State of Alaska Department of Health and Social Services



Alaska Vital Statistics 2019 Annual Report





Alaska Vital Statistics 2019 Annual Report

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PREFACE

Purpose of This Report

The Alaska Vital Statistics Annual Report summarizes information on births, deaths, adoptions, marriages, and separations. The purpose of this report is to provide a general reference for public health statistics and vital events in the state of Alaska.

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Reports are prepared by the Health Analytics Unit of the Alaska Health Analytics and Vital Records Section.

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The Alaska Vital Statistics Annual Report is available online at:

dhss.alaska.gov/dph/vitalstats/pages/data/

Additional Information

We welcome any comments, questions, or concerns you may have about this report. The Health Analytics Unit is also available for special information requests on vital statistics data. The fee for research is \$75/hour for requests taking more than two hours. For further information, please contact the Health Analytics Unit at:

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Acknowledgments

Data and health indicators presented in this report are based on information supplied by many people throughout the state. Parents, doctors, birth attendants, medical facilities, medical examiners, magistrates, funeral directors, and many other individuals provide information on vital records.

The Health Analytics and Vital Records Section staff extends our gratitude to each person who participates in our data collection effort. Accurate data are essential to the Section's effort to report reliable vital event information, and contribute to public health efforts in Alaska. We appreciate the assistance of others in maintaining the integrity of our data.

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Population (2019)

EXECUTIVE SUMMARY

Alaska Population	731,007 ¹
Male	376,257
Female	
White	
AI/AN	
Asian/PI	
Black	
Hispanic (Any Race)	
Death (2019)	
Alaska Deaths	<i>1</i> 621
Alaska Crude Death Rate	
Alaska Age-Adjusted Death Rate	
Male	
Female	
White	
AI/AN	
Asian/PI	
Black	
Hispanic (Any Race)	
mspanie (Any Nace)	525.5
Malignant Neoplasms	148.8
Diseases of the Heart	132.3
Unintentional Injuries	59.4
Intentional Self-Harm (Suicide)	28.7
Drug Overdose	
Three Year Sum Fetal Deaths	175

Birth (2019)	
Top Girl Name	Emma
Top Boy Name	Liam
Alacka Births	0.020
Alaska Births	
Alaska Crude Birth Rate	
Alaska Fertility Rate	
White	
AI/AN	
Asian/PI	
Black	64.9
Hispanic	66.4
Teen Birth Rate (15-19 Years)	17.6 ⁸
Percent Low Weight (<2500 G.)	6.3%
White	5.3%
AI/AN	7.5%
Percent Preterm (<37 Weeks)	9.7%
White	
AI/AN	
Other Vital Events (2019)	
Marriages	4,765
Marriage Rate	6.59

Adoptions 805

Adoption Rate......1.19

1. Alaska Department of Labor and Workforce Development, Research and Analysis Section, Demographics Unit.

Postneonatal (28-364 Days)...... 72

^{2.} Alaska Department of Labor and Workforce Development, Research and Analysis Section, Demographics Unit. Bridged race estimates, and Hispanic of any race (see pg. 4).

^{3.} Deaths per 100,000 Alaska population.

^{4.} Deaths per 100,000 Alaska population, age-adjusted by year 2000 U.S. standard population (see Appendix B).

^{5.} Infant deaths per 1,000 live births. Calculated using death cohort method (see Appendix A).

^{6.} Births per 1,000 Alaska population.

^{7.} Births per 1,000 Alaska female population, aged 15-44 years old.

^{8.} Births per 1,000 Alaska female population, aged 15-19 years old.

^{9.} Events per 1,000 Alaska population.

Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

INTRODUCTION

About Alaska

Alaska is the largest of the 50 states and contains approximately 16 percent of the country's landmass. 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. It also contains more miles of coastline than all of the contiguous lower 48 states combined (approximately 6,640 miles, not including islands), as well as over 5,000 glaciers, 3 million fresh water lakes, and 3,000 rivers (of which the Yukon ranks among the longest in the United States). Much of the coastline and fresh water areas are used as transportation corridors, or fishing grounds. Remote lands are used for hunting and recreational activities.

Unique climatic conditions affect Alaska's people. Temperatures can range from highs up to 100°F, to lows approaching minus 80°F. Alaska experiences extremes in precipitation as well, receiving up to 200 inches of precipitation annually in some areas, while others receive as little as 12 inches.

With diverse cultures, sparse populations, severe temperatures, vast coastlines, and outdoor lifestyles, the state experiences many unique health care challenges. One such challenge is assisting residents who live in remote areas of the state. A combination of organizations, such as Alaska Native Regional Corporations, the State of Alaska, and private health care entities, provide health care, public health facilities, funding, and personnel in many areas.

The Alaska Vital Statistics Annual Report, prepared by the Health Analytics and Vital Records Section (HAVRS), is designed to provide information on a variety of vital events for health care planners, providers, research professionals, students, policy makers, the general public, and others with an interest in Alaska public health issues.

Occasionally, comparisons will be made between Alaska and national public health trends. Differences in trends between Alaska and the rest of the United States may reflect characteristics or challenges that are unique to the state. By reporting these indicators, our hope is to assist others in evaluating the status of public health in Alaska.

How Vital Statistics are Collected

The Alaska Vital Statistics Act (Alaska Statute (AS) 18.50) requires the Department of Health and Social Services to install, maintain, and operate a system of vital records. This system contains information on Alaska births, deaths, divorces, marriages, and adoptions, among other events.

When a birth occurs in Alaska, there is a legal process for recording that birth (AS 18.50.160). Typically, a physician, midwife, or hospital medical records staff member enters the birth record information into the Electronic Vital Records System (EVRS) database using information provided by the birth parent(s) and the delivery attendant.

Similarly, death records are entered in EVRS by funeral home staff members, and then certified by the attending physician or medical examiner. Death certificates should be filed within three days of the date of death (AS 18.50.230). After vital records have been entered into the system, they are then reviewed and registered by the HAVRS Registration Unit in Juneau.

Alaska also participates in the State and Territorial Exchange of Vital Events (STEVE) system. STEVE is a cooperative arrangement that facilitates the exchange of vital records data between states, as well as certain U.S. territories and jurisdictions. This ensures that vital events, such as the death

of an Alaska resident that occurred out of state, is received and recorded in EVRS. Conversely, non-residents vital events occurring in Alaska are also forwarded to their respective state's registrar. Unless otherwise noted, the Annual Report presents birth and death information on Alaska residents, regardless of where the death occurred. Counts of marriages and separations are based on events that occurred in Alaska, regardless of residency status. Counts of adoptions are based on children who were born in Alaska.

Under HAVRS oversight, the Alaska Court System issues marriage licenses and files a certificate for each marriage performed in the state. The certificate should be 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 forwards the certificate to HAVRS for registration and permanent retention. Since 1997, HAVRS has been issuing marriage licenses in Juneau, Anchorage, by mail, as well as registering and providing permanent retention of marriage documents. Marriage licenses in other parts of the state continue to be issued by the Court System under the Section's oversight. Alaska began issuing marriage licenses to same-sex couples on October 13th, 2014.

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

For each adoption granted in Alaska, a report of adoption is prepared and registered with HAVRS (AS 18.50.210). These include both Alaska State Court approved adoptions and Tribal Court approved adoptions, as well as Cultural Adoptions (Village Council approved adoptions of Alaska Native children).

How Certificates are Processed

In 2013, HAVRS implemented a new system for registering and storing information on vital events known as the Electronic Vital Records System (EVRS). This replaces the previous database system (Lightspeed), and enables hospital and clinical staff, birth attendants, physicians, medical examiners, funeral home directors, and other qualified birth/death certifiers to enter vital statistics information into the system.

As record information is entered, the system conducts data integrity checks. Missing or out-of-range information is returned to the facility or birth attendant for verification and/or correction. When the event information has been finalized and entered into EVRS, records are certified and permanently archived by HAVRS.

For death records, a physician or medical examiner works to determine the cause(s) of death, and narrative descriptions are entered on the death certificate. These narrative, or "text literal", causes of death are forwarded to the National Center for Health Statistics (NCHS), who code causes of death according to International Classification of Diseases Version 10 (ICD-10) standards. Final ICD-10 codes for the underlying and/or contributing cause of death are then returned to HAVRS, and uploaded back into the corresponding EVRS record. Unless otherwise noted, causes of death in the Annual Report are based on the underlying cause of death ICD-10 code.

Once all vital events from a calendar year have been entered into EVRS, and records have been checked for accuracy and completeness, the Section's Health Analytics Unit conducts the statistical analyses from which the tables, charts, and information in the Annual Report is based.

There are a number of ways to report on vital events, including the numbers of observations, 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.

Population Estimates

Population estimates used in this report were obtained from the Alaska Department of Labor and Workforce Development, Division of Administrative Services, Research and Analysis Section, Demographics Unit. Population estimates are updated annually. Total population estimates are revised each year to correspond to the United States Census Bureau's estimated state total. Using the decennial census as a base, birth, death, Internal Revenue Service, Alaska Permanent Fund and education statistics are used to produce annual population estimates for geographic areas (see Appendix D).

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. Sex, race, and age distributions within a population are also important. In 2019, the most recent year for which data are available, the median age of Alaska residents was 34.3 years old for males, 36.0 years old for females, and 35.0 years old overall. The median age for the United States was 37.2 years old for males, 39.8 years old for females, and 38.5 years old overall.¹

Determination of Race and Ethnicity

The 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 2003.

Sometimes race may be recorded differently on an individual's death certificate. This can influence death rates, particularly in the case of infant mortality, where, for example, a child's race may be reported as white on the birth certificate

because the mother is white, but Alaska Native on the death certificate because the father is Alaska Native. Unless otherwise noted, the race of the deceased is based on the race provided on the death certificate.

This report classifies race using NCHS provided bridged race categories. Bridging "refers to making data collected using one set of race categories consistent with data collected using a different set of race categories, to permit estimation and comparison of race-specific statistics at a point in time or over time". Bridged race categories allows multiple-race respondents to be classified using a single category for statistical purposes, and allows comparison of records over periods when collection of race information has been revised. Four race categories are reported: Caucasian (White), American Indian or Alaska Native (AI/AN), Asian, Native Hawaiian or Other Pacific Islander (Asian/PI), and Black or African American (Black).

One ethnicity category for Hispanic (of any race) is also reported, and includes peoples of Cuban, Mexican, Puerto Rican, South or Central American, or Other Hispanic origin. The reported race categories are not exclusive to non-Hispanic ethnicity; therefore, persons with Hispanic ethnicity are included in applicable race categories.

^{1.} United States Census Bureau, 2019 American Community Survey 1-Year Estimates, Age and Sex. Accessed 10/08/2020.

^{2.} National Center for Health Statistics, U.S. Census Populations With Bridged Race Categories.



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2019 Facts

- Alaska resident mothers gave birth to 9,830 babies.
- July had the largest number of births by month (919).
- The most popular girl's name was Emma.
- The most popular boy's name was Liam.
- The mean age of mothers was 28.7 years old,
- The mean age of fathers was 31.4 years.
- Teenage mothers (aged 15-19) gave birth to 393 babies.
- The youngest mother was 14 years old, while the oldest was 52.
- The youngest father was 14 years old, while the oldest was 68.

Birth Summary

In 2019, Alaska resident mothers delivered 9,830 live births. Emma was the most popular name for newborn girls, while Liam was the most popular name for newborn boys (Table 1).

In 2019, the **crude birth rate**, which measures the number of births per 1,000 Alaskan residents, was 13.4 (Table 2). Because the overall population includes both men and women, and women over prime childbearing age, fertility rates are a more meaningful measure for analyzing birth trends.

Fertility rates measure the number of births per 1,000 Alaska resident women between the ages of 15 and 44 years old only. In 2019, Alaska's overall fertility rate was 67.9 births per 1,000 population. American Indian/Alaska Native women had the highest fertility rate by race, at 83.2 births per 1,000 population (Figure 1). Women aged 25 to 29 had the highest fertility rate by age group, at 117.0 births per 1,000 population. Southwest Alaska had the highest fertility rate by Public Health Region, at 107.9 births per 1,000 population (Table 2).

Teen Births

In 2019, there were 393 births to teenage mothers aged 15-19 years old. The **teen birth rate**, which measures the number of births per 1,000 Alaska resident women aged 15-19 (which can also be defined as the age-specific fertility rate for women aged 15-19) was 17.6 births per 1,000 population. American Indian/Alaska Native women had the highest teen birth rate by race, at 33.1 births per 1,000 population. Southwest Alaska had the highest teen birth rate by Public Health Region, at 55.2 births per 1,000 population (Table 3).

Medical Services Utilization

In 2019, 68.5 percent of mothers received **prenatal** care (PNC) in their first trimester of pregnancy.¹

PNC in the 1st trimester was lowest among Asian/Pacific Islander mothers, at 53.7 percent (Table 4).

The overall adequacy of PNC mothers receive is estimated using the **Adequacy of Prenatal Care Utilization** index, which evaluates the initial date that PNC began, and the number of PNC visits (see Appendix C). The percentage of mothers that received PNC rated as adequate or better was 65.2 percent. Adequate PNC was lowest among Asian/Pacific Islander mothers, at 50.5 percent (Table 4).

Births delivered by **cesarean section** made up 21.6 percent of all births. Cesarean sections were highest among Black/African American mothers, at 27.6 percent (Table 4).

Infant Health Characteristics and Risk Factors

Low birthweight is defined as live births in which the infant weighs less than 2,500 grams (approximately 5.5 pounds) on delivery. In 2019, 6.3 percent of births were low weight. Low weight births were highest among Black/African American mothers, at 9.3 percent (Table 5).

Preterm births, which are defined as births prior to the 37th week of gestation, made up 9.7 percent of all births. Preterm births were highest among American Indian/Alaska Native mothers, at 13.6 percent (Table 5).

In 2019, 11.0 percent of mothers reported **tobacco use** during pregnancy, which is a risk factor for low birthweight and preterm births. Tobacco use was highest among American Indian/Alaska Native mothers, at 25.5 percent (Table 5).

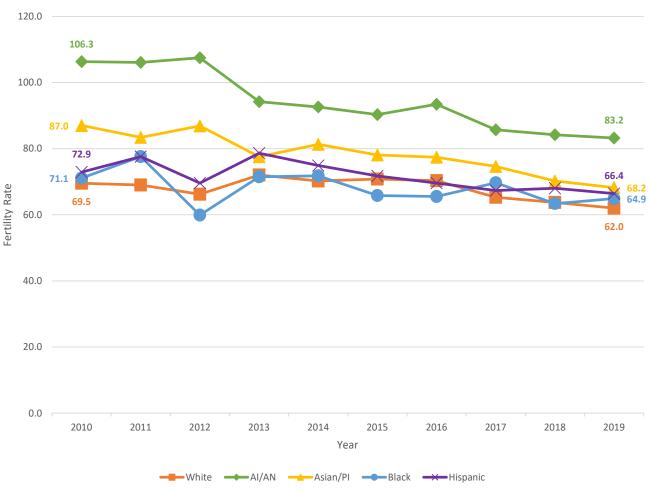
^{1.}Medical utilization, infant health characteristic, and risk factor percentage calculations do not exclude records with unknown/missing responses from the total number of births.

Table 1: Popular Baby Names by Sex (2015-2019)

			Girl			Воу							
Rank	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019			
1	Olivia	Emma	Emma	Olivia	Emma	Liam	James, William	James	Oliver	Liam			
2	Emma	Olivia	Olivia	Amelia	Evelyn	James, Noah	Oliver	Liam	Logan	Oliver			
3	Aurora	Amelia, Charlotte	Aurora	Aurora, Charlotte	Amelia, Ava, Olivia	William	Liam	Wyatt	Liam	Henry, James			
4	Ava	Aurora, Sophia	Isabella	Emma	Aurora	Oliver	Joseph, Logan	William	Elijah, Michael	Noah			
5	Amelia	Abigail	Evelyn, Sophia	Sophia	Charlotte	Joseph	Lucas	Noah, Oliver	Benjamin	William			

Note: Ties are comma seperated.

Figure 1: Fertility Rates by Race and Ethnicity (2010-2019)



Note: Fertility rates represent births per 100,000 women aged 15-44 years old.

Table 2: Births, Birth Rates, and Fertility Rates by Sex of Child, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Births				Cı	ude Birth Rat	te				Fertility Rate		
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex of Child															
Boy	5,791	5,767	5,353	5,215	5,122	7.9	7.8	7.3	7.1	7.0	39.5	39.3	36.6	35.9	35.3
Girl	5,507	5,448	5,099	4,881	4,708	7.5	7.4	6.9	6.6	6.4	37.6	37.1	34.8	33.6	32.6
Race and Ethn	icity	,												,	
White	7,015	6,914	6,343	6,111	5,918	13.6	13.4	12.4	12.1	11.8	70.8	70.3	65.3	63.7	62.0
AI/AN	2,389	2,480	2,292	2,255	2,234	18.8	19.4	17.9	17.6	17.4	90.3	93.4	85.7	84.2	83.2
Asian/PI	1,083	1,115	1,118	1,052	1,031	18.1	18.1	17.6	16.5	16.1	78.1	77.4	74.6	70.2	68.2
Black	472	483	522	473	485	13.6	13.6	14.6	13.1	13.6	65.8	65.5	69.7	63.4	64.9
Hispanic	811	810	799	806	786	16.3	15.8	15.2	15.3	14.9	71.7	69.6	67.3	68.0	66.4
Age Group															
15-19	662	582	486	423	393	13.8	12.1	10.2	8.9	8.4	29.0	25.6	21.5	18.9	17.6
20-24	2,733	2,566	2,260	2,183	2,055	51.7	50.7	46.4	46.2	44.4	113.6	110.0	100.8	100.5	97.6
25-29	3,528	3,552	3,374	3,143	3,086	60.6	61.4	58.8	55.9	56.1	127.5	128.3	121.8	116.7	117.0
30-34	2,895	2,963	2,734	2,769	2,628	50.9	51.4	47.6	48.8	46.2	105.7	106.3	98.3	99.9	94.1
35-39	1,231	1,298	1,304	1,308	1,356	25.7	26.2	25.6	24.9	25.4	53.3	54.2	52.9	51.6	52.6
40-44	230	226	267	256	288	5.2	5.3	6.3	6.0	6.6	10.8	10.9	12.8	12.3	13.7
Public Health I	Region														
Anchorage	4,589	4,510	4,129	3,970	3,937	15.4	15.1	13.9	13.5	13.5	71.5	70.4	64.8	63.5	63.3
Gulf Coast	1,062	1,077	973	954	926	13.1	13.3	12.0	11.8	11.5	77.3	78.4	70.6	69.5	67.4
Interior	1,924	1,871	1,837	1,723	1,574	17.0	16.5	16.4	15.5	14.3	84.3	81.7	81.6	77.4	71.2
Mat-Su	1,541	1,509	1,356	1,395	1,369	15.4	14.7	13.0	13.2	12.9	81.9	78.2	68.8	70.3	68.2
Northern	574	539	567	499	471	20.7	19.4	20.5	18.1	17.2	111.7	104.9	108.6	95.5	90.2
Southeast	777	792	756	734	686	10.5	10.7	10.4	10.1	9.5	56.5	58.5	56.1	54.4	50.8
Southwest	830	913	833	819	865	19.5	21.6	19.7	19.4	20.5	102.8	114.2	103.7	101.6	107.9
Total	11,298	11,215	10,452	10,096	9,830	15.3	15.2	14.2	13.8	13.4	77.1	76.5	71.4	69.6	67.9

