 1989. The single-year infant mortality rates during 1988 and 1989 were 11.7 and 9.3, respectively. The 3-year moving average IMR (using 1986, 1987, and 1988 data) was 11.0 and (using 1987, 1988, and 1989) 10.4 infant deaths per 1,000 live births.

#### **Years of Life Lost**

Years of Life Lost (YLL), or Years of Productive Life Lost, is the difference between the standardized age of 65 and the age of a decedent who dies before age 65. For purposes of calculation, deaths are assumed to occur at the midpoint of a five-year age interval; i.e. a 41-year-old decedent is assumed to be 42.5 years or halfway between 40 and 45. A person dying at age 41 would be said to have 22.5 years of life lost (65-42.5). Years of Life Lost emphasizes mortality in younger populations and is used in this report to measure the impact of specific causes of death. For a specific decedent group, Years of Life Lost is calculated as follows:

$$YLL = \hat{A} 65 - mp$$

where YLL is Years of Life Lost

 $\Sigma$  is sum of all decedents' years of productive life lost

65 represents years of productive life

mp is the mid-point of the decedent's 5-year age group

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# **APPENDIX C: ICD9 CODES**

### **GENERAL MORTALITY**

When analyzing causes of death, *International Classification of Diseases - Ninth Edition* (ICD-9) codes are grouped according to certain logical categories. For purposes of comparing leading causes of death in Alaska with leading causes of death in the United States (Tables 5.7A through 5.10B), it is important to use the same groupings and definitions. On the other hand, when looking at specific problem areas in Alaska such as alcohol use and abuse, it is important to consider all types of death from alcohol. For that reason, ICD-9 code 425.5, alcoholic cardiomyopathy, is grouped with heart disease in Tables 5.7A through 5.10B, and with alcohol use/abuse in Tables 5.11A through 5.15.

Table C.1 lists all ICD-9 codes and shows how they are grouped. Please note that if any cause in a column does not appear in the specified set of tables, this indicates there were no deaths from that cause in the reporting period (e.g. measles).

TABLE C.1 ICD-9 CAUSE OF DEATH CODES FOR GENERAL MORTALITY

| CAUSE OF DEATH                         | CAUSE OF DEATH (TABLES                 | CATIGE OF DEATEN (FABI EG ( 12 ( 15)               | ICD 0 CODES             |
|--|--|--|-------------------------|
| (TABLES 6.7A-6.10B<br>ALL OTHER CAUSES | 6.11A-6.11B)<br>SHIGELLOSIS & AMEIASIS | CAUSE OF DEATH (TABLES 6.12-6.15) ALL OTHER CAUSES | ICD-9 CODES<br>004, 006 |
|  |  |  | 010-018                 |
|  | WHOOPING COUGH                         | ALL OTHER CAUSES                                   | 033                     |
|  |  | ALL OTHER CAUSES                                   | 034-035                 |
|  | THROAT, SCARLATINA &                   | ALL OTTIER CAUSES                                  | 034-033                 |
|  | ERYSIPELAS                             |  |                         |
|  | MENINGOCOCCAL INFECTION                | ALL OTHER CAUSES                                   | 036                     |
|  |  | SEPTICEMIA   | 038                     |
|  | HIV INFECTION                          | HIV INFECTION                                      | 042-044                 |
| ALL OTHER CAUSES                       | ACUTE POLIOMYELITIS                    | ALL OTHER CAUSES                                   | 045                     |
| ALL OTHER CAUSES                       | MEASLES                                | ALL OTHER CAUSES                                   | 055                     |
| ALL OTHER CAUSES                       | VIRAL HEPATITIS                        | ALL OTHER CAUSES                                   | 070                     |
| ALL OTHER CAUSES                       | SYPHILIS                               | ALL OTHER CAUSES                                   | 090-097                 |
| CANCER                                 | CANCER                                 | CANCER: LIP, ORAL CAVITY & PHARYNX                 | 140-149                 |
| CANCER                                 | CANCER                                 | CANCER: DIGESTIVE ORGANS & PERITONEUM              | 150-159                 |
| CANCER                                 | CANCER                                 | CANCER: RESPIRATORY & INTRATHORACIC                | 160-165                 |
|  |  | ORGANS   |                         |
| CANCER                                 | CANCER                                 | CANCER: OTHER & UNSPECIFIED SITES                  | 170-173, 190-199        |
| CANCER                                 | CANCER                                 | CANCER: BREAST                                     | 174-175                 |
| CANCER                                 | CANCER                                 | CANCER: GENITAL ORGANS                             | 179-187                 |
| CANCER                                 | CANCER                                 | CANCER: URINARY ORGANS                             | 188-189                 |
| CANCER                                 | CANCER                                 |  | 200-203                 |
|  |  | HEMATOPOIETIC TISSUES                              |                         |
|  |  |  | 204-208                 |
|  | BENIGN NEOPLASMS                       |  | 210-239                 |
| DIABETES MELLITUS                      |  | DIABETES MELLITUS                                  | 250                     |
|  | NUTRITIONAL DEFICIENCIES               |  | 260-269                 |
|  | ANEMIAS                                |  | 280-285                 |
| ALL OTHER CAUSES                       | ALCOHOL USE/ABUSE                      |  | 291, 303, 305.0, 357.5, |
| ALL OTHER CAUSES                       | MENINGITIS                             | ALL OTHER CAUSES                                   | 535.3, 790.3<br>320-322 |
|  | ALZHEIMER'S DISEASE                    |  | 331.0                   |
|  | HEART DISEASE                          |  | 390-398                 |
| ILAKI DISEASE                          | ILAKI DISEASE                          | DISEASE  | 570-570                 |
| ALL OTHER CAUSES                       | HYPERTENSION                           | ALL OTHER CAUSES                                   | 401, 403                |

**Continued** →

# TABLE C.1 (CONTINUED)

| CAUSE OF DEATH (TABLES<br>6.7A-6.10B | CAUSE OF DEATH (TABLES<br>6.11A-6.11B)   | CAUSE OF DEATH (TABLES<br>6.12-6.15)                         | ICD-9 CODES                 |
|--------------------------------------|--|--|-----------------------------|
| HEART DISEASE                        | HEART DISEASE  | HYPERTENSIVE HEART DISEASE                                   |                             |
| HEART DISEASE                        |  | HYPERTENSIVE HEART & RENAL<br>DISEASE                        |                             |
| HEART DISEASE                        | HEART DISEASE  | ACUTE MYOCARDIAL INFARCTION                                  | 410                         |
| HEART DISEASE                        | HEART DISEASE  | OTHER ACUTE & SUBACUTE<br>FORMS OF ISCHEMIC HEART<br>DISEASE | 411                         |
| HEART DISEASE                        | HEART DISEASE  | OTHER FORMS OF CHRONIC ISCHEMIC HEART DISEASE                | 412, 414                    |
| HEART DISEASE                        | HEART DISEASE  | ANGINA PECTORIS  | 413                         |
| HEART DISEASE                        | HEART DISEASE  | OTHER HEART DISEASE  | 415.0-425.4,<br>425.6-429.9 |
| HEART DISEASE                        | ALCOHOL USE/ABUSE  | ALCOHOL USE/ABUSE  | 425.5                       |
| CEREBROVASCULAR DISEASES             | CEREBROVASCULAR DISEASES   | CEREBROVASCULAR DISEASES                                     | 430-438                     |
| ALL OTHER CAUSES                     | ATHEROSCLEROSIS  | ATHEROSCLEROSIS  | 440                         |
| ALL OTHER CAUSES                     | ACUTE BRONCHITIS &   | ACUTE BRONCHITIS &   | 466                         |
| THE STREET STREET                    | BRONCHIOLITIS  | BRONCHIOLITIS  |                             |
| PNEUMONIA & INFLUENZA                | PNEUMONIA & INFLUENZA  | PNEUMONIA & INFLUENZA  | 480-487                     |
| CHRONIC OBSTRUCTIVE                  | CHRONIC OBSTRUCTIVE  |  | 490-491, 494-496            |
| PULMONARY DISEASES                   | PULMONARY DISEASES   | PULMONARY DISEASES   | 770-471, 474-470            |
| CHRONIC OBSTRUCTIVE                  |  | EMPHYSEMA  | 492                         |
| PULMONARY DISEASES                   | PULMONARY DISEASES   | EMFHISEMA  | 492                         |
| CHRONIC OBSTRUCTIVE                  | CHRONIC OBSTRUCTIVE  | ASTHMA   | 493                         |
|                                      |  | ASTHMA   | 493                         |
| PULMONARY DISEASES                   | PULMONARY DISEASES ULCER OF STOMACH & DUODENUM                                 | ALL OTHER CALIGES  | 531-533                     |
| ALL OTHER CAUSES                     |  |  |                             |
| ALL OTHER CAUSES                     | APPENDICITIS   |  | 540-543                     |
| ALL OTHER CAUSES                     | HERNIA OF ABDOMINAL CAVITY OR INTESTINAL OBSTRUCTION WITHOUT MENTION OF HERNIA | ALL OTHER CAUSES   | 550-553, 560                |
| CHRONIC LIVER DISEASE &<br>CIRRHOSIS | ALCOHOL USE/ABUSE  | ALCOHOL USE/ABUSE  | 571.0-571.3                 |
| CHRONIC LIVER DISEASE &<br>CIRRHOSIS | CHRONIC LIVER DISEASE & CIRRHOSIS  | CHRONIC LIVER DISEASE &<br>CIRRHOSIS                         | 571.4-571.9                 |
| ALL OTHER CAUSES                     | DISORDERS OF GALLBLADDER   | ALL OTHER CAUSES   | 574-575                     |
| ALL OTHER CAUSES                     | NEPHRITIS, NEPHROTIC SYNDROME  |  | 580-589                     |
| THE STREET STREET                    |  | SYNDROME & NEPHROSIS   |                             |
| ALL OTHER CAUSES                     | INFECTIONS OF KIDNEY   | ALL OTHER CAUSES   | 590                         |
| ALL OTHER CAUSES                     | HYPERPLASIA OF PROSTATE  | ALL OTHER CAUSES   | 600                         |
| ALL OTHER CAUSES  ALL OTHER CAUSES   | PREGNANCY WITH ABORTIVE OUTCOME  | ALL OTHER CAUSES   | 630-638                     |
| CONGENITAL ANOMALIES                 | CONGENITAL ANOMALIES   | CONGENITAL ANOMALIES   | 740-759                     |
| PERINATAL PERIOD CONDITIONS          |  | PERINATAL PERIOD CONDITIONS                                  |                             |
| SIDS                                 | SIDS   | SIDS   | 798.0                       |
|                                      |  |  |                             |

**Continued** →

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# TABLE C.1 (CONTINUED)

| CAUSE OF DEATH (TABLES CAUSE OF DEATH (TABLES CAUSE OF DEATH (TABLES |                              |                                       |  |  |  |  |
|--|------------------------------|---------------------------------------|--|--|--|--|
| 6.7A-6.10B   | 6.11A-6.11B)                 | 6.12-6.15)                            | ICD-9 CODES  |  |  |  |
| ALL OTHER CAUSES   | ALL OTHER INTERNAL<br>CAUSES | ALL OTHER CAUSÉS                      | 001-003, 005, 007-009, 020-032, 037, 039-041, 046-054, 056-066, 071-088, 098-139, 240-249, 251-259, 270-279, 286-290, 292-302, 304, 305.1-319.9, 323-330, 331.1-357.4, 357.6-389.9, 399, 405-409, 439, 441-465, 467-479, 488-489, 497-530, 534.0-535.2, 535.4-539.9, 544-549, 554-559, 561-570, 572-573, 576-579, 591-599, 601-629, 640-739, 780.0-790.2, 790.4-797.9, 798.1-799.9 |  |  |  |
| ACCIDENTS & ADVERSE<br>EFFECTS                                       | OTHER ACCIDENTS              | ALL OTHER ACCIDENTS & ADVERSE EFFECTS | E800-E809, E826-E858, E861-E949  |  |  |  |
| ACCIDENTS & ADVERSE<br>EFFECTS                                       | MOTOR VEHICLE<br>ACCIDENTS   | MOTOR VEHICLE<br>ACCIDENTS            | E810-E825  |  |  |  |
| ACCIDENTS & ADVERSE<br>EFFECTS                                       | ALCOHOL USE/ABUSE            | ALCOHOL USE/ABUSE                     | E860   |  |  |  |
| SUICIDE  | SUICIDES                     | SUICIDE                               | E950-E959  |  |  |  |
| HOMICIDE & LEGAL<br>INTERVENTION                                     |                              | HOMICIDE & LEGAL INTERVENTION         | E960-E978  |  |  |  |
| ALL OTHER CAUSES   | ALL OTHER EXTERNAL CAUSES    | ALL OTHER CAUSES                      | E980-E999  |  |  |  |

# **E-CODES (ACCIDENTS, SUICIDES AND HOMICIDES)**

The following descriptions are used for ICD-9 codes in the Child Deaths chapter and Tables 6.16A through 6.20 in the Death Chapter. Since the overwhelming majority of childhood deaths are due to accidents, suicides and homicides, the same categories are used in that chapter as in the section on external causes of death in the Death Chapter. Natural cause codes are not included in Death Chapter Tables 6.16A through 6.20.

TABLE C.2 ICD-9 CODES FOR CHILDHOOD DEATHS (TABLES 3.2C, 3.4A, AND 3.4B) AND EXTERNAL CAUSES (TABLES 6.16A-6.20)

| MANNER OF DEATH | CAUSE OF DEATH           | ICD-9 CODES   |
|-----------------|--------------------------|---|
| NATURAL CAUSE   | CANCER                   | 140-208 (Childhood Deaths only)                                 |
| NATURAL CAUSE   | BENIGN NEOPLASMS         | 238-239 (Childhood Deaths only)                                 |
| NATURAL CAUSE   | NERVOUS SYSTEM DISORDERS | 320-359 (Childhood Deaths only)                                 |
| NATURAL CAUSE   | HEART DISEASE            | 390-429 (Childhood Deaths only)                                 |
| NATURAL CAUSE   | CONGENITAL ANOMALIES     | 740-759 (Childhood Deaths only)                                 |
| NATURAL CAUSE   | OTHER NATURAL CAUSES     | 001-139, 209-237, 240-319, 360-389, 430-739, 760-799 (Childhood |
|                 |                          | Deaths only)  |
| ACCIDENT        | RAILWAY                  | E800-E807   |
| ACCIDENT        | MOTOR VEHICLE            | E810-E825   |
| ACCIDENT        | OTHER ROAD VEHICLE       | E826-E829   |
| ACCIDENT        | DROWNING                 | E830, E832, E910  |
| ACCIDENT        | WATER TRANSPORT          | E831, E833-E838   |
| ACCIDENT        | AIR TRANSPORT            | E840-E845   |
| ACCIDENT        | OTHER VEHICLE            | E846-E848   |
| ACCIDENT        | POISONING                | E850-E869   |
| ACCIDENT        | MEDICAL COMPLICATIONS    | E870-E879, E930-E949  |
| ACCIDENT        | FALLS                    | E880-E888   |
| ACCIDENT        | FIRE/BURNS               | E890-E899, E924   |
| ACCIDENT        | EXPOSURE                 | E900-E909   |
| ACCIDENT        | SUFFOCATION              | E911-E913   |
| ACCIDENT        | FOREIGN BODY             | E914-E915   |
| ACCIDENT        | FIREARMS                 | E922  |
| ACCIDENT        | OTHER ACCIDENTS          | E808-E809, E839, E849, E889, E916-E921, E923, E925-E929         |
| SUICIDE         | POISONING                | E950-E952   |
| SUICIDE         | STRANGULATION            | E953  |
| SUICIDE         | DROWNING                 | E954  |
| SUICIDE         | FIREARMS                 | E955  |
| SUICIDE         | CUTTING/PIERCING         | E956  |
| SUICIDE         | OTHER SUICIDES           | E957-E959   |
| HOMICIDE        | FIGHT/RAPE               | E960  |
| HOMICIDE        | POISONING                | E962  |
| HOMICIDE        | STRANGULATION            | E963  |
| HOMICIDE        | DROWNING                 | E964  |
| HOMICIDE        | FIREARMS                 | E965, E970-E971   |
| HOMICIDE        | CUTTING/PIERCING         | E966, E974  |
| HOMICIDE        | CHILD BATTERING          | E967  |
| HOMICIDE        | OTHER HOMICIDES          | E961, E968-E969   |
| HOMICIDE        | OTHER LEGAL INTERVENTION | E972-E973, E975-E978  |
| OTHER           | POISONING                | E980-E982   |
| OTHER           | STRANGULATION            | E983  |
| OTHER           | DROWNING                 | E984  |
| OTHER           | FIREARMS                 | E985  |
|                 |                          |   |
| OTHER           | OTHER EXTERNAL CAUSES    | E986-E999   |

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### **INFANT MORTALITY**

Table C.3 lists ICD-9 codes and shows how they are grouped in Infant Death Tables 2.7-2.8.

