

Alaska Department of Health
Division of Public Health
Health Analytics and Vital Records



Michael Dunleavy, Governor State of Alaska

Heidi Hedberg, Commissioner Department of Health

Lindsey Kato, Director Division of Public Health

Updated October 17, 2024



Alaska Department of Health Division of Public Health Health Analytics and Vital Records

P.O. Box 110675, Juneau, AK 99811-0675 (907) 465-3391

www.vitalrecords.alaska.gov healthanalytics@alaska.gov

Table of Contents

laska Vital Statistics 2023 Annual Report	1
Table of Contents	3
Executive Summary	5
Birth	5
Death	5
Other Vital Events	5
Chapter 1: Introduction	6
About this Report	6
How Vital Statistics Are Collected	6
How Vital Statistics Are Processed	7
Population and Rate Estimates	7
Determination of Race and Ethnicity	7
Determination of Cause of Death	8
Chapter 2: Birth	10
Alaska Resident Births	10
Maternal Residence	11
Maternal Characteristics	12
Other Parent Characteristics	14
Pregnancy History and Prenatal Care Characteristics	16
Maternal Risk Factors	20
Delivery Characteristics	21
Infant Characteristics	24
Maternal and Infant Medical Characteristics	28
Birth and Fertility Rates	31
Teen Birth Rates	33
Chapter 3: Death	35
Alaska Resident Deaths	35
Decedent Residence	36
Decedent Characteristics	37
Death Characteristics	41
Leading Causes of Death	44
Leading Causes of Infant Death	48
Multiple Causes of Death	50
Death Rates	51
Malignant Neoplasms	53

Diseases of Heart	56
Accidents	59
Chronic Lower Respiratory Diseases	62
Intentional Self-Harm	65
Cerebrovascular Diseases	68
Chronic Liver Disease and Cirrhosis	70
Alzheimer Disease	73
Diabetes Mellitus	75
Nephritis, Nephrotic Syndrome And Nephrosis	77
Assault	79
Influenza and Pneumonia	82
COVID-19	84
Alcohol-Induced	87
Drug-Induced	90
Drug Poisoning	93
Firearm	94
Traumatic Brain Injury	97
Child and Adolescent Death Rates	100
Infant Death Rates	104
Fetal Death Rates	108
Years of Potential Life Lost	110
Life Expectancy	114
Chapter 4: Other Vital Events	116
Alaska Occurrence Marriages	116
Alaska Occurrence Separations	118
Alaska Occurrence Adoptions	120
Appendices	
Appendix A: Glossary	121
Appendix B: Technical Notes	124
Appendix C: Population	128
Appendix D: Race	130

Executive Summary

This page provides a high-level summary of key statistics from the 2023 Vital Statistics Annual Report. Detailed information about each type of vital event can be found in its respective chapter.

Birth

Births: 9,022 Birth Rate¹: 12.2 Fertility Rate²: 61.9

White: 55.0
Black: 45.1
Al/AN: 72.6
Asian/PI: 61.1
Multiple: 74.7
Hispanic: 65.5

Teen Births: 345 Teen Birth Rate³: 14.8

Top Baby Names (Count)

Boys: Oliver (51)Girls: Charlotte (36)

Avg. Mother: 29.2

Parent Ages

Oldest Mother: 56
Youngest Mother: 13
Avg. Other Parent: 31.6
Oldest Other Parent: 68
Youngest Other Parent: 14

Maternal/Infant Health Indicators

 Received WIC: 2,422 (27%)
 No Prenatal Care: 109 (1%)
 1st Trimester Prenatal Care: 6,397 (71%)
 Adequate Prenatal Care:

5,841 (65%)

Tobacco Use: 661 (7%)
Cesareans: 2,165 (24%)
Preterm (<37 Weeks)

Preterm (<37 Weeks): 928 (10%)

 Low Birth Weight (<2,500 g): 603 (7%)

Death

Deaths: 5,533 Death Rate⁴: 750.9

Age-Adjusted Death Rate⁵: 767.4

Men: 905.7

Women: 629.2
White: 663.0
Black: 611.8
AI/AN: 1,358.3
Asian/PI: 447.3
Multiple: 929.7
Hispanic: 512.7

Decedent Ages

Mean: 66Oldest: 107

Life Expectancy: 77.2

Leading Causes of Death

Malig. Neoplasms: 1,057
 Diseases Of Heart: 912

3. Accidents: 679

Chr. Low. Resp. Dis.: 248
 Intent. Self-Harm: 204
 Cerebrovascular Dis.: 202

7. Chr. Liver & Cirrhosis: 1918. Alzheimer Disease: 146

9. Diabetes Mellitus: 136

Nephritis, Nephrotic
 Syndrome & Nephrosis: 85

Infant Deaths (2021-2023): 199 3 Year Avg. Infant Death Rate⁶: 7.2

Fetal Deaths (2021-2023): 152 3 Year Avg. Fetal Death Rate⁷: 5.4

Other Vital Events

Marriages: 4,668 Marriage Rate⁸: 6.3

Separations: 2,290 Separation Rate⁹: 3.1

Adoptions: 651 Adoption Rate¹⁰: 0.9

Resident Population: 736,812

Men: 382,789 (52%)
Women: 354,023 (48%)
White: 472,964 (64%)
Black: 26,970 (4%)
Al/AN: 114,837 (16%)

Asian/PI: 62,395 (8%)Multiple: 59,646 (8%)Hispanic: 54,625 (7%)

¹ Births per 1,000 population.

² Births per 1,000 women ages 15-44 years

³ Births per 1,000 teen girls ages 14-19 years.

⁴ Deaths per 100,000 population.

⁵ Standardized by U.S. year 2000 standard population levels.

⁶ Three-year infant deaths per 1,000 live births.

⁷ Three-year fetal deaths per 1,000 live births and fetal deaths.

⁸ Marriages per 1,000 population.

⁹ Separations per 1,000 population.

¹⁰ Adoptions per 1,000 population.

Chapter 1: Introduction

About this Report

The Alaska Vital Statistics Annual Report is prepared by the Alaska Department of Health (DOH), Division of Public Health (DPH), Health Analytics and Vital Records Section (HAVRS). This report contains information about Alaska resident births, deaths, and fetal deaths, as well as Alaska occurrence marriages, divorces, and adoptions during calendar year 2023. Vital statistics data can be used to:

- Monitor trends in the number and rate of births, and the characteristics of parents and infants.
- Assess changes in maternal and infant health.
- Monitor trends in the number and rate of deaths, and the characteristics of decedents.
- Assess changes in the types of disease and injury that result in death.

How Vital Statistics Are Collected

Alaska Statute (AS) 18.50 requires the Alaska DOH to install, maintain, and operate a system of vital records. ¹¹ This system contains information collected from certificates of birth, death, fetal death and other vital events. Alaska uses the current (2003 revision) U.S. standard certificate forms for the collection of data on birth, death, and fetal death. ¹²

When a live birth occurs in Alaska, there is a legal process for registering the certificate of birth with the state. ¹³ Typically, a physician, midwife, or hospital medical records staff member enters the birth record information into the Alaska Electronic Vital Records System (EVRS) using information provided by the birth parents and birth attendant. Certificates of live birth should be filed with the state within five days of the birth.

For deaths, certificates are typically entered into EVRS by hospital or funeral home staff members and medical information is certified by the attending physician or medical examiner. ¹⁴ Certificates of death should be filed with the state within three days of the death.

For marriages, HAVRS and the Alaska Court System issue marriage licenses and HAVRS files a certificate for each marriage performed in the state. ¹⁵ The certificate should be filed with HAVRS within seven days of the marriage. Alaska began issuing marriage licenses to same-sex couples on October 13th, 2014.

For separations, a divorce, dissolution, or annulment certificate is prepared by a clerk of the court from information provided by the petitioner, plaintiff, and/or court documents. ¹⁶ At least once a month completed certificates are then forwarded to HAVRS for registration.

For adoptions, a report of adoption is prepared and registered with HAVRS when an Alaska-born individual's certificate of birth is requested to be changed following a legal adoption. ¹⁷ This includes Alaska or other US jurisdiction State Court approved adoptions, Alaska Native Tribal Court approved adoptions, as well as Cultural Adoptions (Alaska Native Village Council approved adoptions of Alaska Native children).

Alaska participates in the State and Territorial Exchange of Vital Events (STEVE) system. ¹⁸ STEVE is a cooperative arrangement between U.S. states, territories, and other participating jurisdictions to facilitate the exchange of vital records between health authorities. This ensures that births, deaths, or fetal deaths of Alaska residents that occur out-of-state are reported to Alaska's vital records system. Conversely, non-Alaska resident events occurring in-state are also forwarded to their respective jurisdiction's vital records system. Data are also transmitted to the National Center for Health Statistics

¹¹ Alaska Statute Title 18, Chapter 50. Vital Statistics Act.

¹² Centers for Disease Control and Prevention. 2003 Revisions of the U.S. Standard Certificates and Reports.

¹³ Alaska Statute Title 18, Chapter 50, Section 160. Birth Registration.

¹⁴ <u>Alaska Statute Title 18, Chapter 50, Section 230. Death</u> <u>Registration.</u>

¹⁵ <u>Alaska Statute Title 18, Chapter 50, Section 270. Marriage</u> Registration.

¹⁶ <u>Alaska Statute Title 18, Chapter 50, Section 280. Court</u> Reports of Divorce, Dissolution, and Annulment.

¹⁷ Alaska Statute Title 18, Chapter 50, Section 210. Court Reports of Adoption.

¹⁸ National Association for Public Health Statistics and Information Systems. State and Territorial Exchange of Vital Events.

(NCHS), a division of the U.S. Centers for Disease Control and Prevention (CDC), for medical and statistical coding and inclusion in national public health surveillance systems.¹⁹

Information on births, deaths, and fetal deaths presented in the Vital Statistics Annual Report are based on Alaska resident events only. This includes Alaska resident events that occurred out-of-state and excludes non-Alaska resident events that occurred in-state. Information on marriages and separations are based on Alaska occurrence events only. This includes non-Alaska resident events that occurred in-state and excludes Alaska resident events that occurred out-of-state. Information on adoptions is based on Alaska-born children only. Alaska-born children adopted by parents in another state who have not requested a change to the child's Alaska birth certificate, or non-Alaska-born children without an Alaska birth certificate adopted in Alaska are not reported. Reports before 2023 incorrectly stated that adoption statistics excluded non-Alaska state court adoptions. This has been corrected.

How Vital Statistics Are Processed

In 2013, HAVRS began implementing the EVRS as its new electronic vital records system for processing information from vital events. This replaced the previous database system (Lightspeed), and allows hospital and clinical staff, birth attendants, physicians, medical examiners, funeral home directors, and other qualified vital records personnel to enter information directly into the system. As information is entered, the system conducts automatic data integrity checks. Records with missing or invalid information are returned to the certifier for verification or correction. When the information has been finalized, records are filed with HAVRS, certified, and permanently archived.

Once all vital events from a calendar year have been entered into EVRS, and records have again been checked for accuracy and completeness, the Section's Research/Health Analytics Unit conducts the statistical analyses from which the tables, charts, and other information in this report are based. There are several ways to report data about vital events, including the numbers of events, percentages, rates, and various

other public health statistics. Technical notes on the statistics presented are provided in Appendix B.

Population and Rate Estimates

Population estimates used in the Vital Statistics Annual Report were obtained from the Alaska Department of Labor and Workforce Development, Division of Administrative Services, Research and Analysis Section, Demographics Unit. 20 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 C for more information on the population estimates used in this report.

Rates estimates, which represent the number of vital events (e.g., births, deaths, etc.) relative to the Alaska resident population are calculated for demographic characteristics such as sex, race, age, and region. Rates based on fewer than 20 events are considered statistically unreliable and should be used with caution. Rates based on fewer than 6 events are not reported. Tables with unreliable statistics are indicated by an asterisk suffix next to the value (*). Unreported statistics are indicated by a double asterisk (**).

Determination of Race and Ethnicity

The NCHS issues guidelines for determining the race of a child at birth. The child's race on the birth certificate is assumed to be 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. 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. The race of the deceased is based on the race reported on the death certificate, by the death informant (typically family or a friend of the decedent).

¹⁹ <u>Centers for Disease Control and Prevention. National Vital</u> Statistics System.

²⁰ <u>Alaska Department of Labor and Workforce Development,</u> Research and Analysis Section. Population Estimates.

Race data are collected using a multiple-choice field that allows up to 15 selections. This includes:

- 1. White
- 2. Black or African American
- 3. American Indian or Alaska Native
- 4. Asian Indian
- 5. Chinese
- 6. Filipino
- 7. Japanese
- 8. Korean
- 9. Vietnamese
- 10. Other Asian (Specify)
- 11. Native Hawaiian
- 12. Guamanian or Chamorro
- 13. Samoan
- 14. Other Pacific Islander (Specify)
- 15. Other (Specify)

Single-choice selections are collapsed into four race (alone) categories: White alone (White), Black or African American alone (Black), American Indian or Alaska Native alone (AI/AN), and any Asian, Native Hawaiian or Other Pacific Islander alone (Asian/PI). Records with more than one race selection are generally classified as multiple races (Multiple). Records where the Other (Specify) selection was made in combination with one of the four race alone categories above are classified as the race alone specified. Records where multiple Asian/PI selections were made are classified as Asian/PI alone. Other (Specify) alone and Unknown races are included in the statewide total. Rates for Other and Unknown races cannot be calculated.

Prior to 2021, Vital Statistics Annual Reports classified race using NCHS-provided "bridged" race categories, which redistributed multiple race records into a single race (alone or bridged) category to calculate population rate estimates and to allow for comparison between periods when race collection methods were revised. NCHS has discontinued reporting bridged race population estimates as of 2020 and bridged race coding of vital events as of 2021 and HAVRS can no longer reliably report data by bridged race categories. Data by race are therefore not comparable to Vital Statistics Annual Reports published prior to event year 2021. See Appendix D for additional information about

important differences between the race (alone) and race (bridged) classification methods.

Ethnicity data are collected using a multiple-choice field that allows up to 4 selections. This includes:

- 1. Mexican, Mexican American, Chicano
- 2. Puerto Rican
- 3. Cuban
- 4. Other Spanish/Hispanic/Latino (Specify)

Any Hispanic origin selection is collapsed into a single category for Hispanic (of any race). Ethnicity and race information are frequently reported together, but because these items are collected separately, persons identifying as Hispanic can also identify as any of the specified race categories (e.g., Hispanic White, Non-Hispanic White, etc.). Hispanic counts are therefore not mutually exclusive with race counts.

Determination of Cause of Death

For death certificates, a physician or medical examiner is responsible for completing the cause of death and providing a narrative description of the immediate cause, consequences, other significant conditions, and/or injuries involved. ²¹ These descriptions are provided to NCHS, who code the record based on the World Health Organization's International Classification of Diseases, 10th Revision (ICD-10) manual. ²²

An ICD-10 code for the "underlying" cause of death (defined 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) is then returned to HAVRS to query. In addition, up to 19 "contributing" cause codes (defined as all other causes in the train of morbid events resulting in death) are also provided.

Unless otherwise noted, causes of death reported in the Vital Statistics Annual Report are based on the underlying cause of death ICD-10 code. This allows the mutually exclusive tabulation of each death into a single cause category. Some causes of death, such as drug poisoning, COVID-19, or traumatic brain injuries are also explored in more detail using "multiple cause" of death analysis based on both the underlying and contributing cause codes. This allows a single death to be tabulated

²¹ Centers for Disease Control and Prevention. Instructions for Completing the Cause of Death Section of the Death Certificate.

World Health Organization. International Classification of Diseases 10th Revision Browser.

in multiple non-exclusive cause categories in order to explore common comorbidities or show all cause and cause related deaths, regardless of where in the sequence of events the cause occurred.

Chapter 2: Birth

Alaska Resident Births

In 2023, there were 9,022 Alaska resident births (99% of which occurred in Alaska). The number of births has decreased every year over the last five years, down from 9,832 in 2019.

Figure 1. Number of Births by Year

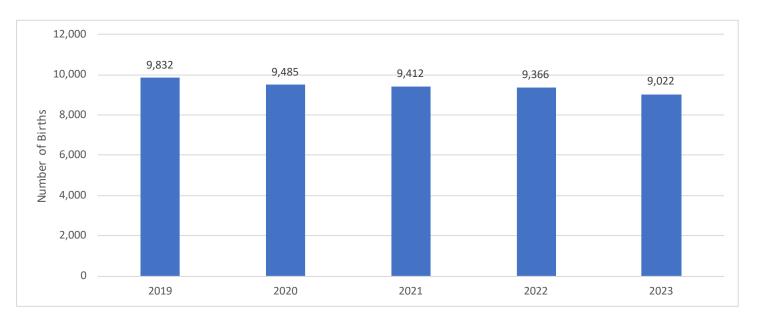


Table 1. Births (%) by State of Birth

Birth State	2019	2020	2021	2022	2023
Alaska	9,710 (99%)	9,377 (99%)	9,289 (99%)	9,257 (99%)	8,915 (99%)
Out-of-State	122 (1%)	108 (1%)	123 (1%)	109 (1%)	106 (1%)
Unknown	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Maternal Residence

In 2023, there were 3,511 Anchorage resident births (39% of births), the most of any county equivalent (Borough, Census Area, or Consolidated City-County) in the state. This was followed by 1,338 Matanuska-Susitna Borough resident births (15%), and 1,283 Fairbanks North Star Borough resident births (14%).

Table 2. Births (%) by Maternal Residence

Residence	2019	2020	2021	2022	2023
Anchorage	3,937 (40%)	3,763 (40%)	3,578 (38%)	3,634 (39%)	3,511 (39%)
Gulf Coast	926 (9%)	873 (9%)	919 (10%)	875 (9%)	876 (10%)
Chugach	80 (<1%)	66 (<1%)	88 (<1%)	69 (<1%)	76 (<1%)
Copper River	32 (<1%)	23 (<1%)	28 (<1%)	24 (<1%)	22 (<1%)
Kenai Peninsula	697 (7%)	620 (7%)	643 (7%)	629 (7%)	643 (7%)
Kodiak Island	117 (1%)	164 (2%)	160 (2%)	153 (2%)	135 (1%)
Interior	1,575 (16%)	1,529 (16%)	1,662 (18%)	1,580 (17%)	1,457 (16%)
Denali	21 (<1%)	15 (<1%)	23 (<1%)	19 (<1%)	15 (<1%)
Fairbanks North Star	1,382 (14%)	1,333 (14%)	1,485 (16%)	1,397 (15%)	1,283 (14%)
Southeast Fairbanks	95 (<1%)	108 (1%)	100 (1%)	105 (1%)	102 (1%)
Yukon-Koyukuk	77 (<1%)	73 (<1%)	54 (<1%)	59 (<1%)	57 (<1%)
Mat-Su	1,369 (14%)	1,341 (14%)	1,345 (14%)	1,415 (15%)	1,338 (15%)
Northern	470 (5%)	496 (5%)	457 (5%)	439 (5%)	426 (5%)
Nome	161 (2%)	200 (2%)	177 (2%)	172 (2%)	174 (2%)
North Slope	153 (2%)	141 (1%)	131 (1%)	128 (1%)	120 (1%)
Northwest Arctic	156 (2%)	155 (2%)	149 (2%)	139 (1%)	132 (1%)
Southeast	686 (7%)	665 (7%)	683 (7%)	630 (7%)	659 (7%)
Haines	22 (<1%)	18 (<1%)	18 (<1%)	27 (<1%)	14 (<1%)
Hoonah-Angoon	16 (<1%)	23 (<1%)	19 (<1%)	16 (<1%)	21 (<1%)
Juneau	321 (3%)	277 (3%)	296 (3%)	273 (3%)	303 (3%)
Ketchikan	116 (1%)	133 (1%)	128 (1%)	112 (1%)	131 (1%)
Petersburg	20 (<1%)	33 (<1%)	29 (<1%)	27 (<1%)	30 (<1%)
Prince Of Wales-Hyder	74 (<1%)	61 (<1%)	78 (<1%)	72 (<1%)	56 (<1%)
Sitka	83 (<1%)	87 (<1%)	80 (<1%)	71 (<1%)	81 (<1%)
Skagway	5 (<1%)	4 (<1%)	11 (<1%)	8 (<1%)	5 (<1%)
Wrangell	24 (<1%)	18 (<1%)	20 (<1%)	23 (<1%)	15 (<1%)
Yakutat	5 (<1%)	11 (<1%)	4 (<1%)	1 (<1%)	3 (<1%)
Southwest	867 (9%)	818 (9%)	768 (8%)	792 (8%)	752 (8%)
Aleutians East	9 (<1%)	17 (<1%)	8 (<1%)	19 (<1%)	11 (<1%)
Aleutians West	32 (<1%)	35 (<1%)	27 (<1%)	25 (<1%)	15 (<1%)
Bethel	450 (5%)	399 (4%)	403 (4%)	408 (4%)	403 (4%)
Bristol Bay	11 (<1%)	6 (<1%)	12 (<1%)	13 (<1%)	8 (<1%)
Dillingham	87 (<1%)	82 (<1%)	83 (<1%)	76 (<1%)	66 (<1%)
Kusilvak	256 (3%)	251 (3%)	222 (2%)	229 (2%)	229 (3%)
Lake And Peninsula	22 (<1%)	28 (<1%)	13 (<1%)	22 (<1%)	20 (<1%)
Unknown	2 (<1%)	0 (0%)	0 (0%)	1 (<1%)	3 (<1%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Maternal Characteristics

Maternal characteristics include data on the individual identified as the legal mother on the birth certificate. This includes non-birthing individuals in cases of surrogate or gestational carrier births.