Note: Crude birth rates represent births per 100,000 population. Fertility rates represent births per 100,000 women aged 15-44 years old.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 3: Teen (15-19 Years) Births and Birth Rates by Race and Ethnicity, and Public Health Region (2015-2019)

		Tee	en (15-19 Yea	rs) Births			Teen	(15-19 Years) Birth Rate	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Race and Ethni	city									
White	258	241	181	163	139	18.4	17.4	13.3	12.1	10.5
AI/AN	280	236	213	184	171	53.8	45.6	41.1	35.8	33.1
Asian/PI	72	72	60	34	55	32.5	31.2	25.0	14.0	22.1
Black	35	25	27	30	20	24.7	17.1	18.3	21.1	14.3
Hispanic	60	44	38	45	40	31.7	22.8	19.8	23.5	20.9
Public Health R	egion									
Anchorage	224	190	162	140	137	23.9	20.4	17.5	15.5	15.3
Gulf Coast	39	58	37	30	37	16.4	24.6	15.7	13.0	16.2
Interior	114	75	80	66	46	34.6	22.6	24.6	20.0	14.2
Mat-Su	67	69	48	48	35	20.7	20.7	14.3	14.4	10.2
Northern	75	60	63	54	37	82.1	65.6	69.1	57.6	39.4
Southeast	40	32	17	20	19	19.3	15.9	8.4*	9.8	9.6*
Southwest	103	98	79	65	82	64.9	64.3	52.0	43.7	55.2
Total	662	582	486	423	393	29.0	25.6	21.5	18.9	17.6

Note: Teen birth rates represent births per 100,000 women aged 15-19 years old.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 4: Medical Service Utilization Percentages by Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

		Percen	t 1st Trimeste	er PNC			Percent Ad	equate/Adeq	juate+ PNC			Percer	nt Cesarean Se	ection	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Race and Ethni	icity														
White	72.3%	73.4%	73.8%	74.0%	72.9%	65.9%	69.8%	68.9%	70.2%	69.7%	25.2%	24.7%	23.8%	24.4%	23.7%
AI/AN	62.2%	63.5%	66.1%	63.5%	65.5%	54.1%	56.7%	57.2%	57.3%	61.7%	13.8%	13.4%	13.7%	14.2%	12.4%
Asian/PI	55.9%	56.7%	61.2%	58.9%	53.7%	52.6%	56.3%	57.3%	56.0%	50.5%	23.6%	27.2%	27.9%	25.0%	26.0%
Black	66.3%	71.8%	71.5%	68.9%	64.3%	63.8%	66.5%	67.8%	66.2%	60.8%	31.8%	34.8%	30.1%	27.3%	27.6%
Hispanic	69.8%	70.7%	73.2%	68.1%	67.0%	62.5%	65.6%	69.2%	66.6%	62.8%	28.2%	26.7%	25.4%	25.7%	27.0%
Age Group															
15-19	52.9%	51.5%	53.9%	52.7%	51.9%	48.9%	48.1%	53.5%	53.4%	51.9%	10.9%	13.4%	8.4%	10.6%	9.2%
20-24	61.5%	64.6%	66.4%	64.8%	64.0%	56.1%	60.4%	61.2%	61.9%	62.2%	18.0%	17.7%	16.5%	14.9%	14.4%
25-29	70.7%	70.9%	72.5%	70.4%	69.0%	61.8%	67.0%	65.7%	65.3%	64.4%	21.8%	21.3%	21.1%	21.0%	18.9%
30-34	72.6%	73.7%	74.0%	73.5%	72.5%	67.4%	69.7%	67.7%	68.2%	67.6%	25.2%	26.2%	26.4%	25.8%	25.7%
35-39	72.5%	73.4%	72.7%	72.8%	72.2%	67.4%	68.1%	68.5%	68.4%	70.3%	34.5%	31.9%	30.8%	32.1%	30.7%
40-44	73.0%	73.9%	70.8%	68.8%	66.0%	68.7%	66.8%	65.9%	68.0%	66.3%	39.6%	35.8%	34.5%	35.2%	38.5%
Public Health F	Region														
Anchorage	70.8%	71.8%	71.7%	70.6%	69.1%	67.1%	70.2%	68.2%	67.0%	65.7%	25.7%	25.7%	25.7%	25.4%	23.9%
Gulf Coast	65.4%	63.9%	66.0%	66.1%	69.1%	58.2%	57.2%	55.9%	61.3%	66.2%	24.1%	23.0%	24.7%	22.0%	23.9%
Interior	65.6%	68.2%	73.8%	74.6%	70.3%	56.2%	62.1%	67.0%	67.9%	68.4%	21.3%	22.0%	19.8%	18.4%	19.2%
Mat-Su	70.7%	71.6%	71.5%	70.1%	67.4%	67.6%	74.3%	73.2%	71.0%	68.4%	26.7%	25.0%	23.7%	26.7%	26.2%
Northern	62.7%	69.2%	71.1%	62.5%	67.1%	54.2%	62.2%	58.2%	57.3%	64.1%	11.0%	10.6%	11.8%	11.0%	11.0%
Southeast	73.9%	76.9%	76.5%	74.4%	76.2%	66.0%	69.2%	70.8%	75.9%	71.0%	22.9%	27.3%	28.6%	28.9%	24.9%
Southwest	56.7%	57.5%	56.9%	57.1%	58.8%	41.3%	40.7%	41.3%	42.6%	46.7%	10.7%	11.2%	9.0%	10.6%	9.4%
Total	68.2%	69.5%	70.6%	69.6%	68.5%	61.9%	65.3%	65.0%	65.3%	65.2%	22.9%	22.9%	22.4%	22.4%	21.6%

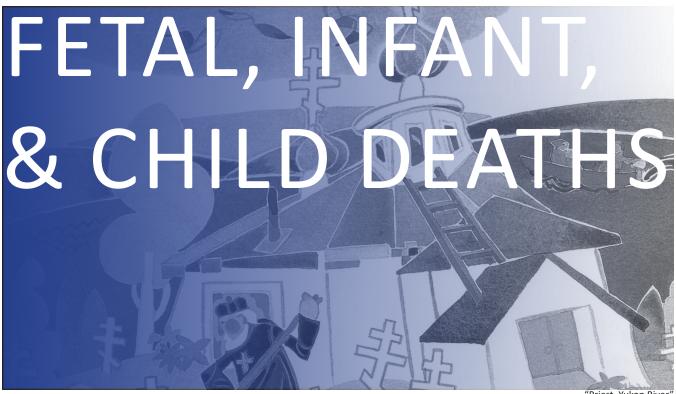
Note: Records with missing or unknown medical service utilization information are not excluded from the percentage denominator.

Table 5: Infant Health Characteristic and Risk Factor Percentages by Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

	Р	ercent Low B	irth Weight (<2500 Grams)			Percent	Preterm (<37	Weeks)			Percent	Mother Toba	cco Use	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Race and Ethn	icity														
White	5.4%	5.2%	5.5%	5.0%	5.3%	7.7%	7.6%	7.5%	7.7%	7.9%	9.6%	9.0%	7.7%	7.6%	7.2%
AI/AN	6.6%	6.1%	6.8%	6.4%	7.5%	12.5%	11.8%	11.8%	12.1%	13.6%	38.8%	30.4%	28.5%	26.8%	25.5%
Asian/PI	5.8%	7.7%	7.0%	7.0%	8.0%	9.6%	9.2%	9.8%	10.2%	11.2%	5.7%	4.3%	5.2%	5.0%	4.4%
Black	7.8%	10.8%	9.4%	10.4%	9.3%	8.7%	11.6%	11.9%	11.6%	10.5%	7.4%	7.9%	8.0%	6.3%	6.0%
Hispanic	6.4%	7.5%	6.6%	5.8%	6.6%	7.3%	9.8%	11.1%	9.6%	9.2%	6.8%	4.7%	6.4%	5.3%	5.0%
Age Group															
15-19	6.0%	7.6%	6.2%	5.9%	7.6%	10.6%	9.1%	8.2%	8.3%	10.7%	22.2%	14.3%	15.2%	16.1%	13.7%
20-24	5.7%	5.1%	6.2%	5.7%	6.2%	8.2%	8.7%	7.7%	8.8%	8.7%	20.6%	16.8%	15.5%	13.2%	11.4%
25-29	5.1%	5.8%	5.6%	5.8%	6.1%	8.8%	8.5%	8.0%	8.7%	9.0%	15.3%	13.9%	13.0%	12.9%	11.9%
30-34	5.5%	5.2%	6.2%	5.9%	6.0%	7.7%	8.5%	9.6%	8.8%	9.4%	11.3%	10.6%	9.4%	9.2%	10.4%
35-39	7.6%	7.2%	7.8%	5.6%	7.2%	11.3%	10.6%	12.3%	11.7%	12.8%	9.3%	9.2%	7.8%	8.8%	9.4%
40-44	10.0%	11.9%	6.7%	9.4%	6.3%	15.2%	11.5%	10.9%	14.1%	11.5%	7.0%	11.9%	9.0%	8.6%	7.3%
Public Health	Region														
Anchorage	6.2%	6.3%	6.7%	6.8%	6.6%	9.2%	9.1%	9.7%	9.8%	9.8%	10.1%	9.0%	8.3%	8.4%	6.8%
Gulf Coast	4.9%	5.3%	4.9%	4.0%	5.6%	6.4%	7.6%	7.2%	7.8%	8.3%	12.4%	14.2%	12.8%	10.8%	11.7%
Interior	5.8%	6.0%	5.2%	5.0%	5.9%	7.8%	9.1%	7.7%	7.7%	7.5%	10.0%	9.8%	8.0%	8.2%	8.8%
Mat-Su	5.5%	5.3%	6.2%	6.3%	5.7%	8.3%	7.9%	8.0%	9.2%	8.8%	11.4%	10.8%	10.8%	10.2%	10.3%
Northern	5.4%	5.2%	7.2%	8.2%	7.4%	12.9%	9.3%	11.1%	11.6%	12.7%	47.7%	42.3%	36.2%	40.1%	36.7%
Southeast	4.1%	5.3%	6.3%	4.2%	5.5%	6.6%	7.6%	7.7%	8.7%	9.0%	11.7%	10.5%	9.8%	10.1%	9.8%
Southwest	7.0%	6.2%	6.5%	5.0%	7.6%	13.4%	11.7%	11.6%	10.7%	15.1%	46.1%	27.4%	24.5%	19.7%	21.0%
Total	5.8%	5.9%	6.2%	5.9%	6.3%	8.9%	8.9%	9.0%	9.3%	9.7%	15.1%	13.1%	11.9%	11.4%	11.0%

Note: Records with missing or unknown infant health characteristic and risk factor information are not excluded from the percentage denominator.

 $Note: Hispanic \ ethnicity \ includes \ peoples \ of \ any \ race, \ and \ counts \ are \ not \ mutually \ exclusive \ with \ counts \ by \ race.$



"Priest, Yukon River" Copyright Rie Munoz, Ltd.

2017-2019 Facts

- There were 175 fetal deaths.
- There were 167 infant deaths (95 neonatal and 72 postneonatal).
- Congenital malformations, deformations, and chromosomal abnormalities were the leading cause of neonatal death.
- Sudden infant death syndrome was the leading cause of postneonatal death.
- There were 219 deaths of children aged 0-4 years.
- There were 79 deaths of children aged 5-14 years.
- There were 138 deaths of teens aged 15-19 years.

Note: Due to the relatively low number of fetal, infant and child deaths in a single year, three year moving sums and averages are used throughout this chapter (see Appendix B).

Fetal Death

Fetal deaths are defined as deaths prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, excluding induced termination.¹ Between 2017-2019, there were 175 Alaska resident fetal deaths (Table 6).

The **fetal death rate** measures the number of fetal deaths per 1,000 live births and fetal deaths combined. Between 2017-2019, the fetal death rate averaged 5.7 deaths per 1,000 live births and fetal deaths. Fetal death rates were highest in the Southwest region, at 9.1 fetal deaths per 1,000 live births and fetal deaths (Table 6).

Infant Death

Infant deaths are defined as deaths occurring between 0 and 364 days of live birth. Infant deaths can be further divided into neonatal deaths, which occur in the first 27 days after birth, and postneonatal deaths, which occur between 28-364 days after birth. Neonatal death is frequently associated with circumstances related to pregnancy or delivery, while postneonatal death is often related to living conditions or the home environment.

Between 2017-2019, there were 167 infant deaths, including 95 neonatal and 72 postneonatal deaths (Table 7). The **infant death rate** measures the number of infant deaths per 1,000 live births in a given year². Between 2017-2019, the infant death rate averaged 5.5 deaths per 1,000 live births (Table 8). American Indian/Alaska Native residents had the highest average infant death rate by race, at 10.2 deaths per 1,000 births.

Between 2017-2019, congenital malformations, deformations, and chromosomal abnormalities

were the leading cause of all infant deaths (42 deaths) (Table 9). This was also the leading cause of death during the neonatal period (32 deaths) (Table 11). Sudden Infant Death Syndrome was the leading cause of death during the postneonatal period (19 deaths) (Table 11).

Child Death

Between 2017-2019, there were 219 deaths of children under five years old. There were also 79 deaths of children aged 5-14 years old, and 138 deaths of teenagers aged 15-19 years old.

Death rates for children and teens up to 19 years old are calculated as **age-specific death rates**, and represent the number of deaths per 100,000 Alaskan residents in the same age group. The **under five death rate** is also calculated, which represents the number of deaths of children aged 0-4 years old per 1,000 live births in a given year, similar to the infant death rate.

Between 2017-2019, the age specific death rates for children aged 0-4 years old and children aged 5-14 years old averaged 143.0 and 24.9 deaths per 100,000 population, respectively. Alternatively, the under five death rate for children aged 0-4 years old in terms of live births, averaged 7.2 deaths per 1,000 live births (Tables 12-13). The age-specific death rate for teens aged 15-19 years old averaged 97.1 deaths per 100,000 population (Table 14).

^{1.} Alaska Statute 18.50.240 requires the filing of a fetal death certificate for each death where gestation lasts at least 20 weeks. Fetal death records with fewer than 20 weeks gestation, or where gestation age is unknown, are not included. See Appendix A for additional data notes.

^{2.}Infant death rates are calculated using the death cohort method (see Appendix A).

Table 6: Fetal Deaths and Fetal Death Rates by Race and Ethnicity, and Public Health Region (2013-2019)

			Fetal Deaths				Fe	etal Death Ra	te	
	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019
Race and Ethni	city									
White	75	90	98	100	78	3.5	4.3	4.8	5.1	4.2
AI/AN	43	56	65	60	57	5.9	7.6	9.0	8.5	8.3
Asian/PI	21	21	21	21	19	6.5	6.3	6.3	6.4	5.9*
Black	13	14	19	11	12	8.6*	9.5*	12.7*	7.4*	8.0*
Hispanic	6	11	16	15	8	2.4*	4.4*	6.6*	6.2*	3.3*
Public Health R	legion									
Anchorage	72	78	81	76	61	5.1	5.6	6.1	6.0	5.0
Gulf Coast	12	17	18	18	18	3.8*	5.3*	5.8*	6.0*	6.3*
Interior	33	37	38	33	26	5.6	6.5	6.7	6.0	5.0
Mat-Su	22	23	28	24	23	5.1	5.1	6.3	5.6	5.6
Northern	7	7	5	7	12	4.1*	4.1*	**	4.3*	7.7*
Southeast	14	12	10	11	11	5.5*	4.9*	4.3*	4.8*	5.0*
Southwest	14	23	30	30	23	5.5*	8.8	11.5	11.6	9.1
Total	174	197	211	200	175	5.1	5.8	6.4	6.3	5.7

Note: Fetal death rates represent fetal deaths per 1,000 live births and fetal deaths combined.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 7: Infant, Neonatal and Postneonatal Deaths by Sex, Race and Ethnicity, and Public Health Region (2013-2019)

		ı	Infant Deaths	i			Neonatal (0-27 Days) De	eaths		P	ostneonatal	(28-364 Days)	Deaths	
	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019
Sex															
Male	118	116	104	100	91	53	56	54	55	51	65	60	50	45	40
Female	100	98	93	80	76	55	55	58	47	44	45	43	35	33	32
Race and Ethnicity															
White	99	87	80	66	66	55	52	56	48	51	44	35	24	18	15
AI/AN	94	94	81	71	69	36	40	36	29	24	58	54	45	42	45
Asian/PI	8	16	22	20	12	6	8	10	8	6	2	8	12	12	6
Black	14	14	9	12	12	10	9	6	8	7	4	5	3	4	5
Hispanic	8	6	4	11	15	3	2	1	6	10	5	4	3	5	5
Public Health R	Region														
Anchorage	85	85	80	65	54	46	43	41	36	36	39	42	39	29	18
Gulf Coast	16	14	13	16	17	6	5	6	7	10	10	9	7	9	7
Interior	33	34	33	35	26	19	23	25	22	14	14	11	8	13	12
Mat-Su	20	18	17	12	14	8	8	10	9	10	12	10	7	3	4
Northern	22	21	17	15	15	7	6	7	8	7	15	15	10	7	8
Southeast	12	15	13	15	12	9	10	8	11	10	3	5	5	4	2
Southwest	29	26	23	21	28	12	15	14	8	7	17	11	9	13	21
Total	218	214	197	180	167	108	111	112	102	95	110	103	85	78	72

Table 8: Infant, Neonatal and Postneonatal Death Rates by Sex, Race and Ethnicity, and Public Health Region (2013-2019)

		Inf	ant Death Ra	ite			Neonatal (0-2	7 Days) Deatl	h Rate		Pos	tneonatal (28	3-364 Days) De	eath Rate	
	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019
Sex															
Male	6.7	6.6	6.1	6.1	5.8	3.0	3.2	3.2	3.4	3.3	3.7	3.4	3.0	2.8	2.5
Female	6.0	6.0	5.8	5.2	5.2	3.3	3.3	3.6	3.0	3.0	2.7	2.6	2.2	2.1	2.2
Race and Ethni	city														
White	4.6	4.1	3.9	3.4	3.6	2.6	2.5	2.8	2.5	2.8	2.1	1.7	1.2	0.9*	0.8*
AI/AN	12.9	12.9	11.3	10.1	10.2	4.9	5.5	5.0	4.1	3.5	8.0	7.4	6.3	6.0	6.6
Asian/PI	2.5*	4.9*	6.6	6.1	3.7*	1.9*	2.4*	3.0*	2.4*	1.9*	**	2.4*	3.6*	3.7*	1.9*
Black	9.4*	9.6*	6.1*	8.1*	8.1*	6.7*	6.1*	4.1*	5.4*	4.7*	**	**	**	**	**
Hispanic	3.2*	2.4*	**	4.6*	6.3*	**	**	**	2.5*	4.2*	**	**	**	**	**
Public Health F	Region														
Anchorage	6.0	6.2	6.0	5.2	4.5	3.3	3.1	3.1	2.9	3.0	2.8	3.0	2.9	2.3	1.5*
Gulf Coast	5.0*	4.4*	4.2*	5.3*	6.0*	1.9*	**	1.9*	2.3*	3.5*	3.2*	2.8*	2.2*	3.0*	2.5*
Interior	5.7	6.0	5.9	6.4	5.1	3.3*	4.0	4.4	4.1	2.7*	2.4*	1.9*	1.4*	2.4*	2.3*
Mat-Su	4.7	4.0*	3.9*	2.8*	3.4*	1.9*	1.8*	2.3*	2.1*	2.4*	2.8*	2.2*	1.6*	**	**
Northern	12.8	12.4	10.1*	9.3*	9.8*	4.1*	3.6*	4.2*	5.0*	4.6*	8.7*	8.9*	6.0*	4.4*	5.2*
Southeast	4.8*	6.1*	5.6*	6.6*	5.5*	3.6*	4.1*	3.4*	4.8*	4.6*	**	**	**	**	**
Southwest	11.5	10.0	8.9	8.2	11.1	4.8*	5.8*	5.4*	3.1*	2.8*	6.7*	4.2*	3.5*	5.1*	8.3
Total	6.4	6.3	6.0	5.7	5.5	3.2	3.3	3.4	3.2	3.1	3.2	3.0	2.6	2.5	2.4

Note: Infant death rates represent infant deaths per 1,000 live births.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

14.0 12.0 10.2 10.0 Infant Death Rate 8.0 6.0 4.0 3.6 2.0 0.0 2008-2010 2009-2011 2010-2012 2011-2013 2012-2014 2013-2015 2014-2016 2015-2017 2016-2018 2017-2019 Year ──White ──AI/AN

Figure 2: Infant Death Rates by Race (2008-2019)

Note: Infant death rates represent infant deaths per 1,000 live births. Due to low numbers of Asian/PI, Black, and Hispanic infant deaths, only White and AI/AN rates are shown.