### TABLE C.3 ICD-9 CAUSE OF DEATH CODES FOR INFANT MORTALITY

| INFANT DEATHS (TABLES 2.7-2.8)   | ICD-9 CODES   |
|--|---|
| WHOOPING COUGH   | 033   |
| MENINGOCOCCAL INFECTION  | 036   |
| SEPTICEMIA   | 038   |
| VIRAL DISEASES   | 045-079   |
| CONGENITAL SYPHILIS  | 090   |
| CANCER   | 140-208   |
| BENIGN NEOPLASMS   | 210-239   |
| THYMUS GLAND DISEASES  | 254   |
| CYSTIC FIBROSIS  | 277.0   |
| BLOOD AND BLOOD-FORMING ORGAN DISEASES   | 280-289   |
| MENINGITIS   | 320-322   |
| ACUTE UPPER RESPIRATORY INFECTIONS   | 460-465   |
| BRONCHITIS AND BRONCHIOLITIS   | 466, 490-491  |
| PNEUMONIA & INFLUENZA  | 480-487   |
| GASTRITIS, DUODENITIS, AND NONINFECTIVE ENTERITIS                              | 535, 555-558  |
| AND COLITIS  | 555, 555-556  |
| HERNIA OF ABDOMINAL CAVITY AND INTESTINAL                                      | 550-553, 560  |
| OBSTRUCTIONS   | 550-555, 500  |
| CONGENITAL ANOMALIES   | 740-759   |
| MATERNAL CONDITIONS (UNRELATED TO PRESENT                                      | 740-739<br>760  |
|  | /00   |
| PREGNANCY) MATERNAL COMPLICATIONS OF PREGNANCY                                 | 761   |
|  | 762   |
| PLACENTA, CORD, AND MEMBRANE COMPLICATIONS                                     | 763   |
| LABOR & DELIVERY: OTHER COMPLICATIONS SLOW FETAL GROWTH AND FETAL MALNUTRITION | 763<br>764  |
|  |   |
| SHORT GESTATION & LOW BIRTHWEIGHT RELATED                                      | 765   |
| DISORDERS  LONG GESTATION AND HIGH PURTHWEIGHT BELATED                         | 700   |
| LONG GESTATION AND HIGH BIRTHWEIGHT RELATED                                    | 766   |
| DISORDERS  | 7.7   |
| BIRTH TRAUMA   | 767   |
| INTRAUTERINE HYPOXIA & BIRTH ASPHYXIA  | 768.2-768.9   |
| RESPIRATORY DISTRESS SYNDROME  | 769   |
| PERINATAL PERIOD INFECTIONS  | 771   |
| NEONATAL HEMORRHAGE  | 772   |
| HEMOLYTIC DISEASE OF NEWBORN   | 773-774   |
| INFANT OF DIABETIC MOTHER AND NEONATAL DIABETES                                | 775.0-775.1   |
| MELLITUS  HENORDIA GIG DIGE AGE OF NEWDODN                                     | 77.60   |
| HEMORRHAGIC DISEASE OF NEWBORN   | 776.0   |
| SIDS   | 798.0   |
| ACCIDENTS & ADVERSE EFFECTS  | E800-E949   |
| HOMICIDE   | E960-E969   |
| ALL OTHER CAUSES   | 001-032, 034-035, 037, 039-044, 080-088, 091-139, 240-253, 255-276, |
|  | 277.1-279.9, 290-319, 323-459, 470-478, 492-534, 536-543, 561-739,  |
|  | 768.0-768.1, 770, 775.2-775.9, 776.1-797.9, 798.1-799.9, E950-E959, |
|  | E970-E999   |

### APPENDIX D: PRENATAL CARE

#### **Kessner Index**

The classification of prenatal care as adequate, intermediate, or inadequate is derived from the Institute of Medicine's Three-Factor Prenatal Care Index. The classes of care are in accordance with recommendations for prenatal care set forth by the American College of Obstetricians and Gynecologists and the World Health Organization. This classification scheme accounts for length of gestation by requiring fewer prenatal visits for pregnancies with short gestation time. Records with missing information (i.e. last normal menstrual period, gestation weeks, number of visits, or month prenatal care began) are assigned to the inadequate prenatal care category.

The gestation weeks are calculated by subtracting the last menstrual date from the child's birth date. If the last menstrual date is missing from the birth record, the doctor's (or other medical professional's) estimate of gestation is used. The accuracy of the level of prenatal care is as reliable as the information provided by the mother and her caregiver.

The table below shows the Institute of Medicine's Three-Factor Prenatal Care Index.

#### TABLE D.1 KESSNER INDEX

|             | TRIMESTER CARE BEGAN AND/OR            |               |
|-------------|--|---------------|
| GESTATION   | NUMBER OF PRENATAL VISITS              | LEVEL OF CARE |
| <=13 Weeks  | At least 1 visit                       | Adequate      |
|             | No prenatal visits                     | Intermediate  |
| 14-17 Weeks | 1st trimester and at least 2 visits    | Adequate      |
|             | 1st or 2nd trimester and 1 visit       | Intermediate  |
|             | No prenatal visits                     |               |
| 18-21 Weeks | 1st trimester and at least 3 visits    | Adequate      |
|             | 1st or 2nd trimester and 1-2 visits    | Intermediate  |
|             | No prenatal visits                     |               |
| 22-25 Weeks | 1st trimester and at least 4 visits    | Adequate      |
|             | 1st or 2nd trimester and 2-3 visits    | Intermediate  |
|             | 3rd trimester or no more than 1 visit  | Inadequate    |
| 26-29 Weeks | 1st trimester and at least 5 visits    | Adequate      |
|             | 1st or 2nd trimester and 2-4 visits    | Intermediate  |
|             | 3rd trimester or no more than 1 visit  | Inadequate    |
| 30-31 Weeks | 1st trimester and at least 6 visits    | Adequate      |
|             | 1st or 2nd trimester and 3-5 visits    | Intermediate  |
|             | 3rd trimester or no more than 2 visits | Inadequate    |
| 32-33 Weeks | 1st trimester and at least 7 visits    | Adequate      |
|             | 1st or 2nd trimester and 4-6 visits    | Intermediate  |
|             | 3rd trimester or no more than 3 visits | Inadequate    |
| 34-35 Weeks | 1st trimester and at least 8 visits    | Adequate      |
|             | 1st or 2nd trimester and 5-7 visits    | Intermediate  |
|             | 3rd trimester or no more than 4 visits | Inadequate    |
| =>36 Weeks  | 1st trimester and at least 9 visits    | Adequate      |
|             | 1st or 2nd trimester and 5-8 visits    | Intermediate  |
|             | 3rd trimester or no more than 4 visits | Inadequate    |

<sup>1</sup> Kessner, D. "Infant Death: An Analysis by Maternal Risk and Health Care." Institute of Medicine, Contrasts in Health Status, Volume I, 1973. National Academy of Sciences, Washington, DC, pp 58-60.

### APPENDIX E: DETERMINATION OF CHILD'S RACE

### **NCHS STANDARDS**

Beginning in 1989, the National Center for Health Statistics (NCHS) changed their standards for determining a child's race. Since that time, a child's race has been determined by the race of the mother as reported on the birth certificate. Following are NCHS guidelines for determining the child's race.

- If the mother is a mixture of Hawaiian and any other race, the child's race is recorded as **Hawaiian**.
- If the mother is a mixture of races other than Hawaiian, the child's race is the **first listed race** of the mother.
- If the mother's race is listed as "Col.", "N", "Negro", "Colored", "B", "Brown", "AA", or "Afro-American", the child's race is recorded as **African American**.
- If the mother's race is listed as Asian, Yellow, Oriental, or Mongolian, and the mother's birth place is given as China, Japan, the Phillipines, Hawaii, India, Korea, Vietnam, Samoa, or Guam, the child's race is recorded by the **country of the mother's birth**. If the birth place is not one of those places, the child's race is recorded as **Other Asian or Pacific Islander**.
- If the mother's race is Indian and the mother's birth place is not in North, Central, or South America, the child's race is recorded as **Other Asian or Pacific Islander**.
- If "part \_\_\_\_\_\_" or "1/4, 1/2, 3/4 \_\_\_\_\_" is given, the child's race is recorded as the **first** reported race of the mother. The prefix is ignored.
- If the mother's race is shown as unknown, the child's race is recorded as **Unknown**.

### STATISTICAL CALCULATIONS

In this report, for any decedents born in Alaska in 1989 or later, a comparison has been made between the decedent's race as shown on the death certificate and the mother's race as shown on the birth certificate. If the two are not the same, the mother's race has been used for statistical analysis.

Birth certificates in which the mother's race is not specified may result in an under-reporting of the race-specific birth rates. Therefore, in this report, for statistical purposes only, any certificates in which the mother's race is unknown are assigned the race of the previous certificate on which the mother's race is known. While not accurate on an individual basis, this does allow for accurate overall estimates of rates by race. This method is also used by the National Centers for Health Statistics.

# **APPENDIX F: YEAR 2000 HEALTH OBJECTIVES**

The U.S. Department of Health and Human Services published *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*<sup>1</sup> to comprehensively address health promotion and disease prevention opportunities in order to allow local communities and states to choose from among its recommendations in addressing their own highest priority needs. The table below provides a brief comparison of some of these objectives compared with Alaska vital statistics from 1996 through 1998.

TABLE F.1 YEAR 2000 HEALTH OBJECTIVES

|   | ALASKA STATISTICS |       |       | YEAR 2000 |
|---|-------------------|-------|-------|-----------|
| HEALTH INDICATOR  | 1996              | 1997  | 1998  | OBJECTIVE |
| Cancer Death Rate*  | 130.4             | 119.8 |       | 130.0     |
| Accident and Adverse Effect Death Rate                        | 56.3              | 46.2  |       | 29.3      |
| Suicide Death Rate  | 22.8              | 21.6  |       | 10.5      |
| Cerebrovascular Disease Death Rate                            | 26.5              | 23.9  |       | 20.0      |
| Chronic Obstructive Pulmonary Disease Death Rate              | 24.2              | 23.6  |       | 25.0      |
| Diabetes Mellitus Death Rate                                  | 13.1              | 15.9  |       | 34.0      |
| Chronic Liver Disease & Cirrhosis Death Rate                  | 9.1               | 7.9   |       | 6.0       |
| Infant Mortality Rate**                                       | 7.9               | 7.7   |       | 7.0       |
| Neonatal Infant Mortality Rate                                | 4.0               | 3.9   |       | 4.5       |
| Postneonatal Infant Mortality Rate                            | 3.9               | 3.8   |       | 2.5       |
| Low Birth Weight (<2500 grams) Percent***                     | 5.3%              | 5.4   | %     | 5.0%      |
| Very Low Birth Weight (<1500 grams) Percent                   | 1.0%              | 1.0   | %     | <1%       |
| Mothers Abstaining from Tobacco Use During Pregnancy          | 79.3%             | 80.6  | %     | 90%       |
| Alaska Mothers Receiving Prenatal Care During First Trimester | 79.9%             | 79.3  | 80.1% | 90%       |
| White Mothers Receiving Prenatal Care During First Trimester  | 82.4%             | 81.5  | 82.4% |           |
| Native Mothers Receiving Prenatal Care During First Trimester | 74.0%             | 75.5  | 74.5% |           |

<sup>\*</sup> All death rates are per 100,000 population, age adjusted to the 1940 standard million population.

<sup>\*\*</sup> All Alaska infant mortality rates are five-year (1992-1996, 1993-1997, 1994-1998) averages per 1,000 live births. The Year 2000 objective is a single year rate per 1,000 live births.

<sup>\*\*\*</sup> Low and very low birth weight rates are five-year percentages of live births.

Public Health Service, U.S. Department of Health and Human Services, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, DHHS Pub. No. PHS 91-50212. Washington, D.C. 1991.

# **APPENDIX G: SAMPLE CERTIFICATES**

**CERTIFICATE OF LIVE BIRTH - Intentionally left blank.** 

**CERTIFICATE OF LIVE BIRTH (continued)** 

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**CERTIFICATE OF FETAL DEATH - Intentionally left blank.** 

# **CERTIFICATE OF FETAL DEATH (continued)**

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**REPORT OF ADOPTION - Intentionally left blank.** 

**CERTIFICATE OF MARRIAGE - Intentionally left blank.** 

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**CERTIFICATE OF DIVORCE, DISSOLUTION OF MARRIAGE, OR ANNULMENT - Intentionally left blank.** 

**CERTIFICATE OF DEATH - Intentionally left blank.** 

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**CERTIFICATE OF PRESUMPTIVE DEATH - Intentionally left blank.** 

# **APPENDIX H: GEOGRAPHIC INFORMATION**

Some of the information in this report is provided by geographic regions. There are three different ways in which Alaska is divided into regions: 1) by census area; 2) by Native regional corporation boundaries; and 3) by judicial districts. The following alphabetic list shows the census area and Native regional corporation for each location.

| LOCATION            | CENSUS AREA N               | ATIVE REGIONAL CORPORATION |
|---------------------|-----------------------------|----------------------------|
|                     |                             |                            |
| ADAK                | ALEUTIANS WEST              | ALEUT CORP.                |
| AFOGNAK             | KODIAK ISLAND BOROUGH       | KONIAG INC.                |
| AKHIOK              | KODIAK ISLAND BOROUGH       | KONIAG INC.                |
| AKIACHAK            | BETHEL                      | CALISTA CORP.              |
| AKIAK               | BETHEL                      | CALISTA CORP.              |
| AKULURAK MISSION    | BETHEL                      | CALISTA CORP.              |
| AKUTAN              | ALEUTIANS EAST              | ALEUT CORP.                |
| ALAKANUK            | WADE HAMPTON                | CALISTA CORP.              |
| ALASKA HWY          | SOUTHEAST FAIRBANKS         | DOYON LTD.                 |
| ALATNA              | YUKON/KOYUKUK               | DOYON LTD.                 |
| ALCAN               | SOUTHEAST FAIRBANKS         | DOYON LTD.                 |
| ALEKNAGIK           | DILLINGHAM                  | BRISTOL BAY CORP.          |
| ALEXANDER CREEK     | MATANUSKA-SUSITNA BOROUGH   |                            |
| ALITAK              | KODIAK ISLAND BOROUGH       | KONIAG INC.                |
| ALLAKAKET           | YUKON/KOYUKUK               | DOYON LTD.                 |
| AMBLER              | NORTHWEST ARCTIC BOROUGH    | NANA REGIONAL CORP.        |
| AMCHITKA            | ALEUTIANS WEST              | ALEUT CORP.                |
| ANAKTUVAK PASS      | NORTH SLOPE BOROUGH         | ARCTIC SLOPE CORP.         |
| ANCHOR POINT        | KENAI PENINSULA BOROUGH     | COOK INLET REG CORP.       |
| ANCHORAGE           | ANCHORAGE BOROUGH           | COOK INLET REG CORP.       |
| ANCHORAGE (CHUGACH) | ANCHORAGE BOROUGH           | CHUGACH NATIVES INC.       |
| ANCHORAGE AIRPORT   | ANCHORAGE BOROUGH           | COOK INLET REG CORP.       |
| ANDERAFSKI          | WADE HAMPTON                | CALISTA CORP.              |
| ANDERSON            | DENALI BOROUGH              | DOYON LTD.                 |
| ANGOON              | ANGOON/HOONAH/SKAGWAY       | SEALASKA CORP.             |
| ANIAK               | BETHEL                      | CALISTA CORP.              |
| ANNETTE             | PRINCE OF WALES/OUTER KETCH | IKAN SEALASKA CORP.        |
| ANNETTE ISLAND      | PRINCE OF WALES/OUTER KETCH | IKAN SEALASKA CORP.        |
| ANVIK               | YUKON/KOYUKUK               | DOYON LTD.                 |
| ARCTIC CIRCLE       | YUKON/KOYUKUK               | DOYON LTD.                 |
| ARCTIC VILLAGE      | YUKON/KOYUKUK               | DOYON LTD.                 |
| ATKA                | ALEUTIANS WEST              | ALEUT CORP.                |
| ATKASOOK            | NORTH SLOPE BOROUGH         | ARCTIC SLOPE CORP.         |
| ATMAUTHUAK          | BETHEL                      | CALISTA CORP.              |
| ATTU                | ALEUTIANS WEST              | ALEUT CORP.                |
| AUKE BAY            | JUNEAU BOROUGH              | SEALASKA CORP.             |
| AURORA LODGE        | FAIRBANKS NORTH STAR BOROU  | GH DOYON LTD.              |
| BARANOF             | SITKA BOROUGH               | SEALASKA CORP.             |
| BARE ISLAND         | KODIAK ISLAND BOROUGH       | KONIAG INC.                |
| BARROW              | NORTH SLOPE BOROUGH         | ARCTIC SLOPE CORP.         |
| BARTER ISLAND       | NORTH SLOPE BOROUGH         | ARCTIC SLOPE CORP.         |
| BEAVER              | YUKON/KOYUKUK               | DOYON LTD.                 |
| BELL ISLAND         | PRINCE OF WALES/OUTER KETCH | IKAN SEALASKA CORP.        |
| BELOFSKI            | ALEUTIANS EAST              | ALEUT CORP.                |
| BELUGA              | KENAI PENINSULA BOROUGH     | COOK INLET REG CORP.       |
| BERRY               | FAIRBANKS NORTH STAR BOROU  | GH DOYON LTD.              |
| BESSIE DREDGE #5    | NOME                        | BERING STRAITS CORP.       |
| BETHEL              | BETHEL                      | CALISTA CORP.              |
| BETTLES             | YUKON/KOYUKUK               | DOYON LTD.                 |
| BIG DELTA           | SOUTHEAST FAIRBANKS         | DOYON LTD.                 |
| BIG HORN            | FAIRBANKS NORTH STAR BOROU  | GH DOYON LTD.              |