In 2023, White and AI/AN women delivered 54% and 20% of births, respectively. Hispanic women delivered 9%. The mean mother age was 29.2 years old. The oldest mother was 56 and the youngest was 13. Women ages 30-34 years delivered the most births, at 29%, followed very closely by women ages 25-29, at 28%. Women with a high school diploma or GED delivered 33% of births while those with at least some college or a degree delivered 58%. Unmarried women delivered 37% of births.

Table 3. Births (%) by Mother Race

Mother Race	2019	2020	2021	2022	2023
White	5,407 (55%)	5,258 (55%)	5,243 (56%)	5,076 (54%)	4,904 (54%)
Black	326 (3%)	298 (3%)	281 (3%)	285 (3%)	248 (3%)
AI/AN	1,944 (20%)	1,850 (20%)	1,843 (20%)	1,813 (19%)	1,793 (20%)
Asian/PI	952 (10%)	894 (9%)	853 (9%)	929 (10%)	858 (10%)
Other	46 (<1%)	38 (<1%)	38 (<1%)	60 (<1%)	61 (<1%)
Multiple	1,025 (10%)	1,027 (11%)	998 (11%)	1,008 (11%)	976 (11%)
Unknown	132 (1%)	120 (1%)	156 (2%)	195 (2%)	182 (2%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 4. Births (%) by Mother Ethnicity

Mother Ethnicity	2019	2020	2021	2022	2023
Hispanic	786 (8%)	734 (8%)	800 (8%)	793 (8%)	792 (9%)
Non-Hispanic	8,877 (90%)	8,666 (91%)	8,401 (89%)	8,454 (90%)	7,977 (88%)
Unknown	169 (2%)	85 (<1%)	211 (2%)	119 (1%)	253 (3%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 5. Mother Age Summary

Mother Age Summary	2019	2020	2021	2022	2023
Mean Age	28.7	28.8	28.9	29	29.2
Median Age	29	29	29	29	29
Mode Age	27	28	30	30	28
Oldest Age	52	52	48	50	56
Youngest Age	14	13	14	14	13

Table 6. Births (%) by Mother Age²³

Mother Age	2019	2020	2021	2022	2023
15-19 Years	394 (4%)	379 (4%)	383 (4%)	358 (4%)	345 (4%)
20-24 Years	2,054 (21%)	1,957 (21%)	1,946 (21%)	1,917 (20%)	1,782 (20%)
25-29 Years	3,087 (31%)	2,903 (31%)	2,758 (29%)	2,683 (29%)	2,566 (28%)
30-34 Years	2,629 (27%)	2,632 (28%)	2,627 (28%)	2,685 (29%)	2,582 (29%)
35-39 Years	1,356 (14%)	1,327 (14%)	1,387 (15%)	1,406 (15%)	1,430 (16%)
40-44 Years	288 (3%)	266 (3%)	294 (3%)	299 (3%)	290 (3%)
Other Ages	22 (<1%)	19 (<1%)	17 (<1%)	18 (<1%)	26 (<1%)
Unknown	2 (<1%)	2 (<1%)	0 (0%)	0 (0%)	1 (<1%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 7. Births (%) by Mother Education

Mother Education	2019	2020	2021	2022	2023
<h.s. ged<="" or="" td=""><td>899 (9%)</td><td>791 (8%)</td><td>783 (8%)</td><td>769 (8%)</td><td>696 (8%)</td></h.s.>	899 (9%)	791 (8%)	783 (8%)	769 (8%)	696 (8%)
<=8th Grade	69 (<1%)	53 (<1%)	62 (<1%)	48 (<1%)	39 (<1%)
Some H.S.	830 (8%)	738 (8%)	721 (8%)	721 (8%)	657 (7%)
H.S. Or GED	3,004 (31%)	2,999 (32%)	2,867 (30%)	3,032 (32%)	2,978 (33%)
>H.S. Or GED	5,760 (59%)	5,540 (58%)	5,595 (59%)	5,417 (58%)	5,198 (58%)
Some College	2,452 (25%)	2,303 (24%)	2,265 (24%)	2,161 (23%)	2,048 (23%)
Associate Degree	776 (8%)	814 (9%)	755 (8%)	695 (7%)	706 (8%)
Bachelor's Degree	1,674 (17%)	1,581 (17%)	1,700 (18%)	1,690 (18%)	1,633 (18%)
Master's Degree	637 (6%)	612 (6%)	656 (7%)	643 (7%)	625 (7%)
Doctorate Degree	221 (2%)	230 (2%)	219 (2%)	228 (2%)	186 (2%)
Unknown	169 (2%)	155 (2%)	167 (2%)	148 (2%)	150 (2%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 8. Births (%) by Mother Marital Status

Mother Marital Status	2019	2020	2021	2022	2023
Married	6,252 (64%)	6,005 (63%)	5,969 (63%)	5,900 (63%)	5,693 (63%)
Unmarried	3,519 (36%)	3,438 (36%)	3,406 (36%)	3,427 (37%)	3,309 (37%)
Unknown	61 (<1%)	42 (<1%)	37 (<1%)	39 (<1%)	20 (<1%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

_

²³ Other category includes people ages <14 and 45+ years, outside of common reproductive range.

Other Parent Characteristics

Other parent characteristics includes data on the person married to the mother at the time of birth or the parent with an approved affidavit establishing legal parentage. This includes fathers or another parent in the case of same-sex or nonbinary couples.²⁴

In 2023, White and AI/AN parents made up 54% and 12% of births, respectively. Hispanic parents made up 8%. The mean parent age was 31.6 years old. The oldest parent was 68 and the youngest was 14. Parents ages 30-34 years made up the most births, at 25%. Parents with a high school diploma or GED made up 34% of births while those with at least some college or a degree made up 48%.

Table 9. Births (%) by Other Parent Race

Other Parent Race	2019	2020	2021	2022	2023
White	5,337 (54%)	5,083 (54%)	5,243 (56%)	5,061 (54%)	4,910 (54%)
Black	446 (5%)	444 (5%)	387 (4%)	420 (4%)	393 (4%)
AI/AN	1,203 (12%)	1,144 (12%)	1,132 (12%)	1,142 (12%)	1,126 (12%)
Asian/PI	793 (8%)	751 (8%)	704 (7%)	771 (8%)	723 (8%)
Other	54 (<1%)	49 (<1%)	58 (<1%)	49 (<1%)	52 (<1%)
Multiple	754 (8%)	795 (8%)	729 (8%)	759 (8%)	697 (8%)
Unknown	1,245 (13%)	1,219 (13%)	1,159 (12%)	1,164 (12%)	1,121 (12%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 10. Births (%) by Other Parent Ethnicity

Other Parent Ethnicity	2019	2020	2021	2022	2023
Hispanic	713 (7%)	653 (7%)	694 (7%)	747 (8%)	702 (8%)
Non-Hispanic	7,737 (79%)	7,509 (79%)	7,297 (78%)	7,271 (78%)	7,008 (78%)
Unknown	1,382 (14%)	1,323 (14%)	1,421 (15%)	1,348 (14%)	1,312 (15%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 11. Other Parent Age Summary

Other Parent Age Summary	2019	2020	2021	2022	2023
Mean Age	31.4	31.5	31.5	31.5	31.6
Median Age	31	31	31	31	31
Mode Age	30	29	31	31	30
Oldest Age	70	64	71	75	68
Youngest Age	13	15	15	14	14

²⁴ Alaska Statute Title 18, Chapter 50, Section 160. Birth Registration.

Table 12. Births (%) by Other Parent Age²⁵

Other Parent Age	2019	2020	2021	2022	2023
15-19 Years	152 (2%)	142 (1%)	135 (1%)	141 (2%)	132 (1%)
20-24 Years	1,288 (13%)	1,220 (13%)	1,220 (13%)	1,255 (13%)	1,136 (13%)
25-29 Years	2,428 (25%)	2,293 (24%)	2,186 (23%)	2,161 (23%)	2,059 (23%)
30-34 Years	2,535 (26%)	2,401 (25%)	2,401 (26%)	2,464 (26%)	2,288 (25%)
35-39 Years	1,642 (17%)	1,638 (17%)	1,680 (18%)	1,549 (17%)	1,602 (18%)
40-44 Years	651 (7%)	644 (7%)	648 (7%)	676 (7%)	663 (7%)
Other Ages	382 (4%)	363 (4%)	356 (4%)	349 (4%)	324 (4%)
Unknown	754 (8%)	784 (8%)	786 (8%)	771 (8%)	818 (9%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 13. Births (%) by Other Parent Education

Other Parent Education	2019	2020	2021	2022	2023
<h.s. ged<="" or="" td=""><td>584 (6%)</td><td>503 (5%)</td><td>499 (5%)</td><td>539 (6%)</td><td>501 (6%)</td></h.s.>	584 (6%)	503 (5%)	499 (5%)	539 (6%)	501 (6%)
<=8th Grade	74 (<1%)	57 (<1%)	49 (<1%)	40 (<1%)	42 (<1%)
Some H.S.	510 (5%)	446 (5%)	450 (5%)	499 (5%)	459 (5%)
H.S. Or GED	3,093 (31%)	2,995 (32%)	2,984 (32%)	3,009 (32%)	3,029 (34%)
>H.S. Or GED	4,847 (49%)	4,693 (49%)	4,711 (50%)	4,621 (49%)	4,361 (48%)
Some College	2,266 (23%)	2,200 (23%)	2,111 (22%)	2,116 (23%)	1,958 (22%)
Associate Degree	702 (7%)	695 (7%)	662 (7%)	647 (7%)	638 (7%)
Bachelor's Degree	1,254 (13%)	1,259 (13%)	1,345 (14%)	1,309 (14%)	1,254 (14%)
Master's Degree	410 (4%)	356 (4%)	412 (4%)	377 (4%)	356 (4%)
Doctorate Degree	215 (2%)	183 (2%)	181 (2%)	172 (2%)	155 (2%)
Unknown	1,308 (13%)	1,294 (14%)	1,218 (13%)	1,197 (13%)	1,131 (13%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

²⁵ Other category includes people ages <14 and 45+ years, outside of common reproductive range.

Pregnancy History and Prenatal Care Characteristics

In 2023, 3,168 births were the woman's first live delivery (35%). Most first-time mothers were 20-24 years old (31%). Mothers with at least one prior other non-live birth pregnancy outcome, including spontaneous or induced losses or ectopic pregnancies, made up 38% of births. The U.S. Special Supplemental Nutrition Assistance Program for Women, Infants, and Children (WIC) provided food assistance for 27% of births. ²⁶

It is very important for women to receive health care before and during pregnancy to decrease the risk of pregnancy complications.²⁷ There were 109 births where the mother reported receiving no prenatal care (PNC). Of births with at least one PNC visit, 71% started PNC in the first trimester.²⁸ First trimester PNC was lowest among AI/AN women (61%), women ages 15-19 years (47%), and residents of the Southwest region (49%).

The adequacy of PNC mothers receive is estimated using the Kotelchuck Adequacy of Prenatal Care Utilization index (see Appendix B for a complete definition). Mothers who received adequate (or higher) PNC made up 65% of births. Adequate PNC was lowest among AI/AN women (53%), women ages 15-19 years (43%), and residents of the Southwest region (39%).

Table 14. Births (%) by Prior Live Births

Prior Live Births	2019	2020	2021	2022	2023
0	3,386 (34%)	3,313 (35%)	3,329 (35%)	3,374 (36%)	3,168 (35%)
1	2,895 (29%)	2,699 (28%)	2,610 (28%)	2,628 (28%)	2,461 (27%)
2	1,652 (17%)	1,608 (17%)	1,593 (17%)	1,577 (17%)	1,443 (16%)
3	865 (9%)	853 (9%)	829 (9%)	813 (9%)	765 (8%)
4	432 (4%)	410 (4%)	401 (4%)	414 (4%)	386 (4%)
5+	486 (5%)	527 (6%)	466 (5%)	467 (5%)	468 (5%)
Unknown	116 (1%)	75 (<1%)	184 (2%)	93 (<1%)	331 (4%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 15. First Time Live Births (%) by Mother Age²⁹

Mother Age	2019	2020	2021	2022	2023
15-19 Years	334 (10%)	330 (10%)	326 (10%)	314 (9%)	290 (9%)
20-24 Years	1,114 (33%)	1,036 (31%)	1,054 (32%)	1,090 (32%)	979 (31%)
25-29 Years	950 (28%)	982 (30%)	923 (28%)	931 (28%)	880 (28%)
30-34 Years	656 (19%)	662 (20%)	695 (21%)	691 (20%)	682 (22%)
35-39 Years	276 (8%)	253 (8%)	280 (8%)	292 (9%)	274 (9%)
40-44 Years	50 (1%)	44 (1%)	46 (1%)	49 (1%)	55 (2%)
Other Ages	5 (<1%)	6 (<1%)	5 (<1%)	7 (<1%)	8 (<1%)
Unknown	1 (<1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	3,386 (100%)	3,313 (100%)	3,329 (100%)	3,374 (100%)	3,168 (100%)

²⁶ To apply for WIC assistance please visit the Alaska Division of Public Assistance, Supplement Nutrition Assistance Program.

²⁷ Centers for Disease Control and Prevention, Pregnancy Complications.

²⁸ The trimester of pregnancy in which PNC began is calculated from the date of the mother's first PNC visit and the date of last menses. Last menses date is calculated from the child's date of birth and the obstetric estimate of gestion.

²⁹ Other category includes people ages <14 and 45+ years, outside of common reproductive range.

Table 16. Births (%) by Prior Other Outcomes³⁰

Prior Other Outcomes	2019	2020	2021	2022	2023
0	6,204 (63%)	6,053 (64%)	5,883 (63%)	5,917 (63%)	5,605 (62%)
1	2,130 (22%)	1,974 (21%)	2,031 (22%)	2,041 (22%)	1,932 (21%)
2	792 (8%)	757 (8%)	825 (9%)	809 (9%)	772 (9%)
3	339 (3%)	353 (4%)	299 (3%)	285 (3%)	320 (4%)
4	140 (1%)	145 (2%)	121 (1%)	114 (1%)	135 (1%)
5+	145 (1%)	135 (1%)	123 (1%)	131 (1%)	121 (1%)
Unknown	82 (<1%)	68 (<1%)	130 (1%)	69 (<1%)	137 (2%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 17. Births (%) by WIC

WIC	2019	2020	2021	2022	2023
Yes	3,099 (32%)	2,644 (28%)	2,443 (26%)	2,375 (25%)	2,422 (27%)
No	6,524 (66%)	6,673 (70%)	6,781 (72%)	6,816 (73%)	6,438 (71%)
Unknown	209 (2%)	168 (2%)	188 (2%)	175 (2%)	162 (2%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 18. Births (%) by Prenatal Care Visits

Prenatal Care Visits	2019	2020	2021	2022	2023
No Prenatal Care	95 (<1%)	106 (1%)	96 (1%)	130 (1%)	109 (1%)
1-2	147 (1%)	144 (2%)	171 (2%)	205 (2%)	154 (2%)
3-4	400 (4%)	399 (4%)	402 (4%)	430 (5%)	387 (4%)
5-6	664 (7%)	746 (8%)	763 (8%)	822 (9%)	752 (8%)
7-8	1,211 (12%)	1,310 (14%)	1,270 (13%)	1,336 (14%)	1,208 (13%)
9-10	1,965 (20%)	1,961 (21%)	1,882 (20%)	2,001 (21%)	1,961 (22%)
11-12	1,989 (20%)	1,932 (20%)	1,962 (21%)	1,956 (21%)	1,972 (22%)
13-14	1,392 (14%)	1,253 (13%)	1,301 (14%)	1,260 (13%)	1,258 (14%)
15-16	740 (8%)	617 (7%)	631 (7%)	589 (6%)	567 (6%)
17-18	350 (4%)	322 (3%)	322 (3%)	242 (3%)	240 (3%)
19+	473 (5%)	403 (4%)	362 (4%)	224 (2%)	211 (2%)
Unknown	406 (4%)	292 (3%)	250 (3%)	171 (2%)	203 (2%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

³⁰ Prior other non-live birth pregnancy outcome, including spontaneous or induced losses or ectopic pregnancies.

Table 19. Births (%) by Trimester Prenatal Care Began

Trimester PNC Began	2019	2020	2021	2022	2023
No Prenatal Care	95 (<1%)	106 (1%)	96 (1%)	130 (1%)	109 (1%)
1st Trimester	7,040 (72%)	6,838 (72%)	6,776 (72%)	6,720 (72%)	6,397 (71%)
2nd Trimester	1,867 (19%)	1,828 (19%)	1,803 (19%)	1,797 (19%)	1,811 (20%)
3rd Trimester	500 (5%)	490 (5%)	542 (6%)	592 (6%)	529 (6%)
Unknown	330 (3%)	223 (2%)	195 (2%)	127 (1%)	176 (2%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 20. 1st Trimester Prenatal Care Births (Rate) by Demographic Characteristics³¹

Demographic	Characteristic	2019	2020	2021	2022	2023
Infant Sex	Male	3,606 (70%)	3,410 (71%)	3,493 (71%)	3,394 (71%)	3,321 (71%)
	Female	3,434 (73%)	3,428 (73%)	3,283 (73%)	3,326 (72%)	3,076 (71%)
Race	White	4,092 (76%)	4,011 (76%)	3,948 (75%)	3,858 (76%)	3,727 (76%)
	Black	221 (68%)	209 (70%)	191 (68%)	198 (69%)	169 (68%)
	AI/AN	1,297 (67%)	1,181 (64%)	1,206 (65%)	1,137 (63%)	1,090 (61%)
	Asian/PI	540 (57%)	560 (63%)	538 (63%)	623 (67%)	528 (62%)
	Multiple	779 (76%)	764 (74%)	775 (78%)	733 (73%)	718 (74%)
	Hispanic	558 (71%)	547 (75%)	576 (72%)	576 (73%)	596 (75%)
Age	15-19 Years	219 (56%)	219 (58%)	207 (54%)	193 (54%)	163 (47%)
	20-24 Years	1,377 (67%)	1,318 (67%)	1,358 (70%)	1,311 (68%)	1,220 (68%)
	25-29 Years	2,246 (73%)	2,137 (74%)	1,990 (72%)	1,970 (73%)	1,850 (72%)
	30-34 Years	1,980 (75%)	1,977 (75%)	1,990 (76%)	1,993 (74%)	1,910 (74%)
	35-39 Years	1,005 (74%)	979 (74%)	1,022 (74%)	1,026 (73%)	1,045 (73%)
	40-44 Years	197 (68%)	196 (74%)	200 (68%)	218 (73%)	195 (67%)
Residence	Anchorage	2,846 (72%)	2,802 (74%)	2,661 (74%)	2,742 (75%)	2,609 (74%)
	Gulf Coast	666 (72%)	618 (71%)	626 (68%)	623 (71%)	605 (69%)
	Interior	1,170 (74%)	1,122 (73%)	1,135 (68%)	1,058 (67%)	1,045 (72%)
	Mat-Su	969 (71%)	985 (73%)	1,024 (76%)	1,073 (76%)	946 (71%)
	Northern	324 (69%)	347 (70%)	316 (69%)	283 (64%)	290 (68%)
	Southeast	536 (78%)	544 (82%)	579 (85%)	514 (82%)	531 (81%)
	Southwest	529 (61%)	420 (51%)	435 (57%)	427 (54%)	369 (49%)
Statewide	Total	7,040 (72%)	6,838 (72%)	6,776 (72%)	6,720 (72%)	6,397 (71%)

 $^{^{31}}$ 1st trimester prenatal care rates are events per 100 births.

Table 21. Births (%) by Adequacy of Prenatal Care

Adequacy of PNC	2019	2020	2021	2022	2023
No Prenatal Care	95 (<1%)	106 (1%)	96 (1%)	130 (1%)	109 (1%)
Inadequate	1,524 (16%)	1,571 (17%)	1,634 (17%)	1,661 (18%)	1,564 (17%)
Intermediate	1,321 (13%)	1,419 (15%)	1,335 (14%)	1,382 (15%)	1,263 (14%)
Adequate or Higher	6,433 (65%)	6,043 (64%)	6,056 (64%)	5,983 (64%)	5,841 (65%)
Adequate	3,471 (35%)	3,343 (35%)	3,388 (36%)	3,485 (37%)	3,439 (38%)
Adequate Plus	2,962 (30%)	2,700 (28%)	2,668 (28%)	2,498 (27%)	2,402 (27%)
Unknown	459 (5%)	346 (4%)	291 (3%)	210 (2%)	245 (3%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 22. Adequate or Higher Prenatal Care Births (Rate) by Demographic Characteristics³²

Demographic	Characteristic	2019	2020	2021	2022	2023
Infant Sex	Male	3,341 (65%)	3,024 (63%)	3,093 (63%)	3,004 (63%)	3,025 (64%)
	Female	3,092 (66%)	3,019 (65%)	2,963 (65%)	2,979 (65%)	2,816 (65%)
Race	White	3,767 (70%)	3,535 (67%)	3,611 (69%)	3,481 (69%)	3,448 (70%)
	Black	189 (58%)	176 (59%)	163 (58%)	184 (65%)	159 (64%)
	AI/AN	1,153 (59%)	1,032 (56%)	1,015 (55%)	966 (53%)	949 (53%)
	Asian/PI	474 (50%)	495 (55%)	476 (56%)	538 (58%)	487 (57%)
	Multiple	758 (74%)	708 (69%)	690 (69%)	680 (67%)	652 (67%)
	Hispanic	489 (62%)	483 (66%)	500 (63%)	492 (62%)	520 (66%)
Age	15-19 Years	205 (52%)	196 (52%)	182 (48%)	188 (53%)	148 (43%)
	20-24 Years	1,293 (63%)	1,139 (58%)	1,191 (61%)	1,169 (61%)	1,105 (62%)
	25-29 Years	1,993 (65%)	1,853 (64%)	1,790 (65%)	1,718 (64%)	1,702 (66%)
	30-34 Years	1,778 (68%)	1,739 (66%)	1,757 (67%)	1,757 (65%)	1,738 (67%)
	35-39 Years	956 (71%)	917 (69%)	942 (68%)	928 (66%)	946 (66%)
	40-44 Years	191 (66%)	186 (70%)	185 (63%)	214 (72%)	190 (66%)
Residence	Anchorage	2,600 (66%)	2,461 (65%)	2,266 (63%)	2,313 (64%)	2,321 (66%)
	Gulf Coast	620 (67%)	539 (62%)	579 (63%)	601 (69%)	567 (65%)
	Interior	1,074 (68%)	951 (62%)	1,096 (66%)	978 (62%)	973 (67%)
	Mat-Su	954 (70%)	958 (71%)	1,013 (75%)	1,056 (75%)	964 (72%)
	Northern	299 (64%)	292 (59%)	287 (63%)	239 (54%)	237 (56%)
	Southeast	482 (70%)	512 (77%)	517 (76%)	481 (76%)	484 (73%)
	Southwest	404 (47%)	330 (40%)	298 (39%)	315 (40%)	293 (39%)
Statewide	Total	6,433 (65%)	6,043 (64%)	6,056 (64%)	5,983 (64%)	5,841 (65%)

³² Adequate or higher prenatal care rates are events per 100 births.