Table 9: Leading Causes of Infant Death (2013-2019)

		2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019
Rank	Cause of Infant Death	Deaths	Deaths	Deaths	Deaths	Deaths
1	Congenital Malformations, Deformations And Chromosomal Abnormalities	37	34	39	37	42
2	Sudden Infant Death Syndrome	29	31	25	21	20
3	Disorders Related To Short Gestation And Low Birth Weight, Not Elsewhere Classified	14	14	14	11	11

^{1.} Leading causes of infant, neonatal and postneonatal death are ranked based on the sum of deaths from the most recent three year period. Only the top three leading causes are shown. Tied ranks are numbered sequentially.

Table 10: Leading Causes of Neonatal Death (2013-2019)

		2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019
Rank	Cause of Neonatal Death	Deaths	Deaths	Deaths	Deaths	Deaths
1	Congenital Malformations, Deformations And Chromosomal Abnormalities	28	28	31	29	32
2	Disorders Related To Short Gestation And Low Birth Weight, Not Elsewhere Classified	13	13	13	11	11
3	Newborn Affected By Maternal Complications Of Pregnancy	11	11	9	10	9

^{1.} Leading causes of infant, neonatal and postneonatal death are ranked based on the sum of deaths from the most recent three year period. Only the top three leading causes are shown. Tied ranks are numbered sequentially.

Table 11: Leading Causes of Postneonatal Death (2013-2019)

		2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019
Rank	Cause of Postneonatal Death	Deaths	Deaths	Deaths	Deaths	Deaths
1	Sudden Infant Death Syndrome	25	28	22	20	19
2	Congenital Malformations, Deformations And Chromosomal Abnormalities	9	6	8	8	10
3	Accidents (Unintentional Injuries)	19	14	9	4	7

^{1.} Leading causes of infant, neonatal and postneonatal death are ranked based on the sum of deaths from the most recent three year period. Only the top three leading causes are shown. Tied ranks are numbered sequentially.

Table 12: Child (<5 Years) Deaths, Age-Specific Rates, and Under Five Rates by Sex, Race and Ethnicity, and Public Health Region (2013-2019)

		Child	(<5 Years) De	eaths		(Child (<5 Year	s) Age-Specifi	c Death Rate			Child (<5 Year	rs) Under Five	Death Rate	
	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019
Sex															
Male	157	158	145	133	120	190.9	194.2	179.4	167.0	154.0	9.0	9.1	8.6	8.1	7.6
Female	120	117	118	101	99	153.1	150.0	151.9	131.4	131.6	7.2	7.1	7.4	6.5	6.7
Race and Ethni	icity													,	
White	123	112	107	86	86	124.1	113.9	109.7	89.3	91.1	5.8	5.3	5.3	4.4	4.7
AI/AN	122	123	116	101	98	307.8	313.1	298.9	267.4	268.8	16.8	16.8	16.2	14.4	14.5
Asian/PI	9	18	23	21	13	77.9*	155.9*	193.4	172.7	106.5*	2.8*	5.5*	6.9	6.4	4.1*
Black	20	19	12	14	13	194.6	186.3*	117.1*	136.4*	128.8*	13.4	13.0*	8.1*	9.5*	8.8*
Hispanic	11	10	10	16	19	61.6*	53.8*	52.3*	84.4*	102.4*	4.4*	4.1*	4.1*	6.6*	7.9*
Public Health F	Region														
Anchorage	108	106	103	81	71	166.6	165.3	162.2	129.7	116.5	7.7	7.7	7.8	6.4	5.9
Gulf Coast	22	21	17	19	20	138.8	132.9	107.9*	121.2*	129.3	6.9	6.5	5.5*	6.3*	7.0
Interior	42	45	46	44	32	167.6	182.2	187.5	182.9	136.2	7.2	7.9	8.2	8.1	6.2
Mat-Su	23	21	22	17	20	104.8	92.9	94.7	72.2*	85.7	5.4	4.7	5.0	4.0*	4.9
Northern	27	27	25	25	25	344.3	356.4	340.1	350.7	364.2	15.7	16.0	14.9	15.6	16.3
Southeast	12	16	15	18	15	86.8*	118.2*	113.9*	141.0*	121.6*	4.8*	6.5*	6.5*	7.9*	6.9*
Southwest	42	38	34	29	35	372.4	343.5	310.3	267.8	326.2	16.6	14.6	13.2	11.3	13.9
Total	277	275	263	234	219	172.5	172.5	166.0	149.6	143.0	8.1	8.1	8.0	7.4	7.2

Note: Age-specific death rates represent deaths per 100,000 population aged <5 years. Under five death rates represent deaths per 1,000 live births. Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 13: Child (5-14 Years) Deaths and Age-Specific Rates by Sex, Race and Ethnicity, and Public Health Region (2013-2019)

		Chi	ld (5-14 Year	s) Deaths		Chi	ild (5-14 Year	s) Age-Specif	ic Death Rate	
	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019
Sex										
Male	31	31	45	48	48	19.1	19.0	27.6	29.3	29.4
Female	23	21	29	29	31	15.0	13.7	18.8	18.8	20.1
Race and Ethni	city									
White	23	22	33	35	35	11.7	11.2	16.9	18.0	18.1
AI/AN	23	22	31	31	33	32.5	30.7	42.6	41.9	44.0
Asian/PI	5	5	6	4	5	**	**	20.6*	**	**
Black	2	2	3	5	4	**	**	**	**	**
Hispanic	1	2	6	8	7	**	**	20.9*	27.0*	23.1*
Public Health F	Region									
Anchorage	16	17	21	28	27	12.8*	13.7*	17.0	22.7	22.1
Gulf Coast	4	2	1	2	6	**	**	**	**	18.6*
Interior	10	5	10	9	10	21.1*	**	21.2*	19.2*	21.6*
Mat-Su	6	8	16	15	14	12.6*	16.4*	32.0*	29.3*	27.0*
Northern	5	7	11	13	11	**	47.9*	74.0*	86.5*	72.5*
Southeast	3	2	2	2	2	**	**	**	**	**
Southwest	9	10	12	8	9	41.7*	46.2*	55.3*	36.8*	41.1*
Total	54	52	74	77	79	17.1	16.5	23.3	24.2	24.9

Note: Age-specific death rates represent deaths per 100,000 population aged 5-14 years.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 14: Teen (15-19 Years) Deaths and Age-Specific Rates by Sex, Race and Ethnicity, and Public Health Region (2013-2019)

		Teen (15-19 Years)	Deaths		Teen	(15-19 Years) Age-Specific	Death Rate	
	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019
Sex										
Male	65	73	89	97	109	85.4	96.3	117.7	128.6	145.9
Female	38	42	34	28	29	54.7	61.1	49.8	41.3	43.0
Race and Ethn	icity									
White	49	53	54	53	51	54.0	59.4	61.4	60.9	59.3
AI/AN	46	52	52	55	61	141.7	159.1	158.6	168.5	188.2
Asian/PI	4	2	5	5	8	**	**	**	**	54.7*
Black	4	5	7	8	11	**	**	77.7*	87.4*	120.9*
Hispanic	6	7	6	3	5	50.5*	58.7*	50.1*	**	**
Public Health I	Region									
Anchorage	35	33	38	32	40	60.0	57.2	66.4	56.2	71.1
Gulf Coast	12	15	13	13	10	77.1*	97.8*	86.1*	87.3*	68.0*
Interior	12	19	17	23	19	56.4*	89.4*	80.4*	108.6	90.5*
Mat-Su	10	10	12	12	11	47.3*	47.1*	56.0*	55.6*	50.3*
Northern	10	11	14	13	15	172.3*	187.1*	235.5*	217.8*	251.6*
Southeast	7	6	6	8	9	52.8*	45.6*	46.0*	62.0*	70.9*
Southwest	18	21	23	24	34	177.5*	208.7	231.3	245.5	352.6
Total	104	115	123	125	138	71.5	79.5	85.5	87.2	97.1

Note: Age-specific death rates represent deaths per 100,000 population aged 15-19 years.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.



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2019 Facts

- There were 4,621 deaths.
- Malignant neoplasms (cancers) were the leading cause of death.
- December had the largest number of deaths by month (430).
- The oldest male decedent was 103 years old.
- The oldest female decedent was 106 years old.
- The mean and median age of death for males was 63.7 and 67.0 years, respectively.
- The mean and median age of death for females was 69.4 and 73.0 years, respectively.

Death Summary

There were 4,621 Alaska resident deaths during 2019. The overall **crude death rate**, which measures the number of deaths per 100,000 Alaska residents, was 632.1. Because populations with higher proportions of older residents will naturally have higher crude death rates, **age-adjusted death rates** are generally a more meaningful measure for analyzing mortality trends between different groups (see Appendix B).

In 2019, Alaska's overall age-adjusted death rate was 715.8 deaths per 100,000 population. The age-adjusted death rates for men and women were 812.6 and 617.0 deaths per 100,000 population, respectively. American Indian/Alaska Native residents had the highest age-adjusted death rate by race, at 1,205.2 deaths per 100,000 population. Northern Alaska had the highest age-adjusted death rate by Public Health Region, at 1,233.9 deaths per 100,000 population (Table 15).

Years of Potential Life Lost (YPLL)

Years of Potential Life Lost (YPLL) measures the impact of premature mortality, and is defined as the difference between an expected natural lifespan of 75 years, and the actual age of death before that time (see Appendix B). In 2019 there were 57,772 YPLL among Alaska residents overall (Table 16).

Alaska's age-adjusted YPLL rate, which is defined as YPLL per 100,000 Alaska residents under the age of 75 years old (adjusted by year 2000 U.S. standard population) was 8,051.6 YPLL per 100,000 population. Age-adjusted YPLL rates for men and women were 9,867.7 and 6,095.9 YPLL per 100,000 population, respectively. American Indian/Alaska Native residents had the highest age-adjusted YPLL rates by race, at 17,496.2 YPLL per 100,000 population (Table 16).

Leading Causes of Death (LCOD)

In 2019, ten leading causes of death (LCOD) were responsible for 3,346 deaths, or 72.4 percent of all deaths (Table 17). Tables 18 through 29 provide additional information on each of 2019's ten leading causes of death. The top three causes are discussed below:

Malignant neoplasms (cancers) were the leading cause of death in 2019, and were responsible for 1,022 deaths. Malignant neoplasms made up 22.1 percent of all deaths, and had an age-adjusted death rate of 148.8 deaths per 100,000 population. American Indian/Alaska Native residents had the highest age-adjusted death rate by race, at 199.4 deaths per 100,000 population (Table 18). Malignant neoplasms were responsible for the deaths of approximately 128 men for every 100 women (Figure 4). Bronchus and lung cancer were the leading type of malignant neoplasms, and were responsible for 222 deaths, or 21.7 percent of all malignant neoplasm deaths (Table 19).

Diseases of the heart were the second leading cause of death in 2019, and were responsible for 842 deaths. Diseases of the heart made up 18.2 percent of all deaths, and had an age-adjusted death rate of 132.3 deaths per 100,000 population. American Indian/Alaska Native residents had the highest age-adjusted death rate by race, at 216.1 deaths per 100,000. Diseases of the heart were responsible for the deaths of approximately 157 men for every 100 women (Figure 4).

Accidents (unintentional injuries) were the third leading cause of death in 2019, and were responsible for 434 deaths. Unintentional injuries made up 9.4% of all deaths, and had an age-adjusted death rate of 63.0 deaths per 100,000 population. American Indian/Alaska Native residents had the highest age-adjusted death rate by race, at 134.0 deaths per 100,000 (Table 21). Unintentional injuries were responsible for the deaths of approximately 195 men for every 100 women (Figure 4). Unintentional injuries were also the number one leading cause of YPLL, and were responsible for 11,927 YPLL,

and an age-adjusted YPLL rate of 1,754.8 YPLL per 100,000 population (Table 17). Poisoning or exposure to noxious substances were the leading cause of unintentional injury, and were responsible for 149 deaths, or 34.3 percent of all unintentional injury deaths. This was followed by motor vehicle accidents, which were responsible for 93 deaths, or 21.4 percent of all unintentional injury deaths (Table 22).

Select Causes of Death (SCOD)

Tables 30 through 33 provide additional information on three select cause of death (SCOD) categories that reflect subjects of special public health interest: alcohol-induced, firearm-related, and drug-induced. Because these categories may overlap with deaths also included in the leading cause of death categories (e.g. firearm-related includes deaths from both the unintentional injuries and intentional self-harm categories), these causes are discussed separately.

Alcohol-induced mortality includes deaths due to alcohol psychoses, alcohol dependence syndrome, non-dependent abuse of alcohol, alcohol-induced chronic liver disease and cirrhosis, and alcohol poisoning. It does not include deaths due to traumatic injury such as motor vehicle accidents. In 2019, there were 185 alcohol-induced deaths, and an age-adjusted death rate of 23.7 deaths per 100,000 population. American Indian/Alaska Native residents had the highest age-adjusted death rate by race, at 87.1 deaths per 100,000 population (Table 30).

Firearm-related mortality includes deaths due to the discharge of a firearm, either by unintentional discharge, assault (homicide), intentional self-harm (suicide), legal intervention, or undetermined intent. In 2019, there were 179 firearm-related deaths, and an age-adjusted death rate of 24.7 deaths per 100,000 population. American Indian/Alaska Native residents had the highest age-adjusted death rate by race, at 46.5 deaths per 100,000 population (Table 31).

Firearm discharges were responsible for 117 suicide deaths, or 56.0 percent of all suicides. Firearm discharges were also responsible for 51 homicide deaths, or 65.4 percent of all homicides deaths (Table 22).

Drug-induced mortality includes deaths due to drug overdose, medical conditions from the chronic use of drugs, or the unintentional misuse of drugs or drug combinations. These can be due to dependent and non-dependent use of illicit, prescription, or over-the-counter drugs. It does not include injuries, or other causes indirectly related to drug use. In 2019, there were 149 drug-induced deaths, and an age-adjusted death rate of 20.1 deaths per 100,000 population. American Indian/Alaska Native residents had the highest age-adjusted death rate by race, at 37.5 deaths per 100,000 population (Table 32).

Drug overdoses were responsible 132 deaths, or 88.6 percent of all drug-induced deaths. Table 33 provides additional information on the types of drugs contributing to overdose mortality. Because multiple drug types can be involved in a single death, overdose categories are not mutually exclusive, and deaths can be counted under multiple categories (e.g. an overdose involving both heroin and cocaine will be included in both categories).

Opioids, psychostimulants, and benzodiazepines are some of the most common drug types involved in overdose deaths. Opioids were involved in 83 overdose deaths, or 62.9 percent of all overdoses. Psychostimulants were involved in 64 overdose deaths, or 48.5 percent of all overdoses. Benzodiazepines were involved in 18 overdose deaths, or 13.6 percent of all overdoses (Table 33).