| LOCATION                    | CENSUS AREA                                      | NATIVE REGIONAL CORPORATION  |  |  |  |  |
|-----------------------------|--|------------------------------|--|--|--|--|
| BIG LAKE                    | MATANUSKA-SUSITNA BOROUGH                        | COOK INLET REG CORP.         |  |  |  |  |
| BILL MOORES SLOUGH          | WADE HAMPTON                                     | CALISTA CORP.                |  |  |  |  |
| BIORKA ISLAND               | SITKA BOROUGH                                    | SEALASKA CORP.               |  |  |  |  |
| BIRCH CREEK                 | YUKON/KOYUKUK                                    | DOYON LTD.                   |  |  |  |  |
| BIRCH LAKE                  | FAIRBANKS NORTH STAR BOROUGH                     | DOYON LTD.                   |  |  |  |  |
| BIRCHWOOD                   | ANCHORAGE BOROUGH                                | COOK INLET REG CORP.         |  |  |  |  |
| BIRD CREEK                  | ANCHORAGE BOROUGH                                | COOK INLET REG CORP.         |  |  |  |  |
| BODENBURG BUTTE             | MATANUSKA-SUSITNA BOROUGH<br>SOUTHEAST FAIRBANKS | COOK INLET REG CORP.         |  |  |  |  |
| BOUNDARY<br>BRADFIELD CANAL | WRANGELL/PETERSBURG                              | DOYON LTD.<br>SEALASKA CORP. |  |  |  |  |
| BREVIG MISSION              | NOME   | BERING STRAITS CORP.         |  |  |  |  |
| BROAD PASS                  | MATANUSKA-SUSITNA BOROUGH                        | AHTNA INC.                   |  |  |  |  |
| BUCKLAND                    | NORTHWEST ARCTIC BOROUGH                         | NANA REGIONAL CORP.          |  |  |  |  |
| BUTTE                       | MATANUSKA-SUSITNA BOROUGH                        | COOK INLET REG CORP.         |  |  |  |  |
| CAMP CARROL                 | ANCHORAGE BOROUGH                                | COOK INLET REG CORP.         |  |  |  |  |
| CAMPION AFS                 | YUKON/KOYUKUK                                    | DOYON LTD.                   |  |  |  |  |
| CANDLE                      | NORTHWEST ARCTIC BOROUGH                         | NANA REGIONAL CORP.          |  |  |  |  |
| CANTWELL                    | DENALI BOROUGH                                   | AHTNA INC.                   |  |  |  |  |
| CANYON CITY                 | MATANUSKA-SUSITNA BOROUGH                        | COOK INLET REG CORP.         |  |  |  |  |
| CANYON VILLAGE              | YUKON/KOYUKUK                                    | DOYON LTD.                   |  |  |  |  |
| CAPE LISBURNE               | NORTH SLOPE BOROUGH                              | ARCTIC SLOPE CORP.           |  |  |  |  |
| CAPE NEWENHAM AFS           | BETHEL   | CALISTA CORP.                |  |  |  |  |
| CAPE POLE                   | PRINCE OF WALES/OUTER KETCHIKAN                  | SEALASKA CORP.               |  |  |  |  |
| CAPE ROMANZOFF              | WADE HAMPTON                                     | CALISTA CORP.                |  |  |  |  |
| CAPE YAKATAGA               | VALDEZ/CORDOVA                                   | CHUGACH NATIVES INC.         |  |  |  |  |
| CASWELL                     | MATANUSKA-SUSITNA BOROUGH                        | COOK INLET REG CORP.         |  |  |  |  |
| CENTRAL<br>CHALKYITSIK      | YUKON/KOYUKUK<br>YUKON/KOYUKUK                   | DOYON LTD.<br>DOYON LTD.     |  |  |  |  |
| CHANDALAR                   | YUKON/KOYUKUK                                    | DOYON LTD.<br>DOYON LTD.     |  |  |  |  |
| CHANLILIUT                  | WADE HAMPTON                                     | CALISTA CORP.                |  |  |  |  |
| CHASE                       | MATANUSKA-SUSITNA BOROUGH                        | COOK INLET REG CORP.         |  |  |  |  |
| CHATANIKA                   | FAIRBANKS NORTH STAR BOROUGH                     | DOYON LTD.                   |  |  |  |  |
| CHEFORNAK                   | BETHEL   | CALISTA CORP.                |  |  |  |  |
| CHENA HOT SPRINGS           | FAIRBANKS NORTH STAR BOROUGH                     | DOYON LTD.                   |  |  |  |  |
| CHENEGA                     | VALDEZ/CORDOVA                                   | CHUGACH NATIVES INC.         |  |  |  |  |
| CHEVAK                      | WADE HAMPTON                                     | CALISTA CORP.                |  |  |  |  |
| CHICHAGOF                   | SITKA BOROUGH                                    | SEALASKA CORP.               |  |  |  |  |
| CHICKALOON                  | MATANUSKA-SUSITNA BOROUGH                        | COOK INLET REG CORP.         |  |  |  |  |
| CHICKEN                     | SOUTHEAST FAIRBANKS                              | DOYON LTD.                   |  |  |  |  |
| CHIGNIK                     | LAKE AND PENINSULA                               | BRISTOL BAY CORP.            |  |  |  |  |
| CHIGNIK LAGOON              | LAKE AND PENINSULA                               | BRISTOL BAY CORP.            |  |  |  |  |
| CHIGNIK LAKE                | LAKE AND PENINSULA                               | BRISTOL BAY CORP.            |  |  |  |  |
| CHILKAT                     | HAINES BOROUGH                                   | SEALASKA CORP.               |  |  |  |  |
| CHILKOOT<br>CHINIAK         | HAINES BOROUGH<br>KODIAK ISLAND BOROUGH          | SEALASKA CORP.               |  |  |  |  |
| CHINIAK                     | VALDEZ/CORDOVA                                   | KONIAG INC.<br>AHTNA INC.    |  |  |  |  |
| CHISTOCHINA                 | VALDEZ/CORDOVA<br>VALDEZ/CORDOVA                 | AHTNA INC.                   |  |  |  |  |
| CHITINA                     | VALDEZ/CORDOVA<br>VALDEZ/CORDOVA                 | AHTNA INC.                   |  |  |  |  |
| CHRISTIAN                   | YUKON/KOYUKUK                                    | DOYON LTD.                   |  |  |  |  |
| CHUATHBALUK                 | BETHEL   | CALISTA CORP.                |  |  |  |  |
| CHUGIAK                     | ANCHORAGE BOROUGH                                | COOK INLET REG CORP.         |  |  |  |  |
| CHULITNA                    | MATANUSKA-SUSITNA BOROUGH                        | COOK INLET REG CORP.         |  |  |  |  |
| CHULLOONAWICK               | WADE HAMPTON                                     | CALISTA CORP.                |  |  |  |  |
| CIRCLE                      | YUKON/KOYUKUK                                    | DOYON LTD.                   |  |  |  |  |
| CIRCLE HOT SPRINGS          | YUKON/KOYUKUK                                    | DOYON LTD.                   |  |  |  |  |
| CLAM GULCH                  | KENAI PENINSULA BOROUGH                          | COOK INLET REG CORP.         |  |  |  |  |
| CLARKS POINT                | DILLINGHAM                                       | BRISTOL BAY CORP.            |  |  |  |  |
| CLEAR                       | DENALI BOROUGH                                   | DOYON LTD.                   |  |  |  |  |
| CLOVER PASS                 | KETCHIKAN GATEWAY BOROUGH                        | SEALASKA CORP.               |  |  |  |  |
| COLOE                       | PRINCE OF WALES/OUTER KETCHIKAN                  | SEALASKA CORP.               |  |  |  |  |
| COLD BAY                    | KENAI PENINSULA BOROUGH                          | COOK INLET REG CORP.         |  |  |  |  |
| COLD BAY                    | ALEUTIANS EAST                                   | ALEUT CORP.                  |  |  |  |  |

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| LOCATION                       | CENSUS AREA                                    | NATIVE REGIONAL CORPORATION        |  |  |  |
|--------------------------------|--|------------------------------------|--|--|--|
| COLDFOOT                       | YUKON/KOYUKUK                                  | DOYON LTD.                         |  |  |  |
| COLLEGE                        | FAIRBANKS NORTH STAR BOROUGH                   | DOYON LTD.                         |  |  |  |
| COOPER LANDING                 | KENAI PENINSULA BOROUGH                        | COOK INLET REG CORP.               |  |  |  |
| COPPER CENTER                  | VALDEZ/CORDOVA                                 | AHTNA INC.                         |  |  |  |
| COPPERVILLE                    | VALDEZ/CORDOVA                                 | AHTNA INC.                         |  |  |  |
| CORDOVA                        | VALDEZ/CORDOVA                                 | CHUGACH NATIVES INC.               |  |  |  |
| COUNCIL                        | NOME   | BERING STRAITS CORP.               |  |  |  |
| COVENANT LIFE                  | HAINES BOROUGH                                 | SEALASKA CORP.                     |  |  |  |
| CRAIG                          | PRINCE OF WALES/OUTER KETCHIKAN                | SEALASKA CORP.                     |  |  |  |
| CROOKED CREEK                  | BETHEL WENT A DODOUGH                          | CALISTA CORP.                      |  |  |  |
| CROWN POINT                    | KENAI PENINSULA BOROUGH                        | CHUGACH NATIVES INC.               |  |  |  |
| CUBE COVE                      | ANGOON/HOONAH/SKAGWAY                          | SEALASKA CORP.                     |  |  |  |
| CURRY                          | MATANUSKA-SUSITNA BOROUGH                      | COOK INLET REG CORP.               |  |  |  |
| CUTOFF<br>DALTON HWY 1         | YUKON/KOYUKUK<br>YUKON/KOYUKUK                 | DOYON LTD.<br>DOYON LTD.           |  |  |  |
| DALTON HWY 1<br>DALTON HWY 2   | NORTH SLOPE BOROUGH                            | ARCTIC SLOPE CORP.                 |  |  |  |
| DANGER BAY                     | KODIAK ISLAND BOROUGH                          | KONIAG INC.                        |  |  |  |
| DEADHORSE                      | NORTH SLOPE BOROUGH                            | ARCTIC SLOPE CORP.                 |  |  |  |
| DEERING                        | NORTHWEST ARCTIC BOROUGH                       | NANA REGIONAL CORP.                |  |  |  |
| DELTA JUNCTION                 | SOUTHEAST FAIRBANKS                            | DOYON LTD.                         |  |  |  |
| DENALI PARK                    | DENALI BOROUGH                                 | DOYON LTD.                         |  |  |  |
| DILLINGHAM                     | DILLINGHAM                                     | BRISTOL BAY CORP.                  |  |  |  |
| DIOMEDE                        | NOME   | BERING STRAITS CORP.               |  |  |  |
| DOME                           | FAIRBANKS NORTH STAR BOROUGH                   | DOYON LTD.                         |  |  |  |
| DORA BAY                       | PRINCE OF WALES/OUTER KETCHIKAN                | SEALASKA CORP.                     |  |  |  |
| DOT LAKE                       | SOUTHEAST FAIRBANKS                            | DOYON LTD.                         |  |  |  |
| DOUGLAS                        | JUNEAU BOROUGH                                 | SEALASKA CORP.                     |  |  |  |
| DRY CREEK                      | SOUTHEAST FAIRBANKS                            | DOYON LTD.                         |  |  |  |
| DUNBAR                         | YUKON/KOYUKUK                                  | DOYON LTD.                         |  |  |  |
| DUTCH HARBOR                   | ALEUTIANS WEST                                 | ALEUT CORP.                        |  |  |  |
| EAGLE                          | SOUTHEAST FAIRBANKS                            | DOYON LTD.                         |  |  |  |
| EAGLE RIVER                    | ANCHORAGE BOROUGH                              | COOK INLET REG CORP.               |  |  |  |
| EAGLE VILLAGE                  | SOUTHEAST FAIRBANKS                            | DOYON LTD.                         |  |  |  |
| EDGERTON HWY                   | VALDEZ/CORDOVA                                 | AHTNA INC.                         |  |  |  |
| EDNA BAY                       | PRINCE OF WALES/OUTER KETCHIKAN                | SEALASKA CORP.                     |  |  |  |
| EEK                            | BETHEL   | CALISTA CORP.                      |  |  |  |
| EGEGIK                         | LAKE AND PENINSULA                             | BRISTOL BAY CORP.                  |  |  |  |
| EIELSON AFB                    | FAIRBANKS NORTH STAR BOROUGH                   | DOYON LTD.                         |  |  |  |
| EKLUTNA                        | ANCHORAGE BOROUGH                              | COOK INLET REG CORP.               |  |  |  |
| EKUK                           | DILLINGHAM                                     | BRISTOL BAY CORP.                  |  |  |  |
| EKWOK                          | DILLINGHAM                                     | BRISTOL BAY CORP.                  |  |  |  |
| ELFIN COVE                     | ANGOON/HOONAH/SKAGWAY                          | SEALASKA CORP.                     |  |  |  |
| ELIM                           | NOME   | BERING STRAITS CORP.               |  |  |  |
| ELLAMAR                        | VALDEZ/CORDOVA<br>FAIRBANKS NORTH STAR BOROUGH | CHUGACH NATIVES INC.               |  |  |  |
| ELLIOTT HWY 1                  |  | DOYON LTD.                         |  |  |  |
| ELLIOTT HWY 2<br>ELMENDORF AFB | YUKON/KOYUKUK<br>ANCHORAGE BOROUGH             | DOYON LTD.<br>COOK INLET REG CORP. |  |  |  |
| ELMENDORF AFB<br>EMMONAK       | WADE HAMPTON                                   | COOK INLET REG CORP. CALISTA CORP. |  |  |  |
| ENGLISH BAY                    | KENAI PENINSULA BOROUGH                        | CHUGACH NATIVES INC.               |  |  |  |
| ESKA                           | MATANUSKA-SUSITNA BOROUGH                      | COOK INLET REG CORP.               |  |  |  |
| ESTER                          | FAIRBANKS NORTH STAR BOROUGH                   | DOYON LTD.                         |  |  |  |
| ETOLIN                         | WRANGELL/PETERSBURG                            | SEALASKA CORP.                     |  |  |  |
| EUREKA LODGE                   | VALDEZ/CORDOVA                                 | AHTNA INC.                         |  |  |  |
| EVANSVILLE                     | YUKON/KOYUKUK                                  | DOYON LTD.                         |  |  |  |
| EXCURSION INLET                | HAINES BOROUGH                                 | SEALASKA CORP.                     |  |  |  |
| EYAK                           | VALDEZ/CORDOVA                                 | CHUGACH NATIVES INC.               |  |  |  |
| FAIRBANKS                      | FAIRBANKS NORTH STAR BOROUGH                   | DOYON LTD.                         |  |  |  |
| FALSE ISLAND                   | SITKA BOROUGH                                  | SEALASKA CORP.                     |  |  |  |
| FALSE PASS                     | ALEUTIANS EAST                                 | ALEUT CORP.                        |  |  |  |
| FAREWELL                       | YUKON/KOYUKUK                                  | DOYON LTD.                         |  |  |  |
| FERRY                          | DENALI BOROUGH                                 | DOYON LTD.                         |  |  |  |
| FIRE ISLAND                    | ANCHORAGE BOROUGH                              | COOK INLET REG CORP.               |  |  |  |
|                                |  |                                    |  |  |  |