Maternal Risk Factors

In 2023, 661 mothers reported using tobacco at some point during pregnancy (7%). Tobacco use is a known risk factor associated with preterm and low birth weight births, birth defects, and increased risk of Sudden Infant Death Syndrome.³³ Tobacco use was most common in AI/AN mothers (21%), mothers ages 15-19 years, 30-34 years, 35-39 years, and 40-44 years (8%) and mothers residing in the Northern region (28%).³⁴

Table 23. Births (%) by Maternal Tobacco Use

Maternal Tobacco Use	2019	2020	2021	2022	2023
Yes	1,080 (11%)	1,011 (11%)	845 (9%)	757 (8%)	661 (7%)
No	8,648 (88%)	8,383 (88%)	8,462 (90%)	8,538 (91%)	8,290 (92%)
Unknown	104 (1%)	91 (<1%)	105 (1%)	71 (<1%)	71 (<1%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 24. Maternal Tobacco Use Births (Rate) by Demographic Characteristics³⁵

Demographic	Characteristic	2019	2020	2021	2022	2023
Infant Sex	Male	578 (11%)	520 (11%)	459 (9%)	386 (8%)	346 (7%)
	Female	502 (11%)	491 (11%)	386 (9%)	371 (8%)	315 (7%)
Race	White	355 (7%)	296 (6%)	244 (5%)	202 (4%)	154 (3%)
	Black	13 (4%)	11 (4%)	6 (2%)	6 (2%)	9 (4%)
	AI/AN	516 (27%)	501 (27%)	423 (23%)	397 (22%)	370 (21%)
	Asian/PI	39 (4%)	38 (4%)	33 (4%)	19 (2%)	25 (3%)
	Multiple	146 (14%)	156 (15%)	135 (14%)	129 (13%)	99 (10%)
	Hispanic	39 (5%)	26 (4%)	36 (5%)	29 (4%)	30 (4%)
Age	15-19 Years	54 (14%)	47 (12%)	43 (11%)	33 (9%)	27 (8%)
	20-24 Years	234 (11%)	224 (11%)	145 (7%)	154 (8%)	126 (7%)
	25-29 Years	367 (12%)	292 (10%)	258 (9%)	219 (8%)	167 (7%)
	30-34 Years	274 (10%)	293 (11%)	244 (9%)	211 (8%)	198 (8%)
	35-39 Years	128 (9%)	126 (9%)	121 (9%)	114 (8%)	120 (8%)
	40-44 Years	21 (7%)	28 (11%)	34 (12%)	26 (9%)	22 (8%)
Residence	Anchorage	269 (7%)	273 (7%)	234 (7%)	198 (5%)	170 (5%)
	Gulf Coast	108 (12%)	62 (7%)	65 (7%)	55 (6%)	38 (4%)
	Interior	139 (9%)	113 (7%)	83 (5%)	82 (5%)	65 (4%)
	Mat-Su	141 (10%)	138 (10%)	108 (8%)	102 (7%)	79 (6%)
	Northern	173 (37%)	177 (36%)	159 (35%)	136 (31%)	120 (28%)
	Southeast	67 (10%)	70 (11%)	53 (8%)	51 (8%)	51 (8%)
	Southwest	182 (21%)	178 (22%)	143 (19%)	132 (17%)	137 (18%)
Statewide	Total	1,080 (11%)	1,011 (11%)	845 (9%)	757 (8%)	661 (7%)

³³ Centers for Disease Control and Prevention. Substance Use During Pregnancy.

-

³⁴ Alaska's Tobacco Quit Line offers proven quit strategies like counseling and nicotine replacement therapy to people interested in quitting tobacco use. Visit the <u>Alaska Quitline</u> or call 1-800-QUIT NOW for more information.

³⁵ Maternal tobacco use rates are events per 100 births.

Delivery Characteristics

In 2023, June and September were the most common birth months, tied with 779 births each. February was the least common birth month, with 682 births. Most births occurred in a hospital (92%). Medical doctors were the most common birth attendant, present at 58% of deliveries. This was followed by certified nurse midwives, present at 28%. Medicaid was the most common payment source for births (36%), followed by private insurance (34%).

Most deliveries occurred via a head-first cephalic (vertex, occiput anterior, or occiput posterior) fetal presentation (94%), which is ideal for delivery. Cesarean (C-Section) births made up 24% of deliveries. Cesarean births were most common in Black women (37%), women ages 40-44 years (39%), and residents of the Southeast region (32%).

Table 25. Births (%) by Month

Month	2019	2020	2021	2022	2023
January	774 (8%)	821 (9%)	746 (8%)	736 (8%)	758 (8%)
February	759 (8%)	717 (8%)	663 (7%)	721 (8%)	682 (8%)
March	881 (9%)	777 (8%)	801 (9%)	834 (9%)	759 (8%)
April	836 (9%)	759 (8%)	818 (9%)	779 (8%)	712 (8%)
May	827 (8%)	833 (9%)	861 (9%)	792 (8%)	768 (9%)
June	809 (8%)	811 (9%)	811 (9%)	816 (9%)	779 (9%)
July	919 (9%)	778 (8%)	862 (9%)	811 (9%)	772 (9%)
August	852 (9%)	784 (8%)	820 (9%)	827 (9%)	740 (8%)
September	874 (9%)	821 (9%)	833 (9%)	800 (9%)	779 (9%)
October	804 (8%)	806 (8%)	742 (8%)	768 (8%)	754 (8%)
November	711 (7%)	770 (8%)	704 (7%)	726 (8%)	770 (9%)
December	786 (8%)	808 (9%)	751 (8%)	756 (8%)	749 (8%)
Unknown	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 26. Births (%) by Place of Birth

Place of Birth	2019	2020	2021	2022	2023
Hospital	9,150 (93%)	8,793 (93%)	8,726 (93%)	8,612 (92%)	8,259 (92%)
Birthing Center	460 (5%)	450 (5%)	426 (5%)	468 (5%)	450 (5%)
Home	201 (2%)	219 (2%)	244 (3%)	254 (3%)	281 (3%)
Planned	177 (2%)	195 (2%)	212 (2%)	234 (2%)	265 (3%)
Unplanned	16 (<1%)	11 (<1%)	11 (<1%)	12 (<1%)	7 (<1%)
Unknown if Planned	8 (<1%)	13 (<1%)	21 (<1%)	8 (<1%)	9 (<1%)
Clinic/Dr. Office	17 (<1%)	15 (<1%)	11 (<1%)	24 (<1%)	22 (<1%)
Other	4 (<1%)	5 (<1%)	3 (<1%)	7 (<1%)	6 (<1%)
Unknown	0 (0%)	3 (<1%)	2 (<1%)	1 (<1%)	4 (<1%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 27. Births (%) by Attendant

Attendant	2019	2020	2021	2022	2023
Doctor	6,493 (66%)	6,289 (66%)	6,338 (67%)	6,164 (66%)	5,800 (64%)
Medical Doctor	5,815 (59%)	5,740 (61%)	5,914 (63%)	5,706 (61%)	5,271 (58%)
Dr. of Osteopathy	678 (7%)	549 (6%)	424 (5%)	458 (5%)	529 (6%)
Midwife	3,266 (33%)	3,131 (33%)	3,007 (32%)	3,130 (33%)	3,143 (35%)
Cert. Nurse Midwife	2,744 (28%)	2,634 (28%)	2,531 (27%)	2,563 (27%)	2,483 (28%)
Other Midwife	522 (5%)	497 (5%)	476 (5%)	567 (6%)	660 (7%)
Other	69 (<1%)	63 (<1%)	64 (<1%)	71 (<1%)	76 (<1%)
Unknown	4 (<1%)	2 (<1%)	3 (<1%)	1 (<1%)	3 (<1%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 28. Births (%) by Payment Source

Payment Source	2019	2020	2021	2022	2023
Medicaid	3,761 (38%)	3,677 (39%)	3,586 (38%)	3,575 (38%)	3,233 (36%)
Private Insurance	3,479 (35%)	3,274 (35%)	3,366 (36%)	3,197 (34%)	3,089 (34%)
Self-Pay	352 (4%)	242 (3%)	240 (3%)	291 (3%)	337 (4%)
Indian Health Service	489 (5%)	509 (5%)	410 (4%)	452 (5%)	593 (7%)
CHAMPUS/Tricare	1,481 (15%)	1,448 (15%)	1,472 (16%)	1,469 (16%)	1,355 (15%)
Other Government	131 (1%)	178 (2%)	158 (2%)	230 (2%)	212 (2%)
Other	18 (<1%)	15 (<1%)	34 (<1%)	25 (<1%)	27 (<1%)
Unknown	121 (1%)	142 (1%)	146 (2%)	127 (1%)	176 (2%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 29. Births (%) by Fetal Presentation

Fetal Presentation	2019	2020	2021	2022	2023
Cephalic	9,317 (95%)	8,984 (95%)	8,804 (94%)	8,790 (94%)	8,510 (94%)
Breech	406 (4%)	409 (4%)	427 (5%)	430 (5%)	397 (4%)
Other	102 (1%)	80 (<1%)	140 (1%)	139 (1%)	111 (1%)
Unknown	7 (<1%)	12 (<1%)	41 (<1%)	7 (<1%)	4 (<1%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 30. Births (%) by Route and Method

Route and Method	2019	2020	2021	2022	2023
Vaginal	7,700 (78%)	7,305 (77%)	7,126 (76%)	7,238 (77%)	6,853 (76%)
Spontaneous	7,490 (76%)	7,089 (75%)	6,930 (74%)	7,037 (75%)	6,673 (74%)
Forceps	51 (<1%)	41 (<1%)	34 (<1%)	49 (<1%)	36 (<1%)
Vacuum	159 (2%)	175 (2%)	162 (2%)	152 (2%)	144 (2%)
Cesarean	2,127 (22%)	2,170 (23%)	2,272 (24%)	2,123 (23%)	2,165 (24%)
Unknown	5 (<1%)	10 (<1%)	14 (<1%)	5 (<1%)	4 (<1%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 31. Cesarean Births (Rate) by Demographic Characteristics³⁶

Demographic	Characteristic	2019	2020	2021	2022	2023
Infant Sex	Male	1,131 (22%)	1,152 (24%)	1,252 (26%)	1,108 (23%)	1,179 (25%)
	Female	996 (21%)	1,018 (22%)	1,020 (23%)	1,015 (22%)	986 (23%)
Race	White	1,279 (24%)	1,318 (25%)	1,392 (27%)	1,244 (25%)	1,266 (26%)
	Black	89 (27%)	89 (30%)	91 (32%)	97 (34%)	91 (37%)
	AI/AN	229 (12%)	238 (13%)	262 (14%)	229 (13%)	254 (14%)
	Asian/PI	249 (26%)	232 (26%)	239 (28%)	257 (28%)	253 (29%)
	Multiple	229 (22%)	243 (24%)	235 (24%)	226 (22%)	227 (23%)
	Hispanic	212 (27%)	199 (27%)	213 (27%)	204 (26%)	224 (28%)
Age	15-19 Years	36 (9%)	38 (10%)	49 (13%)	31 (9%)	36 (10%)
	20-24 Years	296 (14%)	314 (16%)	339 (17%)	306 (16%)	299 (17%)
	25-29 Years	582 (19%)	613 (21%)	617 (22%)	578 (22%)	566 (22%)
	30-34 Years	675 (26%)	711 (27%)	682 (26%)	684 (25%)	677 (26%)
	35-39 Years	416 (31%)	403 (30%)	471 (34%)	413 (29%)	464 (32%)
	40-44 Years	111 (39%)	83 (31%)	107 (36%)	106 (35%)	112 (39%)
Residence	Anchorage	939 (24%)	965 (26%)	894 (25%)	871 (24%)	917 (26%)
	Gulf Coast	221 (24%)	185 (21%)	240 (26%)	212 (24%)	201 (23%)
	Interior	302 (19%)	347 (23%)	416 (25%)	355 (22%)	354 (24%)
	Mat-Su	359 (26%)	328 (24%)	355 (26%)	364 (26%)	344 (26%)
	Northern	52 (11%)	55 (11%)	64 (14%)	49 (11%)	39 (9%)
	Southeast	171 (25%)	197 (30%)	220 (32%)	192 (30%)	214 (32%)
	Southwest	81 (9%)	93 (11%)	83 (11%)	79 (10%)	96 (13%)
Statewide	Total	2,127 (22%)	2,170 (23%)	2,272 (24%)	2,123 (23%)	2,165 (24%)

³⁶ Cesarean rates are events per 100 births.

Infant Characteristics

In 2023, boys made up 52% of births, and the most popular name was Oliver (51 births). Girls made up 48% of births, and the most popular name was Charlotte (36 births). There were 288 multiple gestation births involving a plurality of infants, including 280 twin births (approximately 140 sets of liveborn twins³⁷) and 8 triplet or higher births. Most infants were breastfeeding at the time of discharge (89%).

There were 928 preterm births, defined as births prior to the 37th week of gestation based on the reported obstetrical estimate (10%). Most preterm births were in the late preterm range between 34-36 weeks, although there were 42 extremely preterm births at less than 28 weeks. Preterm births were most common in AI/AN women (16%), women ages 35-39 years (13%), and residents of the Southwest region (16%).

There were 603 low birth weight (LBW) births, defined as infants born weighing less than 2,500 grams (approximately 5.5 pounds) (7%). Most LBW births were in the moderate LBW range between 1,500-2,499 grams, although there were 41 extremely LBW births at less than 1,000 grams. LBW births were most common in Black women (12%), women ages 35-39 years and 40-44 years (8%), and residents of the Northern region and Southwest region (9%).

Table 32. Births (%) by Sex

Sex	2019	2020	2021	2022	2023
Male	5,124 (52%)	4,810 (51%)	4,886 (52%)	4,756 (51%)	4,703 (52%)
Female	4,708 (48%)	4,675 (49%)	4,526 (48%)	4,610 (49%)	4,319 (48%)
Unknown	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 33. Top 5 Baby Boy Names (Count)

Rank	2019	2020	2021	2022	2023
1	Liam (54)	Liam/Oliver (46)	Noah/Oliver (42)	Oliver (46)	Oliver (51)
2	Oliver (46)	Elijah (42)	Wyatt (38)	Liam (42)	Liam (50)
3	James (42)	Theodore (41)	Liam (36)	James (37)	Theodore (46)
4	Henry (41)	William (38)	James (35)	Theodore (34)	Noah (44)
5	Noah (38)	Noah (36)	Lucas/William (33)	Lucas/William (32)	Elijah (39)

Table 34. Top 5 Baby Girl Names (Count)

Rank	2019	2020	2021	2022	2023
1	Emma (42)	Charlotte (44)	Amelia (46)	Aurora/Charlotte (38)	Charlotte (36)
2	Evelyn (41)	Amelia (43)	Ava/Hazel/Olivia (32)	Amelia/Emma/Evelyn (35)	Aurora/Emma/Hazel (29)
3	Amelia/Ava/Olivia (40)	Olivia (39)	Charlotte (31)	Olivia (34)	Amelia (28)
4	Aurora (35)	Sophia (36)	Emma/Evelyn (28)	Penelope (28)	Evelyn/Nora (24)
5	Charlotte (31)	Aurora (35)	Aurora/Eleanor (27)	Scarlett (27)	Ava/Penelope (23)

³⁷ The number of twin births may not be divisible by 2 for a number of reasons, such as a fetal death in one of the twins, a twin birth event occurring over the turn of the year, etc.

Table 35. Births (%) by Plurality

Plurality	2019	2020	2021	2022	2023
Singletons	9,548 (97%)	9,189 (97%)	9,097 (97%)	9,088 (97%)	8,734 (97%)
Twins	272 (3%)	291 (3%)	306 (3%)	267 (3%)	280 (3%)
Triplets+	12 (<1%)	3 (<1%)	9 (<1%)	10 (<1%)	8 (<1%)
Unknown	0 (0%)	2 (<1%)	0 (0%)	1 (<1%)	0 (0%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 36. Births (%) by Breastfeeding at Time of Discharge

Breastfeeding	2019	2020	2021	2022	2023
Yes	9,014 (92%)	8,636 (91%)	8,410 (89%)	8,358 (89%)	7,989 (89%)
No	771 (8%)	778 (8%)	949 (10%)	985 (11%)	986 (11%)
Unknown	47 (<1%)	71 (<1%)	53 (<1%)	23 (<1%)	47 (<1%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 37. Births (%) by Gestation

Gestation	2019	2020	2021	2022	2023
<37 Weeks (Preterm)	955 (10%)	925 (10%)	953 (10%)	940 (10%)	928 (10%)
<28 Weeks (Extreme)	37 (<1%)	53 (<1%)	52 (<1%)	36 (<1%)	42 (<1%)
28-31 Weeks (Very)	65 (<1%)	72 (<1%)	89 (<1%)	91 (<1%)	72 (<1%)
32-33 Weeks (Mod.)	129 (1%)	110 (1%)	107 (1%)	106 (1%)	102 (1%)
34-36 Weeks (Late)	724 (7%)	690 (7%)	705 (7%)	707 (8%)	712 (8%)
37 Weeks	1,043 (11%)	976 (10%)	1,087 (12%)	1,034 (11%)	1,067 (12%)
38 Weeks	1,670 (17%)	1,643 (17%)	1,557 (17%)	1,653 (18%)	1,504 (17%)
39 Weeks	3,136 (32%)	3,214 (34%)	3,093 (33%)	3,112 (33%)	2,973 (33%)
40 Weeks	2,154 (22%)	1,947 (21%)	1,903 (20%)	1,856 (20%)	1,821 (20%)
41 Weeks	797 (8%)	706 (7%)	752 (8%)	710 (8%)	652 (7%)
42+ Weeks	62 (<1%)	51 (<1%)	44 (<1%)	51 (<1%)	58 (<1%)
Unknown	15 (<1%)	23 (<1%)	23 (<1%)	10 (<1%)	19 (<1%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

Table 38. Preterm Births (Rate) by Demographic Characteristics³⁸

Demographic	Characteristic	2019	2020	2021	2022	2023
Infant Sex	Male	528 (10%)	470 (10%)	551 (11%)	510 (11%)	515 (11%)
	Female	427 (9%)	455 (10%)	402 (9%)	430 (9%)	413 (10%)
Race	White	412 (8%)	389 (7%)	447 (9%)	389 (8%)	392 (8%)
	Black	35 (11%)	32 (11%)	27 (10%)	38 (13%)	27 (11%)
	AI/AN	278 (14%)	284 (15%)	252 (14%)	286 (16%)	293 (16%)
	Asian/PI	106 (11%)	101 (11%)	93 (11%)	91 (10%)	105 (12%)
	Multiple	105 (10%)	100 (10%)	106 (11%)	107 (11%)	81 (8%)
	Hispanic	72 (9%)	67 (9%)	83 (10%)	75 (9%)	73 (9%)
Age	15-19 Years	43 (11%)	40 (11%)	29 (8%)	34 (9%)	40 (12%)
	20-24 Years	179 (9%)	196 (10%)	183 (9%)	171 (9%)	166 (9%)
	25-29 Years	278 (9%)	256 (9%)	270 (10%)	266 (10%)	231 (9%)
	30-34 Years	246 (9%)	268 (10%)	247 (9%)	267 (10%)	267 (10%)
	35-39 Years	173 (13%)	138 (10%)	172 (12%)	169 (12%)	183 (13%)
	40-44 Years	33 (11%)	26 (10%)	48 (16%)	28 (9%)	34 (12%)
Residence	Anchorage	386 (10%)	358 (10%)	357 (10%)	374 (10%)	374 (11%)
	Gulf Coast	77 (8%)	59 (7%)	78 (8%)	54 (6%)	47 (5%)
	Interior	118 (7%)	139 (9%)	144 (9%)	136 (9%)	148 (10%)
	Mat-Su	120 (9%)	102 (8%)	132 (10%)	129 (9%)	116 (9%)
	Northern	60 (13%)	59 (12%)	61 (13%)	51 (12%)	58 (14%)
	Southeast	62 (9%)	73 (11%)	73 (11%)	51 (8%)	61 (9%)
	Southwest	132 (15%)	135 (17%)	108 (14%)	145 (18%)	124 (16%)
Statewide	Total	955 (10%)	925 (10%)	953 (10%)	940 (10%)	928 (10%)

Table 39. Births (%) by Birth Weight

Birth Weight	2019	2020	2021	2022	2023
<2,500 g (Low)	621 (6%)	628 (7%)	652 (7%)	649 (7%)	603 (7%)
<1,000 g (Extreme)	36 (<1%)	55 (<1%)	61 (<1%)	43 (<1%)	41 (<1%)
1,000-1,499 g (Very)	71 (<1%)	50 (<1%)	60 (<1%)	54 (<1%)	48 (<1%)
1,500-2,499 g (Mod.)	514 (5%)	523 (6%)	531 (6%)	552 (6%)	514 (6%)
2,500-3,999 g	7,938 (81%)	7,699 (81%)	7,594 (81%)	7,620 (81%)	7,338 (81%)
4,000+ g	1,261 (13%)	1,154 (12%)	1,152 (12%)	1,094 (12%)	1,076 (12%)
Unknown	12 (<1%)	4 (<1%)	14 (<1%)	3 (<1%)	5 (<1%)
Total	9,832 (100%)	9,485 (100%)	9,412 (100%)	9,366 (100%)	9,022 (100%)

³⁸ Preterm rates are events per 100 births.