1400.0 1205.2 1169.9 1200.0 1000.0 Age-Adjusted Death Rate 800.0 680.7 639.6 600.0 529.5 400.0 200.0 0.0 2010 2011 2012 2013 2014 2015 2016 2018 2019 2017 Year -White → AI/AN

Figure 3: All Causes Age-Adjusted Death Rates by Race and Ethnicity (2010-2019)

Note: Age-adjusted death rates represent deaths per 100,000 population, adjusted by year 2000 U.S. standard population ratios. Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

Figure 4: Leading Causes of Death by Sex (2019)

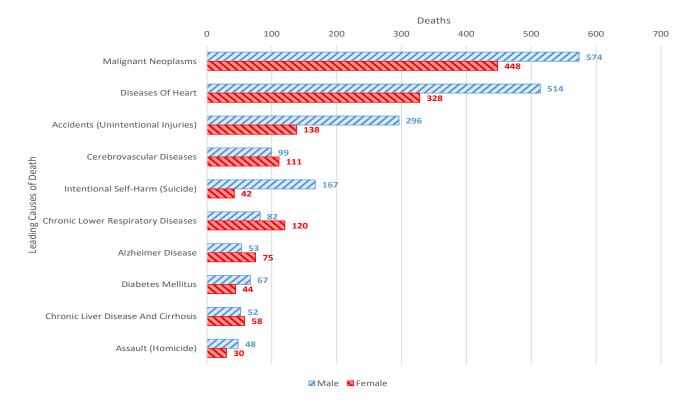


Table 15: All Causes Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Ag	e-Adjusted Ra	ate	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	2,458	2,598	2,536	2,549	2,610	643.8	680.0	667.7	674.9	693.7	852.5	872.9	831.8	823.3	812.6
Female	1,868	1,913	1,892	1,912	2,011	525.9	535.0	528.6	536.5	566.9	625.8	617.9	601.6	601.5	617.0
Race and Ethnic	city														
White	2,933	3,030	2,961	3,026	3,101	568.9	588.5	580.2	597.6	616.4	665.9	660.9	632.6	635.2	639.6
AI/AN	1,022	1,057	1,068	1,032	1,098	803.9	827.1	834.3	806.2	857.5	1,180.7	1,231.2	1,217.3	1,187.0	1,205.2
Asian/PI	184	222	209	183	226	308.3	360.3	328.9	287.4	352.6	452.1	506.8	453.0	406.4	453.5
Black	140	124	133	147	139	403.7	350.2	370.7	408.3	388.5	778.2	631.4	678.8	728.3	680.7
Hispanic	93	91	115	116	115	186.7	177.7	219.1	220.3	218.4	470.5	462.5	521.5	517.7	529.5
Age Group															
00-04	101	81	81	72	66	190.5	152.9	154.3	141.2	132.8					
05-14	22	20	32	25	22	21.0	18.9	30.1	23.6	20.9					
15-24	123	139	126	96	125	121.9	140.8	130.5	101.4	134.0					
25-34	184	236	230	194	228	159.9	204.2	200.3	171.9	203.6					
35-44	196	224	211	206	243	213.6	242.5	225.5	216.0	250.9					
45-54	432	404	409	401	338	441.6	424.6	445.5	453.6	395.7					
55-64	808	818	779	767	769	819.2	818.3	783.3	776.7	790.5					
65-74	838	946	922	954	1,023	1,658.1	1,762.5	1,638.7	1,613.5	1,652.2					
75-84	859	856	838	923	981	4,729.9	4,497.2	4,162.9	4,321.2	4,331.1					
85+	763	786	799	823	826	12,557.6	12,504.0	12,482.4	12,547.6	12,311.8					
Public Health R	egion														
Anchorage	1,649	1,714	1,730	1,682	1,823	552.2	573.3	581.0	571.2	624.6	709.5	708.5	698.3	678.2	721.2
Gulf Coast	570	583	543	644	578	704.3	719.2	672.3	797.0	714.8	726.2	713.8	674.1	751.7	654.7
Interior	587	629	601	585	586	520.0	555.5	536.5	527.5	533.5	701.0	699.3	671.9	663.2	626.0
Mat-Su	583	609	596	619	655	583.2	593.5	571.0	587.2	615.4	731.6	752.3	687.5	696.3	711.3
Northern	171	209	180	174	199	615.5	752.3	649.4	629.8	725.4	1,016.0	1,296.8	1,105.3	1,090.1	1,233.9
Southeast	487	487	503	495	489	655.6	660.4	689.6	681.3	675.7	699.4	685.7	699.4	660.9	644.9
Southwest	273	269	263	250	281	642.3	636.7	622.7	593.0	665.8	1,010.4	1,032.8	976.4	963.8	1,006.3
Total	4,326	4,511	4,428	4,461	4,621	587.0	609.9	600.2	607.7	632.1	736.9	740.6	713.8	709.5	715.8

Note: Crude death rates represent deaths per 100,000 population. Age-adjusted death rates represent deaths per 100,000 population, adjusted by year 2000 U.S. standard population ratios. Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 16: Years of Potential Life Lost by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			YPLL				C	rude YPLL Ra	te			Age-	Adjusted YPLL	. Rate	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex										<u>'</u>					
Male	36,904	38,820	38,272	34,749	36,538	9,950.0	10,475.2	10,406.0	9,522.2	10,074.1	9,672.4	10,195.1	10,166.9	9,266.0	9,867.7
Female	21,598	22,329	21,886	20,349	21,234	6,317.9	6,495.9	6,372.2	5,963.8	6,264.5	6,060.2	6,263.4	6,166.2	5,833.1	6,095.9
Race and Ethni	city														
White	32,508	34,046	32,478	30,506	30,855	6,542.6	6,874.3	6,631.7	6,296.1	6,427.1	6,057.4	6,462.2	6,173.5	5,824.2	5,987.4
AI/AN	20,193	19,512	20,800	18,223	20,551	16,312.2	15,684.3	16,697.0	14,633.9	16,518.2	16,774.2	16,228.2	17,278.6	15,439.7	17,496.2
Asian/PI	2,360	3,451	3,384	1,925	2,990	4,071.1	5,768.5	5,488.0	3,119.1	4,820.6	4,042.8	5,832.5	5,645.3	3,097.4	4,664.4
Black	2,555	2,450	2,478	2,898	2,417	7,487.0	7,032.8	7,024.4	8,192.5	6,880.2	8,272.5	7,177.8	7,689.8	8,873.1	7,475.5
Hispanic	2,096	1,597	2,441	2,662	1,971	4,258.3	3,156.4	4,711.7	5,125.4	3,795.0	4,585.3	3,523.4	5,012.8	5,128.9	4,451.8
Age Group															
00-04	7,517	6,030	6,022	5,378	4,910	14,176.9	11,384.2	11,472.9	10,543.7	9,882.1					
05-14	1,437	1,280	2,074	1,664	1,408	1,368.9	1,208.2	1,951.2	1,571.2	1,337.4					
15-24	6,640	7,561	6,875	5,239	6,878	6,579.7	7,661.2	7,122.4	5,532.4	7,376.0					
25-34	8,429	10,786	10,464	8,749	10,358	7,322.8	9,334.6	9,110.8	7,750.5	9,251.6					
35-44	6,888	7,824	7,547	7,383	8,679	7,507.4	8,469.0	8,064.8	7,743.0	8,960.9					
45-54	10,666	9,978	10,166	9,907	8,334	10,904.1	10,486.0	11,074.2	11,205.4	9,756.3					
55-64	12,363	12,552	11,871	11,468	11,594	12,535.1	12,556.6	11,936.9	11,612.7	11,918.1					
65-74	4,562	5,138	5,139	5,310	5,611	9,026.3	9,572.6	9,133.9	8,981.0	9,061.8					
Public Health R	legion														
Anchorage	22,531	23,233	22,883	20,185	21,557	7,796.3	8,042.0	7,967.7	7,120.0	7,688.2	7,563.2	7,774.7	7,732.3	6,891.5	7,405.0
Gulf Coast	5,904	6,759	5,530	6,444	5,956	7,618.1	8,727.9	7,188.6	8,407.6	7,797.2	6,966.4	8,156.5	6,677.3	7,808.8	7,363.6
Interior	7,949	9,155	8,132	8,030	7,610	7,252.1	8,338.5	7,500.0	7,495.8	7,187.0	6,974.4	7,861.7	7,353.6	7,376.9	7,028.0
Mat-Su	7,357	6,935	7,784	6,912	7,538	7,604.9	6,989.4	7,729.0	6,811.3	7,372.1	7,289.8	6,939.1	7,555.9	6,696.3	7,265.7
Northern	3,510	3,834	3,844	3,406	3,697	12,884.0	14,088.3	14,141.7	12,570.6	13,739.9	12,685.7	14,559.1	14,096.0	12,522.5	14,324.2
Southeast	4,954	5,463	6,211	5,264	4,654	6,972.0	7,757.2	8,935.7	7,622.1	6,787.2	6,454.9	7,525.2	8,643.9	7,122.1	6,311.1
Southwest	6,109	5,578	5,571	4,667	6,594	14,682.3	13,493.3	13,488.8	11,318.3	15,982.4	14,637.9	13,316.7	13,160.2	11,676.2	16,122.7
Total	58,502	61,149	60,158	55,098	57,772	8,207.9	8,560.3	8,458.0	7,802.7	8,233.8	7,944.6	8,310.9	8,246.8	7,611.0	8,051.6

Note: Crude YPLL rates represent YPLL per 100,000 population. Age-adjusted YPLL rates represent YPLL per 100,000 population, adjusted by year 2000 U.S. standard population ratios. Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 17: Leading and Select Causes of Death Summary (2019)

			Mortality				Years	of Potential Life	Lost	
Cause of Death	Deaths Rank	Deaths	Crude Rate	Age Adjusted Rate	Mean Age of Death	YPLL Rank	YPLL	Crude YPLL Rate	Age Adjusted YPLL Rate	Mean YPLL
Leading Causes of Death	<u>'</u>									
Malignant Neoplasms	1	1,022	139.8	148.8	70.1	2	7,815	1,113.8	959.0	7.6
Diseases Of Heart	2	842	115.2	132.3	71.6	4	6,526	930.1	838.6	7.8
Accidents (Unintentional Injuries)	3	434	59.4	63.0	49.1	1	11,927	1,699.9	1,754.8	27.5
Cerebrovascular Diseases	4	210	28.7	36.0	75.1	8	1,345	191.7	186.7	6.4
Intentional Self-Harm (Suicide)	5	209	28.6	28.7	37.8	3	7,813	1,113.5	1,165.2	37.4
Chronic Lower Respiratory Diseases	6	202	27.6	30.9	72.8	9	1,129	160.9	134.6	5.6
Alzheimer Disease	7	128	17.5	26.6	84.9	24	82	11.7*	8.7*	0.6
Diabetes Mellitus	8	111	15.2	16.4	68.6	10	995	141.8	129.2	9.0
Chronic Liver Disease And Cirrhosis	9	110	15.0	14.4	54.1	6	2,329	331.9	344.8	21.2
Assault (Homicide)	10	78	10.7	10.9	37.4	5	2,936	418.4	444.1	37.6
All causes	-	4,621	632.1	715.8	66.2	-	57,772	8,233.8	8,051.6	12.5
Select Causes of Death										
Alcohol-Induced Causes	-	185	25.3	23.7	52.0	-	4,284	610.6	624.4	23.2
Firearm-Related Causes	-	179	24.5	24.7	38.7	-	6,531	930.8	975.4	36.5
Drug-Induced Causes	-	149	20.4	20.1	41.2	-	5,034	717.5	735.2	33.8

Note: Crude death (YPLL) rates represent deaths (YPLL) per 100,000 population. Age-adjusted death (YPLL) rates represent deaths (YPLL) per 100,000 population, adjusted by year 2000 U.S. standard population ratios.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 18: LCOD #1: Malignant Neoplasms Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Age	e-Adjusted Ra	ite	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	518	546	515	524	574	135.7	142.9	135.6	138.7	152.6	171.5	178.9	163.1	161.6	174.6
Female	463	450	411	433	448	130.3	125.8	114.8	121.5	126.3	142.9	135.9	119.2	126.7	126.6
Race and Ethni	city														
White	709	720	665	704	753	137.5	139.9	130.3	139.0	149.7	145.8	146.8	130.2	136.0	142.8
AI/AN	193	193	187	171	177	151.8	151.0	146.1	133.6	138.2	237.5	224.7	212.8	190.9	199.4
Asian/PI	48	45	44	48	56	80.4	73.0	69.2	75.4	87.4	104.8	100.7	94.9	102.8	105.3
Black	26	22	20	26	29	75.0	62.1	55.7	72.2	81.1	148.5	139.9	88.6	118.8	164.0
Hispanic	17	21	22	15	26	34.1*	41.0	41.9	28.5*	49.4	121.1*	122.0	99.3	81.3*	151.2
Age Group															
00-04	2	3	1	1	2	**	**	**	**	**					
05-14	2	0	5	1	2	**		**	**	**					
15-24	1	2	3	1	3	**	**	**	**	**					
25-34	10	11	10	10	5	8.7*	9.5*	8.7*	8.9*	**					
35-44	18	24	11	15	16	19.6*	26.0	11.8*	15.7*	16.5*					
45-54	95	97	76	89	56	97.1	101.9	82.8	100.7	65.6					
55-64	262	232	246	208	218	265.6	232.1	247.4	210.6	224.1					
65-74	275	297	268	301	335	544.1	553.3	476.3	509.1	541.0					
75-84	222	228	201	226	259	1,222.4	1,197.9	998.5	1,058.1	1,143.5					
85+	94	102	105	105	126	1,547.1	1,622.7	1,640.4	1,600.9	1,878.1					
Public Health R	tegion														
Anchorage	368	366	335	343	398	123.2	122.4	112.5	116.5	136.4	150.3	147.8	128.0	133.5	150.3
Gulf Coast	138	143	140	154	140	170.5	176.4	173.3	190.6	173.1	161.2	155.0	154.0	166.0	146.3
Interior	122	145	129	105	126	108.1	128.1	115.2	94.7	114.7	143.3	154.0	133.0	105.3	124.5
Mat-Su	140	148	143	162	156	140.1	144.2	137.0	153.7	146.6	147.1	172.7	160.2	172.2	153.7
Northern	37	40	23	36	33	133.2	144.0	83.0	130.3	120.3	231.8	233.9	173.8	229.3	236.5
Southeast	131	104	102	116	119	176.4	141.0	139.8	159.7	164.4	171.1	137.0	117.4	140.5	144.6
Southwest	43	50	52	39	48	101.2	118.3	123.1	92.5	113.7	178.6	202.3	198.1	129.3	186.7
Total	981	996	926	957	1,022	133.1	134.7	125.5	130.4	139.8	156.1	155.6	138.8	142.0	148.8

ICD-10 Codes: Underlying cause in C00-C97.

Note: Crude death rates represent deaths per 100,000 population. Age-adjusted death rates represent deaths per 100,000 population, adjusted by year 2000 U.S. standard population ratios.

Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 19: LCOD #1: Malignant Neoplasm Mortality by Type of Cancer (2015-2019)

			Deaths				Ag	e-Adjusted Ra	ate	
Type of Cancer (Underlying Cause ICD-10 Code)	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Bronchus and lung (C34)	259	231	203	213	222	40.3	37.7	31.4	31.5	30.7
Colon, and rectum (C18-C20)	85	94	105	89	97	14.1	14.7	15.6	14.0	13.7
Pancreas (C25)	65	79	62	71	70	10.2	11.8	9.5	9.8	9.5
Breast (C50) [Females Only]	60	68	60	58	68	17.3	19.6	16.1	15.9	18.5
Liver and intrahepatic bile ducts (C22)	34	52	40	44	66	4.7	7.5	5.2	6.0	9.5
Prostate (C61) [Males Only]	35	43	39	48	65	14.4	18.0	17.2	20.0	24.7
Esophagus (C15)	34	44	35	34	36	5.7	6.1	4.6	4.8	5.6
Non-Hodgkin's lymphoma (C82-C85)	41	27	32	41	35	6.9	4.6	5.1	6.0	5.8
Leukemia (C91-C95)	26	34	29	36	35	4.8	5.6	4.3	5.7	5.4
Meninges, brain and other parts of central nervous system (C70-C72)	23	39	33	35	27	3.4	5.4	4.7	4.6	3.7
Stomach (C16)	32	31	26	22	23	4.8	4.7	3.6	3.4	3.1
Kidney and renal pelvis (C64-C65)	27	14	22	21	22	4.2	2.0*	3.6	3.1	3.2
Multiple myeloma and immunoproliferative neoplasms (C88, C90)	15	15	14	14	20	2.6*	2.5*	2.6*	1.9*	3.0
Lip, oral cavity and pharynx (C00-C14)	11	17	18	26	20	1.4*	2.3*	2.3*	3.4	2.7
Ovary (C56) [Females Only]	24	20	17	18	19	6.5	6.0	4.4*	5.6*	5.5*
Bladder (C67)	21	26	27	20	19	4.3	4.0	4.5	3.7	2.7*
Corpus uteri and uterus, part unspecified (C54-C55) [Females Only]	10	12	8	12	13	3.2*	3.9*	1.8*	3.1*	4.1*
Skin (C43)	17	11	8	10	11	3.0*	1.8*	1.1*	1.2*	1.6*
Larynx (C32)	2	5	6	1	7	**	**	1.0*	**	1.0*
Cervix uteri (C53) [Females Only]	5	5	8	7	6	**	**	1.8*	2.2*	1.8*
Anus (C21)	0	3	1	4	3		**	**	**	**
Hodgkin's disease (C81)	2	1	3	3	1	**	**	**	**	**

Note: Age-adjusted death rates represent deaths per 100,000 population, adjusted by year 2000 U.S. standard population ratios. Not all cancer sites shown. Cancers that predominantly or exclusively affect one sex (e.g. Breast, Prostate, etc.) are shown on a sex-specific basis.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 20: LCOD #2: Diseases of the Heart Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Ago	e-Adjusted Ra	ite	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	522	531	520	525	514	136.7	139.0	136.9	139.0	136.6	190.0	179.0	175.2	170.7	162.6
Female	325	302	299	291	328	91.5	84.5	83.5	81.7	92.5	115.6	102.8	99.5	93.6	103.4
Race and Ethni	city														
White	599	585	572	573	566	116.2	113.6	112.1	113.2	112.5	140.2	126.5	121.8	119.6	117.1
AI/AN	175	187	171	166	182	137.7	146.3	133.6	129.7	142.1	222.6	248.4	226.5	211.1	216.1
Asian/PI	33	34	31	23	49	55.3	55.2	48.8	36.1	76.5	89.1	74.9	67.8	51.2	110.0
Black	30	18	30	32	35	86.5	50.8*	83.6	88.9	97.8	168.4	86.8*	207.7	174.7	173.0
Hispanic	13	15	13	21	19	26.1*	29.3*	24.8*	39.9	36.1*	75.3*	96.5*	77.0*	108.2	84.9*
Age Group															
00-04	2	3	2	1	0	**	**	**	**						
05-14	1	0	2	0	1	**		**		**					
15-24	3	3	3	3	1	**	**	**	**	**					
25-34	15	9	9	5	11	13.0*	7.8*	7.8*	**	9.8*					
35-44	29	29	28	25	25	31.6	31.4	29.9	26.2	25.8					
45-54	71	75	67	60	58	72.6	78.8	73.0	67.9	67.9					
55-64	171	177	154	176	175	173.4	177.1	154.9	178.2	179.9					
65-74	172	196	201	185	191	340.3	365.2	357.3	312.9	308.5					
75-84	193	164	157	188	199	1,062.7	861.6	779.9	880.1	878.6					
85+	190	177	195	173	181	3,127.1	2,815.8	3,046.4	2,637.6	2,697.9					
Public Health F	tegion														
Anchorage	286	298	317	295	342	95.8	99.7	106.5	100.2	117.2	131.4	122.4	130.1	118.5	136.3
Gulf Coast	136	118	106	127	110	168.0	145.6	131.2	157.2	136.0	178.5	144.1	139.7	148.6	122.6
Interior	130	99	128	121	107	115.2	87.4	114.3	109.1	97.4	156.8	116.7	150.2	148.8	119.2
Mat-Su	101	109	100	96	114	101.0	106.2	95.8	91.1	107.1	127.8	135.3	113.3	100.6	126.9
Northern	35	47	34	31	33	126.0	169.2	122.7	112.2	120.3	227.0	306.7	220.8	212.2	230.9
Southeast	105	120	93	98	91	141.4	162.7	127.5	134.9	125.7	159.1	171.3	132.6	134.7	116.5
Southwest	54	42	38	45	44	127.0	99.4	90.0	106.7	104.3	217.1	185.2	179.4	186.1	196.3
Total	847	833	819	816	842	114.9	112.6	111.0	111.2	115.2	151.3	139.5	136.1	131.2	132.3

ICD-10 Codes: Underlying cause in I00-I09, I11, I20-I51.