| LOCATION             | CENSUS AREA   | NATIVE REGIONAL CORPORATION        |
|----------------------|---|------------------------------------|
| FLAT                 | YUKON/KOYUKUK   | DOYON LTD.                         |
| FORT GREELY          | SOUTHEAST FAIRBANKS                                     | DOYON LTD.                         |
| FORT RANDALL         | ALEUTIANS EAST  | ALEUT CORP.                        |
| FORT RICHARDSON      | ANCHORAGE BOROUGH                                       | COOK INLET REG CORP.               |
| FORT WAINWRIGHT      | FAIRBANKS NORTH STAR BOROUGH                            | DOYON LTD.                         |
| FORT YUKON           | YUKON/KOYUKUK   | DOYON LTD.                         |
| FORTUNA LEDGE        | WADE HAMPTON  | CALISTA CORP.                      |
| FOX<br>FOX RIVER     | FAIRBANKS NORTH STAR BOROUGH<br>KENAI PENINSULA BOROUGH | DOYON LTD.<br>CHUGACH NATIVES INC. |
| FRESHWATER BAY       | ANGOON/HOONAH/SKAGWAY                                   | SEALASKA CORP.                     |
| FRITZ CREEK          | KENAI PENINSULA BOROUGH                                 | COOK INLET REG CORP.               |
| FUNTER BAY           | ANGOON/HOONAH/SKAGWAY                                   | SEALASKA CORP.                     |
| GAKONA               | VALDEZ/CORDOVA  | AHTNA INC.                         |
| GALENA               | YUKON/KOYUKUK   | DOYON LTD.                         |
| GALLA LOGG CAMP      | WRANGELL/PETERSBURG                                     | SEALASKA CORP.                     |
| GAMBELL              | NOME  | BERING STRAITS CORP.               |
| GAME CREEK           | ANGOON/HOONAH/SKAGWAY                                   | SEALASKA CORP.                     |
| GEORGE INLET         | KETCHIKAN GATEWAY BOROUGH                               | SEALASKA CORP.                     |
| GEORGETOWN           | BETHEL  | CALISTA CORP.                      |
| GIRDWOOD             | ANCHORAGE BOROUGH                                       | COOK INLET REG CORP.               |
| GLENN HWY MI 22      | ANCHORAGE BOROUGH                                       | COOK INLET REG CORP.               |
| GLENN HWY 1          | ANCHORAGE BOROUGH                                       | COOK INLET REG CORP.               |
| GLENN HWY 2          | MATANUSKA-SUSITNA BOROUGH                               | COOK INLET REG CORP.               |
| GLENN HWY 3          | MATANUSKA-SUSITNA BOROUGH                               | AHTNA INC.                         |
| GLENN HWY 4          | VALDEZ/CORDOVA  | AHTNA INC.                         |
| GLENN HWY 5          | SOUTHEAST FAIRBANKS                                     | DOYON LTD.                         |
| GLENNALLEN           | VALDEZ/CORDOVA  | AHTNA INC.                         |
| GODDARD              | SITKA BOROUGH   | SEALASKA CORP.                     |
| GOLD CREEK           | MATANUSKA-SUSITNA BOROUGH                               | COOK INLET REG CORP.               |
| GOLOVIN              | NOME  | BERING STRAITS CORP.               |
| GOODNEWS BAY         | BETHEL  EARDANICS NORTH STAR DOROUGH                    | CALISTA CORP.                      |
| GRAEHL<br>GRAYLING   | FAIRBANKS NORTH STAR BOROUGH<br>YUKON/KOYUKUK           | DOYON LTD.<br>DOYON LTD.           |
| GROUSE CREEK GROUP   | KENAI PENINSULA BOROUGH                                 | CHUGACH NATIVES INC.               |
| GULKANA              | VALDEZ/CORDOVA  | AHTNA INC.                         |
| GUSTAVUS             | ANGOON/HOONAH/SKAGWAY                                   | SEALASKA CORP.                     |
| HAINES               | HAINES BOROUGH  | SEALASKA CORP.                     |
| HALIBUT COVE         | KENAI PENINSULA BOROUGH                                 | COOK INLET REG CORP.               |
| HAMILTON             | WADE HAMPTON  | CALISTA CORP.                      |
| HAMILTON ACRES       | FAIRBANKS NORTH STAR BOROUGH                            | DOYON LTD.                         |
| HAPPY VALLEY         | KENAI PENINSULA BOROUGH                                 | COOK INLET REG CORP.               |
| HARDING LAKE         | FAIRBANKS NORTH STAR BOROUGH                            | DOYON LTD.                         |
| HASSLER PASS         | KETCHIKAN GATEWAY BOROUGH                               | SEALASKA CORP.                     |
| HAWK INLET           | ANGOON/HOONAH/SKAGWAY                                   | SEALASKA CORP.                     |
| HAYCOCK              | NOME  | BERING STRAITS CORP.               |
| HEALY                | DENALI BOROUGH  | DOYON LTD.                         |
| HEALY LAKE           | SOUTHEAST FAIRBANKS                                     | DOYON LTD.                         |
| HERRING COVE         | KETCHIKAN GATEWAY BOROUGH                               | SEALASKA CORP.                     |
| HERRING POINT        | KETCHIKAN GATEWAY BOROUGH                               | SEALASKA CORP.                     |
| HOBART BAY           | ANGOON/HOONAH/SKAGWAY                                   | SEALASKA CORP.                     |
| HOGATZA              | YUKON/KOYUKUK   | DOYON LTD.                         |
| HOLIKACHUK           | YUKON/KOYUKUK   | DOYON LTD.                         |
| HOLLIS               | BETHEL  PRINCE OF WALES/OUTER KETCHIKAN                 | CALISTA CORP.                      |
| HOLLIS<br>HOLV CROSS | PRINCE OF WALES/OUTER KETCHIKAN<br>YUKON/KOYUKUK        | SEALASKA CORP.<br>DOYON LTD.       |
| HOLY CROSS<br>HOMER  | YUKUN/KUYUKUK<br>KENAI PENINSULA BOROUGH                | COOK INLET REG CORP.               |
| HOONAH               | ANGOON/HOONAH/SKAGWAY                                   | SEALASKA CORP.                     |
| HOONAH<br>HOOPER BAY | WADE HAMPTON  | CALISTA CORP.                      |
| HOPE                 | KENAI PENINSULA BOROUGH                                 | COOK INLET REG CORP.               |
| HOUSTON              | MATANUSKA-SUSITNA BOROUGH                               | COOK INLET REG CORP.               |
| HUGHES               | YUKON/KOYUKUK   | DOYON LTD.                         |
| HURRICANE            | MATANUSKA-SUSITNA BOROUGH                               | DOYON LTD.                         |
|                      |   |                                    |

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| LOCATION              | CENSUS AREA                     | NATIVE REGIONAL CORPORATION        |  |  |
|-----------------------|---------------------------------|------------------------------------|--|--|
| HUSLIA                | YUKON/KOYUKUK                   | DOYON LTD.                         |  |  |
| HYDABURG              | PRINCE OF WALES/OUTER KETCHIKAN | SEALASKA CORP.                     |  |  |
| HYDER                 | PRINCE OF WALES/OUTER KETCHIKAN | SEALASKA CORP.                     |  |  |
| ICY BAY               | VALDEZ/CORDOVA                  | CHUGACH NATIVES INC.               |  |  |
| IDITAROD              | YUKON/KOYUKUK                   | DOYON LTD.                         |  |  |
| IGIUGIG               | LAKE AND PENINSULA              | BRISTOL BAY CORP.                  |  |  |
| IGLOO                 | NOME                            | BERING STRAITS CORP.               |  |  |
| ILIAMNA               | LAKE AND PENINSULA              | BRISTOL BAY CORP.                  |  |  |
| INALIK                | NOME                            | BERING STRAITS CORP.               |  |  |
| INDIAN                | ANCHORAGE BOROUGH               | COOK INLET REG CORP.               |  |  |
| INDIAN MOUNTAIN       | YUKON/KOYUKUK                   | DOYON LTD.                         |  |  |
| IVANOFF BAY           | LAKE AND PENINSULA              | BRISTOL BAY CORP.                  |  |  |
| JAKOLOF BAY           | KENAI PENINSULA BOROUGH         | COOK INLET REG CORP.               |  |  |
| JONESVILLE            | MATANUSKA-SUSITNA BOROUGH       | COOK INLET REG CORP.               |  |  |
| JUNEAU                | JUNEAU BOROUGH                  | SEALASKA CORP.                     |  |  |
| KACHAMAK              | KENAI PENINSULA BOROUGH         | COOK INLET REG CORP.               |  |  |
| KAGUYAK               | KODIAK ISLAND BOROUGH           | KONIAG INC.                        |  |  |
| KAKE                  | WRANGELL/PETERSBURG             | SEALASKA CORP.                     |  |  |
| KAKHONAK BAY          | LAKE AND PENINSULA              | BRISTOL BAY CORP.                  |  |  |
| KAKTOVIK              | NORTH SLOPE BOROUGH             | ARCTIC SLOPE CORP.                 |  |  |
| KALIFONSKY            | KENAI PENINSULA BOROUGH         | COOK INLET REG CORP.               |  |  |
| KALSKAG<br>KALTAG     | BETHEL<br>YUKON/KOYUKUK         | CALISTA CORP.<br>DOYON LTD.        |  |  |
| KANAKANAK             | DILLINGHAM                      | BRISTOL BAY CORP.                  |  |  |
|                       | KODIAK ISLAND BOROUGH           | KONIAG INC.                        |  |  |
| KARLUK<br>KASAAN      | PRINCE OF WALES/OUTER KETCHIKAN | SEALASKA CORP.                     |  |  |
| KASHWITNA             | MATANUSKA-SUSITNA BOROUGH       | COOK INLET REG CORP.               |  |  |
| KASHWIINA<br>KASIGLUK | BETHEL                          | CALISTA CORP.                      |  |  |
| KASILOF               | KENAI PENINSULA BOROUGH         | COOK INLET REG CORP.               |  |  |
| KENAI                 | KENAI PENINSULA BOROUGH         | COOK INLET REG CORP.               |  |  |
| KENNY LAKE            | VALDEZ/CORDOVA                  | AHTNA INC.                         |  |  |
| KETCHIKAN             | KETCHIKAN GATEWAY BOROUGH       | SEALASKA CORP.                     |  |  |
| KETCHIKAN EAST        | KETCHIKAN GATEWAY BOROUGH       | SEALASKA CORP.                     |  |  |
| KETCHIKAN SUBURBAN    | KETCHIKAN GATEWAY BOROUGH       | SEALASKA CORP.                     |  |  |
| KEYALUVIK             | BETHEL                          | CALISTA CORP.                      |  |  |
| KIANA                 | NORTHWEST ARCTIC BOROUGH        | NANA REGIONAL CORP.                |  |  |
| KING COVE             | ALEUTIANS EAST                  | ALEUT CORP.                        |  |  |
| KING ISLAND           | NOME                            | BERING STRAITS CORP.               |  |  |
| KING SALMON           | BRISTOL BAY BOROUGH             | BRISTOL BAY CORP.                  |  |  |
| KINGEGAN              | NOME                            | BERING STRAITS CORP.               |  |  |
| KIPNUK                | BETHEL                          | CALISTA CORP.                      |  |  |
| KITOI BAY             | KODIAK ISLAND BOROUGH           | KONIAG INC.                        |  |  |
| KIVALINA              | NORTHWEST ARCTIC BOROUGH        | NANA REGIONAL CORP.                |  |  |
| KIWALIK               | NORTHWEST ARCTIC BOROUGH        | NANA REGIONAL CORP.                |  |  |
| KLAWOCK               | PRINCE OF WALES/OUTER KETCHIKAN | SEALASKA CORP.                     |  |  |
| KLUCHEVA              | KENAI PENINSULA BOROUGH         | COOK INLET REG CORP.               |  |  |
| KLUCHEVAYA            | KENAI PENINSULA BOROUGH         | COOK INLET REG CORP.               |  |  |
| KLUKWAN               | ANGOON/HOONAH/SKAGWAY           | SEALASKA CORP.                     |  |  |
| KNIK                  | MATANUSKA-SUSITNA BOROUGH       | COOK INLET REG CORP.               |  |  |
| KNUDSON COVE          | KETCHIKAN GATEWAY BOROUGH       | SEALASKA CORP.                     |  |  |
| KOBUK                 | NORTHWEST ARCTIC BOROUGH        | NANA REGIONAL CORP.                |  |  |
| KODIAK                | KODIAK ISLAND BOROUGH           | KONIAG INC.                        |  |  |
| KODIAK NAVAL ST       | KODIAK ISLAND BOROUGH           | KONIAG INC.                        |  |  |
| KOKHANOK              | LAKE AND PENINSULA              | BRISTOL BAY CORP.                  |  |  |
| KOKRINES              | YUKON/KOYUKUK                   | DOYON LTD.                         |  |  |
| KOLIGANEK             | DILLINGHAM                      | BRISTOL BAY CORP.                  |  |  |
| KONGIGANAK            | BETHEL<br>WADE HAMPTON          | CALISTA CORP.                      |  |  |
| KOTLIK                | WADE HAMPTON                    | CALISTA CORP.                      |  |  |
| KOTZEBUE              | NORTHWEST ARCTIC BOROUGH        | NANA REGIONAL CORP.                |  |  |
| KOYUK                 | NOME<br>YUKON/KOYUKUK           | BERING STRAITS CORP.<br>DOYON LTD. |  |  |
| KOYUKUK<br>KUPREANOF  | WRANGELL/PETERSBURG             | SEALASKA CORP.                     |  |  |
| KULKLANOF             | WIN MOELL/I LIERSBURG           | SLALASINA COM .                    |  |  |