Table 40. Low Birth Weight Births (Rate) by Demographic Characteristics³⁹

Demographic	Characteristic	2019	2020	2021	2022	2023
Infant Sex	Male	295 (6%)	275 (6%)	332 (7%)	309 (6%)	298 (6%)
	Female	326 (7%)	353 (8%)	320 (7%)	340 (7%)	305 (7%)
Race	White	275 (5%)	293 (6%)	312 (6%)	294 (6%)	247 (5%)
	Black	31 (10%)	40 (13%)	32 (11%)	32 (11%)	29 (12%)
	AI/AN	154 (8%)	140 (8%)	141 (8%)	171 (9%)	170 (9%)
	Asian/PI	74 (8%)	74 (8%)	80 (9%)	61 (7%)	78 (9%)
	Multiple	73 (7%)	69 (7%)	64 (6%)	68 (7%)	58 (6%)
	Hispanic	52 (7%)	48 (7%)	73 (9%)	59 (7%)	55 (7%)
Age	15-19 Years	30 (8%)	26 (7%)	25 (7%)	21 (6%)	24 (7%)
	20-24 Years	128 (6%)	137 (7%)	137 (7%)	127 (7%)	121 (7%)
	25-29 Years	187 (6%)	164 (6%)	187 (7%)	181 (7%)	147 (6%)
	30-34 Years	157 (6%)	186 (7%)	161 (6%)	185 (7%)	169 (7%)
	35-39 Years	98 (7%)	92 (7%)	117 (8%)	110 (8%)	115 (8%)
	40-44 Years	18 (6%)	21 (8%)	25 (9%)	21 (7%)	24 (8%)
Residence	Anchorage	259 (7%)	267 (7%)	255 (7%)	256 (7%)	244 (7%)
	Gulf Coast	52 (6%)	39 (4%)	52 (6%)	52 (6%)	34 (4%)
	Interior	93 (6%)	98 (6%)	110 (7%)	107 (7%)	104 (7%)
	Mat-Su	78 (6%)	80 (6%)	82 (6%)	76 (5%)	72 (5%)
	Northern	35 (7%)	37 (7%)	42 (9%)	37 (8%)	37 (9%)
	Southeast	38 (6%)	43 (6%)	51 (7%)	32 (5%)	41 (6%)
	Southwest	66 (8%)	64 (8%)	60 (8%)	88 (11%)	71 (9%)
Statewide	Total	621 (6%)	628 (7%)	652 (7%)	649 (7%)	603 (7%)

³⁹ Low birth weight rates are events per 100 births.

Maternal and Infant Medical Characteristics

In 2023, pregnancy-associated hypertension was the most common risk factor associated with pregnancy complications among women who delivered a liveborn infant, reported in 1,283 births (14%). This was followed by gestational diabetes (1,174 births) and a prior cesarean birth (1,148 births). COVID-19 was the most common maternal infection diagnosed or treated at any point during pregnancy, at 424 births (5%). Epidural or spinal anesthesia was administered to the mother in 4,490 births (50%). Assistive ventilation, either immediately or within 6 hours of birth, was required for 1,078 infants (12%). There were 919 infants that required admission to the Neonatal Intensive Care Unit (NICU) (10%). Congenital anomalies were relatively rare, with confirmed Down's Syndrome being the most common condition, at 11 infants.

Table 41. Births (%) by Pregnancy Risk Factors

Pregnancy Risk Factors	2019	2020	2021	2022	2023
Diabetes - Prepregnancy	98 (<1%)	110 (1%)	127 (1%)	110 (1%)	98 (1%)
Diabetes - Gestational	1,144 (12%)	1,183 (12%)	1,249 (13%)	1,248 (13%)	1,174 (13%)
Hypertension - Prepregnancy	352 (4%)	339 (4%)	428 (5%)	439 (5%)	397 (4%)
Hypertension - Pregnancy Assoc.	1,117 (11%)	1,077 (11%)	1,218 (13%)	1,302 (14%)	1,283 (14%)
Hypertension - Eclampsia	39 (<1%)	24 (<1%)	34 (<1%)	23 (<1%)	31 (<1%)
Prior Preterm Births	533 (5%)	495 (5%)	568 (6%)	487 (5%)	459 (5%)
Infertility Treatment	124 (1%)	113 (1%)	140 (1%)	154 (2%)	129 (1%)
Fertility Drugs or Art. Insem.	65 (<1%)	47 (<1%)	73 (<1%)	94 (1%)	80 (<1%)
Assisted Reproductive Tech.	69 (<1%)	76 (<1%)	71 (<1%)	66 (<1%)	60 (<1%)
Prior Cesarean	1,119 (11%)	1,117 (12%)	1,097 (12%)	1,085 (12%)	1,148 (13%)
Vaginal Birth After Cesarean	293 (3%)	253 (3%)	258 (3%)	274 (3%)	291 (3%)

Table 42. Births (%) by Maternal Infections

Maternal Infections	2019	2020	2021	2022	2023
Gonorrhea	33 (<1%)	30 (<1%)	39 (<1%)	50 (<1%)	44 (<1%)
Syphilis	7 (<1%)	29 (<1%)	15 (<1%)	34 (<1%)	32 (<1%)
Chlamydia	262 (3%)	210 (2%)	243 (3%)	265 (3%)	263 (3%)
Hepatitis B	26 (<1%)	30 (<1%)	15 (<1%)	16 (<1%)	9 (<1%)
Hepatitis C	80 (<1%)	104 (1%)	98 (1%)	86 (<1%)	88 (<1%)
COVID-19	0 (0%)	63 (<1%)	432 (5%)	1,438 (15%)	424 (5%)

⁴⁰ Maternal COVID-19 infection data collection began April of 2020. Data for this year are incomplete. Data may not include home testing positives, asymptomatic cases, and diagnoses not reported to the birth certifier.

Table 43. Births (%) by Obstetrical Procedures

Obstetrical Procedures	2019	2020	2021	2022	2023
Cervical Cerclage	32 (<1%)	28 (<1%)	37 (<1%)	29 (<1%)	16 (<1%)
Tocolysis	44 (<1%)	48 (<1%)	34 (<1%)	38 (<1%)	51 (<1%)
External Cephalic - Success	43 (<1%)	44 (<1%)	45 (<1%)	39 (<1%)	39 (<1%)
External Cephalic - Failed	54 (<1%)	59 (<1%)	56 (<1%)	58 (<1%)	44 (<1%)

Table 44. Births (%) by Onset of Labor

Onset of Labor	2019	2020	2021	2022	2023
Premature Rupture of	687 (7%)	664 (7%)	667 (7%)	548 (6%)	523 (6%)
Membrane (12+ Hours)					
Precipitous Labor (<3 Hours)	729 (7%)	724 (8%)	836 (9%)	857 (9%)	699 (8%)
Prolonged Labor (20+ Hours)	214 (2%)	225 (2%)	227 (2%)	223 (2%)	242 (3%)

Table 45. Births (%) by Characteristics of Labor and Delivery

Labor	2019	2020	2021	2022	2023
Induction of Labor	3,049 (31%)	3,101 (33%)	3,125 (33%)	3,047 (33%)	3,131 (35%)
Augmentation of Labor	1,825 (19%)	1,805 (19%)	1,813 (19%)	1,928 (21%)	1,642 (18%)
Non-Vertex Presentation	265 (3%)	285 (3%)	291 (3%)	297 (3%)	264 (3%)
Steroids for Lung Maturity	538 (5%)	504 (5%)	656 (7%)	592 (6%)	582 (6%)
Antibiotics Received	2,253 (23%)	2,240 (24%)	2,437 (26%)	2,339 (25%)	1,803 (20%)
Chorioamnionitis Diagnosed	141 (1%)	133 (1%)	147 (2%)	141 (2%)	128 (1%)
Mod./Heavy Meconium Staining	1,218 (12%)	1,033 (11%)	1,150 (12%)	1,180 (13%)	1,164 (13%)
Fetal Intolerance	341 (3%)	327 (3%)	415 (4%)	335 (4%)	379 (4%)
Epidural or Spinal Anesthesia	4,690 (48%)	4,938 (52%)	4,990 (53%)	4,568 (49%)	4,490 (50%)

Table 46. Births (%) by Maternal Morbidity

Maternal Morbidity	2019	2020	2021	2022	2023
Maternal Transfusion	84 (<1%)	88 (<1%)	127 (1%)	132 (1%)	151 (2%)
3rd or 4th Deg. Perineal Lacer.	138 (1%)	112 (1%)	110 (1%)	130 (1%)	102 (1%)
Ruptured Uterus	5 (<1%)	8 (<1%)	8 (<1%)	9 (<1%)	9 (<1%)
Unplanned Hysterectomy	6 (<1%)	5 (<1%)	4 (<1%)	3 (<1%)	12 (<1%)
Admitted to Intensive Care	17 (<1%)	16 (<1%)	17 (<1%)	19 (<1%)	19 (<1%)
Unplanned Operation Procedure	76 (<1%)	75 (<1%)	98 (1%)	90 (<1%)	107 (1%)

Table 47. Births (%) by Conditions of the Newborn

Conditions	2019	2020	2021	2022	2023
Assist Ventilation Immediately	852 (9%)	885 (9%)	1,041 (11%)	1,007 (11%)	810 (9%)
Assist Ventilation >6 Hours	259 (3%)	258 (3%)	279 (3%)	302 (3%)	268 (3%)
NICU Admission	958 (10%)	876 (9%)	917 (10%)	908 (10%)	919 (10%)
Surfactant Replace. Therapy	40 (<1%)	31 (<1%)	52 (<1%)	40 (<1%)	32 (<1%)
Antibiotics for Neonatal Sepsis	159 (2%)	124 (1%)	151 (2%)	154 (2%)	141 (2%)
Seizures	6 (<1%)	6 (<1%)	2 (<1%)	8 (<1%)	4 (<1%)
Birth Injury	15 (<1%)	15 (<1%)	18 (<1%)	11 (<1%)	15 (<1%)

Table 48. Births (%) by Congenital Anomalies

Congenital Anomalies	2019	2020	2021	2022	2023
Anencephaly	1 (<1%)	1 (<1%)	1 (<1%)	2 (<1%)	2 (<1%)
Meningomyelocele/Spina Bifida	0 (0%)	0 (0%)	1 (<1%)	2 (<1%)	0 (0%)
Cyanotic Congen. Heart Disease	11 (<1%)	10 (<1%)	16 (<1%)	15 (<1%)	9 (<1%)
Congen. Diaphragmatic Hernia	1 (<1%)	0 (0%)	4 (<1%)	4 (<1%)	0 (0%)
Omphalocele	2 (<1%)	0 (0%)	0 (0%)	1 (<1%)	0 (0%)
Gastroschisis	4 (<1%)	7 (<1%)	6 (<1%)	6 (<1%)	5 (<1%)
Limb Reduction Defect	2 (<1%)	4 (<1%)	3 (<1%)	4 (<1%)	2 (<1%)
Cleft Lip with or w/o Cleft Palate	7 (<1%)	8 (<1%)	8 (<1%)	5 (<1%)	8 (<1%)
Cleft Palate Alone	2 (<1%)	6 (<1%)	2 (<1%)	2 (<1%)	4 (<1%)
Down's Syndrome (Confirmed)	5 (<1%)	4 (<1%)	5 (<1%)	4 (<1%)	11 (<1%)
Chromos. Disorder (Confirmed)	2 (<1%)	5 (<1%)	7 (<1%)	4 (<1%)	3 (<1%)
Hypospadias	12 (<1%)	10 (<1%)	8 (<1%)	9 (<1%)	8 (<1%)

Birth and Fertility Rates

In 2023, the crude birth rate (CBR), which measures the number of births per 1,000 Alaskan residents, was 12.2, down from 12.7 in 2022. Because the overall population includes both men and women outside of common reproductive age, the fertility rate (FR), which measures the number of births per 1,000 women ages 15-44 years, is generally a more meaningful method for analyzing natality trends than CBRs. In 2023, Alaska's total FR was 61.9, down from 64.6 in 2022. The highest statistically reliable (i.e., based on 20 or more events) FRs were found in multiple race women (74.7), women ages 25-29 years (110.8), and residents of the Southwest region (94.8).

Figure 2. Number of Births and Fertility Rate by Year

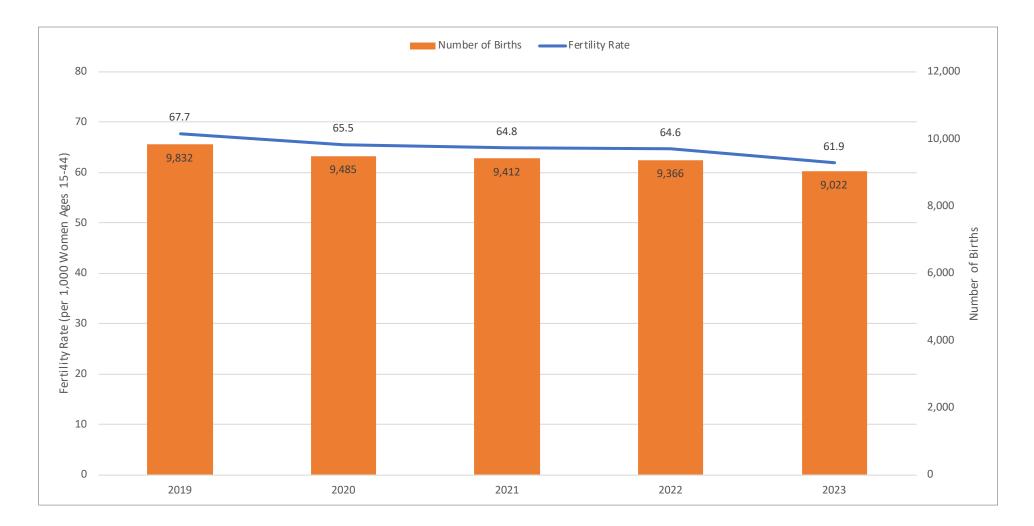


Table 49. Births (Crude Birth Rate) [Fertility Rate] by Demographic Characteristics⁴¹

Demographic	Characteristic	2019	2020	2021	2022	2023
Infant Sex	Male	5,124 (7.0) [35.2]	4,810 (6.6) [33.2]	4,886 (6.6) [33.7]	4,756 (6.5) [32.8]	4,703 (6.4) [32.3]
	Female	4,708 (6.4) [32.5]	4,675 (6.4) [32.3]	4,526 (6.1) [31.2]	4,610 (6.3) [31.8]	4,319 (5.9) [29.6]
Race	White	5,407 (11.4) [60.2]	5,258 (11.1) [59.3]	5,243 (11.0) [59.1]	5,076 (10.7) [57.6]	4,904 (10.4) [55.5]
	Black	326 (12.1) [57.6]	298 (11.1) [54.2]	281 (10.4) [51.3]	285 (10.6) [52.5]	248 (9.2) [45.1]
	AI/AN	1,944 (17.2) [81.8]	1,850 (16.1) [76.1]	1,843 (16.0) [75.4]	1,813 (15.8) [73.6]	1,793 (15.6) [72.6]
	Asian/PI	952 (15.9) [69.1]	894 (14.8) [64.5]	853 (13.9) [61.5]	929 (15.0) [66.4]	858 (13.8) [61.1]
	Multiple	1,025 (18.1) [83.8]	1,027 (18.1) [82.8]	998 (17.2) [78.8]	1,008 (17.1) [78.4]	976 (16.4) [74.7]
	Hispanic	786 (14.8) [65.9]	734 (14.7) [65.6]	800 (15.4) [69.1]	793 (14.9) [67.0]	792 (14.5) [65.5]
Age	15-19 Years	394 (8.4) [17.6]	379 (8.0) [16.9]	383 (8.0) [16.8]	358 (7.3) [15.5]	345 (7.0) [14.8]
	20-24 Years	2,054 (44.3) [97.3]	1,957 (39.6) [89.7]	1,946 (38.7) [88.2]	1,917 (39.2) [89.3]	1,782 (35.6) [82.1]
	25-29 Years	3,087 (56.0) [116.7]	2,903 (52.7) [111.3]	2,758 (52.7) [111.4]	2,683 (53.7) [114.0]	2,566 (51.4) [110.8]
	30-34 Years	2,629 (46.1) [93.9]	2,632 (46.2) [96.4]	2,627 (46.4) [96.4]	2,685 (47.6) [97.8]	2,582 (45.7) [95.3]
	35-39 Years	1,356 (25.4) [52.5]	1,327 (24.6) [51.8]	1,387 (25.4) [53.4]	1,406 (25.6) [53.5]	1,430 (25.9) [54.0]
	40-44 Years	288 (6.6) [13.7]	266 (6.0) [12.5]	294 (6.4) [13.3]	299 (6.3) [13.1]	290 (5.9) [12.3]
Residence	Anchorage	3,937 (13.5) [63.1]	3,763 (12.9) [61.1]	3,578 (12.3) [58.5]	3,634 (12.5) [59.5]	3,511 (12.1) [57.4]
	Gulf Coast	926 (11.4) [67.2]	873 (10.7) [62.7]	919 (11.3) [65.8]	875 (10.6) [61.9]	876 (10.5) [61.0]
	Interior	1,575 (14.3) [71.1]	1,529 (14.0) [69.4]	1,662 (14.9) [74.2]	1,580 (14.3) [71.7]	1,457 (13.3) [66.0]
	Mat-Su	1,369 (12.8) [68.0]	1,341 (12.5) [67.0]	1,345 (12.3) [65.6]	1,415 (12.7) [67.2]	1,338 (11.7) [62.0]
	Northern	470 (17.1) [89.8]	496 (17.2) [90.5]	457 (16.1) [84.5]	439 (15.8) [82.0]	426 (15.4) [79.0]
	Southeast	686 (9.5) [50.7]	665 (9.2) [49.0]	683 (9.4) [50.2]	630 (8.8) [47.4]	659 (9.3) [50.0]
	Southwest	867 (20.5) [108.0]	818 (19.1) [99.5]	768 (18.1) [94.0]	792 (18.9) [97.1]	752 (18.1) [94.8]
Statewide	Total	9,832 (13.4) [67.7]	9,485 (12.9) [65.5]	9,412 (12.8) [64.8]	9,366 (12.7) [64.6]	9,022 (12.2) [61.9]

⁴¹ Crude birth rates are live births per 1,000 population. Fertility rates are live births per 1,000 women ages 15-44 years.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Teen Birth Rates

In 2023, there were 345 births among teen girls ages 15-19 years. The teen birth rate (TBR), which measures the number of births per 1,000 girls ages 15-19 years, was 14.8, down from 15.5 in 2022 and lowest rate since 2019. The highest statistically reliable TBRs were found in AI/AN girls (29.2), and residents of the Southwest region (42.3).

Figure 3. Number of Teen Births and Teen Birth Rate by Year

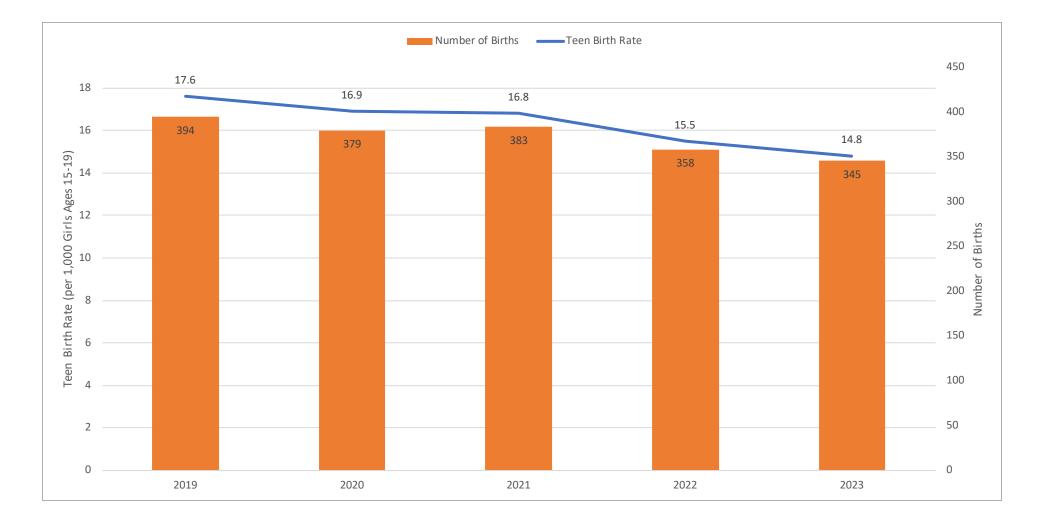


Table 50. Teen Births (Teen Birth Rate) by Demographic Characteristics 42

Demographic	Characteristic	2019	2020	2021	2022	2023
Infant Sex	Male	201 (9.0)	180 (8.0)	201 (8.8)	184 (7.9)	180 (7.7)
	Female	193 (8.6)	199 (8.9)	182 (8.0)	174 (7.5)	165 (7.1)
Race	White	114 (9.5)	124 (10.5)	109 (9.0)	111 (9.0)	92 (7.4)
	Black	10 (12.3*)	13 (16.4*)	7 (8.9*)	8 (10.4*)	5 (**)
	AI/AN	153 (34.4)	144 (31.2)	172 (36.8)	152 (32.0)	138 (29.2)
	Asian/PI	51 (23.1)	35 (15.6)	31 (13.9)	28 (12.9)	35 (17.1)
	Multiple	58 (19.6)	58 (19.6)	57 (18.6)	50 (15.7)	70 (21.3)
	Hispanic	40 (20.9)	29 (16.0)	25 (13.1)	30 (14.9)	33 (16.0)
Residence	Anchorage	137 (15.2)	117 (13.0)	119 (13.2)	82 (9.0)	118 (12.9)
	Gulf Coast	37 (16.2)	25 (10.8)	29 (12.5)	27 (11.5)	30 (12.5)
	Interior	46 (14.2)	58 (18.9)	53 (16.6)	60 (18.8)	42 (13.1)
	Mat-Su	35 (10.1)	45 (13.0)	40 (11.1)	45 (11.7)	38 (9.7)
	Northern	37 (39.4)	48 (47.1)	50 (45.9)	57 (53.0)	42 (38.3)
	Southeast	19 (9.6*)	12 (6.0*)	15 (7.4*)	20 (10.0)	11 (5.5*)
	Southwest	83 (55.8)	74 (47.3)	77 (49.6)	67 (43.0)	64 (42.3)
Statewide	Total	394 (17.6)	379 (16.9)	383 (16.8)	358 (15.5)	345 (14.8)

Teen birth rates are live births per 1,000 girls ages 15-19 years.
 * Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Chapter 3: Death

Alaska Resident Deaths

In 2023, there were 5,533 Alaska resident deaths (95% of which occurred in Alaska), down from 5,724 deaths in 2022.