Note: Crude death rates represent deaths per 100,000 population. Age-adjusted death rates represent deaths per 100,000 population, adjusted by year 2000 U.S. standard population ratios.

Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 21: LCOD #3: Accidents (Unintentional Injuries) Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Age	e-Adjusted Ra	ite	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	269	319	292	264	296	70.5	83.5	76.9	69.9	78.7	78.3	90.9	83.0	72.7	82.2
Female	120	119	151	135	138	33.8	33.3	42.2	37.9	38.9	37.3	35.9	45.9	39.9	41.9
Race and Ethni	city														
White	218	276	258	228	257	42.3	53.6	50.6	45.0	51.1	46.0	55.3	53.2	44.6	50.9
AI/AN	143	125	153	145	142	112.5	97.8	119.5	113.3	110.9	130.9	115.5	138.6	139.2	134.0
Asian/PI	4	12	15	5	14	**	19.5*	23.6*	**	21.8*	**	25.7*	29.7*	**	24.9*
Black	12	13	13	11	12	34.6*	36.7*	36.2*	30.6*	33.5*	46.1*	44.4*	55.0*	32.7*	50.6*
Hispanic	17	8	20	14	11	34.1*	15.6*	38.1	26.6*	20.9*	38.4*	20.6*	56.7	25.6*	55.3*
Age Group															
00-04	15	5	10	7	9	28.3*	**	19.1*	13.7*	18.1*					
05-14	6	7	15	10	6	5.7*	6.6*	14.1*	9.4*	5.7*					
15-24	38	54	36	28	33	37.7	54.7	37.3	29.6	35.4					
25-34	74	77	85	62	86	64.3	66.6	74.0	54.9	76.8					
35-44	51	65	68	69	73	55.6	70.4	72.7	72.4	75.4					
45-54	58	58	83	71	51	59.3	61.0	90.4	80.3	59.7					
55-64	54	75	50	80	68	54.8	75.0	50.3	81.0	69.9					
65-74	33	38	37	26	35	65.3	70.8	65.8	44.0	56.5					
75-84	30	20	28	25	42	165.2	105.1	139.1	117.0	185.4					
85+	30	38	31	21	31	493.7	604.5	484.3	320.2	462.1					
Public Health R	tegion														
Anchorage	144	141	153	137	145	48.2	47.2	51.4	46.5	49.7	52.4	52.4	54.5	47.0	51.5
Gulf Coast	46	67	38	40	43	56.8	82.7	47.1	49.5	53.2	54.1	83.8	49.7	43.0	52.6
Interior	50	72	60	57	53	44.3	63.6	53.6	51.4	48.2	51.0	64.8	60.8	53.5	49.7
Mat-Su	52	54	63	50	70	52.0	52.6	60.4	47.4	65.8	64.2	58.5	65.6	53.2	74.1
Northern	19	17	32	27	33	68.4*	61.2*	115.5	97.7	120.3	80.9*	66.0*	143.4	127.9	136.7
Southeast	32	44	54	40	45	43.1	59.7	74.0	55.1	62.2	45.0	62.6	76.6	53.6	63.5
Southwest	46	38	39	46	44	108.2	89.9	92.3	109.1	104.3	125.9	106.9	98.9	147.0	119.4
Total	389	438	443	399	434	52.8	59.2	60.0	54.4	59.4	57.9	63.2	65.1	56.6	63.0

ICD-10 Codes: Underlying cause in V01-X59, Y85-Y86.

Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

 $^{^{}st}$ Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 22: Accidents (Unintentional Injuries) and Violent Death Mortality by Cause (2015-2019)

			Deaths				Age	e-Adjusted Ra	ate	
Cause of Death	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Accidents (Unintentional Injuries) (Underlying Cause ICD-10 Code)	_									
Total Unintentional Injuries	389	438	443	399	434	57.9	63.2	65.1	56.6	63.0
- Motor Vehicles (V02-V04, V090, V092, V12-V14, V190-V192, V194-V196, V20-V79, V803-V805, V810-V811, V820-V821, V83-V86, V870-V878, V880-V888, V890, V892)	74	97	102	95	93	10.6	13.0	14.5	12.7	12.7
- Other Land Transport (V01, V05-V06, V091, V093-V099, V10-V11, V15-V18, V193, V198-V199, V800-V802, V806-V809, V812-V819, V822-V829, V879, V889, V891, V893, V899)	1	3	0	2	3	**	**		**	**
- Water, Air, Space, or Other Transport (V90-V99, Y85)	17	43	24	35	28	2.1*	5.9	3.3	4.5	3.5
- Falls (W00-W19)	52	72	67	44	65	10.5	13.4	12.4	7.7	11.8
- Firearm Discharge (W32-W34)	5	5	4	2	2	**	**	**	**	**
- Drowning and Submersion (W65-W74)	30	28	22	20	18	4.2	4.0	2.9	2.6	2.5*
- Exposure to Smoke, Fire, Flames (X00-X09)	11	14	11	10	11	1.9*	2.0*	1.6*	1.3*	1.3*
- Poisoning or Exposure to Noxious Substances (X40-X49)	135	129	154	142	149	18.1	17.0	21.2	19.6	20.3
- Other Nontransport (W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86)	64	47	59	49	65	9.6	6.8	8.6	7.7	10.1
Assault (Homicide) (Underlying Cause ICD-10 Code)										
Total Assault (Homicide)	62	55	78	56	78	8.1	7.7	10.7	7.6	10.9
- Firearm Discharge (U014, X93)	42	46	46	37	51	5.5	6.4	6.5	5.2	7.3
- Other and Unspecified Means (U010-U013, U015-U019, U02, X85-X92, X96-Y09, Y871)	20	9	32	19	27	2.7	1.3*	4.2	2.5*	3.7
Intentional Self-harm (Suicide) (Underlying Cause ICD-10 Code)										
Total Intentional Self-harm (Suicide)	201	193	199	187	209	27.3	26.3	27.2	25.3	28.7
- Firearm Discharge (X72-X74)	123	113	119	108	117	16.6	15.1	16.3	14.8	15.9
- Other and Unspecified Means (U03, X60-X71, X75-X84, Y870)	78	80	80	79	92	10.6	11.1	11.0	10.5	12.9

Note: Age-adjusted death rates represent deaths per 100,000 population, adjusted by year 2000 U.S. standard population ratios. Violent death includes deaths due to assault (homicide) and intentional self-harm (suicide), and excludes deaths due to legal intervention and operations of war.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 23: LCOD #4: Cerebrovascular Diseases Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Age	e-Adjusted Ra	te	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex														<u> </u>	
Male	90	95	82	96	99	23.6	24.9	21.6	25.4	26.3	36.6	39.7	32.0	39.4	35.3
Female	91	100	108	117	111	25.6	28.0	30.2	32.8	31.3	34.6	37.0	38.0	40.9	36.1
Race and Ethn	icity												<u>'</u>	·	
White	123	130	125	141	139	23.9	25.3	24.5	27.8	27.6	33.6	33.5	30.4	34.0	32.7
AI/AN	36	36	44	42	47	28.3	28.2	34.4	32.8	36.7	48.1	55.4	61.3	64.9	56.3
Asian/PI	19	18	15	20	17	31.8*	29.2*	23.6*	31.4	26.5*	42.3*	43.5*	38.7*	53.0	33.0*
Black	3	8	5	7	4	**	22.6*	**	19.4*	**	**	64.5*	**	43.4*	**
Hispanic	1	4	1	2	4	**	**	**	**	**	**	**	**	**	**
Age Group		,										,	'	,	
00-04	1	1	1	1	1	**	**	**	**	**					
05-14	0	0	0	0	0										
15-24	0	0	0	0	0										
25-34	2	3	0	0	1	**	**			**					
35-44	8	3	2	4	10	8.7*	**	**	**	10.3*					
45-54	16	8	3	8	11	16.4*	8.4*	**	9.0*	12.9*					
55-64	18	18	18	15	25	18.3*	18.0*	18.1*	15.2*	25.7					
65-74	31	37	51	39	47	61.3	68.9	90.6	66.0	75.9					
75-84	46	63	54	70	47	253.3	331.0	268.3	327.7	207.5					
85+	59	62	61	76	68	971.0	986.3	953.0	1,158.7	1,013.6					
Public Health F	Region														
Anchorage	71	64	72	74	70	23.8	21.4	24.2	25.1	24.0	33.5	31.5	32.7	35.2	31.2
Gulf Coast	26	25	16	33	27	32.1	30.8	19.8*	40.8	33.4	39.9	35.8	21.9*	41.6	30.0
Interior	23	30	38	32	42	20.4	26.5	33.9	28.9	38.2	35.8	42.9	50.9	48.5	53.3
Mat-Su	27	35	19	32	23	27.0	34.1	18.2*	30.4	21.6	42.0	54.4	25.6*	40.3	27.6
Northern	5	12	8	6	7	**	43.2*	28.9*	21.7*	25.5*	**	90.5*	77.6*	43.0*	51.2*
Southeast	20	19	24	24	25	26.9	25.8*	32.9	33.0	34.5	30.5	28.4*	37.6	37.4	33.0
Southwest	8	10	13	12	15	18.8*	23.7*	30.8*	28.5*	35.5*	36.9*	51.1*	60.2*	66.7*	67.0*
Total	181	195	190	213	210	24.6	26.4	25.8	29.0	28.7	36.0	38.4	35.3	40.4	36.0

ICD-10 Codes: Underlying cause in I60-I69.

Note: Crude death rates represent deaths per 100,000 population. Age-adjusted death rates represent deaths per 100,000 population, adjusted by year 2000 U.S. standard population ratios.

Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 24: LCOD #5: Intentional Self-Harm (Suicide) Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Age	e-Adjusted Ra	ite	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	154	147	158	146	167	40.3	38.5	41.6	38.7	44.4	40.0	39.0	42.6	38.5	44.9
Female	47	46	41	41	42	13.2	12.9	11.5	11.5	11.8	13.4	12.6	11.0	11.5	11.5
Race and Ethni	icity														
White	121	111	115	120	115	23.5	21.6	22.5	23.7	22.9	23.0	21.3	22.2	22.9	21.9
AI/AN	64	58	67	58	83	50.3	45.4	52.3	45.3	64.8	49.5	43.6	52.8	41.9	67.2
Asian/PI	6	11	6	3	5	10.1*	17.9*	9.4*	**	**	8.7*	18.2*	8.6*	**	**
Black	5	7	7	2	3	**	19.8*	19.5*	**	**	**	18.4*	16.7*	**	**
Hispanic	4	4	7	6	6	**	**	13.3*	11.4*	11.4*	**	**	13.7*	12.3*	12.5*
Age Group															
00-04	0	0	0	0	0										
05-14	3	5	2	3	5	**	**	**	**	**					
15-24	57	48	45	42	54	56.5	48.6	46.6	44.4	57.9					
25-34	38	51	54	48	51	33.0	44.1	47.0	42.5	45.6					
35-44	31	35	26	22	30	33.8	37.9	27.8	23.1	31.0					
45-54	38	22	26	24	25	38.8	23.1	28.3	27.1	29.3					
55-64	23	20	24	27	26	23.3	20.0	24.1	27.3	26.7					
65-74	8	9	12	13	12	15.8*	16.8*	21.3*	22.0*	19.4*					
75-84	3	2	7	6	4	**	**	34.8*	28.1*	**					
85+	0	1	3	2	2		**	**	**	**					
Public Health F	Region														
Anchorage	79	68	63	58	67	26.5	22.7	21.2	19.7	23.0	25.7	21.7	20.6	18.9	23.2
Gulf Coast	23	21	18	26	20	28.4	25.9	22.3*	32.2	24.7	29.1	25.8	21.8*	32.3	25.0
Interior	21	31	32	33	38	18.6	27.4	28.6	29.8	34.6	18.6	26.5	28.2	29.2	35.3
Mat-Su	19	22	30	21	26	19.0*	21.4	28.7	19.9	24.4	19.9*	23.7	30.5	20.5	22.9
Northern	16	13	16	15	18	57.6*	46.8*	57.7*	54.3*	65.6*	56.4*	47.9*	58.8*	49.9*	61.2*
Southeast	15	13	21	20	10	20.2*	17.6*	28.8	27.5	13.8*	19.7*	17.9*	29.8	25.8	12.2*
Southwest	28	24	19	14	30	65.9	56.8	45.0*	33.2*	71.1	62.9	52.8	40.3*	31.4*	70.7
Total	201	193	199	187	209	27.3	26.1	27.0	25.5	28.6	27.3	26.3	27.2	25.3	28.7

ICD-10 Codes: Underlying cause in U03, X60-X84, Y870.

Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

 $^{^{}st}$ Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 25: LCOD #6: Chronic Lower Respiratory Diseases Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Ag	e-Adjusted Ra	ite	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	104	126	105	113	82	27.2	33.0	27.6	29.9	21.8	42.1	48.3	40.0	36.6	24.3
Female	100	112	99	108	120	28.2	31.3	27.7	30.3	33.8	33.0	34.8	33.3	34.4	36.3
Race and Ethni	city														
White	141	162	144	160	150	27.4	31.5	28.2	31.6	29.8	32.7	35.9	33.2	32.8	30.2
AI/AN	47	62	53	56	43	37.0	48.5	41.4	43.7	33.6	67.1	82.1	69.4	76.1	49.6
Asian/PI	11	10	5	2	2	18.4*	16.2*	**	**	**	30.6*	26.6*	**	**	**
Black	5	3	2	2	7	**	**	**	**	19.6*	**	**	**	**	32.0*
Hispanic	3	1	1	3	1	**	**	**	**	**	**	**	**	**	**
Age Group															
00-04	0	0	0	0	0										
05-14	0	0	0	0	0										
15-24	1	0	0	0	0	**									
25-34	2	1	3	0	0	**	**	**							
35-44	2	2	0	4	3	**	**		**	**					
45-54	6	10	8	9	7	6.1*	10.5*	8.7*	10.2*	8.2*					
55-64	37	43	25	24	36	37.5	43.0	25.1	24.3	37.0					
65-74	58	73	57	84	65	114.8	136.0	101.3	142.1	105.0					
75-84	61	69	66	65	58	335.9	362.5	327.9	304.3	256.1					
85+	37	40	45	35	33	609.0	636.3	703.0	533.6	491.9					
Public Health F	tegion														
Anchorage	74	74	73	75	72	24.8	24.8	24.5	25.5	24.7	34.0	31.1	31.9	29.0	30.2
Gulf Coast	22	35	29	27	30	27.2	43.2	35.9	33.4	37.1	28.2	42.9	38.9	30.3	30.2
Interior	29	35	21	35	26	25.7	30.9	18.7	31.6	23.7	35.3	42.2	26.9	43.3	28.4
Mat-Su	33	39	35	33	30	33.0	38.0	33.5	31.3	28.2	38.7	51.2	44.0	36.0	32.4
Northern	9	18	9	13	9	32.4*	64.8*	32.5*	47.1*	32.8*	71.4*	129.8*	61.3*	115.8*	59.2*
Southeast	25	22	26	32	25	33.7	29.8	35.6	44.0	34.5	41.4	30.0	36.7	42.5	28.3
Southwest	12	15	11	6	10	28.2*	35.5*	26.0*	14.2*	23.7*	64.1*	71.7*	59.0*	32.3*	41.1*
Total	204	238	204	221	202	27.7	32.2	27.7	30.1	27.6	36.9	40.7	36.0	35.5	30.9

ICD-10 Codes: Underlying cause in J40-J47.

Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 26: LCOD #7: Alzheimer's Disease Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Ago	e-Adjusted Ra	ite	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	18	45	34	43	53	4.7*	11.8	9.0	11.4	14.1	10.2*	25.1	18.5	22.5	26.3
Female	50	66	63	88	75	14.1	18.5	17.6	24.7	21.1	20.6	26.1	25.1	32.4	27.2
Race and Ethn	icity														
White	52	83	79	112	109	10.1	16.1	15.5	22.1	21.7	16.1	25.1	23.1	30.9	28.9
AI/AN	10	17	11	13	12	7.9*	13.3*	8.6*	10.2*	9.4*	19.5*	30.4*	19.6*	25.1*	21.4*
Asian/PI	2	8	3	5	4	**	13.0*	**	**	**	**	25.6*	**	**	**
Black	4	1	3	1	1	**	**	**	**	**	**	**	**	**	**
Hispanic	1	2	2	2	2	**	**	**	**	**	**	**	**	**	**
Age Group															
00-04	0	0	0	0	0										
05-14	0	0	0	0	0										
15-24	0	0	0	0	0										
25-34	0	0	0	0	0										
35-44	0	0	0	0	0										
45-54	0	0	0	0	0										
55-64	1	1	0	4	2	**	**		**	**					
65-74	3	8	6	8	10	**	14.9*	10.7*	13.5*	16.2*					
75-84	22	35	31	38	44	121.1	183.9	154.0	177.9	194.3					
85+	42	67	60	81	72	691.2	1,065.9	937.4	1,234.9	1,073.2					
Public Health F	Region														
Anchorage	29	44	51	71	68	9.7	14.7	17.1	24.1	23.3	17.4	25.6	28.6	38.4	35.5
Gulf Coast	6	14	6	14	4	7.4*	17.3*	7.4*	17.3*	**	10.8*	23.6*	10.2*	21.7*	**
Interior	9	20	15	13	20	8.0*	17.7	13.4*	11.7*	18.2	15.6*	34.0	25.3*	18.2*	29.0
Mat-Su	12	13	15	21	25	12.0*	12.7*	14.4*	19.9	23.5	23.9*	23.0*	24.4*	32.3	37.6
Northern	2	5	2	2	2	**	**	**	**	**	**	**	**	**	**
Southeast	9	8	7	7	8	12.1*	10.8*	9.6*	9.6*	11.1*	16.0*	14.8*	12.0*	11.4*	15.2*
Southwest	1	7	1	3	1	**	16.6*	**	**	**	**	41.0*	**	**	**
Total	68	111	97	131	128	9.2	15.0	13.1	17.8	17.5	16.6	25.8	22.1	28.4	26.6

ICD-10 Codes: Underlying cause in G30.