| LOCATION                            | CENSUS AREA                        | NATIVE REGIONAL CORPORATION           |  |  |  |
|-------------------------------------|------------------------------------|---------------------------------------|--|--|--|
| KUSKOKWIM RIVER 1                   | BETHEL                             | CALISTA CORP.                         |  |  |  |
| KUSKOKWIM RIVER 2                   | BETHEL                             | CALISTA CORP.                         |  |  |  |
| KUSKOKWIM RIVER 3                   | YUKON/KOYUKUK                      | DOYON LTD.                            |  |  |  |
| KUZITRINE RIVER                     | NOME                               | BERING STRAITS CORP.                  |  |  |  |
| KVICHAK                             | LAKE AND PENINSULA                 | BRISTOL BAY CORP.                     |  |  |  |
| KWETHLUK                            | BETHEL                             | CALISTA CORP.                         |  |  |  |
| KWIGILLINGOK                        | BETHEL<br>WADE HAMPTON             | CALISTA CORP.                         |  |  |  |
| KWIGOK                              | PRINCE OF WALES/OUTER KETCHIKAN    | CALISTA CORP.                         |  |  |  |
| LABOUCHERE BAY<br>LADD AFB          | FAIRBANKS NORTH STAR BOROUGH       | SEALASKA CORP.<br>DOYON LTD.          |  |  |  |
| LADD AFB<br>LAKE CLARK PASS         | LAKE AND PENINSULA                 | BRISTOL BAY CORP.                     |  |  |  |
| LAKE CLARK I ASS<br>LAKE MINCHUMINA | YUKON/KOYUKUK                      | DOYON LTD.                            |  |  |  |
| LARSEN BAY                          | KODIAK ISLAND BOROUGH              | KONIAG INC.                           |  |  |  |
| LAZY BAY                            | KODIAK ISLAND BOROUGH              | KONIAG INC.                           |  |  |  |
| LAZY MOUNTAIN                       | MATANUSKA-SUSITNA BOROUGH          | COOK INLET REG CORP.                  |  |  |  |
| LEMETA                              | FAIRBANKS NORTH STAR BOROUGH       | DOYON LTD.                            |  |  |  |
| LENA BEACH                          | JUNEAU BOROUGH                     | SEALASKA CORP.                        |  |  |  |
| LENA COVE                           | JUNEAU BOROUGH                     | SEALASKA CORP.                        |  |  |  |
| LEVELOCK                            | LAKE AND PENINSULA                 | BRISTOL BAY CORP.                     |  |  |  |
| LIGNITE                             | DENALI BOROUGH                     | DOYON LTD.                            |  |  |  |
| LIME VILLAGE                        | BETHEL                             | CALISTA CORP.                         |  |  |  |
| LITTLE DIOMEDE                      | NOME                               | BERING STRAITS CORP.                  |  |  |  |
| LITTLE PORT WALTER                  | SITKA BOROUGH                      | SEALASKA CORP.                        |  |  |  |
| LIVENGOOD                           | YUKON/KOYUKUK                      | DOYON LTD.                            |  |  |  |
| LONELY                              | NORTH SLOPE BOROUGH                | ARCTIC SLOPE CORP.                    |  |  |  |
| LONG ISLAND                         | PRINCE OF WALES/OUTER KETCHIKAN    | SEALASKA CORP.                        |  |  |  |
| LORING                              | KETCHIKAN GATEWAY BOROUGH          | SEALASKA CORP.                        |  |  |  |
| LOST RIVER                          | NOME                               | BERING STRAITS CORP.                  |  |  |  |
| LOWER KALSKAG                       | BETHEL                             | CALISTA CORP.                         |  |  |  |
| LOWER TONSINA                       | VALDEZ/CORDOVA                     | AHTNA INC.                            |  |  |  |
| LUTAK                               | HAINES BOROUGH                     | SEALASKA CORP.                        |  |  |  |
| MANLEY HOT SPRINGS                  | YUKON/KOYUKUK                      | DOYON LTD.                            |  |  |  |
| MANOKOTAK<br>MARSHALL               | DILLINGHAM WADE HAMPTON            | BRISTOL BAY CORP.<br>CALISTA CORP.    |  |  |  |
| MARYS IGLOO                         | WADE HAMPTON<br>NOME               | BERING STRAITS CORP.                  |  |  |  |
| MAY CREEK                           | NORTHWEST ARCTIC BOROUGH           | NANA REGIONAL CORP.                   |  |  |  |
| MCCARTHY                            | VALDEZ/CORDOVA                     | AHTNA INC.                            |  |  |  |
| MCGRATH                             | YUKON/KOYUKUK                      | DOYON LTD.                            |  |  |  |
| MCKINLEY PARK                       | DENALI BOROUGH                     | DOYON LTD.                            |  |  |  |
| MEADOW LAKES                        | MATANUSKA-SUSITNA BOROUGH          | COOK INLET REG CORP.                  |  |  |  |
| MEAKERVILLE                         | VALDEZ/CORDOVA                     | CHUGACH NATIVES INC.                  |  |  |  |
| MEDFRA                              | YUKON/KOYUKUK                      | DOYON LTD.                            |  |  |  |
| MEKORYUK                            | BETHEL                             | CALISTA CORP.                         |  |  |  |
| MENDELTNA LODGE                     | VALDEZ/CORDOVA                     | AHTNA INC.                            |  |  |  |
| MENTASTA LAKE                       | VALDEZ/CORDOVA                     | AHTNA INC.                            |  |  |  |
| METLAKATLA                          | PRINCE OF WALES/OUTER KETCHIKAN    | SEALASKA CORP.                        |  |  |  |
| MEYERS CHUCK                        | PRINCE OF WALES/OUTER KETCHIKAN    | SEALASKA CORP.                        |  |  |  |
| MILLER HOUSE                        | YUKON/KOYUKUK                      | DOYON LTD.                            |  |  |  |
| MINTO                               | YUKON/KOYUKUK                      | DOYON LTD.                            |  |  |  |
| MONTANA                             | MATANUSKA-SUSITNA BOROUGH          | COOK INLET REG CORP.                  |  |  |  |
| MONTANA CRK LODGE                   | MATANUSKA-SUSITNA BOROUGH          | COOK INLET REG CORP.                  |  |  |  |
| MOOSE CREEK                         | FAIRBANKS NORTH STAR BOROUGH       | DOYON LTD.                            |  |  |  |
| MOOSE PASS                          | KENAI PENINSULA BOROUGH            | COOK INLET REG CORP.                  |  |  |  |
| MOSES POINT                         | KODIAK ISLAND BOROUGH              | KONIAG INC.                           |  |  |  |
| MOSES POINT                         | NOME<br>VETCHIKAN GATEWAY POPOLICH | BERING STRAITS CORP.                  |  |  |  |
| MOUNTAIN POINT                      | KETCHIKAN GATEWAY BOROUGH          | SEALASKA CORP.                        |  |  |  |
| MOUNTAIN VIEW<br>MOUNTAIN VILLAGE   | ANCHORAGE BOROUGH WADE HAMPTON     | COOK INLET REG CORP.<br>CALISTA CORP. |  |  |  |
| MT DENALI                           | DENALI BOROUGH                     | DOYON LTD.                            |  |  |  |
| MT EDGECUMBE                        | SITKA BOROUGH                      | SEALASKA CORP.                        |  |  |  |
| MT MC KINLEY                        | DENALI BOROUGH                     | DOYON LTD.                            |  |  |  |
| MUMTRAK                             | BETHEL                             | CALISTA CORP.                         |  |  |  |
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# (continued) APPENDIX H

| LOCATION               | CENSUS AREA   | NATIVE REGIONAL CORPORATION        |  |
|------------------------|---|------------------------------------|--|
| MURPHY DOME            | FAIRBANKS NORTH STAR BOROUGH                          | DOYON LTD.                         |  |
| NABESNA                | VALDEZ/CORDOVA  | AHTNA INC.                         |  |
| NAKNEK                 | BRISTOL BAY BOROUGH                                   | BRISTOL BAY CORP.                  |  |
| NANAKA                 | ANCHORAGE BOROUGH                                     | COOK INLET REG CORP.               |  |
| NANWALEK               | KENAI PENINSULA BOROUGH                               | CHUGACH NATIVES INC.               |  |
| NAPAIMUTE              | BETHEL  | CALISTA CORP.                      |  |
| NAPAKIAK               | BETHEL  | CALISTA CORP.                      |  |
| NAPASKIAK              | BETHEL  | CALISTA CORP.                      |  |
| NAUKATI BAY            | PRINCE OF WALES/OUTER KETCHIKAN                       | SEALASKA CORP.                     |  |
| NEETS BAY              | KETCHIKAN GATEWAY BOROUGH                             | SEALASKA CORP.                     |  |
| NELSON LAGOON          | ALEUTIANS EAST  | ALEUT CORP.                        |  |
| NENANA                 | YUKON/KOYUKUK   | DOYON LTD.                         |  |
| NEW STUYAHOK           | DILLINGHAM  | BRISTOL BAY CORP.                  |  |
| NEWHALEN<br>NEWTOK     | LAKE AND PENINSULA<br>BETHEL                          | BRISTOL BAY CORP.<br>CALISTA CORP. |  |
| NEW TOK<br>NIGHTMUTE   | BETHEL  | CALISTA CORP. CALISTA CORP.        |  |
| NIKISKI                | KENAI PENINSULA BOROUGH                               | COOK INLET REG CORP.               |  |
| NIKOLAEVSK             | KENAI PENINSULA BOROUGH                               | COOK INLET REG CORP.               |  |
| NIKOLAL VSK<br>NIKOLAI | YUKON/KOYUKUK   | DOYON LTD.                         |  |
| NIKOLSKI               | ALEUTIANS WEST  | ALEUT CORP.                        |  |
| NINILCHIK              | KENAI PENINSULA BOROUGH                               | COOK INLET REG CORP.               |  |
| NOATAK                 | NORTHWEST ARCTIC BOROUGH                              | NANA REGIONAL CORP.                |  |
| NOHODKA                | KENAI PENINSULA BOROUGH                               | COOK INLET REG CORP.               |  |
| NOME                   | NOME  | BERING STRAITS CORP.               |  |
| NONDALTON              | LAKE AND PENINSULA                                    | BRISTOL BAY CORP.                  |  |
| NOORVIK                | NORTHWEST ARCTIC BOROUGH                              | NANA REGIONAL CORP.                |  |
| NORTH KENAI            | KENAI PENINSULA BOROUGH                               | COOK INLET REG CORP.               |  |
| NORTH POLE             | FAIRBANKS NORTH STAR BOROUGH                          | DOYON LTD.                         |  |
| NORTH WHALE PASS       | PRINCE OF WALES/OUTER KETCHIKAN                       | SEALASKA CORP.                     |  |
| NORTHEAST CAPE         | NOME  | BERING STRAITS CORP.               |  |
| NORTHWAY               | SOUTHEAST FAIRBANKS                                   | DOYON LTD.                         |  |
| NORTHWAY JUNCTION      | SOUTHEAST FAIRBANKS                                   | DOYON LTD.                         |  |
| NORTHWAY VILLAGE       | SOUTHEAST FAIRBANKS                                   | DOYON LTD.                         |  |
| NUIQSUT                | NORTH SLOPE BOROUGH                                   | ARCTIC SLOPE CORP.                 |  |
| NULATO                 | YUKON/KOYUKUK   | DOYON LTD.                         |  |
| NUNAKA VALLEY          | ANCHORAGE BOROUGH                                     | COOK INLET REG CORP.               |  |
| NUNAPITCHUK            | BETHEL  | CALISTA CORP.                      |  |
| NUNIVAK ISLAND         | BETHEL  | CALISTA CORP.                      |  |
| NUSHAGAK               | DILLINGHAM  | BRISTOL BAY CORP.                  |  |
| NYAC                   | BETHEL  | CALISTA CORP.                      |  |
| OHGSENAKALE            | DILLINGHAM  | BRISTOL BAY CORP.                  |  |
| OHOGAMIUTE             | WADE HAMPTON  | CALISTA CORP.                      |  |
| OLD HARBOR<br>OLNES    | KODIAK ISLAND BOROUGH<br>FAIRBANKS NORTH STAR BOROUGH | KONIAG INC.                        |  |
| OPHIR                  | YUKON/KOYUKUK   | DOYON LTD.<br>DOYON LTD.           |  |
| OSCARVILLE             | BETHEL  | CALISTA CORP.                      |  |
| OUZINKIE               | KODIAK ISLAND BOROUGH                                 | KONIAG INC.                        |  |
| PAIMUTE                | WADE HAMPTON  | CALISTA CORP.                      |  |
| PALMER                 | MATANUSKA-SUSITNA BOROUGH                             | COOK INLET REG CORP.               |  |
| PARKS HWY 1            | MATANUSKA-SUSITNA BOROUGH                             | COOK INLET REG CORP.               |  |
| PARKS HWY 2            | MATANUSKA-SUSITNA BOROUGH                             | DOYON LTD.                         |  |
| PARKS HWY 3            | MATANUSKA-SUSITNA BOROUGH                             | AHTNA INC.                         |  |
| PARKS HWY 4            | DENALI BOROUGH  | AHTNA INC.                         |  |
| PARKS HWY 5            | DENALI BOROUGH  | DOYON LTD.                         |  |
| PARKS HWY 6            | YUKON/KOYUKUK   | UNKNOWN                            |  |
| PARKS HWY 7            | FAIRBANKS NORTH STAR BOROUGH                          | DOYON LTD.                         |  |
| PASTOLIK               | WADE HAMPTON  | CALISTA CORP.                      |  |
| PAULOFF HARBOR         | ALEUTIANS EAST  | ALEUT CORP.                        |  |
| PAXSON                 | VALDEZ/CORDOVA  | AHTNA INC.                         |  |
| PEDRO BAY              | LAKE AND PENINSULA BRISTOL BAY CORP.                  |                                    |  |
| PELICAN                | ANGOON/HOONAH/SKAGWAY                                 | SEALASKA CORP.                     |  |
| PENNOCK ISLAND         | KETCHIKAN GATEWAY BOROUGH                             | SEALASKA CORP.                     |  |
|                        |   |                                    |  |

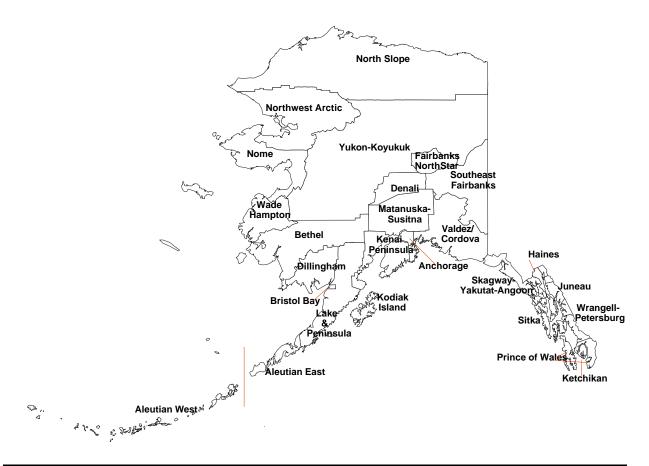
| LOCATION                     | CENSUS AREA  | NATIVE REGIONAL CORPORATION       |  |  |
|------------------------------|--|-----------------------------------|--|--|
| PERKINSVILLE                 | NOME   | BERING STRAITS CORP.              |  |  |
| PERRYVILLE                   | LAKE AND PENINSULA                                     | BRISTOL BAY CORP.                 |  |  |
| PETERS CREEK                 | ANCHORAGE BOROUGH                                      | COOK INLET REG CORP.              |  |  |
| PETERSBURG                   | WRANGELL/PETERSBURG                                    | SEALASKA CORP.                    |  |  |
| PETERSVILLE                  | MATANUSKA-SUSITNA BOROUGH                              | COOK INLET REG CORP.              |  |  |
| PILOT POINT                  | LAKE AND PENINSULA                                     | BRISTOL BAY CORP.                 |  |  |
| PILOT STATION                | WADE HAMPTON   | CALISTA CORP.                     |  |  |
| PITKA'S POINT                | WADE HAMPTON   | CALISTA CORP.                     |  |  |
| PLATINUM                     | BETHEL   | CALISTA CORP.                     |  |  |
| PLEASANT VALLEY              | FAIRBANKS NORTH STAR BOROUGH                           | DOYON LTD.                        |  |  |
| POINT BAKER                  | PRINCE OF WALES/OUTER KETCHIKAN                        | SEALASKA CORP.                    |  |  |
| POINT BARROW                 | NORTH SLOPE BOROUGH                                    | ARCTIC SLOPE CORP.                |  |  |
| POINT HOPE                   | NORTH SLOPE BOROUGH                                    | ARCTIC SLOPE CORP.                |  |  |
| POINT LAY                    | NORTH SLOPE BOROUGH                                    | ARCTIC SLOPE CORP.                |  |  |
| POLK INLET                   | PRINCE OF WALES/OUTER KETCHIKAN                        | SEALASKA CORP.                    |  |  |
| POPE & VANNOY                | LAKE AND PENINSULA                                     | BRISTOL BAY CORP.                 |  |  |
| PORT ALEXANDER               | WRANGELL/PETERSBURG                                    | SEALASKA CORP.                    |  |  |
| PORT ALICE                   | PRINCE OF WALES/OUTER KETCHIKAN                        | SEALASKA CORP.                    |  |  |
| PORT ALSWORTH                | LAKE AND PENINSULA                                     | COOK INLET REG CORP.              |  |  |
| PORT ARMSTRONG               | SITKA BOROUGH  | SEALASKA CORP.                    |  |  |
| PORT ASHTON                  | VALDEZ/CORDOVA   | CHUGACH NATIVES INC.              |  |  |
| PORT BAILEY<br>PORT CHILKOOT | KODIAK ISLAND BOROUGH<br>HAINES BOROUGH                | KONIAG INC.<br>SEALASKA CORP.     |  |  |
| PORT CLARENCE                | NOME   | BERING STRAITS CORP.              |  |  |
| PORT GRAHAM                  | KENAI PENINSULA BOROUGH                                | CHUGACH NATIVES INC.              |  |  |
| PORT HEIDEN                  | LAKE AND PENINSULA                                     | BRISTOL BAY CORP.                 |  |  |
| PORT LIONS                   | KODIAK ISLAND BOROUGH                                  | KONIAG INC.                       |  |  |
| PORT MOLLER                  | ALEUTIANS EAST   | ALEUT CORP.                       |  |  |
| PORT PROTECTION              | PRINCE OF WALES/OUTER KETCHIKAN                        | SEALASKA CORP.                    |  |  |
| PORT WAKEFIELD               | KODIAK ISLAND BOROUGH                                  | KONIAG INC.                       |  |  |
| PORTAGE                      | ANCHORAGE BOROUGH                                      | COOK INLET REG CORP.              |  |  |
| PORTAGE CREEK                | DILLINGHAM   | BRISTOL BAY CORP.                 |  |  |
| PORTLOCK                     | KENAI PENINSULA BOROUGH                                | CHUGACH NATIVES INC.              |  |  |
| PRINCE OF WALES LOG CP       | PRINCE OF WALES/OUTER KETCHIKAN                        | SEALASKA CORP.                    |  |  |
| PRIMROSE                     | KENAI PENINSULA BOROUGH                                | CHUGACH NATIVES INC.              |  |  |
| PRUDHOE BAY                  | NORTH SLOPE BOROUGH                                    | ARCTIC SLOPE CORP.                |  |  |
| QUINHAGAK                    | BETHEL   | CALISTA CORP.                     |  |  |
| RAMPART                      | YUKON/KOYUKUK  | DOYON LTD.                        |  |  |
| RED DEVIL                    | BETHEL   | CALISTA CORP.                     |  |  |
| RED MOUNTAIN                 | KENAI PENINSULA BOROUGH                                | COOK INLET REG CORP.              |  |  |
| RICHARDSON HWY 1             | VALDEZ/CORDOVA   | CHUGACH NATIVES INC.              |  |  |
| RICHARDSON HWY 2             | VALDEZ/CORDOVA   | AHTNA INC.                        |  |  |
| RICHARDSON HWY 3             | SOUTHEAST FAIRBANKS                                    | DOYON LTD.                        |  |  |
| RICHARDSON HWY 4             | FAIRBANKS NORTH STAR BOROUGH                           | DOYON LTD.                        |  |  |
| RIDGEWAY                     | KENAI PENINSULA BOROUGH                                | COOK INLET REG CORP.              |  |  |
| ROWAN BAY                    | WRANGELL/PETERSBURG                                    | SEALASKA CORP.                    |  |  |
| RUBY                         | YUKON/KOYUKUK  | DOYON LTD.                        |  |  |
| RUSS MISS KUSK RV            | BETHEL   | CALISTA CORP.                     |  |  |
| RUSSIAN MISSION              | WADE HAMPTON   | CALISTA CORP.                     |  |  |
| SALAMATOF                    | KENAI PENINSULA BOROUGH                                | COOK INLET REG CORP.              |  |  |
| SALCHA                       | FAIRBANKS NORTH STAR BOROUGH                           | DOYON LTD.                        |  |  |
| SALCHAKET                    | FAIRBANKS NORTH STAR BOROUGH                           | DOYON LTD.                        |  |  |
| SANAK                        | ALEUTIANS EAST   | ALEUT CORP.                       |  |  |
| SAND POINT                   | ALEUTIANS EAST   | ALEUT CORP.                       |  |  |
| SAVOONGA                     | NOME   | BERING STRAITS CORP.              |  |  |
| SAXMAN<br>SAXMAN FAST        | KETCHIKAN GATEWAY BOROUGH<br>KETCHIKAN GATEWAY BOROUGH | SEALASKA CORP.                    |  |  |
| SAXMAN EAST                  |  | SEALASKA CORP.                    |  |  |
| SCAMMON BAY<br>SCOTTY CREEK  | WADE HAMPTON<br>SOUTHEAST FAIRBANKS                    | CALISTA CORP.<br>DOYON LTD.       |  |  |
| SCOTTY CREEK<br>SELAWIK      | NORTHWEST ARCTIC BOROUGH                               | DOYON LID.<br>NANA REGIONAL CORP. |  |  |
| SELDOVIA                     | KENAI PENINSULA BOROUGH                                | COOK INLET REG CORP.              |  |  |
| SEVONOSKI                    | BRISTOL BAY BOROUGH                                    | BRISTOL BAY CORP.                 |  |  |
| DL ( ONODIN                  | DESCRIPTION DONOUGH                                    | DIGIOL DAT CORT.                  |  |  |