Figure 4. Deaths by Year

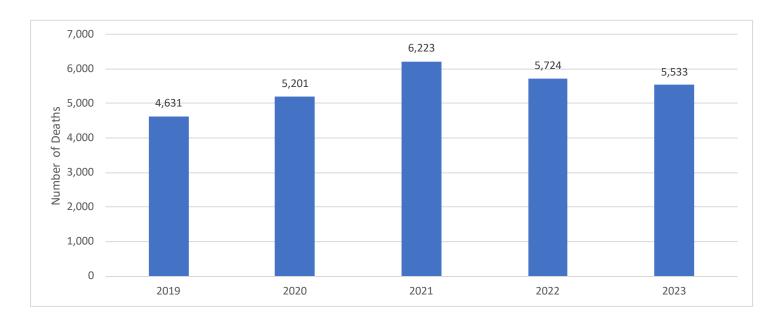


Table 51. Deaths (%) by State of Death

Death State	2019	2020	2021	2022	2023
Alaska	4,389 (95%)	4,950 (95%)	5,932 (95%)	5,422 (95%)	5,277 (95%)
Out-of-State	242 (5%)	251 (5%)	291 (5%)	302 (5%)	256 (5%)
Unknown	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Decedent Residence

In 2023, there were 2,173 Anchorage resident deaths (39% of deaths), the most of any county equivalent (Borough, Census Area, or Consolidated City-County) in the state. This was followed by 840 Matanuska-Susitna Borough resident deaths (15%), and 621 Fairbanks North Star Borough resident deaths (11%).

Table 52. Deaths (%) by Decedent Residence

Residence	2019	2020	2021	2022	2023
Anchorage	1,825 (39%)	2,059 (40%)	2,363 (38%)	2,197 (38%)	2,173 (39%)
Gulf Coast	579 (13%)	607 (12%)	783 (13%)	724 (13%)	646 (12%)
Chugach	43 (<1%)	33 (<1%)	41 (<1%)	43 (<1%)	56 (1%)
Copper River	24 (<1%)	25 (<1%)	43 (<1%)	28 (<1%)	27 (<1%)
Kenai Peninsula	438 (9%)	473 (9%)	595 (10%)	576 (10%)	474 (9%)
Kodiak Island	74 (2%)	76 (1%)	104 (2%)	77 (1%)	89 (2%)
Interior	587 (13%)	679 (13%)	846 (14%)	772 (13%)	770 (14%)
Denali	7 (<1%)	4 (<1%)	9 (<1%)	9 (<1%)	9 (<1%)
Fairbanks North Star	476 (10%)	551 (11%)	688 (11%)	633 (11%)	621 (11%)
Southeast Fairbanks	55 (1%)	68 (1%)	71 (1%)	55 (<1%)	70 (1%)
Yukon-Koyukuk	49 (1%)	56 (1%)	78 (1%)	75 (1%)	70 (1%)
Mat-Su	655 (14%)	768 (15%)	997 (16%)	870 (15%)	840 (15%)
Northern	203 (4%)	202 (4%)	228 (4%)	238 (4%)	199 (4%)
Nome	86 (2%)	83 (2%)	96 (2%)	79 (1%)	78 (1%)
North Slope	57 (1%)	58 (1%)	62 (<1%)	67 (1%)	60 (1%)
Northwest Arctic	60 (1%)	61 (1%)	70 (1%)	92 (2%)	61 (1%)
Southeast	490 (11%)	555 (11%)	652 (10%)	600 (10%)	606 (11%)
Haines	10 (<1%)	24 (<1%)	22 (<1%)	14 (<1%)	20 (<1%)
Hoonah-Angoon	15 (<1%)	23 (<1%)	30 (<1%)	16 (<1%)	25 (<1%)
Juneau	190 (4%)	208 (4%)	219 (4%)	244 (4%)	225 (4%)
Ketchikan	108 (2%)	108 (2%)	133 (2%)	115 (2%)	124 (2%)
Petersburg	24 (<1%)	31 (<1%)	27 (<1%)	31 (<1%)	24 (<1%)
Prince Of Wales-Hyder	57 (1%)	62 (1%)	97 (2%)	73 (1%)	66 (1%)
Sitka	55 (1%)	65 (1%)	77 (1%)	74 (1%)	73 (1%)
Skagway	3 (<1%)	7 (<1%)	10 (<1%)	6 (<1%)	11 (<1%)
Wrangell	19 (<1%)	25 (<1%)	30 (<1%)	25 (<1%)	31 (<1%)
Yakutat	9 (<1%)	2 (<1%)	7 (<1%)	2 (<1%)	7 (<1%)
Southwest	282 (6%)	323 (6%)	351 (6%)	317 (6%)	286 (5%)
Aleutians East	5 (<1%)	10 (<1%)	11 (<1%)	13 (<1%)	13 (<1%)
Aleutians West	13 (<1%)	19 (<1%)	18 (<1%)	17 (<1%)	18 (<1%)
Bethel	130 (3%)	153 (3%)	151 (2%)	163 (3%)	125 (2%)
Bristol Bay	7 (<1%)	7 (<1%)	15 (<1%)	3 (<1%)	12 (<1%)
Dillingham	48 (1%)	48 (<1%)	56 (<1%)	44 (<1%)	43 (<1%)
Kusilvak	67 (1%)	67 (1%)	88 (1%)	66 (1%)	65 (1%)
Lake And Peninsula	12 (<1%)	19 (<1%)	12 (<1%)	11 (<1%)	10 (<1%)
Unknown	10 (<1%)	8 (<1%)	3 (<1%)	6 (<1%)	13 (<1%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Decedent Characteristics

In 2023, men made up 59% of deaths while women made up 41%. White and AI/AN people made up 63% and 23% of deaths, respectively. Hispanic people made up 3%. The mean age at the time of death was 68.4 years for women, 64.3 years for men, and 66 years overall. The oldest decedent was 107 years old.

There were 139 deaths among children and adolescents ages <20 years. This includes 39 teens ages 15-19 years, 81 children ages <5 years, and 66 infants ages <1 year. Infant deaths can be further divided into neonatal infant deaths, ages 0-27 days (56% of infant deaths), and postneonatal infant deaths, ages 28+ days (44% of infant deaths). Neonatal infant death is frequently associated with circumstances related to pregnancy or delivery, while postneonatal infant death is often related to unintentional injury (accidents), living conditions, or the home environment.

Decedents with a high school diploma or GED made up 42% of deaths while those with at least some college or a degree made up 38%. Decedents who were married at the time of death made up 32% of deaths. Decedents who were currently serving, or had previously served, in the U.S. armed forces made up 21% of deaths.

Table 53. Deaths (%) by Sex

Sex	2019	2020	2021	2022	2023
Male	2,617 (57%)	3,018 (58%)	3,656 (59%)	3,265 (57%)	3,264 (59%)
Female	2,014 (43%)	2,183 (42%)	2,567 (41%)	2,459 (43%)	2,269 (41%)
Unknown	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Table 54. Deaths (%) by Race

Race	2019	2020	2021	2022	2023
White	2,990 (65%)	3,246 (62%)	3,878 (62%)	3,593 (63%)	3,495 (63%)
Black	128 (3%)	157 (3%)	142 (2%)	172 (3%)	130 (2%)
AI/AN	1,034 (22%)	1,221 (23%)	1,480 (24%)	1,352 (24%)	1,276 (23%)
Asian/PI	216 (5%)	271 (5%)	356 (6%)	252 (4%)	256 (5%)
Other	48 (1%)	48 (<1%)	74 (1%)	76 (1%)	70 (1%)
Multiple	193 (4%)	223 (4%)	261 (4%)	225 (4%)	215 (4%)
Unknown	22 (<1%)	35 (<1%)	32 (<1%)	54 (<1%)	91 (2%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Table 55. Deaths (%) by Ethnicity

Ethnicity	2019	2020	2021	2022	2023
Hispanic	115 (2%)	126 (2%)	146 (2%)	146 (3%)	153 (3%)
Non-Hispanic	4,489 (97%)	5,043 (97%)	6,028 (97%)	5,524 (97%)	5,289 (96%)
Unknown	27 (<1%)	32 (<1%)	49 (<1%)	54 (<1%)	91 (2%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Table 56. Decedent Age Summary

Sex	Age Summary	2019	2020	2021	2022	2023
Female	Mean Age	69.4	68.7	68.3	69.2	68.4
	Median Age	73	72	72	73	72
	Mode Age	79	86	79	75	71
	Oldest Age	106	106	103	107	107
Male	Mean Age	63.7	64.4	64.2	64	64.3
	Median Age	67	68	67	67	68
	Mode Age	67	73	67	75	68
	Oldest Age	103	104	104	103	102
Total	Mean Age	66.2	66.2	65.9	66.2	66
	Median Age	70	70	69	70	70
	Mode Age	67	73	67	75	71
	Oldest Age	106	106	104	107	107

Table 57. Deaths (%) by Age

Age	2019	2020	2021	2022	2023
<5 Years	66 (1%)	62 (1%)	84 (1%)	74 (1%)	81 (1%)
5-14 Years	22 (<1%)	35 (<1%)	10 (<1%)	23 (<1%)	19 (<1%)
15-24 Years	126 (3%)	133 (3%)	144 (2%)	130 (2%)	133 (2%)
25-34 Years	228 (5%)	239 (5%)	303 (5%)	280 (5%)	255 (5%)
35-44 Years	246 (5%)	289 (6%)	378 (6%)	330 (6%)	393 (7%)
45-54 Years	338 (7%)	412 (8%)	530 (9%)	435 (8%)	411 (7%)
55-64 Years	771 (17%)	861 (17%)	1,005 (16%)	923 (16%)	856 (15%)
65-74 Years	1,027 (22%)	1,138 (22%)	1,441 (23%)	1,321 (23%)	1,269 (23%)
75-84 Years	981 (21%)	1,101 (21%)	1,277 (21%)	1,230 (21%)	1,147 (21%)
85+ Years	826 (18%)	931 (18%)	1,051 (17%)	978 (17%)	969 (18%)
Unknown	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Table 58. Child and Adolescent (<20 Years) Deaths (%) by Age

Age	2019	2020	2021	2022	2023
<5 Years	66 (45%)	62 (44%)	84 (60%)	74 (50%)	81 (58%)
<1 Year	48 (32%)	54 (39%)	71 (50%)	62 (42%)	66 (47%)
1-4 Years	18 (12%)	8 (6%)	13 (9%)	12 (8%)	15 (11%)
5-9 Years	5 (3%)	17 (12%)	4 (3%)	12 (8%)	8 (6%)
10-14 Years	17 (11%)	18 (13%)	6 (4%)	11 (7%)	11 (8%)
15-19 Years	60 (41%)	43 (31%)	47 (33%)	50 (34%)	39 (28%)
Total	148 (100%)	140 (100%)	141 (100%)	147 (100%)	139 (100%)

Table 59. Infant (< 1 Year) Deaths (%) by Age

Age	2019	2020	2021	2022	2023
<28 Days (Neonatal)	26 (54%)	37 (69%)	44 (62%)	30 (48%)	37 (56%)
28+ Days (Postneonatal)	22 (46%)	17 (31%)	27 (38%)	32 (52%)	29 (44%)
Unknown	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	48 (100%)	54 (100%)	71 (100%)	62 (100%)	66 (100%)

Table 60. Deaths (%) by Education

Education	2019	2020	2021	2022	2023
<h.s. ged<="" or="" td=""><td>819 (18%)</td><td>920 (18%)</td><td>1,009 (16%)</td><td>856 (15%)</td><td>849 (15%)</td></h.s.>	819 (18%)	920 (18%)	1,009 (16%)	856 (15%)	849 (15%)
<=8th Grade	421 (9%)	470 (9%)	468 (8%)	405 (7%)	370 (7%)
Some H.S.	398 (9%)	450 (9%)	541 (9%)	451 (8%)	479 (9%)
H.S. Or GED	1,850 (40%)	2,086 (40%)	2,580 (41%)	2,452 (43%)	2,346 (42%)
>H.S. Or GED	1,826 (39%)	2,017 (39%)	2,404 (39%)	2,222 (39%)	2,100 (38%)
Some College	809 (17%)	855 (16%)	1,049 (17%)	980 (17%)	858 (16%)
Associate Degree	322 (7%)	327 (6%)	436 (7%)	394 (7%)	342 (6%)
Bachelor's Degree	451 (10%)	533 (10%)	582 (9%)	528 (9%)	578 (10%)
Master's Degree	176 (4%)	227 (4%)	229 (4%)	241 (4%)	241 (4%)
Doctorate Degree	68 (1%)	75 (1%)	108 (2%)	79 (1%)	81 (1%)
Unknown	136 (3%)	178 (3%)	230 (4%)	194 (3%)	238 (4%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Table 61. Deaths (%) by Marital Status

Marital Status	2019	2020	2021	2022	2023
Married	1,593 (34%)	1,700 (33%)	2,104 (34%)	1,808 (32%)	1,795 (32%)
Married But Separated	40 (<1%)	62 (1%)	66 (1%)	63 (1%)	58 (1%)
Widowed	1,016 (22%)	1,113 (21%)	1,302 (21%)	1,263 (22%)	1,094 (20%)
Divorced	940 (20%)	1,087 (21%)	1,292 (21%)	1,184 (21%)	1,112 (20%)
Never Married	953 (21%)	1,129 (22%)	1,346 (22%)	1,272 (22%)	1,320 (24%)
Unknown	89 (2%)	110 (2%)	113 (2%)	134 (2%)	154 (3%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Table 62. Deaths (%) by Ever in U.S. Armed Forces

Ever in U.S. Armed Forces	2019	2020	2021	2022	2023
Yes	1,007 (22%)	1,213 (23%)	1,343 (22%)	1,137 (20%)	1,135 (21%)
No	3,304 (71%)	3,631 (70%)	4,479 (72%)	4,166 (73%)	4,025 (73%)
Unknown	320 (7%)	357 (7%)	401 (6%)	421 (7%)	373 (7%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Death Characteristics

In 2023, January was the most common month of death, with 517 deaths. July was the least common, with 406. Most deaths occurred in a hospital (40%), closely followed by the decedent's residence (38%). Cremation was the most common method of disposition (73%), followed by burial (23%). The Alaska State Medical Examiner Office, which is responsible for conducting medical/legal investigative work related to unanticipated, sudden, or violent deaths, certified 1,396 deaths (25%). There were 963 deaths with a non-natural manner, including accident, homicide, and suicide (17%). Tobacco was a confirmed or probable contributing factor in 826 deaths (15%).

Table 63. Deaths (%) by Month

Month	2019	2020	2021	2022	2023
January	422 (9%)	443 (9%)	486 (8%)	552 (10%)	517 (9%)
February	378 (8%)	384 (7%)	386 (6%)	459 (8%)	438 (8%)
March	428 (9%)	371 (7%)	428 (7%)	473 (8%)	465 (8%)
April	356 (8%)	369 (7%)	437 (7%)	440 (8%)	458 (8%)
May	398 (9%)	407 (8%)	438 (7%)	436 (8%)	430 (8%)
June	375 (8%)	381 (7%)	421 (7%)	468 (8%)	436 (8%)
July	315 (7%)	436 (8%)	470 (8%)	490 (9%)	406 (7%)
August	354 (8%)	442 (8%)	594 (10%)	457 (8%)	429 (8%)
September	365 (8%)	434 (8%)	637 (10%)	453 (8%)	478 (9%)
October	385 (8%)	486 (9%)	742 (12%)	476 (8%)	477 (9%)
November	423 (9%)	517 (10%)	610 (10%)	455 (8%)	503 (9%)
December	432 (9%)	531 (10%)	574 (9%)	565 (10%)	496 (9%)
Unknown	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Table 64. Deaths (%) by Place of Death

Place of Death	2019	2020	2021	2022	2023
Hospital	1,896 (41%)	2,066 (40%)	2,669 (43%)	2,308 (40%)	2,236 (40%)
Inpatient	1,637 (35%)	1,725 (33%)	2,293 (37%)	1,961 (34%)	1,934 (35%)
Emergency Room/Outpatient	253 (5%)	335 (6%)	372 (6%)	341 (6%)	298 (5%)
Dead On Arrival	6 (<1%)	6 (<1%)	4 (<1%)	6 (<1%)	4 (<1%)
Other Locations	2,733 (59%)	3,132 (60%)	3,553 (57%)	3,416 (60%)	3,297 (60%)
Residence	1,744 (38%)	2,100 (40%)	2,437 (39%)	2,257 (39%)	2,079 (38%)
Hospice Facility	12 (<1%)	7 (<1%)	16 (<1%)	15 (<1%)	11 (<1%)
Nursing Home	462 (10%)	490 (9%)	522 (8%)	549 (10%)	584 (11%)
Other	515 (11%)	535 (10%)	578 (9%)	595 (10%)	623 (11%)
Unknown	2 (<1%)	3 (<1%)	1 (<1%)	0 (0%)	0 (0%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

⁴³ Alaska Department of Health. State Medical Examiner Office.

⁴⁴ The "manner" of death describes the way in which a death occurred. This may differ from the "cause" of death, which describes the specific conditions, diseases, and injuries in the train of morbid events resulting in death (see Appendix A).

Table 65. Deaths (%) by Disposition

Disposition	2019	2020	2021	2022	2023
Burial	1,194 (26%)	1,285 (25%)	1,554 (25%)	1,385 (24%)	1,278 (23%)
Cremation	3,209 (69%)	3,727 (72%)	4,475 (72%)	4,136 (72%)	4,057 (73%)
Donation	27 (<1%)	5 (<1%)	1 (<1%)	1 (<1%)	2 (<1%)
Entombment	3 (<1%)	1 (<1%)	3 (<1%)	3 (<1%)	1 (<1%)
Removal From State	171 (4%)	160 (3%)	173 (3%)	164 (3%)	154 (3%)
Other	2 (<1%)	1 (<1%)	5 (<1%)	3 (<1%)	5 (<1%)
Unknown	25 (<1%)	22 (<1%)	12 (<1%)	32 (<1%)	36 (<1%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Table 66. Deaths (%) by Certifier

Certifier	2019	2020	2021	2022	2023
Certifying Physician	3,325 (72%)	3,734 (72%)	4,615 (74%)	4,217 (74%)	3,992 (72%)
Medical Examiner	1,096 (24%)	1,222 (23%)	1,341 (22%)	1,309 (23%)	1,396 (25%)
Pronouncing & Certifying Phys.	156 (3%)	201 (4%)	216 (3%)	144 (3%)	90 (2%)
Other	43 (<1%)	38 (<1%)	46 (<1%)	23 (<1%)	19 (<1%)
Unknown	11 (<1%)	6 (<1%)	5 (<1%)	31 (<1%)	36 (<1%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Table 67. Deaths (%) by Manner

Manner	2019	2020	2021	2022	2023
Natural	3,806 (82%)	4,361 (84%)	5,237 (84%)	4,760 (83%)	4,450 (80%)
Non-Natural	746 (16%)	754 (14%)	886 (14%)	864 (15%)	963 (17%)
Accident	451 (10%)	489 (9%)	617 (10%)	584 (10%)	691 (12%)
Suicide	208 (4%)	204 (4%)	218 (4%)	200 (3%)	207 (4%)
Homicide	87 (2%)	61 (1%)	51 (<1%)	80 (1%)	65 (1%)
Could Not Be Determined	60 (1%)	80 (2%)	81 (1%)	78 (1%)	95 (2%)
Unknown/Pending	19 (<1%)	6 (<1%)	19 (<1%)	22 (<1%)	25 (<1%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Table 68. Deaths (%) by Tobacco Contributed

Tobacco Contributed	2019	2020	2021	2022	2023
Yes	486 (10%)	446 (9%)	494 (8%)	471 (8%)	463 (8%)
No	2,196 (47%)	2,371 (46%)	2,807 (45%)	2,522 (44%)	2,680 (48%)
Probably	333 (7%)	372 (7%)	467 (8%)	421 (7%)	363 (7%)
Unknown	1,616 (35%)	2,012 (39%)	2,455 (39%)	2,310 (40%)	2,027 (37%)
Total	4,631 (100%)	5,201 (100%)	6,223 (100%)	5,724 (100%)	5,533 (100%)

Leading Causes of Death

Alaska's leading causes of death (LCOD) are determined by collapsing over 8,000 International Classification of Disease, 10th Revision (ICD-10) cause of death codes into 52 cause categories recommended by the CDC for the general analysis of mortality, or into 71 cause categories recommend for the analysis of infant mortality. ⁴⁵ Cause categories are tabulated and ranked based on the "underlying cause of death" (UCOD), defined 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. This analysis excludes "contributing causes of death" (CCOD), defined as all other causes in the train of morbid events resulting in death. This ensures that cause categories are mutually exclusive and prevents a single death from being counted in multiple categories. Cause of death differs from the "manner of death", which describes the way in which the death occurred, as opposed to the medical conditions, diseases, or injuries in the train of morbid events that resulted in death (even though common terms like "accident", "suicide", or "homicide" may be common to both concepts, despite technically referring to slightly different aspects of the death).