 $Note: Hispanic \ ethnicity \ includes \ peoples \ of \ any \ race, \ and \ counts \ are \ not \ mutually \ exclusive \ with \ counts \ by \ race.$

 $^{^{}st}$ Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 27: LCOD #8: Diabetes Mellitus Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Age	e-Adjusted Ra	ite	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	91	75	88	81	67	23.8	19.6	23.2	21.4	17.8	31.5	23.2	26.3	23.7	18.4
Female	50	49	42	42	44	14.1	13.7	11.7	11.8	12.4	16.1	14.8	12.6	12.5	13.9
Race and Ethni	icity														
White	97	90	98	85	76	18.8	17.5	19.2	16.8	15.1	20.1	17.9	18.5	15.1	15.0
AI/AN	24	16	13	18	14	18.9	12.5*	10.2*	14.1*	10.9*	27.7	20.7*	14.9*	23.1*	17.2*
Asian/PI	12	9	10	14	12	20.1*	14.6*	15.7*	22.0*	18.7*	35.4*	19.4*	19.4*	29.1*	18.5*
Black	8	5	5	6	4	23.1*	**	**	16.7*	**	57.9*	**	**	43.7*	**
Hispanic	1	5	9	2	7	**	**	17.1*	**	13.3*	**	**	53.0*	**	31.3*
Age Group															
00-04	0	0	0	0	0										
05-14	0	0	0	0	0										
15-24	0	1	1	0	0		**	**							
25-34	0	3	0	0	2		**			**					
35-44	3	4	3	3	4	**	**	**	**	**					
45-54	16	9	20	11	9	16.4*	9.5*	21.8	12.4*	10.5*					
55-64	32	26	30	24	22	32.4	26.0	30.2	24.3	22.6					
65-74	42	45	40	48	32	83.1	83.8	71.1	81.2	51.7					
75-84	30	19	23	23	32	165.2	99.8*	114.3	107.7	141.3					
85+	18	17	13	14	10	296.2*	270.4*	203.1*	213.4*	149.1*					
Public Health F	Region														
Anchorage	54	49	56	57	45	18.1	16.4	18.8	19.4	15.4	21.6	18.0	20.5	21.3	15.7
Gulf Coast	20	17	21	20	12	24.7	21.0*	26.0	24.8	14.8*	25.6	19.6*	23.9	19.8	12.5*
Interior	20	19	14	15	19	17.7	16.8*	12.5*	13.5*	17.3*	24.8	24.0*	17.0*	15.3*	23.1*
Mat-Su	26	21	21	17	21	26.0	20.5	20.1	16.1*	19.7	32.4	22.3	19.3	17.8*	20.8
Northern	3	1	4	1	2	**	**	**	**	**	**	**	**	**	**
Southeast	13	15	12	9	10	17.5*	20.3*	16.5*	12.4*	13.8*	18.1*	18.9*	17.3*	10.7*	13.6*
Southwest	5	2	2	4	2	**	**	**	**	**	**	**	**	**	**
Total	141	124	130	123	111	19.1	16.8	17.6	16.8	15.2	23.1	18.9	19.2	17.8	16.4

ICD-10 Codes: Underlying cause in E10-E14.

Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 28: LCOD #9: Chronic Liver Disease and Cirrhosis Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Ago	e-Adjusted Ra	ite	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	58	58	55	62	52	15.2	15.2	14.5	16.4	13.8	15.1	14.8	13.1	15.9	13.2
Female	56	66	66	59	58	15.8	18.5	18.4	16.6	16.3	14.9	17.4	17.0	15.3	15.6
Race and Ethni	icity														
White	69	73	67	75	61	13.4	14.2	13.1	14.8	12.1	11.6	12.3	10.4	12.7	10.3
AI/AN	36	43	49	42	45	28.3	33.6	38.3	32.8	35.1	36.7	38.7	45.3	38.4	41.0
Asian/PI	1	2	3	1	0	**	**	**	**		**	**	**	**	
Black	6	2	2	0	3	17.3*	**	**		**	22.4*	**	**		**
Hispanic	3	2	1	7	5	**	**	**	13.3*	**	**	**	**	18.5*	**
Age Group															
00-04	0	0	0	0	0										
05-14	0	0	0	0	0										
15-24	0	0	0	0	2					**					
25-34	6	16	9	10	8	5.2*	13.8*	7.8*	8.9*	7.1*					
35-44	12	17	13	10	21	13.1*	18.4*	13.9*	10.5*	21.7					
45-54	27	28	31	33	22	27.6	29.4	33.8	37.3	25.8					
55-64	41	38	45	37	31	41.6	38.0	45.2	37.5	31.9					
65-74	19	18	19	23	20	37.6*	33.5*	33.8*	38.9	32.3					
75-84	5	7	3	7	6	**	36.8*	**	32.8*	26.5*					
85+	4	0	1	1	0	**		**	**						
Public Health F	Region														
Anchorage	53	46	57	42	47	17.7	15.4	19.1	14.3	16.1	17.6	14.7	18.1	13.0	16.0
Gulf Coast	12	18	9	24	14	14.8*	22.2*	11.1*	29.7	17.3*	11.4*	17.5*	8.1*	25.4	14.7*
Interior	14	25	16	20	14	12.4*	22.1	14.3*	18.0	12.7*	10.9*	21.2	11.6*	18.1	12.2*
Mat-Su	12	14	11	12	12	12.0*	13.6*	10.5*	11.4*	11.3*	11.9*	13.0*	10.2*	10.8*	10.3*
Northern	2	4	5	3	6	**	**	**	**	21.9*	**	**	**	**	25.5*
Southeast	16	10	15	16	10	21.5*	13.6*	20.6*	22.0*	13.8*	19.9*	13.2*	17.6*	19.7*	10.8*
Southwest	4	7	8	4	6	**	16.6*	18.9*	**	14.2*	**	16.9*	17.0*	**	14.0*
Total	114	124	121	121	110	15.5	16.8	16.4	16.5	15.0	14.9	16.0	15.0	15.5	14.4

ICD-10 Codes: Underlying cause in K70, K73-K74.

 $Note: Hispanic \ ethnicity \ includes \ peoples \ of \ any \ race, \ and \ counts \ are \ not \ mutually \ exclusive \ with \ counts \ by \ race.$

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 29: LCOD #10: Assault (Homicide) Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Ago	e-Adjusted Ra	ite	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	44	33	56	43	48	11.5	8.6	14.7	11.4	12.8	11.2	8.7	14.6	11.2	13.3
Female	18	22	22	13	30	5.1*	6.2	6.1	3.6*	8.5	4.8*	6.6	6.5	3.9*	8.3
Race and Ethni	icity														
White	21	28	28	15	32	4.1	5.4	5.5	3.0*	6.4	4.1	5.8	5.4	3.0*	6.2
AI/AN	28	16	30	18	33	22.0	12.5*	23.4	14.1*	25.8	23.7	13.1*	24.0	14.4*	29.5
Asian/PI	3	3	5	8	5	**	**	**	12.6*	**	**	**	**	12.4*	**
Black	10	7	12	14	6	28.8*	19.8*	33.4*	38.9*	16.8*	24.5*	18.2*	34.9*	36.7*	17.4*
Hispanic	6	4	7	4	5	12.0*	**	13.3*	**	**	9.4*	**	14.0*	**	**
Age Group															
00-04	5	2	1	3	1	**	**	**	**	**					
05-14	3	1	1	1	1	**	**	**	**	**					
15-24	14	15	18	10	13	13.9*	15.2*	18.6*	10.6*	13.9*					
25-34	16	19	18	14	21	13.9*	16.4*	15.7*	12.4*	18.8					
35-44	8	12	15	12	18	8.7*	13.0*	16.0*	12.6*	18.6*					
45-54	4	5	10	7	14	**	**	10.9*	7.9*	16.4*					
55-64	9	0	10	7	7	9.1*		10.1*	7.1*	7.2*					
65-74	2	1	3	2	3	**	**	**	**	**					
75-84	1	0	1	0	0	**		**							
85+	0	0	1	0	0			**							
Public Health F	Region														
Anchorage	25	31	39	29	30	8.4	10.4	13.1	9.8	10.3	7.6	10.0	13.1	9.9	10.5
Gulf Coast	4	0	3	4	7	**		**	**	8.7*	**		**	**	9.5*
Interior	11	9	16	8	12	9.7*	7.9*	14.3*	7.2*	10.9*	9.6*	7.9*	15.1*	6.9*	11.7*
Mat-Su	6	9	2	5	11	6.0*	8.8*	**	**	10.3*	6.5*	9.9*	**	**	9.9*
Northern	4	4	4	3	2	**	**	**	**	**	**	**	**	**	**
Southeast	5	2	6	2	4	**	**	8.2*	**	**	**	**	7.1*	**	**
Southwest	7	0	7	5	11	16.5*		16.6*	**	26.1*	15.5*		15.1*	**	28.5*
Total	62	55	78	56	78	8.4	7.4	10.6	7.6	10.7	8.1	7.7	10.7	7.6	10.9

ICD-10 Codes: Underlying cause in U01-U02, X85-Y09, Y871.

 $Note: Hispanic \ ethnicity \ includes \ peoples \ of \ any \ race, \ and \ counts \ are \ not \ mutually \ exclusive \ with \ counts \ by \ race.$

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 30: SCOD: Alcohol-Induced Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Ago	e-Adjusted Ra	ite	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	94	105	94	114	113	24.6	27.5	24.7	30.2	30.0	23.4	24.8	23.3	29.4	27.9
Female	67	78	65	89	72	18.9	21.8	18.2	25.0	20.3	17.7	21.2	17.0	23.3	19.4
Race and Ethni	icity														
White	75	82	76	79	77	14.5	15.9	14.9	15.6	15.3	12.2	13.3	12.4	13.3	12.9
AI/AN	79	92	77	118	98	62.1	72.0	60.2	92.2	76.5	70.9	81.7	68.8	110.6	87.1
Asian/PI	1	2	2	1	1	**	**	**	**	**	**	**	**	**	**
Black	4	2	2	0	6	**	**	**		16.8*	**	**	**		21.3*
Hispanic	4	3	1	6	6	**	**	**	11.4*	11.4*	**	**	**	15.7*	14.8*
Age Group															
00-04	0	0	0	0	0										
05-14	1	0	0	0	1	**				**					
15-24	3	2	0	1	5	**	**		**	**					
25-34	12	22	25	21	20	10.4*	19.0	21.8	18.6	17.9					
35-44	21	24	23	31	30	22.9	26.0	24.6	32.5	31.0					
45-54	52	47	36	53	40	53.2	49.4	39.2	59.9	46.8					
55-64	53	62	50	62	52	53.7	62.0	50.3	62.8	53.5					
65-74	15	20	20	25	32	29.7*	37.3	35.5	42.3	51.7					
75-84	3	6	4	10	5	**	31.5*	**	46.8*	**					
85+	1	0	1	0	0	**		**							
Public Health R	Region														
Anchorage	73	73	76	69	74	24.4	24.4	25.5	23.4	25.4	23.6	22.8	24.3	21.0	24.3
Gulf Coast	14	20	9	29	16	17.3*	24.7	11.1*	35.9	19.8*	13.5*	20.8	6.9*	31.4	17.8*
Interior	20	30	22	30	27	17.7	26.5	19.6	27.1	24.6	16.7	25.2	16.5	27.6	23.3
Mat-Su	11	14	9	12	17	11.0*	13.6*	8.6*	11.4*	16.0*	10.5*	13.1*	9.1*	11.0*	14.9*
Northern	6	11	6	12	12	21.6*	39.6*	21.6*	43.4*	43.7*	21.3*	39.8*	25.1*	45.0*	44.4*
Southeast	23	18	20	26	18	31.0	24.4*	27.4	35.8	24.9*	25.6	19.5*	26.2	32.1	18.8*
Southwest	13	16	16	25	20	30.6*	37.9*	37.9*	59.3	47.4	32.3*	40.8*	34.7*	68.1	46.9
Total	161	183	159	203	185	21.8	24.7	21.6	27.7	25.3	20.5	23.0	20.1	26.4	23.7

ICD-10 Codes: Underlying cause in E244, F10, G312, G621, G721, I42.6, K292, K70, K852, K860, R780, X45, X65, Y15.

 $Note: Hispanic \ ethnicity \ includes \ peoples \ of \ any \ race, \ and \ counts \ are \ not \ mutually \ exclusive \ with \ counts \ by \ race.$

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 31: SCOD: Firearm-Related Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Ago	e-Adjusted Ra	ite	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	140	143	151	128	147	36.7	37.4	39.8	33.9	39.1	35.8	37.0	40.6	34.2	39.7
Female	37	35	29	28	32	10.4	9.8	8.1	7.9	9.0	10.7	9.8	8.4	8.2	8.8
Race and Ethni	city														
White	112	104	101	96	104	21.7	20.2	19.8	19.0	20.7	21.4	20.2	19.7	18.7	19.9
AI/AN	46	49	51	39	55	36.2	38.3	39.8	30.5	43.0	34.6	37.5	40.8	28.8	46.5
Asian/PI	4	10	6	8	8	**	16.2*	9.4*	12.6*	12.5*	**	15.0*	8.7*	12.4*	11.6*
Black	13	11	18	13	8	37.5*	31.1*	50.2*	36.1*	22.4*	30.6*	26.2*	47.1*	31.9*	21.7*
Hispanic	7	6	12	7	10	14.1*	11.7*	22.9*	13.3*	19.0*	11.0*	8.7*	23.8*	12.2*	21.5*
Age Group															
00-04	5	1	0	1	0	**	**		**						
05-14	6	4	5	3	2	5.7*	**	**	**	**					
15-24	48	44	48	36	41	47.6	44.6	49.7	38.0	44.0					
25-34	36	59	39	38	44	31.3	51.1	34.0	33.7	39.3					
35-44	22	29	22	23	28	24.0	31.4	23.5	24.1	28.9					
45-54	25	18	25	18	27	25.6	18.9*	27.2	20.4*	31.6					
55-64	22	12	19	19	24	22.3	12.0*	19.1*	19.2*	24.7					
65-74	9	10	13	11	8	17.8*	18.6*	23.1*	18.6*	12.9*					
75-84	4	1	6	5	3	**	**	29.8*	**	**					
85+	0	0	3	2	2			**	**	**					
Public Health R	tegion														
Anchorage	72	76	69	53	67	24.1	25.4	23.2	18.0	23.0	22.8	24.2	24.0	17.4	23.3
Gulf Coast	22	12	15	17	17	27.2	14.8*	18.6*	21.0*	21.0*	27.5	13.6*	18.2*	22.8*	20.2*
Interior	27	32	27	33	31	23.9	28.3	24.1	29.8	28.2	23.6	25.9	23.2	29.3	30.4
Mat-Su	20	22	23	22	31	20.0	21.4	22.0	20.9	29.1	20.8	23.8	22.5	22.2	27.4
Northern	12	12	10	9	11	43.2*	43.2*	36.1*	32.6*	40.1*	42.4*	44.3*	39.4*	30.9*	40.3*
Southeast	10	11	18	12	6	13.5*	14.9*	24.7*	16.5*	8.3*	13.4*	15.3*	24.0*	15.5*	8.8*
Southwest	14	12	17	10	14	32.9*	28.4*	40.3*	23.7*	33.2*	30.8*	26.7*	36.9*	21.4*	33.5*
Total	177	178	180	156	179	24.0	24.1	24.4	21.3	24.5	23.8	24.0	24.9	21.5	24.7

ICD-10 Codes: Underlying cause in W32-W34, X72-X74, X93-X95, Y22-Y24, Y350.

 $Note: Hispanic \ ethnicity \ includes \ peoples \ of \ any \ race, \ and \ counts \ are \ not \ mutually \ exclusive \ with \ counts \ by \ race.$

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 32: SCOD: Drug-Induced Mortality by Sex, Race and Ethnicity, Age Group, and Public Health Region (2015-2019)

			Deaths					Crude Rate				Age	e-Adjusted Ra	ite	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex															
Male	79	87	97	71	100	20.7	22.8	25.5	18.8	26.6	19.6	22.1	26.4	18.0	25.9
Female	48	51	60	48	49	13.5	14.3	16.8	13.5	13.8	13.6	14.1	16.5	13.6	13.9
Race and Ethni	city														
White	80	95	103	85	93	15.5	18.5	20.2	16.8	18.5	14.9	17.9	20.2	15.8	17.8
AI/AN	39	24	43	24	44	30.7	18.8	33.6	18.7	34.4	33.8	20.0	36.7	22.1	37.5
Asian/PI	1	3	2	1	4	**	**	**	**	**	**	**	**	**	**
Black	4	9	7	8	8	**	25.4*	19.5*	22.2*	22.4*	**	27.6*	24.2*	21.8*	27.0*
Hispanic	7	6	8	3	1	14.1*	11.7*	15.2*	**	**	11.6*	11.3*	15.2*	**	**
Age Group															
00-04	1	0	0	0	1	**				**					
05-14	0	0	0	0	0										
15-24	17	18	13	11	9	16.8*	18.2*	13.5*	11.6*	9.7*					
25-34	34	36	39	26	51	29.5	31.2	34.0	23.0	45.6					
35-44	21	28	35	25	36	22.9	30.3	37.4	26.2	37.2					
45-54	28	29	42	27	20	28.6	30.5	45.8	30.5	23.4					
55-64	19	23	21	26	21	19.3*	23.0	21.1	26.3	21.6					
65-74	5	4	5	4	9	**	**	**	**	14.5*					
75-84	0	0	2	0	2			**		**					
85+	2	0	0	0	0	**									
Public Health F	Region														
Anchorage	61	51	78	50	61	20.4	17.1	26.2	17.0	20.9	19.1	16.4	26.2	16.2	19.7
Gulf Coast	19	20	13	18	18	23.5*	24.7	16.1*	22.3*	22.3*	23.4*	24.3	17.5*	20.4*	21.7*
Interior	14	17	15	13	21	12.4*	15.0*	13.4*	11.7*	19.1	13.9*	13.9*	13.0*	11.4*	19.1
Mat-Su	14	25	21	18	24	14.0*	24.4	20.1	17.1*	22.5	14.5*	25.3	20.6	17.2*	24.0
Northern	2	0	3	3	5	**		**	**	**	**		**	**	**
Southeast	13	17	17	12	12	17.5*	23.1*	23.3*	16.5*	16.6*	16.3*	23.8*	24.7*	15.2*	15.7*
Southwest	4	5	9	4	8	**	**	21.3*	**	19.0*	**	**	22.3*	**	24.1*
Total	127	138	157	119	149	17.2	18.7	21.3	16.2	20.4	16.9	18.3	21.6	15.9	20.1

ICD-10 Codes: Underlying cause in D521, D590, D592, D611, D642, E064, E160, E231, E242, E273, E661, F110-F115, F117-F119, F120-F125, F127-F129, F130-F135, F137-F139, F140-F145, F147-F149, F150-F155, F157-F159, F160-F165, F167-F169, F170, F173-F175, F177-F179, F180-F185, F187-F189, F190-F195, F197-F199, G211, G240, G251, G254, G256, G444, G620, G720, I952, J702, J703, J704, L105, L270, L271, M102, M320, M804, M814, M835, M871, R502, R781, R782, R783, R784, R785, X40-X44, X60-X64, X85, Y10-Y14.