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| LOCATION                  | CENSUS AREA                         | NATIVE REGIONAL CORPORATION   |  |  |  |  |
|---------------------------|-------------------------------------|-------------------------------|--|--|--|--|
| SEWARD                    | KENAI PENINSULA BOROUGH             | CHUGACH NATIVES INC.          |  |  |  |  |
| SHAGELUK                  | YUKON/KOYUKUK                       | DOYON LTD.                    |  |  |  |  |
| SHAKTOOLIK                | NOME                                | BERING STRAITS CORP.          |  |  |  |  |
| SHELDON POINT             | WADE HAMPTON                        | CALISTA CORP.                 |  |  |  |  |
| SHEMYA AFB                | ALEUTIANS WEST                      | ALEUT CORP.                   |  |  |  |  |
| SHISHMAREF                | NOME                                | BERING STRAITS CORP.          |  |  |  |  |
| SHUNGNAK                  | NORTHWEST ARCTIC BOROUGH            | NANA REGIONAL CORP.           |  |  |  |  |
| SILVER TIP                | KENAI PENINSULA BOROUGH             | COOK INLET REG CORP.          |  |  |  |  |
| SITKA                     | SITKA BOROUGH                       | SEALASKA CORP.                |  |  |  |  |
| SITKA LOGGING CAMP        | SITKA BOROUGH                       | SEALASKA CORP.                |  |  |  |  |
| SKAGWAY                   | ANGOON/HOONAH/SKAGWAY               | SEALASKA CORP.                |  |  |  |  |
| SKWENTNA                  | MATANUSKA-SUSITNA BOROUGH           | COOK INLET REG CORP.          |  |  |  |  |
| SLANA                     | VALDEZ/CORDOVA                      | AHTNA INC.                    |  |  |  |  |
| SLATERVILLE               | FAIRBANKS NORTH STAR BOROUGH        | DOYON LTD.                    |  |  |  |  |
| SLEETMUTE                 | BETHEL                              | CALISTA CORP.                 |  |  |  |  |
| SNETTISHAM                | JUNEAU BOROUGH                      | SEALASKA CORP.                |  |  |  |  |
| SOLDOTNA                  | KENAI PENINSULA BOROUGH             | COOK INLET REG CORP.          |  |  |  |  |
| SOLOMON                   | NOME                                | BERING STRAITS CORP.          |  |  |  |  |
| SOURDOUGH                 | VALDEZ/CORDOVA                      | AHTNA INC.                    |  |  |  |  |
| SOUTH NAKNEK              | BRISTOL BAY BOROUGH                 | BRISTOL BAY CORP.             |  |  |  |  |
| SPARREVOHN                | BETHEL ANGUAGE POPOLICIA            | CALISTA CORP.                 |  |  |  |  |
| SPENARD                   | ANCHORAGE BOROUGH<br>ALEUTIANS EAST | COOK INLET REG CORP.          |  |  |  |  |
| SQUAW HARBOR              |                                     | ALEUT CORP.                   |  |  |  |  |
| ST. GEORGE ISLAND         | ALEUTIANS WEST                      | ALEUT CORP.<br>SEALASKA CORP. |  |  |  |  |
| ST. JOHN HARBOR           | WRANGELL/PETERSBURG                 | BERING STRAITS CORP.          |  |  |  |  |
| ST. LAWRENCE IS.          | NOME<br>WADE HAMPTON                | CALISTA CORP.                 |  |  |  |  |
| ST. MARY'S<br>ST. MICHAEL | NOME                                | BERING STRAITS CORP.          |  |  |  |  |
| ST. PAUL ISLAND           | ALEUTIANS WEST                      | ALEUT CORP.                   |  |  |  |  |
| STEBBINS                  | NOME                                | BERING STRAITS CORP.          |  |  |  |  |
| STEESE HWY 1              | FAIRBANKS NORTH STAR BOROUGH        | DOYON LTD.                    |  |  |  |  |
| STEESE HWY 2              | YUKON/KOYUKUK                       | DOYON LTD.                    |  |  |  |  |
| STERLING                  | KENAI PENINSULA BOROUGH             | COOK INLET REG CORP.          |  |  |  |  |
| STEVENS VILLAGE           | YUKON/KOYUKUK                       | DOYON LTD.                    |  |  |  |  |
| STONY RIVER               | BETHEL                              | CALISTA CORP.                 |  |  |  |  |
| SUMMIT                    | MATANUSKA-SUSITNA BOROUGH           | AHTNA INC.                    |  |  |  |  |
| SUNRISE VILLAGE           | KENAI PENINSULA BOROUGH             | COOK INLET REG CORP.          |  |  |  |  |
| SUNSHINE                  | MATANUSKA-SUSITNA BOROUGH           | COOK INLET REG CORP.          |  |  |  |  |
| SUNTRANA                  | DENALI BOROUGH                      | DOYON LTD.                    |  |  |  |  |
| SUSITNA                   | MATANUSKA-SUSITNA BOROUGH           | COOK INLET REG CORP.          |  |  |  |  |
| SUTTON                    | MATANUSKA-SUSITNA BOROUGH           | COOK INLET REG CORP.          |  |  |  |  |
| TAKOTNA                   | YUKON/KOYUKUK                       | DOYON LTD.                    |  |  |  |  |
| TAKU HARBOR               | JUNEAU BOROUGH                      | SEALASKA CORP.                |  |  |  |  |
| TALKEETNA                 | MATANUSKA-SUSITNA BOROUGH           | COOK INLET REG CORP.          |  |  |  |  |
| TANACROSS                 | SOUTHEAST FAIRBANKS                 | DOYON LTD.                    |  |  |  |  |
| TANANA                    | YUKON/KOYUKUK                       | DOYON LTD.                    |  |  |  |  |
| TANUNAK                   | BETHEL                              | CALISTA CORP.                 |  |  |  |  |
| TATALINA AFS              | YUKON/KOYUKUK                       | DOYON LTD.                    |  |  |  |  |
| TATITLEK                  | VALDEZ/CORDOVA                      | CHUGACH NATIVES INC.          |  |  |  |  |
| TAYLOR HWY                | SOUTHEAST FAIRBANKS                 | DOYON LTD.                    |  |  |  |  |
| TAZLINA                   | VALDEZ/CORDOVA                      | AHTNA INC.                    |  |  |  |  |
| TEE HARBOR                | JUNEAU BOROUGH                      | SEALASKA CORP.                |  |  |  |  |
| TELIDA                    | YUKON/KOYUKUK                       | DOYON LTD.                    |  |  |  |  |
| TELLER                    | NOME                                | BERING STRAITS CORP.          |  |  |  |  |
| TELLER MISSION            | NOME                                | BERING STRAITS CORP.          |  |  |  |  |
| TENAKEE SPRINGS           | ANGOON/HOONAH/SKAGWAY               | SEALASKA CORP.                |  |  |  |  |
| TETLIN                    | SOUTHEAST FAIRBANKS                 | DOYON LTD.                    |  |  |  |  |
| THOMAS BASIN              | KETCHIKAN GATEWAY BOROUGH           | SEALASKA CORP.                |  |  |  |  |
| THORNE BAY                | PRINCE OF WALES/OUTER KETCHIKAN     |                               |  |  |  |  |
| TIKIKLUK                  | NORTH SLOPE BOROUGH                 | ARCTIC SLOPE CORP.            |  |  |  |  |
| TIN CITY AFS              | NOME                                | BERING STRAITS CORP.          |  |  |  |  |
| TOGIAK                    | DILLINGHAM                          | BRISTOL BAY CORP.             |  |  |  |  |
|                           |                                     |                               |  |  |  |  |

| LOCATION        | CENSUS AREA                     | NATIVE REGIONAL CORPORATION |  |  |  |
|-----------------|---------------------------------|-----------------------------|--|--|--|
| TOK JUNCTION    | SOUTHEAST FAIRBANKS             | DOYON LTD.                  |  |  |  |
| TOKEEN          | PRINCE OF WALES/OUTER KETCHIKAN | SEALASKA CORP.              |  |  |  |
| TOKSOOK BAY     | BETHEL                          | CALISTA CORP.               |  |  |  |
| TONSINA         | VALDEZ/CORDOVA                  | AHTNA INC.                  |  |  |  |
| TRAPPER CREEK   | MATANUSKA-SUSITNA BOROUGH       | COOK INLET REG CORP.        |  |  |  |
| TULUKSAK        | BETHEL                          | CALISTA CORP.               |  |  |  |
| TUNTUTULIAK     | BETHEL                          | CALISTA CORP.               |  |  |  |
| TUSTUMENA       | KENAI PENINSULA BOROUGH         | COOK INLET REG CORP.        |  |  |  |
| TUXEKAN         | PRINCE OF WALES/OUTER KETCHIKAN | SEALASKA CORP.              |  |  |  |
| TWELVE MILE ARM | PRINCE OF WALES/OUTER KETCHIKAN | SEALASKA CORP.              |  |  |  |
| TWIN HILLS      | DILLINGHAM                      | BRISTOL BAY CORP.           |  |  |  |
| TWO RIVERS      | FAIRBANKS NORTH STAR BOROUGH    | DOYON LTD.                  |  |  |  |
| TYONEK          | KENAI PENINSULA BOROUGH         | COOK INLET REG CORP.        |  |  |  |
| UGANIK BAY      | KODIAK ISLAND BOROUGH           | KONIAG INC.                 |  |  |  |
| UGASHIK         | LAKE AND PENINSULA              | BRISTOL BAY CORP.           |  |  |  |
| UKIVOK          | NOME                            | BERING STRAITS CORP.        |  |  |  |
| UMIAT           | NORTH SLOPE BOROUGH             | ARCTIC SLOPE CORP.          |  |  |  |
| UMKUMUTE        | BETHEL                          | CALISTA CORP.               |  |  |  |
| UNALAKLEET      | NOME                            | BERING STRAITS CORP.        |  |  |  |
| UNALASKA        | ALEUTIANS WEST                  | ALEUT CORP.                 |  |  |  |
| UNGA            | ALEUTIANS EAST                  | ALEUT CORP.                 |  |  |  |
| UPPER KALSKAG   | BETHEL                          | CALISTA CORP.               |  |  |  |
| USIBELLI        | DENALI BOROUGH                  | DOYON LTD.                  |  |  |  |
| UYAK            | KODIAK ISLAND BOROUGH           | KONIAG INC.                 |  |  |  |
| VALDEZ          | VALDEZ/CORDOVA                  | CHUGACH NATIVES INC.        |  |  |  |
| VENETIE         | YUKON/KOYUKUK                   | DOYON LTD.                  |  |  |  |

MAP H.1 CENSUS AREAS OF ALASKA



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| LOCATION           | CENSUS AREA                     | NATIVE REGIONAL CORPORATION |
|--------------------|---------------------------------|-----------------------------|
| WACKER             | KETCHIKAN GATEWAY BOROUGH       | SEALASKA CORP.              |
| WAINWRIGHT         | NORTH SLOPE BOROUGH             | ARCTIC SLOPE CORP.          |
| WALES              | NOME                            | BERING STRAITS CORP.        |
| WARD COVE          | KETCHIKAN GATEWAY BOROUGH       | SEALASKA CORP.              |
| WASILLA            | MATANUSKA-SUSITNA BOROUGH       | COOK INLET REG CORP.        |
| WATERFALL          | PRINCE OF WALES/OUTER KETCHIKAN | SEALASKA CORP.              |
| WEST POINT         | KODIAK ISLAND BOROUGH           | KONIAG INC.                 |
| WEVOK              | NORTH SLOPE BOROUGH             | ARCTIC SLOPE CORP.          |
| WHALE PASS         | PRINCE OF WALES/OUTER KETCHIKAN | SEALASKA CORP.              |
| WHITE MOUNTAIN     | NOME                            | BERING STRAITS CORP.        |
| WHITESTONE LOGGING | ANGOON/HOONAH/SKAGWAY           | SEALASKA CORP.              |
| WHITTIER           | VALDEZ/CORDOVA                  | CHUGACH NATIVES INC.        |
| WILDWOOD AFS       | KENAI PENINSULA BOROUGH         | COOK INLET REG CORP.        |
| WILLOW             | MATANUSKA-SUSITNA BOROUGH       | COOK INLET REG CORP.        |
| WISEMAN            | YUKON/KOYUKUK                   | DOYON LTD.                  |
| WOMENS BAY         | KODIAK ISLAND BOROUGH           | KONIAG INC.                 |
| WOODY ISLAND       | KODIAK ISLAND BOROUGH           | KONIAG INC.                 |
| WRANGELL           | WRANGELL/PETERSBURG             | SEALASKA CORP.              |
| YAKATAGA           | VALDEZ/CORDOVA                  | CHUGACH NATIVES INC.        |
| YAKUTAT            | YAKUTAT                         | SEALASKA CORP.              |
| YUKON RIVER BRIDGE | YUKON/KOYUKUK                   | DOYON LTD.                  |
| YUKON RIVER 1      | WADE HAMPTON                    | CALISTA CORP.               |
| YUKON RIVER 2      | YUKON/KOYUKUK                   | DOYON LTD.                  |
| YUKON RIVER 3      | YUKON/KOYUKUK                   | DOYON LTD.                  |
| YUKON RIVER 4      | YUKON/KOYUKUK                   | DOYON LTD.                  |
| YUKON RIVER 5      | SOUTHEAST FAIRBANKS             | DOYON LTD.                  |
| ZACHER BAY         | KODIAK ISLAND BOROUGH           | KONIAG INC.                 |
| ZAREMBO ISLAND     | WRANGELL/PETERSBURG             | SEALASKA CORP.              |

### MAP H.2 ALASKA'S NATIVE REGIONAL CORPORATIONS



LOCATION **CENSUS AREA** NATIVE REGIONAL CORPORATION MAP H.3 ALASKA COURT LOCATIONS Second Judicial District Fourth Judicial District Third Judicial District Judicia District To produce of **1st Judicial District 2nd Judicial District 3rd Judicial District** 4th Judicial District **Superior Courts Superior Courts Superior Courts Superior Courts** Juneau Sitka Anchorage Kodiak Barrow Nome Bethel Fairbnks Ketchikan Kotzebue Dillingham Palmer **District Court** Kenai **District Courts District Courts** Fairbanks **District Courts** Juneau None **Magistrates** Anchorage Palmer Ketchikan Magistrates Aniak Galena/ Homer Valdez **Magistrates** Ambler/Shungnak McGrath Bethel **Magistrates** Angoon Pelican Healy/ Barrow Chevak/

Information courtesy of the Alaska Court System.