In 2023, the top ten LCOD were responsible for 3,860 deaths, or 70% percent of all deaths. Malignant neoplasms (1,057 deaths) and diseases of heart (912 deaths) are consistently the top two LCOD in Alaska. Accidents were the third LCOD. Malignant neoplasms were the LCOD for both men and women, White and Hispanic people (tied with accidents), people ages 55-84 years, and residents of the Anchorage, Gulf Coast, Interior, Matanuska-Susitna, Southeast, and Southwest regions. Diseases of heart were the LCOD for Asian/PI people, people ages 85+ years, and residents of the Northern region. Accidents were the LCOD for Black, Al/AN, multiple race, and Hispanic people (tied with malignant neoplasms), people ages 5-54 years. Certain conditions originating in the perinatal period were the LCOD among children ages <5 years.

⁴⁵ Centers for Disease Control and Prevention. ICD-10 Cause-of-Death Lists for Tabulating Mortality Statistics (Updated September 2020 to include WHO updates to ICD-10 for data year 2020).

Figure 5. 2023 Top Ten Leading Causes of Death

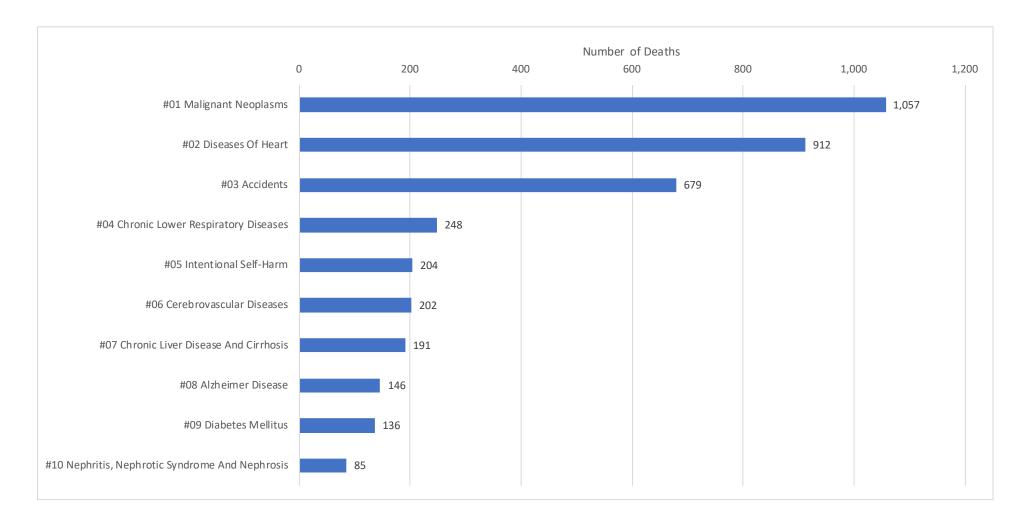


Table 69. Top Ten Leading Causes of Death (Count)

Rank	2019	2020	2021	2022	2023
#1	Malignant Neoplasms (1,023)	Malignant Neoplasms (1,043)	Malignant Neoplasms (1,091)	Malignant Neoplasms (1,075)	Malignant Neoplasms (1,057)
#2	Diseases Of Heart (842)	Diseases Of Heart (915)	Diseases Of Heart (1,011)	Diseases Of Heart (1,011)	Diseases Of Heart (912)
#3	Accidents (433)	Accidents (465)	COVID-19 (762)	Accidents (561)	Accidents (679)
#4	Cerebrovascular Diseases / Intentional Self-Harm (210)	COVID-19 (231)	Accidents (591)	COVID-19 (264)	Chronic Lower Respiratory Diseases (248)
#5	Chronic Lower Respiratory Diseases (202)	Cerebrovascular Diseases (212)	Cerebrovascular Diseases (253)	Cerebrovascular Diseases (222)	Intentional Self-Harm (204)
#6	Alzheimer Disease (128)	Chronic Lower Respiratory Diseases (205)	Chronic Lower Respiratory Diseases (237)	Chronic Lower Respiratory Diseases (212)	Cerebrovascular Diseases (202)
#7	Diabetes Mellitus (111)	Intentional Self-Harm (204)	Intentional Self-Harm (220)	Intentional Self-Harm (200)	Chronic Liver Disease And Cirrhosis (191)
#8	Chronic Liver Disease And Cirrhosis (110)	Diabetes Mellitus (174)	Chronic Liver Disease And Cirrhosis (189)	Chronic Liver Disease And Cirrhosis (185)	Alzheimer Disease (146)
#9	Assault (79)	Chronic Liver Disease And Cirrhosis (167)	Diabetes Mellitus (183)	Diabetes Mellitus (184)	Diabetes Mellitus (136)
#10	Nephritis, Nephrotic Syndrome And Nephrosis (62)	Alzheimer Disease (139)	Alzheimer Disease (135)	Alzheimer Disease (177)	Nephritis, Nephrotic Syndrome And Nephrosis (85)
Overall	All Causes (4,631)	All Causes (5,201)	All Causes (6,223)	All Causes (5,724)	All Causes (5,533)

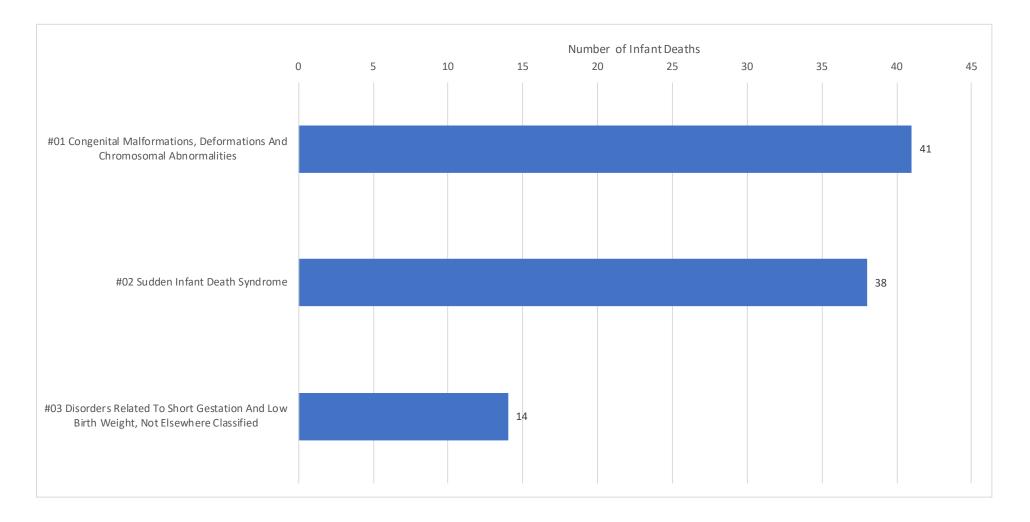
Table 70. 2023 Top Three Leading Causes of Death (Count) by Demographic Characteristics

Demographic	Characteristic	#1	#2	#3	Overall
Sex	Male	Malignant Neoplasms (645)	Diseases Of Heart (573)	Accidents (448)	All Causes (3,264)
	Female	Malignant Neoplasms (412)	Diseases Of Heart (339)	Accidents (231)	All Causes (2,269)
Race	White	Malignant Neoplasms (752)	Diseases Of Heart (576)	Accidents (363)	All Causes (3,495)
	Black	Accidents (26)	Diseases Of Heart (23)	Malignant Neoplasms (19)	All Causes (130)
	AI/AN	Accidents (221)	Diseases Of Heart (199)	Malignant Neoplasms (184)	All Causes (1,276)
	Asian/PI	Diseases Of Heart (45)	Malignant Neoplasms (44)	Cerebrovascular Diseases / Diabetes Mellitus (19)	All Causes (256)
	Multiple	Accidents (39)	Diseases Of Heart (34)	Malignant Neoplasms (29)	All Causes (215)
	Hispanic	Accidents / Malignant Neoplasms (24)	Diseases Of Heart (20)	Intentional Self-Harm (9)	All Causes (153)
Age	<5 Years	Certain Conditions Originating In The Perinatal Period (27)	Congenital Malformations, Deformations And Chromosomal Abnormalities (13)	Accidents (5)	All Causes (81)
	5-14 Years	Accidents (4)	Intentional Self-Harm / Malignant Neoplasms (2)	Aortic Aneurysm And Dissection / Assault / Chronic Lower Respiratory Diseases / Diseases Of Heart / In Situ Neoplasms, Benign Neoplasms And Neoplasms Of Uncertain Or Unknown Behavior / Influenza And Pneumonia (1)	All Causes (19)
	15-24 Years	Accidents (59)	Intentional Self-Harm (42)	Assault (10)	All Causes (133)
	25-34 Years	Accidents (104)	Intentional Self-Harm (40)	Chronic Liver Disease And Cirrhosis (28)	All Causes (255)
	35-44 Years	Accidents (169)	Intentional Self-Harm (39)	Chronic Liver Disease And Cirrhosis (38)	All Causes (393)
	45-54 Years	Accidents (96)	Malignant Neoplasms (62)	Diseases Of Heart (61)	All Causes (411)
	55-64 Years	Malignant Neoplasms (213)	Diseases Of Heart (163)	Accidents (82)	All Causes (856)
	65-74 Years	Malignant Neoplasms (352)	Diseases Of Heart (235)	Chronic Lower Respiratory Diseases (80)	All Causes (1,269)
	75-84 Years	Malignant Neoplasms (273)	Diseases Of Heart (207)	Chronic Lower Respiratory Diseases (82)	All Causes (1,147)
	85+ Years	Diseases Of Heart (206)	Malignant Neoplasms (120)	Alzheimer Disease (81)	All Causes (969)
Residence	Anchorage	Malignant Neoplasms (388)	Diseases Of Heart (356)	Accidents (303)	All Causes (2,173)
	Gulf Coast	Malignant Neoplasms (146)	Diseases Of Heart (110)	Accidents (63)	All Causes (646)
	Interior	Malignant Neoplasms (134)	Diseases Of Heart (119)	Accidents (92)	All Causes (770)
	Mat-Su	Malignant Neoplasms (169)	Diseases Of Heart (143)	Accidents (86)	All Causes (840)
	Northern	Diseases Of Heart (36)	Malignant Neoplasms (34)	Accidents (27)	All Causes (199)
	Southeast	Malignant Neoplasms (136)	Diseases Of Heart (96)	Accidents (67)	All Causes (606)
	Southwest	Malignant Neoplasms (49)	Diseases Of Heart (47)	Accidents (37)	All Causes (286)
Statewide	Total	Malignant Neoplasms (1,057)	Diseases Of Heart (912)	Accidents (679)	All Causes (5,533)

Leading Causes of Infant Death⁴⁶

Between 2021-2023, the top three LCOD for infants were congenital malformations, deformations, and chromosomal abnormalities (41 deaths), Sudden Infant Death Syndrome (38 deaths), and disorders related to short gestation and low birth weight, not elsewhere classified (14 deaths). Congenital malformations, etc. were the LCOD in the neonatal period. Sudden Infant Death Syndrome was the LCOD in the postneonatal period.

Figure 6. 2021-2023 Top Three Leading Causes of Infant Death



⁴⁶ Due to relatively low annual numbers of infant deaths in Alaska, leading causes are based on a three-year rolling sum of deaths.

Table 71. Top Three Leading Causes of Infant Death (Count)

Rank	2017-2019	2018-2020	2019-2021	2020-2022	2021-2023
#1	Congenital Malformations,				
	Deformations And				
	Chromosomal Abnormalities				
	(42)	(39)	(44)	(40)	(41)
#2	Sudden Infant Death				
	Syndrome (20)	Syndrome (24)	Syndrome (32)	Syndrome (38)	Syndrome (38)
#3	Disorders Related To Short				
	Gestation And Low Birth				
	Weight, Not Elsewhere				
	Classified (11)	Classified (16)	Classified (15)	Classified (16)	Classified (14)
Overall	All Causes (168)	All Causes (164)	All Causes (173)	All Causes (187)	All Causes (199)

Table 72. 2021-2023 Top Three Leading Causes of Infant Death (Count) by Demographic Characteristics

Demographic	Characteristic	#1	#2	#3	Overall
Age	<27 Days (Neonatal)	Congenital Malformations, Deformations And Chromosomal Abnormalities (33)	Disorders Related To Short Gestation And Low Birth Weight, Not Elsewhere Classified (14)	Newborn Affected By Maternal Complications Of Pregnancy (11)	All Causes (111)
	28+ Days (Postneonatal)	Sudden Infant Death Syndrome (33)	Congenital Malformations, Deformations And Chromosomal Abnormalities (8)	Accidents (7)	All Causes (88)
Statewide	Total	Congenital Malformations, Deformations And Chromosomal Abnormalities (41)	Sudden Infant Death Syndrome (38)	Disorders Related To Short Gestation And Low Birth Weight, Not Elsewhere Classified (14)	All Causes (199)

Multiple Causes of Death

While classifying a single disease or injury as the UCOD is a useful starting point for analyzing mortality, this also represents an oversimplification of the complicated pathology involved in many deaths. Multiple cause of death (MCOD) analysis, which considers both underlying and contributing causes, can also be used to explore common comorbidities or show all cause and cause related deaths. Because deaths by MCOD are not mutually exclusive, these are not ranked, and a single death can be counted in multiple categories. For example, in 2023, while malignant neoplasms were the UCOD in 1,057 deaths, they were also a CCOD in an additional 112 deaths, for a total of 1,169 total malignant neoplasms related deaths. This includes 25 deaths where diseases of heart were the UCOD, 11 deaths where chronic lower respiratory diseases were the UCOD, etc. Conversely, 172 deaths where malignant neoplasms were the UCOD had heart disease as a CCOD, 114 had chronic lower respiratory diseases as a CCOD, etc.

Table 73. Leading Underlying Causes of Deaths (%) by Multiple Cause⁴⁷

	Malig. Neo.	Heart	Accidents	C.L.R.D.	Self-Harm	Carabra	C.L.D.C.	Alzheimer	Diabetes	Nephritis, Nephrotic Syndrome And
Leading Underlying Causes	Related	Related	Related	Related	Related	Cerebro. Related	Related	Related	Related	Nephrosis
All Cause-Related	1,169 (21%)	2,118 (38%)	797 (14%)	553 (10%)	207 (4%)	463 (8%)	288 (5%)	170 (3%)	382 (7%)	379 (7%)
Malignant Neoplasms	1,057 (100%)	172 (16%)	5 (<1%)	71 (7%)	0 (0%)	36 (3%)	20 (2%)	1 (<1%)	39 (4%)	47 (4%)
Diseases Of Heart	25 (3%)	912 (100%)	27 (3%)	78 (9%)	1 (<1%)	59 (6%)	17 (2%)	3 (<1%)	78 (9%)	70 (8%)
Accidents	7 (1%)	217 (32%)	679 (100%)	38 (6%)	0 (0%)	26 (4%)	17 (3%)	7 (1%)	26 (4%)	7 (1%)
Chronic Lower Respiratory Diseases (C.L.R.D.)	11 (4%)	114 (46%)	5 (2%)	248 (100%)	0 (0%)	9 (4%)	6 (2%)	1 (<1%)	13 (5%)	17 (7%)
Intentional Self-Harm	0 (0%)	5 (2%)	2 (<1%)	1 (<1%)	204 (100%)	1 (<1%)	2 (<1%)	0 (0%)	0 (0%)	0 (0%)
Cerebrovascular Diseases	4 (2%)	42 (21%)	8 (4%)	6 (3%)	0 (0%)	202 (100%)	2 (<1%)	0 (0%)	13 (6%)	4 (2%)
Chronic Liver Disease And Cirrhosis (C.L.D.C.)	4 (2%)	49 (26%)	6 (3%)	3 (2%)	0 (0%)	5 (3%)	191 (100%)	0 (0%)	7 (4%)	21 (11%)
Alzheimer Disease	6 (4%)	13 (9%)	4 (3%)	5 (3%)	0 (0%)	4 (3%)	0 (0%)	146 (100%)	3 (2%)	6 (4%)
Diabetes Mellitus	4 (3%)	89 (65%)	2 (1%)	2 (1%)	0 (0%)	20 (15%)	1 (<1%)	0 (0%)	136 (100%)	3 (2%)
Nephritis, Nephrotic Syndrome And Nephrosis	1 (1%)	31 (36%)	2 (2%)	1 (1%)	0 (0%)	4 (5%)	1 (1%)	0 (0%)	1 (1%)	85 (100%)

⁴⁷ Leading underlying cause and cause-related categories in this table are limited to the first ten LCOD categories by ranked order. The full top ten list may be omitted in the event of ties.

Death Rates

In 2023, the crude death rate (CDR), which measures the number of deaths per 100,000 Alaska residents, was 750.9, down from 777.2 in 2022. Because the age distribution of populations can change over time and differ by groups of people, the age-adjusted death rate (AADR) is generally a more meaningful measure for analyzing mortality trends than CDRs. The AADR standardizes CDRs by the U.S. year 2000 standard population level to report rates as if all groups had comparable age distributions. The age-specific death rate (ASDR), which measures the number of deaths per 100,000 population in the same age group (i.e., CDRs by age) does not require age-adjustment. In 2023, Alaska's total AADR rate was 767.4, down from 805.2 in 2022. The highest statistical reliable (i.e., based on 20 or more events) AADRs were found in men (905.7) Al/AN people (1,358.3), and residents of the Northern region (1,093.2).

Figure 7. Number of Deaths and Age-Adjusted Death Rate by Year

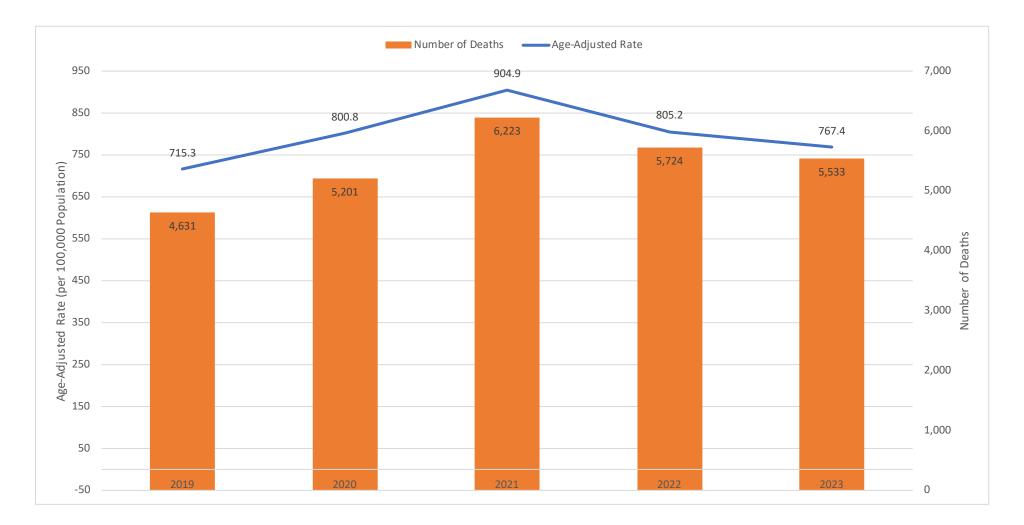


Table 74. Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics 48

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	2,617 (693.9) [812.1]	3,018 (791.3) [936.5]	3,656 (956.0) [1,065.0]	3,265 (855.3) [916.3]	3,264 (852.7) [905.7]
	Female	2,014 (566.4) [616.3]	2,183 (620.2) [667.4]	2,567 (725.8) [747.0]	2,459 (693.1) [690.9]	2,269 (640.9) [629.2]
Race	White	2,990 (628.2) [626.6]	3,246 (684.1) [686.4]	3,878 (816.7) [771.6]	3,593 (758.1) [693.4]	3,495 (739.0) [663.0]
	Black	128 (476.6) [717.2]	157 (584.2) [822.9]	142 (527.0) [745.4]	172 (638.8) [857.6]	130 (482.0) [611.8]
	AI/AN	1,034 (913.1) [1,248.5]	1,221 (1,064.1) [1,452.9]	1,480 (1,288.4) [1,664.9]	1,352 (1,176.7) [1,457.7]	1,276 (1,111.1) [1,358.3]
	Asian/PI	216 (359.8) [453.5]	271 (447.3) [549.6]	356 (580.4) [670.8]	252 (407.3) [462.5]	256 (410.3) [447.3]
	Multiple	193 (340.9) [833.0]	223 (393.2) [905.3]	261 (448.9) [1,044.2]	225 (382.2) [845.6]	215 (360.5) [929.7]
	Hispanic	115 (216.0) [503.4]	126 (252.1) [529.8]	146 (281.0) [575.2]	146 (274.0) [480.0]	153 (280.1) [512.7]
Age	<5 Years	66 (132.5)	62 (128.9)	84 (181.5)	74 (164.8)	81 (181.6)
	5-14 Years	22 (20.8)	35 (34.2)	10 (9.7*)	23 (22.2)	19 (18.7*)
	15-24 Years	126 (134.8)	133 (137.3)	144 (146.3)	130 (132.6)	133 (134.0)
	25-34 Years	228 (203.2)	239 (213.3)	303 (278.0)	280 (263.2)	255 (239.6)
	35-44 Years	246 (253.4)	289 (293.7)	378 (374.4)	330 (321.7)	393 (375.8)
	45-54 Years	338 (394.8)	412 (485.7)	530 (642.4)	435 (529.6)	411 (501.7)
	55-64 Years	771 (790.7)	861 (901.0)	1,005 (1,076.9)	923 (1,008.9)	856 (975.6)
	65-74 Years	1,027 (1,654.8)	1,138 (1,745.5)	1,441 (2,068.5)	1,321 (1,830.4)	1,269 (1,731.5)
	75-84 Years	981 (4,321.2)	1,101 (4,691.3)	1,277 (5,000.8)	1,230 (4,377.1)	1,147 (3,866.2)
	85+ Years	826 (12,275.2)	931 (14,281.3)	1,051 (14,876.2)	978 (13,388.1)	969 (12,865.1)
Residence	Anchorage	1,825 (624.0) [720.2]	2,059 (707.0) [794.9]	2,363 (813.6) [867.9]	2,197 (757.7) [785.4]	2,173 (750.2) [769.3]
	Gulf Coast	579 (714.4) [654.5]	607 (743.7) [701.6]	783 (959.1) [862.8]	724 (877.9) [753.2]	646 (776.9) [649.2]
	Interior	587 (533.3) [625.7]	679 (620.5) [751.2]	846 (758.3) [850.2]	772 (697.6) [752.5]	770 (701.3) [758.1]
	Mat-Su	655 (613.4) [709.2]	768 (717.2) [834.5]	997 (913.8) [1,011.9]	870 (778.2) [836.5]	840 (737.4) [791.1]
	Northern	203 (738.6) [1,250.1]	202 (699.7) [1,207.3]	228 (804.3) [1,267.0]	238 (856.5) [1,249.6]	199 (717.8) [1,093.2]
	Southeast	490 (675.2) [643.2]	555 (767.8) [736.1]	652 (897.0) [822.1]	600 (834.8) [728.3]	606 (852.6) [731.5]
	Southwest	282 (666.7) [1,007.6]	323 (753.6) [1,148.0]	351 (829.1) [1,259.3]	317 (755.8) [1,090.7]	286 (689.4) [944.3]
Statewide	Total	4,631 (632.0) [715.3]	5,201 (709.2) [800.8]	6,223 (845.4) [904.9]	5,724 (777.2) [805.2]	5,533 (750.9) [767.4]