Note: Crude death rates represent deaths per 100,000 population. Age-adjusted death rates represent deaths per 100,000 population, adjusted by year 2000 U.S. standard population ratios. Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

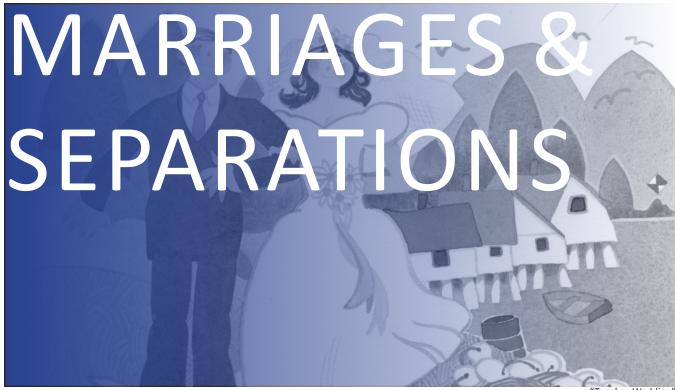
Table 33: Drug Overdose Mortality by Type of Drugs Involved (2015-2019)

			Deaths				Ag	e-Adjusted Ra	ate	
Cause of Death	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Drug Overdose (Underlying Cause ICD-10 Code)										
Total Drug Overdose (X40-X44, X60-X64, X85, Y10-Y14)	122	128	146	110	132	16.1	17.0	20.1	14.7	17.9
Narcotics Overdose (Contributing Cause ICD-10 Code)										
Total Narcotics (T400-T409)	93	97	107	73	88	12.2	13.0	14.5	9.5	11.6
- Opioids (T400-T404, T406)	86	94	100	66	83	11.2	12.7	13.6	8.5	11.0
- Heroin (T401)	37	49	34	28	44	4.8	6.6	4.6	3.7	5.9
- Analgesic Pain Reliever (T402-T404)	67	58	76	47	61	8.8	7.8	10.2	6.0	7.9
- Natural and Semi-Synthetic (T402)	51	45	46	34	42	6.6	6.1	6.3	4.5	5.5
- Methadone (T403)	10	13	8	9	9	1.4*	1.7*	1.0*	1.2*	1.2*
- Non-Methadone Synthetic (T404)	14	9	37	17	24	1.8*	1.2*	4.9	2.1*	3.3
- Fentanyl (T404 w/ fentanyl cited)	12	4	28	10	16	1.5*	**	3.7	1.3*	2.2*
- Cocaine (T405)	8	15	17	10	7	1.1*	1.8*	2.2*	1.3*	0.9*
Sedatives Overdose (Contributing Cause ICD-10 Code)										
Total Sedatives (T420-T428)	36	61	77	60	73	4.8	7.8	10.6	8.4	9.8
- Benzodiazepines (T424)	19	24	30	24	18	2.4*	3.4	4.3	3.2	2.6*
Psychotropics Overdose (Contributing Cause ICD-10 Code)										
Total Psychotropics (T430-T439)	36	61	77	60	73	4.8	7.8	10.6	8.4	9.8
- Antidepressants (T430-T432)	6	10	12	11	10	0.8*	1.3*	1.6*	1.7*	1.4*
- Antipsychotics (T433-T435)	7	7	7	5	1	1.0*	0.9*	0.9*	**	**
- Psychostimulants (T436)	27	49	64	50	64	3.6	6.3	8.9	6.9	8.6
- Methamphetamine (T436 w/ methamphetamine cited)	25	47	59	45	59	3.3	6.1	8.2	6.1	7.8

Note: Age-adjusted death rates represent deaths per 100,000 population, adjusted by year 2000 U.S. standard population ratios. Drug overdose contributing cause subcategories are not mutually exclusive, and deaths can be included in multiple categories (e.g. Cocaine and Heroin). Fentanyl and Methamphetamine estimates are based on contributing cause ICD-10 codes and drug-specific keywords cited on the death certificate's descriptive text literal fields.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.



"Tenakee Wedding" Copyright Rie Munoz, Ltd.

2019 Facts

- There were 4,765 marriages, and 2,665 separations.
- June had the largest number of marriages by month (715).
- February had the smallest number of marriages by month (219).
- May had the largest number of separations by month (251).
- March had the smallest number of separations by month (188).

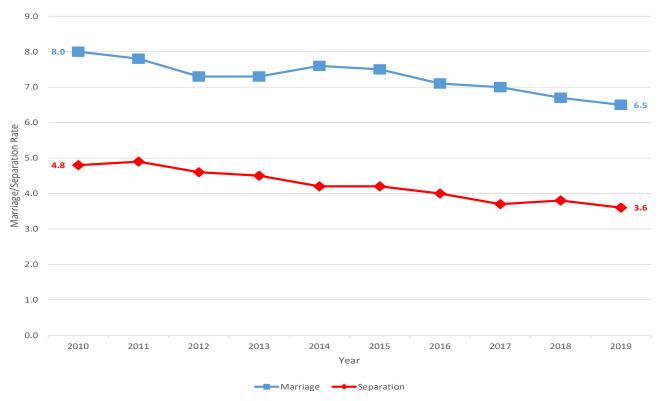
Marriages Summary

In 2019, there were 4,765 marriages occurring in Alaska. The marriage rate, which measure the number of marriages (regardless of residency status) per 1,000 Alaskan residents, was 6.5. Approximately 72 marriages, or 1.5 percent of all marriages, were between same-sex couples. Marriages between Alaska resident couples made up 84.4 percent of all marriages, while marriages between non-resident couples made up 10.6 percent of all marriages. (Table 34). Between 2015-2019, most marriages were between two partners aged 20-24 years old, making up 14.0 percent of all marriages (Table 35).

Separations Summary

In 2019, there were 2,665 separations decreed in Alaska. The **separation rate**, which measure the number of separations (regardless of residency status) per 1,000 Alaskan residents, was 3.6. Approximately 34 separations, or 1.3 percent of all separations, were between same-sex couples. There are three administrative procedures for terminating a marriage in Alaska: dissolution, divorce, and annulment. Divorces made up 55.2 percent of all separations, while dissolutions made up 44.5 percent. Between 2015-2019, most separations were between two partners aged 25-29 years old, making up 8.5 percent of all separations (Table 35).

Figure 5: Marriage and Separation Rates (2010-2019)



Note: Marriage and separation rates represent events per 100,000 population.

^{1.} Partner sex is not recorded on marriage or divorce certificates, but is indirectly estimated through use of gendered terms that are recorded (groom/husband = male, bride/wife = female, spouse = not specified). Alaska began registering same sex marriages on October 13th, 2014.

Table 34: Marriages and Rates by Sexual Orientation, Alaska Residency Status, and Public Health Region (2015-2019)

			Marriages				ı	Marriage Rate	e	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sexual Orientation										
Opposite Sex	5,240	5,046	4,921	4,750	4,519					
Same Sex	87	81	78	78	72					
Not Specified	171	156	130	115	174					
ALL Residency Status										
Two Residents	4,726	4,544	4,283	4,099	4,020					
One Non-Resident	328	298	324	300	247					
Two Non-Residents	444	441	522	544	498					
Public Health Region (Ceremon	y Occurrence	e)								
Anchorage	2,228	2,128	2,091	1,969	1,854	7.5	7.1	7.0	6.7	6.4
Gulf Coast	643	610	632	581	596	7.9	7.5	7.8	7.2	7.4
Interior	971	927	870	866	839	8.6	8.2	7.8	7.8	7.6
Mat-Su	769	736	793	787	775	7.7	7.2	7.6	7.5	7.3
Northern	96	88	70	58	72	3.5	3.2	2.5	2.1	2.6
Southeast	596	603	527	558	488	8.0	8.2	7.2	7.7	6.7
Southwest	166	153	126	112	131	3.9	3.6	3.0	2.7	3.1
Total	5,498	5,283	5,129	4,943	4,765	7.5	7.1	7.0	6.7	6.5

Note: Marriage rates represent marriages per 100,000 population. Rates by sexual orientation and Alaska residency status are not applicable.

Table 35: Marriages by Partner Age Groups (2015-2019)

						Partner 2					
Partner 1	<15	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+	ALL
<15	0	0	0	0	0	0	0	0	0	0	0
15-19	0	448	434	49	12	3	1	0	0	0	947
20-24	0	696	3,587	1,054	208	53	19	8	2	2	5,629
25-29	0	73	1,399	2,983	1,106	302	92	27	17	5	6,004
30-34	0	17	332	1,227	1,676	628	212	85	17	9	4,203
35-39	0	9	100	405	716	797	318	135	42	25	2,547
40-44	0	4	24	126	281	377	381	217	83	39	1,532
45-49	0	0	17	61	101	201	321	360	178	116	1,355
50-54	0	3	12	31	64	88	150	268	350	238	1,204
55+	0	1	10	27	60	78	107	225	440	1,249	2,197
ALL	0	1,251	5,915	5,963	4,224	2,527	1,601	1,325	1,129	1,683	25,618

Note: Marriages by partner age group tables are not comparable to reports prior to 2015, which were cross-tabulated by Bride and Groom age groups. Because all marriages (regardless of sexual orientation) are now included, tables are now cross-tabulated by Partner 1 and Partner 2 age groups, which can include partners of any sex.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

Table 36: Separations and Rates by Sexual Orientation, Separation Procedure Type, and Public Health Region (2015-2019)

			Separations				S	eparation Ra	te	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sexual Orientation										
Opposite Sex	3,073	2,912	2,629	2,603	2,475					
Same Sex	19	22	23	29	34					
Not Specified	20	58	79	132	156					
Separation Procedure Type										
Divorce	1,616	1,620	1,531	1,577	1,472					
Dissolution	1,484	1,368	1,193	1,183	1,185					
Annulment	12	4	7	4	7					
Public Health Region (Decree C	Occurrence)									
Anchorage	1,447	1,438	1,291	1,301	1,246	4.8	4.8	4.3	4.4	4.3
Gulf Coast	250	303	253	268	252	3.1	3.7	3.1	3.3	3.1
Interior	483	534	517	477	509	4.3	4.7	4.6	4.3	4.6
Mat-Su	394	390	373	399	385	3.9	3.8	3.6	3.8	3.6
Northern	44	41	40	39	34	1.6	1.5	1.4	1.4	1.2
Southeast	261	241	218	232	198	3.5	3.3	3.0	3.2	2.7
Southwest	50	44	39	47	41	1.2	1.0	0.9	1.1	1.0
Total	3,112	2,992	2,731	2,764	2,665	4.2	4.0	3.7	3.8	3.6

Note: Separation rates represent separations per 100,000 population. Rates by sexual orientation and separation procedure type are not applicable.

Table 37: Separations by Partner Age Groups (2015-2019)

						Partner 2					
Partner 1	<15	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+	ALL
<15	0	0	0	0	0	0	0	0	0	0	0
15-19	0	11	30	1	0	0	0	0	0	1	43
20-24	0	49	791	299	61	23	5	1	0	1	1,247
25-29	0	2	357	1,210	485	121	32	17	3	10	2,264
30-34	0	2	65	528	1,024	430	139	41	17	12	2,288
35-39	0	1	25	156	439	838	346	131	56	32	2,047
40-44	0	2	5	45	175	423	587	287	108	53	1,712
45-49	0	0	4	17	60	160	334	503	263	124	1,484
50-54	0	0	6	4	24	64	131	270	423	253	1,187
55+	0	0	1	8	17	33	98	174	349	1,204	1,931
ALL	0	68	1,286	2,274	2,288	2,104	1,676	1,426	1,226	1,704	14,264

Note: Separations by partner age group tables are not comparable to reports prior to 2015, which were cross-tabulated by Wife and Husband age groups. Because all separations (regardless of sexual orientation) are now included, tables are now cross-tabulated by Partner 1 and Partner 2 age groups, which can include partners of any sex.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.



"Picking Blueberries" Copyright Rie Munoz, Ltd.

2019 Facts

- There were 805 adoptions granted.
- Alaska state courts granted 642 adoptions.
- Alaska Native Village Councils and Tribal Courts granted 163 adoptions.
- The mean and median age of adoption was 11.3 and 7.0 years old, respectively.

Adoptions Summary

There were 805 adoptions of Alaska children granted in 2019.¹ The Alaska state court system granted 79.8 percent of adoptions (642 adoptions), while the remainder were granted by Alaska Native Tribal courts (29 adoptions), or through cultural adoptions approved by Alaska Native Village Councils (134 adoptions) (Table 38).

Adoption rates measure the number of adoptions granted per 1,000 Alaskan residents, and was 1.1 adoptions per 1,000 population in 2019. American Indian/Alaska Native children had the highest adoption rate by race at 3.0 adoptions per 1,000 population. (Table 38).

Table 38: Adoptions and Rates by Sex of Child, Race and Ethnicity of Child, and Adoption Type (2015-2019)

			Adoptions				,	Adoption Rate	e	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Sex of Child										
Male	331	379	391	375	371	0.9	1.0	1.0	1.0	1.0
Female	322	364	371	374	433	0.9	1.0	1.0	1.0	1.2
Race and Ethnicity of Child										
White	270	298	336	323	344	0.5	0.6	0.7	0.6	0.7
AI/AN	332	395	361	366	390	2.6	3.1	2.8	2.9	3.0
Asian/PI	21	25	33	24	42	0.4	0.4	0.5	0.4	0.7
Black	19	15	21	19	18	0.5*	0.4*	0.6	0.5*	0.5*
Hispanic	25	41	30	25	43	0.5	0.8	0.6	0.5	0.8
Adoption Type										
State Court	474	557	588	563	642					
Cultural	154	150	141	149	134					
Tribal Court	25	36	33	37	29					
Total	653	743	762	749	805	0.9	1.0	1.0	1.0	1.1

Note: Adoption rates represent adoptions per 100,000 population. Rates by adoption type are not applicable. Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

^{1.} Adoptions of children without an Alaska birth certificate (including adoptions of foreign nationals), and adoptions of Alaska-born children to out of state adoptive parents are not included. Adoptions statistics are not comparable to reports prior to 2015.

^{*} Rates based on fewer than 20 events are statistically unreliable and should be used with caution.

^{**} Rates based on fewer than 6 events are not reported.

APPENDIX A: TERMS

Adoption Rate: The number of adoptions divided by the estimated population, multiplied by a constant of proportionality (usually 1,000). This report does not include adoptions of children without an Alaska birth certificate, adoptions of foreign nationals, or adoptions of Alaska-born children to out of state adoptive parents.

Age-Adjusted Death Rate: A weighted average of age-specific death rates adjusted using one standard age distribution (usually the U.S. year 2000 standard 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 Rate: The number of events for a specific age group divided by the population for the same age group, multiplied by a constant of proportionality (usually 1,000 or 100,000).

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

Cause of Death: Unless otherwise noted, 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 - Tenth Revision (ICD-10) as the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the injury or violence which produced the fatality.

Constant of Proportionality: A constant number (often 1,000 or 100,000) which is used for calculating a rate so that comparisons are possible and more understandable. (e.g. it is easier to compare 21.7 to 21.3 per 1,000 than it is to compare 0.0217 to 0.0213.)

Crude Rate: The number of events divided by the estimated population, multiplied by a constant of proportionality (usually 1,000 or 100,000).

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

Infant Death: Deaths occurring between 0 and 364 days of birth. Infant deaths can be further divided into neonatal deaths, which occur in the first 27 days, and postneonatal deaths, which occur between 28-364 days after birth.

Infant Death Rate: The number of infant deaths divided by the number of live births, multiplied by a constant of proportionality (usually 1,000). The infant death rate in this report is calculated using the "death cohort" method. The death cohort method is determined by dividing the number of infant deaths by the number of live births in a given calendar year. For example, to calculate the death cohort infant death rate for the current year, divide the total number of infant deaths for that year by the total number of live births that occurred the same year, and multiply the result by a constant of proportionality. By using the death cohort infant death method, some infant deaths will be counted in the current year even if that infant was actually born the year before. Other deaths to infants born in the current year who died before their first birthday the following year will not be counted.

Fetal Death: Deaths occurring prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, excluding induced termination. Alaska Statute 18.50.240 requires the filing of a fetal death certificate for each death where gestation lasts at least 20 weeks.

Note: Annual Reports published prior to 2016 erroneously stated that fetal death records with a gestational age estimate less than 20 weeks were

excluded from results. However, some records under 20 weeks, or with unknown gestational ages, were still counted. As of the 2018 Annual Report, fetal death statistics now correctly exclude all fetal deaths under 20 weeks, or with unknown gestational age. Fetal death statistics are not comparable to reports prior to 2018.

Fetal Death Rate: The number of fetal deaths, divided by sum of the number of live births and fetal deaths, multiplied by a constant of proportionality (usually 1,000).

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-10: International Classification of Diseases - Tenth Revision. The official classification system which codifies all diseases and injuries. ICD-10 was first introduced in 1999. All deaths between 1978 and 1998 were coded using ICD-9.

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 on the location of actual residence. The location of actual residence; i.e., census area, 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 Birthweight: An infant born weighing less than 2,500 grams (approximately 5.5 pounds).

Marriage Rate: The number of marriages divided by the estimated population, multiplied by a constant of proportionality (usually 1,000). This report includes all marriages granted in Alaska, regardless of partner residency.

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).

Postneonatal Infant Mortality Rate: The number of deaths to infants from 28 days up to one year old divided by the number of live births, multiplied by a constant of proportionality (usually 1,000).

Preterm Birth: An infant born prior to the 37th week of gestation.

Race of Infant: The reported race of the mother provided on the infant's birth certificate is considered the race of the infant. Prior to 1989, races of both parents were taken into consideration when determining the race of the infant using a look-up table. Beginning in 1989, the National Center for Health Statistics (NCHS) recommended that all states adopt the same standard for determining the race of the infant at birth.

Separation Rate: The number of separations divided by the estimated population, multiplied by a constant of proportionality (usually 1,000). Separations include divorce, dissolutions, and annulments. This report includes all separations granted in Alaska regardless of partner residency.

Standard Population: Age-adjusted rates are calculated using U.S. year 2000 standard population weights (see Table A.1). This weighting convention is based on a longstanding coordinated agreement among federal and state agencies to use a uniform standard for age adjustment of data (Table 39).¹

^{1.}Age Adjustment Using the 2000 Projected U.S. Population, National Center For Health Statistics, Healthy People Statistical Notes (20), 2001.

Table 39: U.S. Year 2000 Standard Population

Age	2000 U.S. Standard Population (Millions)	Weight
0–4 years	69,135	0.069135
5–14 years	145,565	0.145565
15–24 years	138,646	0.138646
25–34 years	135,573	0.135573
35–44 years	162,613	0.162613
45-54 years	134,834	0.134834
55–64 years	87,247	0.087247
65-74 years	66,037	0.066037
75–84 years	44,842	0.044842
>85 years	15,508	0.015508
TOTAL	1,000,000	1.0000000

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).

Under Five Death Rate: The number of deaths to infants and children less than five years of age divided by the number of live births in a given year, multiplied by a constant of proportionality (usually 1,000).

Years of Potential Life Lost (YPLL): The difference between a constant, representing the assumed natural life span in years of an individual (typically 75), and the actual age of death. (See Appendix B for calculation of years of life lost).

APPENDIX B: TECHNICAL NOTES

How to Use Vital Statistics

Vital Events: Vital events are registered with the Health Analytics and Vital Records Section, and include live births, fetal deaths (after at least 20 weeks gestation), deaths, adoptions, marriages, and divorces. Information on each of these events is provided on standard forms.

Reliability of the Data: The reliability of vital records 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 selfreported or reported by relatives (smoking during pregnancy, marital status of deceased, etc.). The Section 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: Section staff, medical professionals, magistrates, funeral directors, marriage commissioners, judges, and each individual involved in, or witness to, a vital event.

Comparing 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 4,200/280,000 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 500/30,000 or 0.016666 births for every person living in Juneau.