Petersburg

Skagway

Wrangell

Yakutat

Sitka

Gambell/Savoonga

Kotzebue

Nome

Kiana/Selawik/Noorvik

Craig

Haines

Hoonah

Juneau

Ketchikan

Kake

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Cordova

Kenai

Kodiak

Naknek

Palmer

Dillingham

Glennallen

St. Paul Is.

Sand Point

Seward

Valdez

Whittier

Unalaska

Hooper

Delta Jct.

Emmonak

Fort Yukon Tok

Bay

Nenana/

Tanana

Quinhagak

St. Mary's

### **APPENDIX I: POPULATION OVERVIEW**

### **ALASKA'S POPULATION**

Population estimates used in this report are provided by the Alaska Department of Labor, Research and Analysis Section, Demographics Unit. In March 1998, the Department of Labor revised population estimates back to 1991. Changes in estimates affect rates which are based on population. Revised estimates for 1991 through 1995 are also included in this appendix.

TABLE I.1 ESTIMATED POPULATION OF ALASKA BY AGE, SEX AND RACE, JULY 1998

| AGE   |         | ALASKA  |         |         | WHITE   |         |         | NATIVE |        |
|-------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| GROUP | TOTAL   | MALE    | FEMALE  | TOTAL   | MALE    | MALE    | TOTAL   | MALE   | FEMALE |
| 0-4   | 51,876  | 26,467  | 25,409  | 35,066  | 17,856  | 17,210  | 11,554  | 5,941  | 5,613  |
| 5-9   | 56,847  | 29,124  | 27,723  | 37,892  | 19,529  | 18,363  | 13,301  | 6,760  | 6,541  |
| 10-14 | 54,905  | 28,149  | 26,756  | 38,205  | 19,660  | 18,545  | 11,865  | 6,070  | 5,795  |
| 15-19 | 47,633  | 24,867  | 22,766  | 33,292  | 17,369  | 15,923  | 9,899   | 5,075  | 4,824  |
| 20-24 | 34,181  | 17,242  | 16,939  | 21,921  | 10,611  | 11,310  | 7,634   | 3,947  | 3,687  |
| 25-29 | 39,380  | 21,243  | 18,137  | 26,679  | 14,077  | 12,602  | 6,605   | 3,451  | 3,154  |
| 30-34 | 49,064  | 26,309  | 22,755  | 36,351  | 19,646  | 16,705  | 7,404   | 3,839  | 3,565  |
| 35-39 | 59,803  | 31,144  | 28,659  | 47,221  | 25,008  | 22,213  | 7,656   | 3,655  | 4,001  |
| 40-44 | 60,515  | 31,213  | 29,302  | 48,519  | 25,408  | 23,111  | 7,123   | 3,431  | 3,692  |
| 45-49 | 52,315  | 27,939  | 24,376  | 42,856  | 23,165  | 19,691  | 5,613   | 2,834  | 2,779  |
| 50-54 | 37,298  | 20,288  | 17,010  | 31,103  | 17,293  | 13,810  | 3,819   | 1,792  | 2,027  |
| 55-59 | 24,904  | 13,348  | 11,556  | 20,417  | 11,256  | 9,161   | 3,001   | 1,372  | 1,629  |
| 60-64 | 16,073  | 8,555   | 7,518   | 12,391  | 6,874   | 5,517   | 2,553   | 1,235  | 1,318  |
| 65-69 | 11,808  | 5,951   | 5,857   | 8,875   | 4,683   | 4,192   | 1,961   | 900    | 1,061  |
| 70-74 | 9,113   | 4,453   | 4,660   | 6,950   | 3,518   | 3,432   | 1,364   | 613    | 751    |
| 75-79 | 6,202   | 2,822   | 3,380   | 4,669   | 2,227   | 2,442   | 999     | 410    | 589    |
| 80-84 | 3,238   | 1,347   | 1,891   | 2,544   | 1,098   | 1,446   | 531     | 189    | 342    |
| 85+   | 1,927   | 723     | 1,204   | 1,320   | 459     | 861     | 479     | 188    | 291    |
| TOTAL | 617,082 | 321,184 | 295,898 | 456,271 | 239,737 | 216,534 | 103,361 | 51,702 | 51,659 |

TABLE I.2 ESTIMATED POPULATION OF ALASKA BY AGE, SEX AND RACE, JULY 1997

| AGE   | ALASKA  |         |         | WHITE   |         |         | NATIVE  |        |        |
|-------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| GROUP | TOTAL   | MALE    | FEMALE  | TOTAL   | MALE    | MALE    | TOTAL   | MALE   | FEMALE |
| 0-4   | 51,970  | 26,478  | 25,492  | 34,904  | 17,698  | 17,206  | 11,764  | 6,061  | 5,703  |
| 5-9   | 57,185  | 29,242  | 27,943  | 38,465  | 19,808  | 18,657  | 13,270  | 6,709  | 6,561  |
| 10-14 | 54,375  | 27,884  | 26,491  | 38,071  | 19,590  | 18,481  | 11,586  | 5,921  | 5,665  |
| 15-19 | 45,790  | 23,913  | 21,877  | 32,235  | 16,798  | 15,437  | 9,355   | 4,814  | 4,541  |
| 20-24 | 33,330  | 16,807  | 16,523  | 21,449  | 10,394  | 11,055  | 7,459   | 3,853  | 3,606  |
| 25-29 | 41,078  | 22,457  | 18,621  | 28,507  | 15,335  | 13,172  | 6,489   | 3,391  | 3,098  |
| 30-34 | 51,509  | 27,399  | 24,110  | 38,630  | 20,738  | 17,892  | 7,793   | 4,017  | 3,776  |
| 35-39 | 60,363  | 31,247  | 29,116  | 47,915  | 25,223  | 22,692  | 7,598   | 3,575  | 4,023  |
| 40-44 | 59,804  | 31,002  | 28,802  | 48,178  | 25,311  | 22,867  | 6,917   | 3,388  | 3,529  |
| 45-49 | 49,967  | 26,803  | 23,164  | 41,153  | 22,347  | 18,806  | 5,262   | 2,653  | 2,609  |
| 50-54 | 35,215  | 19,121  | 16,094  | 29,453  | 16,369  | 13,084  | 3,630   | 1,689  | 1,941  |
| 55-59 | 22,684  | 12,195  | 10,489  | 18,400  | 10,150  | 8,250   | 2,923   | 1,377  | 1,546  |
| 60-64 | 15,351  | 8,128   | 7,223   | 11,727  | 6,498   | 5,229   | 2,541   | 1,221  | 1,320  |
| 65-69 | 11,583  | 5,821   | 5,762   | 8,788   | 4,597   | 4,191   | 1,875   | 860    | 1,015  |
| 70-74 | 8,814   | 4,301   | 4,513   | 6,651   | 3,361   | 3,290   | 1,395   | 638    | 757    |
| 75-79 | 5,797   | 2,641   | 3,156   | 4,445   | 2,126   | 2,319   | 905     | 359    | 546    |
| 80-84 | 3,004   | 1,239   | 1,765   | 2,311   | 986     | 1,325   | 537     | 192    | 345    |
| 85+   | 1,836   | 680     | 1,156   | 1,265   | 421     | 844     | 452     | 187    | 265    |
| TOTAL | 609,655 | 317,358 | 292,297 | 452,547 | 237,750 | 214,797 | 101,751 | 50,905 | 50,846 |

TABLE I.3 ESTIMATED POPULATION OF ALASKA BY AGE, SEX AND RACE, JULY 1996

| AGE   | ALASKA  |         |         | WHITE   |         |         | NATIVE |        |        |  |
|-------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--|
| GROUP | TOTAL   | MALE    | FEMALE  | TOTAL   | MALE    | MALE    | TOTAL  | MALE   | FEMALE |  |
| 0-4   | 52,568  | 26,699  | 25,869  | 35,064  | 17,756  | 17,308  | 12,145 | 6,193  | 5,952  |  |
| 5-9   | 56,717  | 29,049  | 27,668  | 38,585  | 19,891  | 18,694  | 12,859 | 6,534  | 6,325  |  |
| 10-14 | 53,252  | 27,318  | 25,934  | 37,500  | 19,272  | 18,228  | 11,117 | 5,682  | 5,435  |  |
| 15-19 | 44,503  | 23,231  | 21,272  | 31,551  | 16,441  | 15,110  | 8,933  | 4,597  | 4,336  |  |
| 20-24 | 32,666  | 16,655  | 16,011  | 21,009  | 10,327  | 10,682  | 7,225  | 3,734  | 3,491  |  |
| 25-29 | 43,599  | 24,056  | 19,543  | 30,951  | 16,960  | 13,991  | 6,579  | 3,413  | 3,166  |  |
| 30-34 | 53,827  | 28,496  | 25,331  | 40,959  | 21,890  | 19,069  | 7,866  | 4,028  | 3,838  |  |
| 35-39 | 61,471  | 31,750  | 29,721  | 48,999  | 25,734  | 23,265  | 7,583  | 3,548  | 4,035  |  |
| 40-44 | 59,095  | 30,810  | 28,285  | 47,962  | 25,275  | 22,687  | 6,613  | 3,286  | 3,327  |  |
| 45-49 | 49,229  | 26,658  | 22,571  | 40,931  | 22,482  | 18,449  | 4,973  | 2,505  | 2,468  |  |
| 50-54 | 31,988  | 17,286  | 14,702  | 26,663  | 14,740  | 11,923  | 3,454  | 1,618  | 1,836  |  |
| 55-59 | 21,352  | 11,586  | 9,766   | 17,211  | 9,580   | 7,631   | 2,833  | 1,370  | 1,463  |  |
| 60-64 | 14,695  | 7,688   | 7,007   | 11,195  | 6,126   | 5,069   | 2,470  | 1,174  | 1,296  |  |
| 65-69 | 11,610  | 5,915   | 5,695   | 8,927   | 4,733   | 4,194   | 1,807  | 822    | 985    |  |
| 70-74 | 8,588   | 4,140   | 4,448   | 6,472   | 3,203   | 3,269   | 1,387  | 650    | 737    |  |
| 75-79 | 5,442   | 2,463   | 2,979   | 4,192   | 1,991   | 2,201   | 859    | 337    | 522    |  |
| 80-84 | 2,820   | 1,180   | 1,640   | 2,128   | 910     | 1,218   | 542    | 208    | 334    |  |
| 85+   | 1,790   | 641     | 1,149   | 1,250   | 399     | 851     | 433    | 179    | 254    |  |
| TOTAL | 605,212 | 315.621 | 289,591 | 451.549 | 237,710 | 213,839 | 99,678 | 49,878 |        |  |

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TABLE I.4 ESTIMATED POPULATION OF ALASKA BY AGE, SEX AND RACE, JULY 1995

| AGE   |         | ALASKA  |               |         | WHITE   |         |        | NATIVE |        |
|-------|---------|---------|---------------|---------|---------|---------|--------|--------|--------|
| GROUP | TOTAL   | MALE    | <b>FEMALE</b> | TOTAL   | MALE    | MALE    | TOTAL  | MALE   | FEMALE |
| 0-4   | 54,514  | 27,756  | 26,758        | 36,495  | 18,597  | 17,898  | 12,600 | 6,381  | 6,219  |
| 5-9   | 56,937  | 29,224  | 27,713        | 39,389  | 20,373  | 19,016  | 12,455 | 6,337  | 6,118  |
| 10-14 | 52,908  | 27,251  | 25,657        | 37,673  | 19,447  | 18,226  | 10,701 | 5,453  | 5,248  |
| 15-19 | 42,595  | 22,253  | 20,342        | 30,292  | 15,811  | 14,481  | 8,539  | 4,399  | 4,140  |
| 20-24 | 32,806  | 17,037  | 15,769        | 21,222  | 10,688  | 10,534  | 7,098  | 3,664  | 3,434  |
| 25-29 | 45,104  | 24,832  | 20,272        | 32,392  | 17,825  | 14,567  | 6,874  | 3,539  | 3,335  |
| 30-34 | 56,678  | 29,850  | 26,828        | 43,802  | 23,293  | 20,509  | 7,906  | 4,011  | 3,895  |
| 35-39 | 61,866  | 31,921  | 29,945        | 49,527  | 25,958  | 23,569  | 7,461  | 3,504  | 3,957  |
| 40-44 | 57,955  | 30,460  | 27,495        | 47,310  | 25,094  | 22,216  | 6,381  | 3,214  | 3,167  |
| 45-49 | 46,133  | 25,061  | 21,072        | 38,526  | 21,268  | 17,258  | 4,627  | 2,311  | 2,316  |
| 50-54 | 30,368  | 16,436  | 13,932        | 25,239  | 13,956  | 11,283  | 3,400  | 1,613  | 1,787  |
| 55-59 | 20,108  | 10,973  | 9,135         | 16,112  | 9,047   | 7,065   | 2,758  | 1,345  | 1,413  |
| 60-64 | 14,330  | 7,417   | 6,913         | 10,932  | 5,881   | 5,051   | 2,420  | 1,163  | 1,257  |
| 65-69 | 11,419  | 5,825   | 5,594         | 8,861   | 4,688   | 4,173   | 1,728  | 789    | 939    |
| 70-74 | 8,382   | 4,007   | 4,375         | 6,343   | 3,118   | 3,225   | 1,350  | 622    | 728    |
| 75-79 | 5,004   | 2,259   | 2,745         | 3,850   | 1,806   | 2,044   | 813    | 328    | 485    |
| 80-84 | 2,774   | 1,160   | 1,614         | 2,083   | 876     | 1,207   | 550    | 215    | 335    |
| 85+   | 1,700   | 592     | 1,108         | 1,197   | 373     | 824     | 397    | 159    | 238    |
| TOTAL | 601,581 | 314,314 | 287,267       | 451,245 | 238,099 | 213,146 | 98,058 | 49,047 | 49,011 |