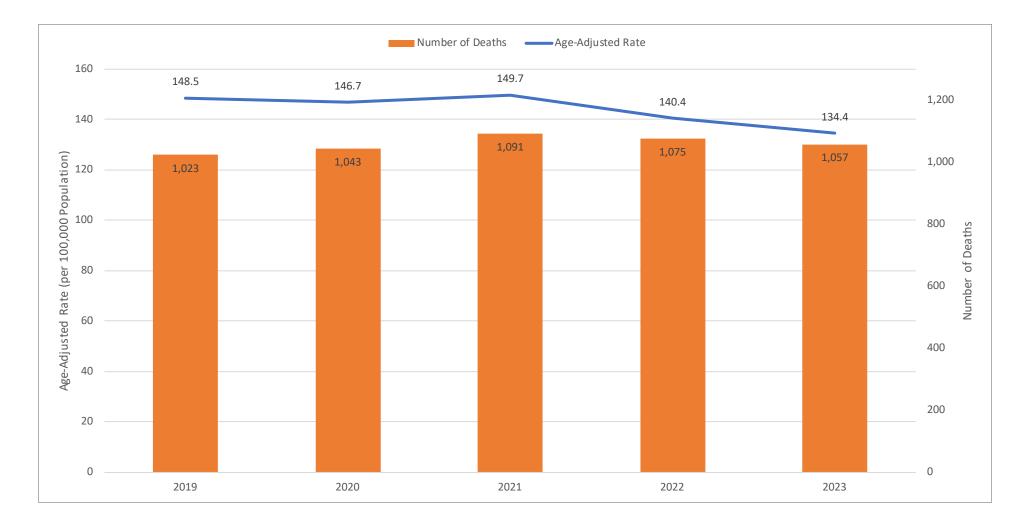
⁴⁸Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Malignant Neoplasms⁴⁹

Malignant neoplasms (cancers) were the number one leading cause of death in 2023 (1,057 deaths). Malignant neoplasms had an overall AADR of 134.4, down from 140.4 in 2022. The highest statistically reliable AADRs were found in men (167.2), AI/AN people (194.0), and residents of the Northern region (209.0). The most common type of malignant neoplasms were trachea, bronchus and lung (220 deaths).

Figure 8. Malignant Neoplasms Number of Deaths and Age-Adjusted Death Rate by Year



⁴⁹ ICD-10 Codes: C00-C97.

Table 75. Malignant Neoplasms Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics⁵⁰

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	574 (152.2) [174.1]	587 (153.9) [169.6]	620 (162.1) [179.2]	578 (151.4) [153.8]	645 (168.5) [167.2]
	Female	449 (126.3) [126.5]	456 (129.6) [126.2]	471 (133.2) [124.3]	497 (140.1) [128.9]	412 (116.4) [104.3]
Race	White	724 (152.1) [139.0]	722 (152.2) [137.0]	773 (162.8) [139.7]	769 (162.3) [134.5]	752 (159.0) [126.9]
	Black	27 (100.5) [166.3]	29 (107.9) [135.3]	19 (70.5*) [105.4*]	37 (137.4) [196.1]	19 (70.4*) [87.3*]
	AI/AN	161 (142.2) [196.7]	187 (163.0) [215.3]	186 (161.9) [223.9]	168 (146.2) [177.4]	184 (160.2) [194.0]
	Asian/PI	54 (90.0) [105.0]	56 (92.4) [104.2]	56 (91.3) [101.9]	51 (82.4) [89.7]	44 (70.5) [74.1]
	Multiple	48 (84.8) [253.5]	37 (65.2) [166.0]	36 (61.9) [181.9]	29 (49.3) [145.8]	29 (48.6) [146.5]
	Hispanic	26 (48.8) [142.6]	17 (34.0*) [85.2*]	19 (36.6*) [81.0*]	25 (46.9) [100.7]	24 (43.9) [104.1]
Age	<5 Years	2 (**)	2 (**)	1 (**)	1 (**)	0
	5-14 Years	2 (**)	2 (**)	0	2 (**)	2 (**)
	15-24 Years	3 (**)	3 (**)	4 (**)	6 (6.1*)	6 (6.0*)
	25-34 Years	5 (**)	7 (6.2*)	7 (6.4*)	8 (7.5*)	11 (10.3*)
	35-44 Years	16 (16.5*)	24 (24.4)	20 (19.8)	23 (22.4)	18 (17.2*)
	45-54 Years	56 (65.4)	75 (88.4)	56 (67.9)	71 (86.4)	62 (75.7)
	55-64 Years	219 (224.6)	223 (233.4)	197 (211.1)	204 (223.0)	213 (242.7)
	65-74 Years	335 (539.8)	347 (532.2)	374 (536.9)	363 (503.0)	352 (480.3)
	75-84 Years	259 (1,140.9)	260 (1,107.8)	295 (1,155.2)	269 (957.3)	273 (920.2)
	85+ Years	126 (1,872.5)	100 (1,534.0)	137 (1,939.1)	128 (1,752.2)	120 (1,593.2)
Residence	Anchorage	399 (136.4) [150.2]	421 (144.6) [153.0]	383 (131.9) [132.7]	423 (145.9) [142.4]	388 (134.0) [128.6]
	Gulf Coast	140 (172.7) [146.0]	115 (140.9) [119.1]	149 (182.5) [150.7]	147 (178.2) [132.2]	146 (175.6) [126.5]
	Interior	126 (114.5) [124.3]	133 (121.5) [132.5]	151 (135.4) [148.4]	136 (122.9) [128.2]	134 (122.0) [123.5]
	Mat-Su	156 (146.1) [153.2]	155 (144.8) [144.7]	182 (166.8) [171.6]	173 (154.7) [151.9]	169 (148.3) [141.9]
	Northern	33 (120.1) [236.1]	40 (138.6) [242.2]	34 (119.9) [175.5]	24 (86.4) [110.8]	34 (122.6) [209.0]
	Southeast	119 (164.0) [144.1]	132 (182.6) [150.9]	145 (199.5) [164.7]	136 (189.2) [153.3]	136 (191.3) [148.9]
	Southwest	48 (113.5) [186.3]	45 (105.0) [154.0]	47 (111.0) [198.9]	35 (83.4) [110.2]	49 (118.1) [173.6]
Statewide	Total	1,023 (139.6) [148.5]	1,043 (142.2) [146.7]	1,091 (148.2) [149.7]	1,075 (146.0) [140.4]	1,057 (143.5) [134.4]

⁵⁰ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 76. Malignant Neoplasms Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Type⁵¹

Туре	2019	2020	2021	2022	2023
Malignant Neoplasms	1,023 (139.6) [148.5]	1,043 (142.2) [146.7]	1,091 (148.2) [149.7]	1,075 (146.0) [140.4]	1,057 (143.5) [134.4]
Lip, Oral Cavity And Pharynx	20 (2.7) [2.7]	18 (2.5*) [2.5*]	25 (3.4) [3.4]	21 (2.9) [2.4]	24 (3.3) [2.6]
Esophagus	36 (4.9) [5.6]	22 (3.0) [2.8]	34 (4.6) [4.4]	35 (4.8) [4.1]	41 (5.6) [4.9]
Stomach	23 (3.1) [3.0]	29 (4.0) [3.8]	37 (5.0) [4.7]	28 (3.8) [3.6]	31 (4.2) [3.7]
Colon, Rectum And Anus	100 (13.6) [14.1]	109 (14.9) [16.3]	88 (12.0) [12.5]	96 (13.0) [12.6]	111 (15.1) [14.8]
Liver And Intrahepatic Bile Ducts	66 (9.0) [9.4]	54 (7.4) [7.3]	58 (7.9) [7.2]	54 (7.3) [6.3]	57 (7.7) [7.0]
Pancreas	70 (9.6) [9.5]	88 (12.0) [11.8]	63 (8.6) [8.2]	81 (11.0) [9.8]	75 (10.2) [9.0]
Larynx	7 (1.0*) [1.0*]	5 (**) [**]	5 (**) [**]	7 (1.0*) [0.9*]	8 (1.1*) [1.1*]
Trachea, Bronchus And Lung	222 (30.3) [30.6]	239 (32.6) [32.8]	232 (31.5) [31.9]	233 (31.6) [29.1]	220 (29.9) [27.2]
Skin	11 (1.5*) [1.6*]	14 (1.9*) [2.2*]	8 (1.1*) [1.0*]	15 (2.0*) [2.1*]	16 (2.2*) [2.1*]
Breast (Women Only)	69 (9.4) [9.7]	60 (8.2) [7.6]	70 (9.5) [9.5]	63 (8.6) [8.1]	63 (8.6) [8.0]
Cervix Uteri	6 (0.8*) [0.9*]	4 (**) [**]	11 (1.5*) [1.4*]	5 (**) [**]	10 (1.4*) [1.4*]
Corpus Uteri And Uterus, Part Unspecified	13 (1.8*) [2.2*]	20 (2.7) [2.7]	14 (1.9*) [1.8*]	7 (1.0*) [0.9*]	8 (1.1*) [0.8*]
Ovary	19 (2.6*) [2.8*]	14 (1.9*) [1.9*]	28 (3.8) [3.3]	24 (3.3) [3.2]	17 (2.3*) [2.5*]
Prostate	65 (8.9) [11.0]	49 (6.7) [8.0]	65 (8.8) [10.1]	65 (8.8) [9.3]	59 (8.0) [8.0]
Kidney And Renal Pelvis	22 (3.0) [3.2]	25 (3.4) [3.4]	30 (4.1) [4.1]	31 (4.2) [4.1]	16 (2.2*) [1.9*]
Bladder	19 (2.6*) [2.7*]	20 (2.7) [3.5]	28 (3.8) [4.1]	35 (4.8) [5.1]	24 (3.3) [3.4]
Meninges, Brain And Other Parts Of Central Nervous System	27 (3.7) [3.7]	31 (4.2) [4.0]	39 (5.3) [5.3]	28 (3.8) [3.7]	32 (4.3) [3.8]
Hodgkin's Disease	1 (**) [**]	1 (**) [**]	0	2 (**) [**]	1 (**) [**]
Non-Hodgkin's Lymphoma	35 (4.8) [5.8]	35 (4.8) [5.2]	38 (5.2) [5.2]	30 (4.1) [4.4]	34 (4.6) [4.9]
Leukemia	35 (4.8) [5.3]	40 (5.5) [6.1]	38 (5.2) [6.0]	32 (4.3) [4.7]	31 (4.2) [4.1]
Multiple Myeloma And Immunoproliferative Neoplasms	20 (2.7) [3.0]	12 (1.6*) [1.9*]	20 (2.7) [2.9]	17 (2.3*) [2.3*]	19 (2.6*) [2.3*]
All Other Malignant Neoplasms	137 (18.7) [20.5]	154 (21.0) [21.9]	160 (21.7) [22.0]	166 (22.5) [22.7]	160 (21.7) [20.7]

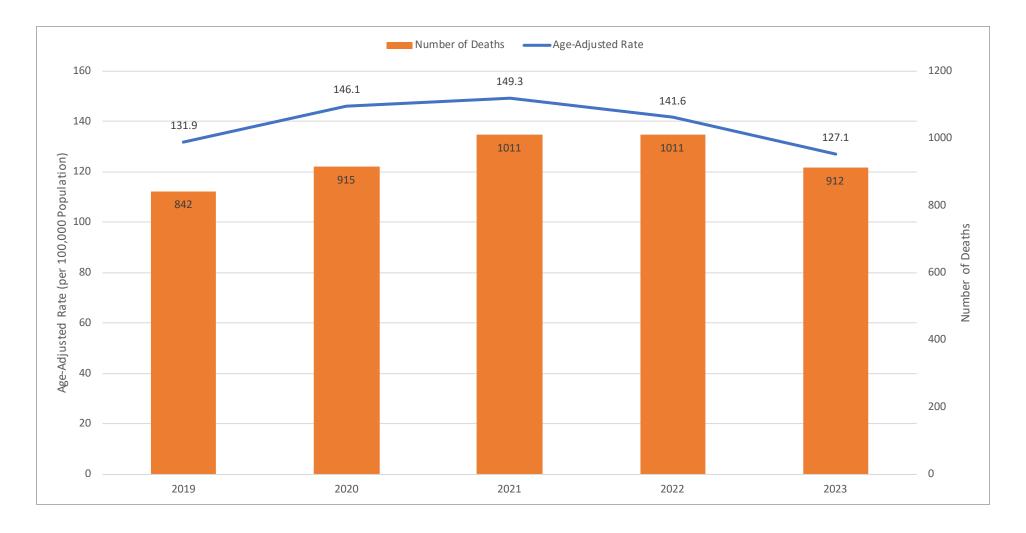
⁵¹ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Diseases of Heart⁵²

Diseases of heart were the second leading cause of death in 2023 (912 deaths). Disease of heart had an overall AADR of 127.1, down from 141.6 in 2022. The highest statistically reliable AADRs were found in men (159.2), AI/AN people (223.9), and residents of the Northern region (218.6). The most common type of disease of heart (excluding all other residual types) were atherosclerotic cardiovascular disease (179 deaths).

Figure 9. Diseases of Heart Number of Deaths and Age-Adjusted Death Rate by Year



⁵² ICD-10 Codes: I00-I09, I11, I13, I20-I51.

Table 77. Diseases of Heart Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics⁵³

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	514 (136.3) [162.2]	569 (149.2) [184.9]	647 (169.2) [191.7]	615 (161.1) [171.1]	573 (149.7) [159.2]
	Female	328 (92.2) [103.2]	346 (98.3) [110.0]	364 (102.9) [108.9]	396 (111.6) [112.1]	339 (95.8) [95.0]
Race	White	548 (115.1) [114.5]	622 (131.1) [131.8]	651 (137.1) [130.3]	624 (131.7) [119.1]	576 (121.8) [110.2]
	Black	32 (119.1) [179.4]	16 (59.5*) [100.1*]	33 (122.5) [189.4]	34 (126.3) [162.2]	23 (85.3) [116.4]
	AI/AN	174 (153.7) [226.6]	181 (157.7) [242.8]	202 (175.8) [235.0]	240 (208.9) [269.3]	199 (173.3) [223.9]
	Asian/PI	49 (81.6) [114.2]	50 (82.5) [100.9]	68 (110.9) [129.6]	54 (87.3) [97.6]	45 (72.1) [76.2]
	Multiple	27 (47.7) [138.4]	36 (63.5) [200.0]	45 (77.4) [196.3]	35 (59.5) [156.6]	34 (57.0) [175.3]
	Hispanic	19 (35.7*) [80.9*]	17 (34.0*) [71.1*]	19 (36.6*) [70.0*]	21 (39.4) [67.0]	20 (36.6) [67.6]
Age	<5 Years	0	1 (**)	2 (**)	1 (**)	0
	5-14 Years	1 (**)	0	0	2 (**)	1 (**)
	15-24 Years	1 (**)	1 (**)	7 (7.1*)	6 (6.1*)	1 (**)
	25-34 Years	11 (9.8*)	10 (8.9*)	20 (18.3)	14 (13.2*)	9 (8.5*)
	35-44 Years	25 (25.8)	37 (37.6)	31 (30.7)	32 (31.2)	29 (27.7)
	45-54 Years	58 (67.7)	70 (82.5)	92 (111.5)	74 (90.1)	61 (74.5)
	55-64 Years	175 (179.5)	178 (186.3)	180 (192.9)	189 (206.6)	163 (185.8)
	65-74 Years	191 (307.8)	197 (302.2)	252 (361.7)	256 (354.7)	235 (320.6)
	75-84 Years	199 (876.6)	193 (822.4)	204 (798.9)	244 (868.3)	207 (697.7)
	85+ Years	181 (2,689.8)	228 (3,497.5)	223 (3,156.4)	193 (2,642.0)	206 (2,735.0)
Residence	Anchorage	342 (116.9) [136.0]	363 (124.6) [143.3]	398 (137.0) [145.6]	366 (126.2) [129.2]	356 (122.9) [127.1]
	Gulf Coast	110 (135.7) [122.3]	126 (154.4) [143.0]	140 (171.5) [149.0]	131 (158.8) [132.9]	110 (132.3) [112.6]
	Interior	107 (97.2) [119.0]	132 (120.6) [160.1]	117 (104.9) [123.9]	133 (120.2) [127.9]	119 (108.4) [121.9]
	Mat-Su	114 (106.8) [126.5]	111 (103.7) [121.7]	149 (136.6) [158.6]	142 (127.0) [138.9]	143 (125.5) [130.1]
	Northern	33 (120.1) [230.6]	33 (114.3) [261.8]	41 (144.6) [260.7]	55 (197.9) [340.5]	36 (129.9) [218.6]
	Southeast	91 (125.4) [116.0]	102 (141.1) [140.2]	112 (154.1) [143.0]	133 (185.0) [160.5]	96 (135.1) [113.8]
	Southwest	44 (104.0) [196.0]	47 (109.7) [204.2]	54 (127.6) [206.3]	51 (121.6) [196.4]	47 (113.3) [163.1]
Statewide	Total	842 (114.9) [131.9]	915 (124.8) [146.1]	1,011 (137.3) [149.3]	1,011 (137.3) [141.6]	912 (123.8) [127.1]

⁵³ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 78. Disease of Heart Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Type⁵⁴

Туре	2019	2020	2021	2022	2023
Diseases Of Heart	842 (114.9) [131.9]	915 (124.8) [146.1]	1,011 (137.3) [149.3]	1,011 (137.3) [141.6]	912 (123.8) [127.1]
Acute Rheumatic Fever And Chronic Rheumatic Heart Diseases	12 (1.6*) [2.0*]	10 (1.4*) [1.7*]	13 (1.8*) [2.0*]	15 (2.0*) [1.9*]	12 (1.6*) [1.8*]
Hypertensive Heart Disease	69 (9.4) [10.2]	54 (7.4) [8.2]	104 (14.1) [13.7]	70 (9.5) [10.0]	60 (8.1) [8.5]
Hypertensive Heart And Renal Disease	5 (**) [**]	6 (0.8*) [1.1*]	5 (**) [**]	19 (2.6*) [3.2*]	15 (2.0*) [2.9*]
Acute Myocardial Infarction	103 (14.1) [16.7]	112 (15.3) [17.6]	102 (13.9) [14.1]	104 (14.1) [13.2]	91 (12.4) [11.9]
Other Acute Ischemic Heart Diseases	4 (**) [**]	1 (**) [**]	12 (1.6*) [1.6*]	18 (2.4*) [2.2*]	14 (1.9*) [1.6*]
Atherosclerotic Cardiovascular Disease, So Described	150 (20.5) [18.3]	206 (28.1) [26.9]	153 (20.8) [18.7]	189 (25.7) [22.4]	179 (24.3) [21.4]
All Other Forms Of Chronic Ischemic Heart Disease	165 (22.5) [27.1]	189 (25.8) [33.4]	217 (29.5) [34.6]	210 (28.5) [31.1]	164 (22.3) [23.2]
Acute And Subacute Endocarditis	3 (**) [**]	2 (**) [**]	2 (**) [**]	3 (**) [**]	7 (1.0*) [1.0*]
Diseases Of Pericardium And Acute Myocarditis	3 (**) [**]	2 (**) [**]	2 (**) [**]	5 (**) [**]	1 (**) [**]
Heart Failure	89 (12.1) [16.5]	76 (10.4) [14.2]	105 (14.3) [17.5]	99 (13.4) [15.6]	115 (15.6) [17.5]
All Other Diseases Of Heart	239 (32.6) [38.6]	257 (35.0) [41.9]	296 (40.2) [45.7]	279 (37.9) [40.8]	254 (34.5) [37.2]

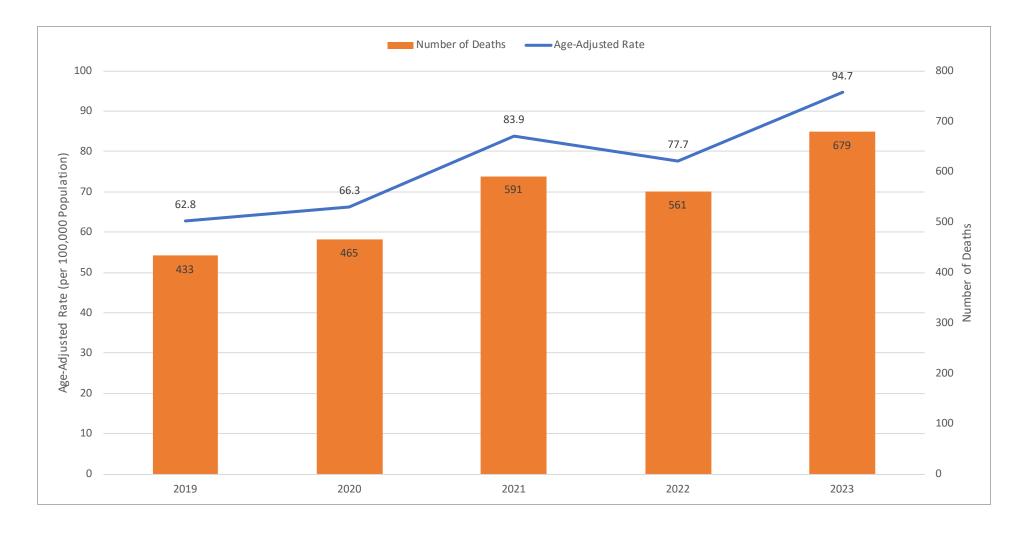
⁵⁴ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Accidents⁵⁵

Accidents (unintentional injuries) were the third leading cause of death in 2023 (679 deaths). Accidents had an overall AADR of 94.7, up from 77.7 in 2022. The highest statistically reliable AADRs were found in men (120.7), AI/AN people (215.2), and residents of the Southwest (106.5). The most common type of accidents were accidental poisoning and exposure to noxious substances (364 deaths). This was followed by motor vehicle accidents (85 deaths).