Since small decimal numbers are difficult 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 comparable rates. 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 15.0 births per 1,000 population. The birth rate for Juneau would be 0.016666*1,000 or 16.7 births per 1,000 population. This number is usually rounded to the nearest tenth. 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 prior paragraph are crude birth rates because they compare events to the total population. A more meaningful comparison would use only the female population of childbearing ages (15-44 years of age). Let's assume that the number of fertile women aged 15-44 in Anchorage is 60,000, and in Juneau is 7,300. The Anchorage fertility rate would be (4,200/60,000)*1,000 or 70.0 births for every 1,000 women of childbearing age. The Juneau fertility rate would be (500/7,300)*1,000 or 68.5 births for every 1,000 women of childbearing 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 (60,000/280,000 or 0.2143) is lower than in Juneau (7,300/30,000 or 0.2433).

Constant of Proportionality: In calculating crude birth rates and fertility rates, we use a constant of proportionality of 1,000. Vital statistics may be reported with different constants of proportionality. Readers may 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 incorrect conclusions. For instance, in this report we calculate death rates per 100,000 population. If the another publication reported deaths per 1,000 population, you would need to convert the rates in this report (by dividing by 100) or the death rates in the other report (by multiplying by 100) in order to make a valid comparison.

Small Populations or Few Events: Data based on 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. A method that is used in this report to provide greater reliability is moving averages. (For an explanation of moving averages, see "Vital Statistics Formulas" below.)

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, a population with a high proportion of young people, generally will have a lower crude death rate than a population with a high percentage of elderly persons. 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 population based on the decennial U.S. Census of 2000 (see the Standard Population in Appendix A).

$$AA = \sum (m_a * (p_a / p))$$

AA is age-adjusted rate

∑ is sum

 $m_{\scriptscriptstyle a}$ is the age-specific death rate for age group

 p_a is the standard population for age group

p is the total standard population

Moving Averages: Calculations of multiple year moving averages can be performed when single-year rates are not reliable due to a small number of observations, or large fluctuations in the number of events from year to year. Moving averages can help to smooth out rates which would vary widely from one year to another, or otherwise be below standard reporting thresholds.

For example, single-year infant death rates are seldom good indicators for the state of infant health within Alaska because rates can fluctuate dramatically from year to year. For example, 67 infants died during 2008, 76 infants died during 2009, and 43 infants died during 2010. The single-year infant death rates during 2008, 2009 and 2010 were 5.9, 6.7 and 3.7 deaths per 1,000 births, respectively. Taking a 3-year average gives an infant death rate of 5.4 deaths per 1,000, which provides a more meaningful measure of infant mortality trends over time.

Years of Potential Life Lost: Years of potential life lost (YPLL) is the difference between a constant, representing the expected natural lifespan of an individual, and the age of a decedent who dies before that constant. The constant used in the calculation is ultimately arbitrary, but 75 is a common standard given that this is close to the median natural lifespan expected in many developed countries. This is the constant value used in this report. YPLL is a useful way to estimate the impact of specific causes of death, and emphasizes mortality in younger populations. For each cause of death, YPLL is calculated as follows:

$$YPLL = \sum (75 - age)$$

YPLL is years of potential life lost

∑ is sum

75 is the assumed natural lifespan

age is the age of the decedent at death.

Life Expectancy

Life expectancy represents the number of years that an infant born in a given year can expect to live if they experience the same age-specific death rates as all persons who died during their birth year. Three year rolling averages are used to smooth out year-to-year fluctuations in life expectancy, and provide a more stable basis for comparison.

Between 2017-2019, average life expectancy for all Alaskan residents was 79.8 years. Life expectancy for men was 6.2 years lower than women over the same period. American Indian/Alaska Native residents had the lowest average life expectancy, at 72.9 years.

Table 40: Average Life Expectancy by Sex, Race and Ethnicity, and Age Group (2013-2019)

			Life Expectancy		
	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019
Sex					
Male	77	76.4	76.3	76.5	76.9
Female	83.4	83.3	83.1	83.2	83.1
Race and Ethi	nicity				
White	87	85.6	86.2	85.6	85.8
AI/AN	72	73.2	72.5	72.9	72.9
Asian/PI	88.1	87.6	87.9	88.6	89.5
Black	83.9	85	85.9	86.3	86.6
Hispanic	89.1	88.5	88.7	88.2	87.7
Age Group (Y	ears Left at Beginning	of Age Group)			
00	80	79.6	79.5	79.6	79.8
01-04	79.6	79.2	79	79.1	79.3
05-09	75.7	75.3	75.1	75.2	75.4
10-14	70.8	70.4	70.2	70.3	70.5
15-19	65.8	65.4	65.3	65.4	65.6
20-24	61.1	60.7	60.6	60.7	60.9
25-29	56.5	56.2	56.1	56.2	56.4
30-34	52	51.7	51.7	51.7	51.9
35-39	47.4	47.1	47.2	47.2	47.4
40-44	42.8	42.6	42.6	42.7	42.9
45-49	38.3	38.1	38.2	38.3	38.5
50-54	34	33.8	33.9	33.9	34.1
55-59	29.8	29.6	29.7	29.8	30
60-64	25.8	25.6	25.7	25.8	25.9
65-69	22	21.8	21.8	21.9	22.1
70-74	18.3	18.1	18.2	18.3	18.5
75-79	15.2	15.1	15.1	15.2	15.3
80-84	12.8	12.6	12.6	12.6	12.7
85+	11.6	11.5	11.3	11.1	11.3

Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

^{1.} Corrections to the formula for the 85+ age group (see Table 40, Column H) resulted in slightly higher life expectancies than calculated in Annual Reports published prior to 2017. Life expectancy estimates are not comparable to reports prior to 2017.

Table 41: Average Life Expectancy Calculations by Age Group (2017-2019)

Age Group	Deaths (A)	Population (B)	Ratio (C)	Proportion Dying in Age Group (D)	Proportion Living in Age Group (E)	Number Living at Beginning of Age Group (F)	Number Dying in Age Group (G)	Number Living in Age Group (H)	Cumulative Population (I)	Years Left at Beginning of Age Group (J)
00	167	29,704	0.0056221	0.0056064	0.9943936	100,000	561	99,523	7,984,172	79.8
01-04	53	123,478	0.0004292	0.0017151	0.9982849	99,439	171	397,329	7,884,649	79.3
05-09	32	160,144	0.0001998	0.0009986	0.9990014	99,268	99	496,093	7,487,320	75.4
10-14	47	157,335	0.0002987	0.0014925	0.9985075	99,169	148	495,475	6,991,227	70.5
15-19	143	142,155	0.0010059	0.0050171	0.9949829	99,021	497	493,863	6,495,752	65.6
20-24	220	142,316	0.0015459	0.0076995	0.9923005	98,524	759	490,723	6,001,889	60.9
25-29	327	168,588	0.0019396	0.0096514	0.9903486	97,765	944	486,465	5,511,166	56.4
30-34	358	171,107	0.0020923	0.0104069	0.9895931	96,821	1,008	481,585	5,024,701	51.9
35-39	358	156,727	0.0022842	0.0113563	0.9886437	95,813	1,088	476,345	4,543,116	47.4
40-44	338	129,058	0.002619	0.0130097	0.9869903	94,725	1,232	470,545	4,066,771	42.9
45-49	483	129,356	0.0037339	0.0184967	0.9815033	93,493	1,729	463,143	3,596,226	38.5
50-54	711	136,278	0.0052173	0.0257505	0.9742495	91,764	2,363	452,913	3,133,083	34.1
55-59	1,057	153,385	0.0068912	0.0338722	0.9661278	89,401	3,028	439,435	2,680,170	30
60-64	1,350	142,098	0.0095005	0.0464004	0.9535996	86,373	4,008	421,845	2,240,735	25.9
65-69	1,517	107,652	0.0140917	0.0680608	0.9319392	82,365	5,606	397,810	1,818,890	22.1
70-74	1,473	69,655	0.0211471	0.1004261	0.8995739	76,759	7,709	364,523	1,421,080	18.5
75-79	1,406	40,483	0.0347306	0.15978	0.84022	69,050	11,033	317,668	1,056,557	15.3
80-84	1,399	23,657	0.0591368	0.2576	0.7424	58,017	14,945	252,723	738,889	12.7
85+	2,480	19,669	0.1260867	0.4793382	0.5206618	43,072	43,072	341,606	486,166	11.3

Column A: Sum of deaths during period.

Column B: Sum of population during period.

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 one year: F-(.85*G)

- For 1–4 years: 4*F-(2.5*G)
- For 85+: (F/C)
- All others: (5*F)-(2.5*G).

Column I: Cumulative population Sum of H for this and all older age

Column J: Years left at beginning of age (I/F).

APPENDIX C: PRENATAL CARE

Adequacy of Prenatal Care

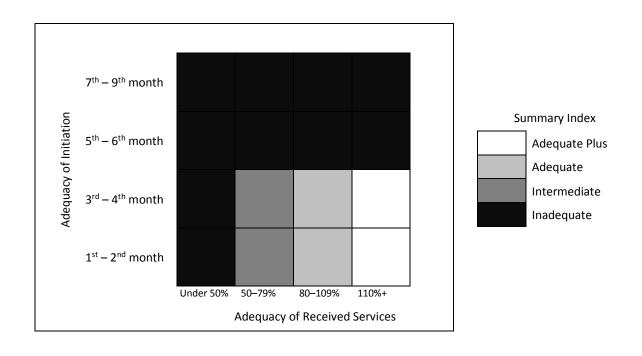
The Adequacy of Prenatal Care Utilization (APNCU) index makes use of two types of prenatal care information obtained from birth certificate data: when prenatal care began (adequacy of initiation) and the number of prenatal visits from when prenatal care began until delivery (adequacy of received services). The APNCU index classifies the adequacy of initiation under the assumption that prenatal care starting earlier is better during the following months of pregnancy: months 1-2, months 3-4, months 5-6, and months 7-9.

To classify the adequacy of received services, the number of prenatal visits is compared to the expected number of visits for the period between when care began and the delivery date. The expected number of visits is based on the American College of Obstetricians and Gynecologists prenatal

care standards for uncomplicated pregnancies and is adjusted for the gestational age when care began and for the gestational age at delivery. A ratio of observed to expected visits is calculated and grouped into four categories—Inadequate (received less than 50% of expected visits), Intermediate (50%–79%), Adequate (80%–109%), and Adequate Plus (110%). The final APNCU index measure combines these two dimensions into a single summary score (Figure 6).

While the APNCU index provides a reasonable starting point for evaluation of prenatal care, it also carries certain limitations. For example, the APNCU index does not measure the quality of a prenatal care visit, only the quantity of visits received. It is also dependent on how well the patient or provider recalls the date of initiation, and the number of visits. Furthermore, it may not be a good measure of adequacy of care for high-risk pregnancies due to the increased probability of services among atrisk patients.

Figure 6: Adequacy of Prenatal Care Utilization Index



^{1.} Kotelchuck M. An evaluation of the Kessner Adequacy of Prenatal Care Index and a proposed Adequacy of Prenatal Care Utilization Index. American Journal of Public Health, 1994;84:1414-1420.

APPENDIX D: POPULATION

Alaska Population

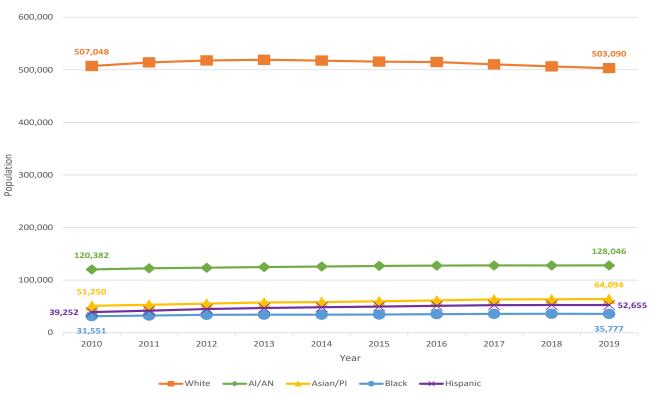
In 2019, Alaska's population was 731,007 persons, compared to 710,231 persons in 2010. Alaska's population by race was approximately 68.8 percent White (503,090 people), 17.5 percent American Indian/Alaska Native (128,046 people), 8.8 percent Asian/Pacific Islander (64,094 people), and 4.9 percent Black/African American (35,777 people) (Figure 7).¹ Alaska's population by Ethnicity was 7.2 percent Hispanic (52,655 people). This includes Hispanic peoples of any race and does not sum into the population totals by race.

Alaska's population included 376,257 males, and 354,750 females. There were approximately 106 males for every 100 females (Table 42). This is compared to approximately 97 males for every 100 females in the U.S. (Figure 8).

The Anchorage, Matanuska-Susitna, Interior, and Gulf Coast Public Health Regions contained 80.6 percent of Alaska's population (588,996 people), with 39.9 percent concentrated in Anchorage alone (291,845 people) (Table 43).

In 2019, children aged 0-14 years, made up 21.2 percent of Alaska's of Alaska's population (154,964 people). Teens, aged 15-19 years, made up 6.4 percent (46,961 people). Adults, aged 20-64 years, made up 59.9 percent (437,804 people). Seniors, aged 65 years and over made up 12.5 percent (91,278 people) (Table 44).

Figure 7: Population by Race and Ethnicity (2010-2019)



^{1.} Bridged race estimates.

Figure 8: Population Distribution by Age Group and Sex: Alaska and U.S.



^{1.)} United States Census Bureau, 2018 American Community Survey 1-Year Estimates. Accessed 10/01/2019

^{2.)} Alaska Department of Labor and Workforce Development, Research and Analysis Section, Demographics Unit.

Table 42: Population by Year, Race and Ethnicity, and Sex (2010-2019)

	Wh	nite	AI/	AN	Asia	n/PI	Bla	ck	Hisp	anic		All	
Year	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
2010	267,066	239,982	60,850	59,532	24,578	26,672	17,134	14,417	20,131	19,121	369,628	340,603	710,231
2011	270,189	243,651	61,815	60,653	25,545	27,725	17,808	14,876	21,653	20,361	375,357	346,905	722,262
2012	271,464	246,238	62,179	61,438	26,485	28,882	18,511	15,452	23,182	21,752	378,639	352,010	730,649
2013	271,541	247,508	62,851	62,112	27,354	30,145	18,838	15,728	24,365	22,618	380,584	355,493	736,077
2014	271,042	246,477	63,521	62,561	27,833	30,428	18,902	15,652	25,130	23,396	381,298	355,118	736,416
2015	270,218	245,297	64,132	62,992	28,466	31,209	18,973	15,702	25,818	23,983	381,789	355,200	736,989
2016	269,112	245,719	64,412	63,387	29,332	32,275	19,220	16,192	26,442	24,773	382,076	357,573	739,649
2017	266,090	244,266	64,317	63,693	30,057	33,485	19,367	16,508	27,084	25,396	379,831	357,952	737,783
2018	263,817	242,554	64,292	63,714	30,128	33,550	19,459	16,541	27,229	25,426	377,696	356,359	734,055
2019	262,217	240,873	64,323	63,723	30,307	33,787	19,410	16,367	27,229	25,426	376,257	354,750	731,007

Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

Table 43: Population by Region, Race and Ethnicity, and Sex (2019)

	Wh	ite	AI/	AN	Asia	n/PI	Bla	ick	Hisp	anic		All	
Region	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
Anchorage	101,303	95,879	14,525	16,244	18,931	21,983	12,040	10,940	13,739	13,518	146,799	145,046	291,845
Gulf Coast	34,161	31,111	4,820	4,627	2,419	2,670	620	438	2,144	1,967	42,020	38,846	80,866
Interior	44,850	39,638	7,116	7,127	2,116	2,574	3,519	2,907	4,392	3,959	57,601	52,246	109,847
Mat-Su	47,400	44,608	4,738	4,639	1,164	1,616	1,245	1,028	2,658	2,723	54,547	51,891	106,438
Northern	4,186	1,978	10,317	9,436	576	454	275	210	548	406	15,354	12,078	27,432
Southeast	26,177	25,010	7,271	7,114	2,548	2,867	827	559	2,331	2,097	36,823	35,550	72,373
Southwest	4,140	2,649	15,536	14,536	2,553	1,623	884	285	1,417	756	23,113	19,093	42,206
Total	262,217	240,873	64,323	63,723	30,307	33,787	19,410	16,367	27,229	25,426	376,257	354,750	731,007

Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.

Table 44: Population by Age Group, Race and Ethnicity, and Sex (2019)

	White		AI/AN		Asian/PI		Black		Hispanic		All		
Age	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
00-04	15,759	15,022	5,971	5,654	1,989	2,008	1,662	1,621	3,056	2,997	25,381	24,305	49,686
05-09	16,292	15,595	6,648	6,383	2,268	2,069	1,638	1,617	2,810	2,755	26,846	25,664	52,510
10-14	16,652	15,478	6,379	5,810	2,645	2,467	1,674	1,663	2,342	2,229	27,350	25,418	52,768
15-19	15,076	13,289	5,583	5,166	2,384	2,485	1,581	1,397	2,161	1,911	24,624	22,337	46,961
20-24	16,184	12,995	4,759	4,426	2,359	2,093	1,926	1,546	2,652	2,079	25,228	21,060	46,288
25-29	18,921	17,252	5,103	5,002	2,757	2,725	1,868	1,404	2,635	2,217	28,649	26,383	55,032
30-34	20,013	19,052	4,833	4,819	2,463	2,856	1,698	1,193	2,554	2,225	29,007	27,920	56,927
35-39	19,838	17,873	4,183	4,142	2,043	2,638	1,438	1,131	2,155	1,951	27,502	25,784	53,286
40-44	16,331	14,710	3,319	3,268	1,756	2,270	1,131	783	1,604	1,448	22,537	21,031	43,568
45-49	15,657	14,544	3,004	3,010	1,738	2,207	1,012	735	1,294	1,302	21,411	20,496	41,907
50-54	16,508	14,957	3,197	3,221	1,841	2,155	916	720	1,083	1,189	22,462	21,053	43,515
55-59	19,515	17,651	3,462	3,549	1,908	2,176	946	780	1,019	1,078	25,831	24,156	49,987
60-64	18,736	17,564	2,851	3,201	1,590	1,910	791	651	766	804	23,968	23,326	47,294
65-69	15,419	13,639	2,209	2,358	1,112	1,472	583	487	500	515	19,323	17,956	37,279
70-74	10,273	9,284	1,315	1,589	714	927	270	268	276	330	12,572	12,068	24,640
75-79	5,890	5,629	787	956	363	546	134	150	155	189	7,174	7,281	14,455
80-84	3,046	3,228	474	631	224	381	87	124	102	109	3,831	4,364	8,195
85+	2,107	3,111	246	538	153	402	55	97	65	98	2,561	4,148	6,709
All	262,217	240,873	64,323	63,723	30,307	33,787	19,410	16,367	27,229	25,426	376,257	354,750	731,007

Note: Hispanic ethnicity includes peoples of any race, and counts are not mutually exclusive with counts by race.