TABLE I.5 ESTIMATED POPULATION OF ALASKA BY AGE, SEX AND RACE, JULY 1994

| AGE   |         | ALASKA  |         |         | WHITE   |         | NATIVE |        |        |  |
|-------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--|
| GROUP | TOTAL   | MALE    | FEMALE  | TOTAL   | MALE    | MALE    | TOTAL  | MALE   | FEMALE |  |
| 0-4   | 56,874  | 28,997  | 27,877  | 38,165  | 19,539  | 18,626  | 13,105 | 6,605  | 6,500  |  |
| 5-9   | 56,547  | 28,978  | 27,569  | 39,671  | 20,449  | 19,222  | 11,950 | 6,099  | 5,851  |  |
| 10-14 | 52,217  | 27,002  | 25,215  | 37,421  | 19,395  | 18,026  | 10,275 | 5,216  | 5,059  |  |
| 15-19 | 40,906  | 21,308  | 19,598  | 29,199  | 15,184  | 14,015  | 8,123  | 4,205  | 3,918  |  |
| 20-24 | 35,222  | 18,669  | 16,553  | 23,542  | 12,210  | 11,332  | 6,904  | 3,525  | 3,379  |  |
| 25-29 | 47,265  | 25,586  | 21,679  | 34,393  | 18,606  | 15,787  | 7,249  | 3,747  | 3,502  |  |
| 30-34 | 59,164  | 31,220  | 27,944  | 46,222  | 24,658  | 21,564  | 7,877  | 3,958  | 3,919  |  |
| 35-39 | 62,492  | 32,159  | 30,333  | 50,264  | 26,232  | 24,032  | 7,312  | 3,472  | 3,840  |  |
| 40-44 | 56,537  | 30,064  | 26,473  | 46,387  | 24,909  | 21,478  | 6,086  | 3,080  | 3,006  |  |
| 45-49 | 43,001  | 23,425  | 19,576  | 36,056  | 19,976  | 16,080  | 4,294  | 2,140  | 2,154  |  |
| 50-54 | 29,198  | 15,865  | 13,333  | 24,283  | 13,483  | 10,800  | 3,284  | 1,563  | 1,721  |  |
| 55-59 | 19,254  | 10,510  | 8,744   | 15,341  | 8,619   | 6,722   | 2,730  | 1,348  | 1,382  |  |
| 60-64 | 13,920  | 7,199   | 6,721   | 10,632  | 5,705   | 4,927   | 2,351  | 1,128  | 1,223  |  |
| 65-69 | 11,064  | 5,653   | 5,411   | 8,652   | 4,570   | 4,082   | 1,640  | 751    | 889    |  |
| 70-74 | 8,108   | 3,894   | 4,214   | 6,162   | 3,042   | 3,120   | 1,297  | 600    | 697    |  |
| 75-79 | 4,603   | 2,056   | 2,547   | 3,514   | 1,619   | 1,895   | 793    | 327    | 466    |  |
| 80-84 | 2,688   | 1,140   | 1,548   | 2,001   | 860     | 1,141   | 551    | 209    | 342    |  |
| 85+   | 1,562   | 538     | 1,024   | 1,110   | 338     | 772     | 361    | 151    | 210    |  |
| TOTAL | 600,622 | 314,263 | 286,359 | 453,015 | 239,394 | 213,621 | 96,182 | 48,124 | 48,058 |  |

TABLE I.6 ESTIMATED POPULATION OF ALASKA BY AGE, SEX AND RACE, JULY 1993

| AGE   | ALASKA  |         |         | WHITE   |         |         | NATIVE |        |        |
|-------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| GROUP | TOTAL   | MALE    | FEMALE  | TOTAL   | MALE    | MALE    | TOTAL  | MALE   | FEMALE |
| 0-4   | 58,200  | 29,782  | 28,418  | 39,351  | 20,227  | 19,124  | 13,249 | 6,701  | 6,548  |
| 5-9   | 55,654  | 28,521  | 27,133  | 39,344  | 20,278  | 19,066  | 11,586 | 5,904  | 5,682  |
| 10-14 | 51,054  | 26,492  | 24,562  | 36,914  | 19,159  | 17,755  | 9,772  | 4,983  | 4,789  |
| 15-19 | 39,408  | 20,481  | 18,927  | 28,200  | 14,688  | 13,512  | 7,815  | 4,019  | 3,796  |
| 20-24 | 38,151  | 20,791  | 17,360  | 26,504  | 14,312  | 12,192  | 6,715  | 3,420  | 3,295  |
| 25-29 | 49,428  | 26,616  | 22,812  | 36,410  | 19,661  | 16,749  | 7,678  | 3,964  | 3,714  |
| 30-34 | 60,741  | 31,900  | 28,841  | 47,875  | 25,465  | 22,410  | 7,776  | 3,847  | 3,929  |
| 35-39 | 62,539  | 32,362  | 30,177  | 50,577  | 26,484  | 24,093  | 7,129  | 3,454  | 3,675  |
| 40-44 | 54,874  | 29,485  | 25,389  | 45,239  | 24,575  | 20,664  | 5,792  | 2,947  | 2,845  |
| 45-49 | 40,105  | 21,879  | 18,226  | 33,677  | 18,706  | 14,971  | 4,043  | 2,000  | 2,043  |
| 50-54 | 27,654  | 15,051  | 12,603  | 22,974  | 12,787  | 10,187  | 3,143  | 1,497  | 1,646  |
| 55-59 | 18,532  | 10,058  | 8,474   | 14,657  | 8,191   | 6,466   | 2,743  | 1,358  | 1,385  |
| 60-64 | 13,761  | 7,206   | 6,555   | 10,625  | 5,763   | 4,862   | 2,225  | 1,074  | 1,151  |
| 65-69 | 10,776  | 5,470   | 5,306   | 8,393   | 4,377   | 4,016   | 1,627  | 765    | 862    |
| 70-74 | 7,668   | 3,667   | 4,001   | 5,875   | 2,900   | 2,975   | 1,211  | 543    | 668    |
| 75-79 | 4,384   | 1,963   | 2,421   | 3,330   | 1,525   | 1,805   | 797    | 333    | 464    |
| 80-84 | 2,484   | 1,053   | 1,431   | 1,817   | 776     | 1,041   | 539    | 212    | 327    |
| 85+   | 1,493   | 534     |         | 1,074   | 335     | 739     | 336    | 152    | 184    |
| TOTAL | 596,906 | 313,311 | 283,595 | 452,836 | 240,209 | 212,627 | 94,176 | 47,173 | 47,003 |

TABLE I.7 ESTIMATED POPULATION OF ALASKA BY AGE, SEX AND RACE, JULY 1992

| AGE   |         | ALASKA  |         |         | WHITE   |         | NATIVE |        |        |  |
|-------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--|
| GROUP | TOTAL   | MALE    | FEMALE  | TOTAL   | MALE    | MALE    | TOTAL  | MALE   | FEMALE |  |
| 0-4   | 57,959  | 29,677  | 28,282  | 39,461  | 20,348  | 19,113  | 13,159 | 6,615  | 6,544  |  |
| 5-9   | 54,904  | 28,119  | 26,785  | 39,106  | 20,131  | 18,975  | 11,258 | 5,730  | 5,528  |  |
| 10-14 | 48,765  | 25,345  | 23,420  | 35,485  | 18,445  | 17,040  | 9,188  | 4,698  | 4,490  |  |
| 15-19 | 38,548  | 20,059  | 18,489  | 27,775  | 14,513  | 13,262  | 7,598  | 3,906  | 3,692  |  |
| 20-24 | 40,118  | 22,417  | 17,701  | 28,741  | 16,069  | 12,672  | 6,562  | 3,345  | 3,217  |  |
| 25-29 | 51,435  | 27,694  | 23,741  | 38,316  | 20,779  | 17,537  | 8,064  | 4,153  | 3,911  |  |
| 30-34 | 60,863  | 31,875  | 28,988  | 48,244  | 25,612  | 22,632  | 7,659  | 3,744  | 3,915  |  |
| 35-39 | 61,835  | 32,289  | 29,546  | 50,314  | 26,573  | 23,741  | 6,892  | 3,392  | 3,500  |  |
| 40-44 | 52,544  | 28,480  | 24,064  | 43,613  | 23,927  | 19,686  | 5,407  | 2,745  | 2,662  |  |
| 45-49 | 37,591  | 20,469  | 17,122  | 31,602  | 17,547  | 14,055  | 3,848  | 1,897  | 1,951  |  |
| 50-54 | 25,460  | 13,948  | 11,512  | 20,985  | 11,734  | 9,251   | 3,054  | 1,494  | 1,560  |  |
| 55-59 | 17,887  | 9,644   | 8,243   | 14,080  | 7,836   | 6,244   | 2,718  | 1,339  | 1,379  |  |
| 60-64 | 13,589  | 7,150   | 6,439   | 10,592  | 5,748   | 4,844   | 2,130  | 1,032  | 1,098  |  |
| 65-69 | 10,416  | 5,232   | 5,184   | 8,052   | 4,135   | 3,917   | 1,645  | 793    | 852    |  |
| 70-74 | 7,092   | 3,407   | 3,685   | 5,477   | 2,718   | 2,759   | 1,112  | 487    | 625    |  |
| 75-79 | 4,061   | 1,835   | 2,226   | 3,031   | 1,409   | 1,622   | 798    | 332    | 466    |  |
| 80-84 | 2,282   | 933     | 1,349   | 1,672   | 674     | 998     | 507    | 202    | 305    |  |
| 85+   | 1,373   | 506     | 867     | 956     | 308     | 648     | 334    | 152    | 182    |  |
| TOTAL | 586,722 | 309,079 | 277,643 | 447,502 | 238,506 | 208,996 | 91.933 | 46,056 | 45,877 |  |

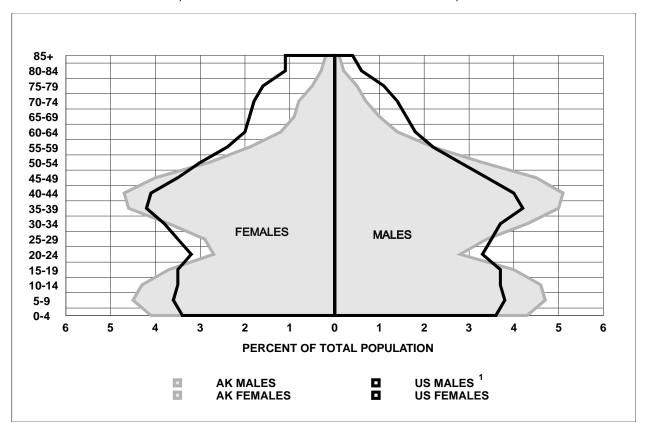
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TABLE I.8 ESTIMATED POPULATION OF ALASKA BY AGE, SEX AND RACE, JULY 1991

| AGE   |         | ALASKA  |         | WHITE   |         |         | NATIVE |        |        |  |
|-------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--|
| GROUP | TOTAL   | MALE    | FEMALE  | TOTAL   | MALE    | MALE    | TOTAL  | MALE   | FEMALE |  |
| 0-4   | 56,719  | 29,074  | 27,645  | 38,970  | 20,105  | 18,865  | 12,706 | 6,417  | 6,289  |  |
| 5-9   | 53,263  | 27,321  | 25,942  | 38,145  | 19,656  | 18,489  | 10,768 | 5,478  | 5,290  |  |
| 10-14 | 46,203  | 24,024  | 22,179  | 33,620  | 17,505  | 16,115  | 8,746  | 4,470  | 4,276  |  |
| 15-19 | 36,932  | 19,271  | 17,661  | 26,527  | 13,895  | 12,632  | 7,367  | 3,795  | 3,572  |  |
| 20-24 | 40,965  | 22,879  | 18,086  | 29,682  | 16,650  | 13,032  | 6,660  | 3,380  | 3,280  |  |
| 25-29 | 52,247  | 27,833  | 24,414  | 39,302  | 21,079  | 18,223  | 8,119  | 4,155  | 3,964  |  |
| 30-34 | 60,549  | 31,466  | 29,083  | 48,017  | 25,272  | 22,745  | 7,635  | 3,721  | 3,914  |  |
| 35-39 | 59,991  | 31,515  | 28,476  | 49,029  | 26,000  | 23,029  | 6,585  | 3,293  | 3,292  |  |
| 40-44 | 50,344  | 27,385  | 22,959  | 41,980  | 23,142  | 18,838  | 5,088  | 2,577  | 2,511  |  |
| 45-49 | 34,064  | 18,564  | 15,500  | 28,542  | 15,870  | 12,672  | 3,655  | 1,810  | 1,845  |  |
| 50-54 | 23,611  | 12,967  | 10,644  | 19,283  | 10,796  | 8,487   | 2,977  | 1,490  | 1,487  |  |
| 55-59 | 17,061  | 9,137   | 7,924   | 13,393  | 7,397   | 5,996   | 2,633  | 1,294  | 1,339  |  |
| 60-64 | 13,320  | 7,094   | 6,226   | 10,422  | 5,728   | 4,694   | 2,079  | 1,009  | 1,070  |  |
| 65-69 | 10,029  | 5,004   | 5,025   | 7,728   | 3,926   | 3,802   | 1,626  | 793    | 833    |  |
| 70-74 | 6,524   | 3,111   | 3,413   | 5,033   | 2,471   | 2,562   | 1,052  | 460    | 592    |  |
| 75-79 | 3,826   | 1,757   | 2,069   | 2,805   | 1,305   | 1,500   | 803    | 354    | 449    |  |
| 80-84 | 2,120   | 843     | 1,277   | 1,552   | 607     | 945     | 471    | 184    | 287    |  |
| 85+   | 1,286   | 486     | 800     | 896     | 304     | 592     | 316    | 140    | 176    |  |
| TOTAL | 569,054 | 299,731 | 269,323 | 434,926 | 231,708 | 203,218 | 89,286 | 44,820 | 44,466 |  |

### POPULATION DISTRIBUTION IN ALASKA AND THE UNITED STATES

CHART I.1 PERCENT DISTRIBUTION OF THE POPULATION BY AGE AND SEX, ALASKA AND THE UNITED STATES, 1998<sup>1</sup>



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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, February, 1996, p.44 (Alaska State Library U.S. Government Publications, reference C3.186).

### APPENDIX J: OTHER DATA SOURCES

The most comprehensive source for data in the Department of Health and Social Services can be found from the department's web page at **http://www.hss.state.ak.us**. Other data sources within the department which provide reference material and indicators of public health trends are listed below.

Department of Health and Social Services Division of Administrative Services Facilities and Planning Section P.O. Box 110650 Juneau, AK 99811-0650 (907) 465-3015

- Healthy Alaskans 2000 presents information, findings and recommendations in the areas of: health promotion, health protection, preventive services and surveillance and data systems (last printing 1992).
- The Village Clinic Survey presents information on the physical condition of over 200 small clinics in rural Alaska (last printing 1994).
- Alaska Hospital Survey reports on acute, specialized, and nursing homes throughout Alaska (last printing 1994).
- The Department of Health and Social Services Database Directory lists each database managed within the Department (last printing 1995).

### Department of Health and Social Services Division of Family and Youth Services

P.O. Box 110630 Juneau, AK 99811-0630 (907) 465-3170 dfys@health.state.ak.us

Annual Report

#### Department of Health and Social Services Division of Medical Assistance

P.O. Box 110660
Juneau, AK 99811-0660

(907) 465-3355

- Medical Assistance in Alaska
- Annual Report

### Department of Health and Social Services

Division of Mental Health and Developmental Disabilities

P.O. Box 110620 Juneau, AK 99811-0620 (907) 465-3370

• Annual Report

#### **Department of Health and Social Services**

#### **Division of Public Assistance**

P.O. Box 110640 Juneau, AK 99811-0640 (907) 465-3347

- Welfare Reform Briefing Papers
- Welfare Reform Status Report
- Welfare Reform Report Card

### **Department of Health and Social Services**

**Division of Public Health** 

**Community Health and Emergency Medical Services** 

P.O. Box 110616 Juneau, AK 99811-0616 (907) 465-3027

- Alaska Trauma Registry
- Behavioral Risk Factor Surveillance System

#### **Department of Health and Social Services**

**Division of Public Health** 

**Epidemiology Section** 

P.O. Box 240249 Anchorage, AK 99524-0249 (907) 269-8000

• EPI Bulletin: published up to 40 times per year with statistics on reportable diseases

### Department of Health and Social Services

**Division of Public Health** 

Maternal, Child and Family Health

1231 Gambell Street Anchorage, AK 99501-4267 (907) 269-3400

- · Five-Year Maternal and Child Health Needs Assessment
- Maternal Child Health Block Grant
- Adolescent Health Plan
- Family Health Data Line (bi-monthly)
- Family Health Shareline (quarterly)

### **Department of Health and Social Services**

**Division of Public Health** 

**Medicaid Services Unit** 

P.O. Box 110611 Juneau, AK 99811-0611

(907) 465-2845

 Information on the Healthy Babies program which provides prenatal medical care, and the Healthy Kids program which provides comprehensive child health services through outreach, screening, referral and follow-up

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