Figure 10. Accident Number of Deaths and Age-Adjusted Death Rates by Year



⁵⁵ ICD-10 Codes: V01-X59, Y85, Y86.

Table 79. Accident Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics⁵⁶

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	295 (78.2) [81.8]	304 (79.7) [85.4]	396 (103.5) [107.5]	362 (94.8) [97.7]	448 (117.0) [120.7]
	Female	138 (38.8) [41.8]	161 (45.7) [46.9]	195 (55.1) [58.5]	199 (56.1) [56.3]	231 (65.2) [67.6]
Race	White	244 (51.3) [49.8]	246 (51.8) [51.9]	326 (68.7) [67.0]	302 (63.7) [60.5]	363 (76.8) [73.1]
	Black	10 (37.2*) [50.3*]	18 (67.0*) [65.1*]	6 (22.3*) [21.5*]	15 (55.7*) [62.0*]	26 (96.4) [93.5]
	AI/AN	129 (113.9) [135.0]	137 (119.4) [132.8]	191 (166.3) [186.9]	177 (154.0) [173.4]	221 (192.4) [215.2]
	Asian/PI	11 (18.3*) [22.3*]	17 (28.1*) [33.4*]	12 (19.6*) [22.8*]	5 (**) [**]	14 (22.4*) [25.9*]
	Multiple	30 (53.0) [78.1]	30 (52.9) [84.0]	49 (84.3) [146.7]	45 (76.4) [102.7]	39 (65.4) [110.0]
	Hispanic	11 (20.7*) [52.8*]	10 (20.0*) [20.7*]	10 (19.2*) [21.3*]	22 (41.3) [41.8]	24 (43.9) [46.1]
Age	<5 Years	9 (18.1*)	4 (**)	3 (**)	7 (15.6*)	5 (**)
	5-14 Years	6 (5.7*)	13 (12.7*)	4 (**)	8 (7.7*)	4 (**)
	15-24 Years	33 (35.3)	51 (52.6)	53 (53.8)	38 (38.8)	59 (59.4)
	25-34 Years	86 (76.6)	69 (61.6)	108 (99.1)	111 (104.3)	104 (97.7)
	35-44 Years	73 (75.2)	79 (80.3)	116 (114.9)	101 (98.4)	169 (161.6)
	45-54 Years	51 (59.6)	60 (70.7)	94 (113.9)	76 (92.5)	96 (117.2)
	55-64 Years	67 (68.7)	67 (70.1)	93 (99.6)	91 (99.5)	82 (93.5)
	65-74 Years	35 (56.4)	59 (90.5)	40 (57.4)	50 (69.3)	77 (105.1)
	75-84 Years	42 (185.0)	30 (127.8)	47 (184.1)	48 (170.8)	43 (144.9)
	85+ Years	31 (460.7)	33 (506.2)	33 (467.1)	31 (424.4)	40 (531.1)
Residence	Anchorage	145 (49.6) [51.4]	168 (57.7) [61.3]	228 (78.5) [80.8]	207 (71.4) [73.5]	303 (104.6) [105.9]
	Gulf Coast	43 (53.1) [52.5]	56 (68.6) [66.8]	77 (94.3) [99.1]	71 (86.1) [82.3]	63 (75.8) [71.9]
	Interior	53 (48.2) [49.6]	70 (64.0) [65.4]	80 (71.7) [75.3]	70 (63.3) [64.8]	92 (83.8) [85.9]
	Mat-Su	69 (64.6) [73.3]	52 (48.6) [52.2]	75 (68.7) [73.8]	80 (71.6) [71.4]	86 (75.5) [81.2]
	Northern	33 (120.1) [136.4]	26 (90.1) [103.2]	24 (84.7) [94.2]	31 (111.6) [120.5]	27 (97.4) [103.5]
	Southeast	45 (62.0) [63.3]	45 (62.3) [66.3]	67 (92.2) [92.1]	52 (72.3) [72.5]	67 (94.3) [90.7]
	Southwest	44 (104.0) [119.2]	48 (112.0) [125.0]	39 (92.1) [94.7]	50 (119.2) [126.5]	37 (89.2) [106.5]
Statewide	Total	433 (59.1) [62.8]	465 (63.4) [66.3]	591 (80.3) [83.9]	561 (76.2) [77.7]	679 (92.2) [94.7]

⁵⁶ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 80. Accident Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Type⁵⁷

Туре	2019	2020	2021	2022	2023
Accidents	433 (59.1) [62.8]	465 (63.4) [66.3]	591 (80.3) [83.9]	561 (76.2) [77.7]	679 (92.2) [94.7]
Motor Vehicle Accidents	93 (12.7) [12.7]	81 (11.0) [11.0]	97 (13.2) [13.3]	117 (15.9) [15.7]	85 (11.5) [11.4]
Other Land Transport Accidents	3 (**) [**]	1 (**) [**]	1 (**) [**]	4 (**) [**]	2 (**) [**]
Water, Air And Space, And Other And Unspecified Transport Accidents And Their Sequelae	27 (3.7) [3.4]	26 (3.5) [3.6]	18 (2.4*) [2.7*]	19 (2.6*) [2.6*]	37 (5.0) [4.9]
Falls	64 (8.7) [11.6]	64 (8.7) [11.5]	77 (10.5) [12.3]	66 (9.0) [10.6]	67 (9.1) [10.9]
Accidental Discharge Of Firearms	2 (**) [**]	3 (**) [**]	2 (**) [**]	3 (**) [**]	2 (**) [**]
Accidental Drowning And Submersion	18 (2.5*) [2.5*]	21 (2.9) [2.8]	27 (3.7) [3.9]	19 (2.6*) [2.5*]	15 (2.0*) [1.9*]
Accidental Exposure To Smoke, Fire And Flames	11 (1.5*) [1.3*]	15 (2.0*) [2.1*]	18 (2.4*) [2.4*]	16 (2.2*) [2.0*]	18 (2.4*) [2.2*]
Accidental Poisoning And Exposure To Noxious Substances	149 (20.3) [20.3]	179 (24.4) [24.3]	278 (37.8) [38.4]	265 (36.0) [36.1]	364 (49.4) [50.8]
All Other Accidents	66 (9.0) [10.3]	75 (10.2) [10.4]	73 (9.9) [10.5]	52 (7.1) [7.3]	89 (12.1) [12.0]

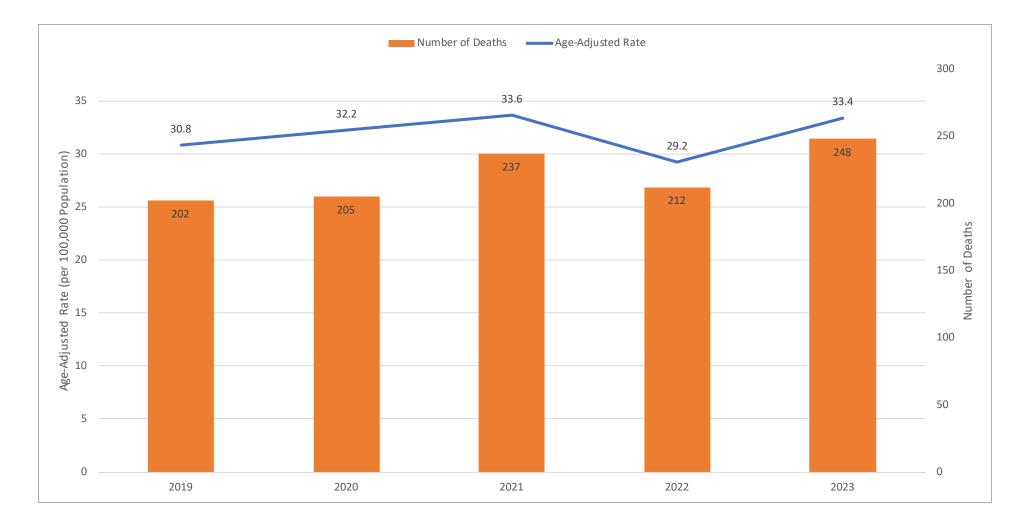
⁵⁷ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Chronic Lower Respiratory Diseases⁵⁸

Chronic lower respiratory diseases (CLRDs) were the fourth leading cause of death in 2023 (248 deaths). CLRDs had an overall AADR of 33.4, up from 29.2 in 2022. The highest statistically reliable AADRs were found in men (37.0), AI/AN people (60.2), and residents of the Matanuska-Susitna region (51.4). The most common type of CLRD (excluding all other chronic obstructive pulmonary disease) was emphysema (19 deaths).

Figure 11. Chronic Lower Respiratory Diseases Number of Deaths and Age-Adjusted Death Rates by Year



Alaska Health Analytics And Vital Records

⁵⁸ ICD-10 Codes: J40-J47.

Table 81. Chronic Lower Respiratory Diseases Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics⁵⁹

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	82 (21.7) [24.2]	109 (28.6) [35.2]	116 (30.3) [33.4]	127 (33.3) [35.7]	133 (34.7) [37.0]
	Female	120 (33.7) [36.3]	96 (27.3) [29.8]	121 (34.2) [33.7]	85 (24.0) [23.2]	115 (32.5) [30.1]
Race	White	144 (30.3) [29.4]	141 (29.7) [30.3]	170 (35.8) [32.0]	133 (28.1) [24.3]	172 (36.4) [30.2]
	Black	6 (22.3*) [30.5*]	3 (**) [**]	1 (**) [**]	7 (26.0*) [38.2*]	2 (**) [**]
	AI/AN	40 (35.3) [51.3]	41 (35.7) [50.4]	56 (48.7) [65.9]	53 (46.1) [62.5]	52 (45.3) [60.2]
	Asian/PI	2 (**) [**]	9 (14.9*) [18.8*]	2 (**) [**]	5 (**) [**]	4 (**) [**]
	Multiple	10 (17.7*) [46.9*]	10 (17.6*) [51.5*]	6 (10.3*) [35.4*]	9 (15.3*) [38.4*]	12 (20.1*) [78.0*]
	Hispanic	1 (**) [**]	5 (**) [**]	2 (**) [**]	2 (**) [**]	5 (**) [**]
Age	<5 Years	0	0	0	0	0
	5-14 Years	0	0	0	0	1 (**)
	15-24 Years	0	4 (**)	0	0	1 (**)
	25-34 Years	0	6 (5.4*)	2 (**)	2 (**)	2 (**)
	35-44 Years	3 (**)	1 (**)	4 (**)	2 (**)	1 (**)
	45-54 Years	7 (8.2*)	10 (11.8*)	5 (**)	6 (7.3*)	4 (**)
	55-64 Years	36 (36.9)	35 (36.6)	39 (41.8)	25 (27.3)	32 (36.5)
	65-74 Years	65 (104.7)	48 (73.6)	79 (113.4)	71 (98.4)	80 (109.2)
	75-84 Years	58 (255.5)	62 (264.2)	67 (262.4)	71 (252.7)	82 (276.4)
	85+ Years	33 (490.4)	39 (598.3)	41 (580.3)	35 (479.1)	45 (597.5)
Residence	Anchorage	72 (24.6) [30.1]	67 (23.0) [25.8]	75 (25.8) [27.5]	64 (22.1) [23.4]	76 (26.2) [25.7]
	Gulf Coast	30 (37.0) [30.1]	25 (30.6) [28.0]	37 (45.3) [34.0]	30 (36.4) [29.4]	25 (30.1) [24.1]
	Interior	26 (23.6) [28.4]	22 (20.1) [25.0]	36 (32.3) [34.5]	34 (30.7) [31.8]	32 (29.1) [31.9]
	Mat-Su	30 (28.1) [32.3]	46 (43.0) [54.9]	37 (33.9) [38.8]	40 (35.8) [37.7]	57 (50.0) [51.4]
	Northern	9 (32.7*) [59.2*]	12 (41.6*) [71.2*]	11 (38.8*) [76.9*]	11 (39.6*) [75.1*]	13 (46.9*) [92.2*]
	Southeast	25 (34.4) [28.2]	25 (34.6) [33.4]	28 (38.5) [33.2]	27 (37.6) [27.6]	34 (47.8) [40.5]
	Southwest	10 (23.6*) [41.0*]	7 (16.3*) [27.4*]	13 (30.7*) [54.5*]	6 (14.3*) [34.1*]	11 (26.5*) [42.3*]
Statewide	Total	202 (27.6) [30.8]	205 (28.0) [32.2]	237 (32.2) [33.6]	212 (28.8) [29.2]	248 (33.7) [33.4]

⁵⁹ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 82. Chronic Lower Respiratory Diseases Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Type⁶⁰

Туре	2019	2020	2021	2022	2023
Chronic Lower Respiratory	202 (27.6) [30.8]	205 (28.0) [32.2]	237 (32.2) [33.6]	212 (28.8) [29.2]	248 (33.7) [33.4]
Diseases					
Bronchitis, Chronic And	1 (**) [**]	0	1 (**) [**]	1 (**) [**]	1 (**) [**]
Unspecified					
Emphysema	8 (1.1*) [1.3*]	13 (1.8*) [2.0*]	18 (2.4*) [2.1*]	19 (2.6*) [2.4*]	19 (2.6*) [2.6*]
Other chronic obstructive	181 (24.7) [27.6]	174 (23.7) [27.9]	202 (27.4) [29.0]	179 (24.3) [24.9]	214 (29.0) [28.8]
pulmonary disease					
Asthma	9 (1.2*) [1.2*]	15 (2.0*) [1.9*]	11 (1.5*) [1.6*]	10 (1.4*) [1.3*]	10 (1.4*) [1.2*]
Bronchiectasis	3 (**) [**]	3 (**) [**]	5 (**) [**]	3 (**) [**]	4 (**) [**]

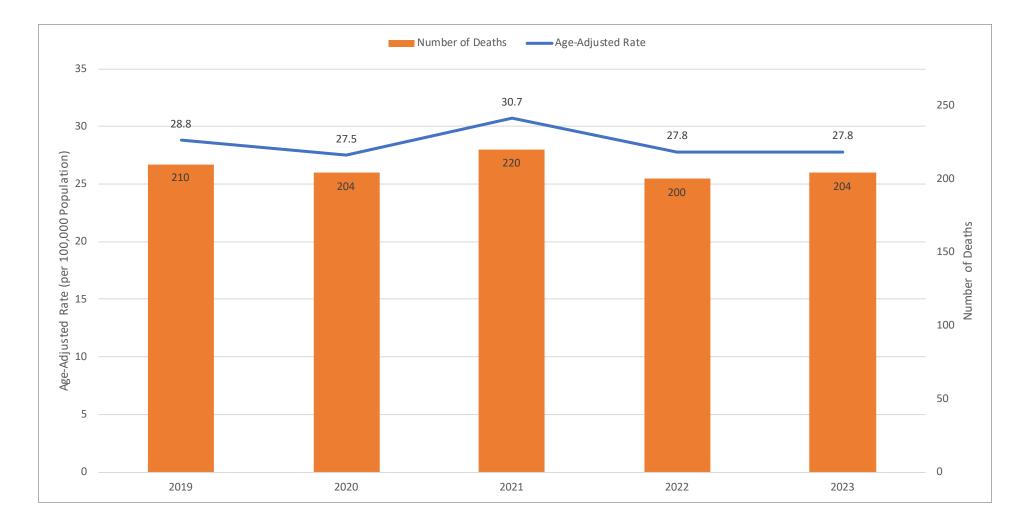
⁶⁰ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Intentional Self-Harm⁶¹

Intentional self-harm (suicide) was the fifth leading cause of death in 2023 (204 deaths). Intentional self-harm had an overall AADR of 27.8, unchanged from 2022. The highest statistically reliable AADRs were found in men (41.6), AI/AN people (60.0), and residents of the Southwest region (62.2). People ages 15-24 years had the highest reliable ASDR (42.3). The most common type of intentional self-harm mechanism was firearms (120 deaths).

Figure 12. Accidents Number of Deaths and Age-Adjusted Death Rates by Year



⁶¹ ICD-10 Codes: U03, X60-X84, Y870.

Table 83. Intentional Self-Harm Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics 62

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	167 (44.3) [44.8]	165 (43.3) [42.7]	170 (44.5) [45.3]	163 (42.7) [44.0]	159 (41.5) [41.6]
	Female	43 (12.1) [11.8]	39 (11.1) [10.8]	50 (14.1) [14.8]	37 (10.4) [10.7]	45 (12.7) [13.0]
Race	White	106 (22.3) [20.8]	110 (23.2) [22.0]	115 (24.2) [24.4]	109 (23.0) [22.7]	103 (21.8) [20.7]
	Black	3 (**) [**]	3 (**) [**]	4 (**) [**]	1 (**) [**]	2 (**) [**]
	AI/AN	77 (68.0) [70.4]	67 (58.4) [55.0]	72 (62.7) [61.9]	65 (56.6) [55.4]	68 (59.2) [60.0]
	Asian/PI	6 (10.0*) [9.8*]	2 (**) [**]	6 (9.8*) [8.3*]	8 (12.9*) [13.9*]	10 (16.0*) [14.4*]
	Multiple	13 (23.0*) [25.2*]	20 (35.3) [43.1]	16 (27.5*) [33.1*]	14 (23.8*) [42.2*]	16 (26.8*) [37.4*]
	Hispanic	6 (11.3*) [12.4*]	10 (20.0*) [21.8*]	9 (17.3*) [15.7*]	7 (13.1*) [13.6*]	9 (16.5*) [15.9*]
Age	<5 Years	0	0	0	0	0
	5-14 Years	5 (**)	6 (5.9*)	2 (**)	4 (**)	2 (**)
	15-24 Years	54 (57.8)	46 (47.5)	59 (59.9)	43 (43.9)	42 (42.3)
	25-34 Years	51 (45.4)	55 (49.1)	52 (47.7)	46 (43.2)	40 (37.6)
	35-44 Years	30 (30.9)	24 (24.4)	52 (51.5)	40 (39.0)	39 (37.3)
	45-54 Years	26 (30.4)	23 (27.1)	17 (20.6*)	26 (31.7)	27 (33.0)
	55-64 Years	26 (26.7)	22 (23.0)	13 (13.9*)	17 (18.6*)	21 (23.9)
	65-74 Years	12 (19.3*)	18 (27.6*)	14 (20.1*)	14 (19.4*)	19 (25.9*)
	75-84 Years	4 (**)	10 (42.6*)	10 (39.2*)	6 (21.4*)	12 (40.4*)
	85+ Years	2 (**)	0	1 (**)	4 (**)	2 (**)
Residence	Anchorage	67 (22.9) [23.2]	69 (23.7) [22.8]	60 (20.7) [20.1]	54 (18.6) [18.4]	69 (23.8) [23.6]
	Gulf Coast	20 (24.7) [24.9]	19 (23.3*) [24.6*]	20 (24.5) [25.9]	24 (29.1) [32.7]	14 (16.8*) [16.6*]
	Interior	38 (34.5) [35.3]	26 (23.8) [23.1]	43 (38.5) [37.7]	35 (31.6) [31.2]	38 (34.6) [34.3]
	Mat-Su	26 (24.3) [22.8]	32 (29.9) [30.8]	34 (31.2) [33.4]	30 (26.8) [29.1]	21 (18.4) [18.7]
	Northern	18 (65.5*) [61.1*]	19 (65.8*) [62.8*]	19 (67.0*) [64.6*]	24 (86.4) [84.7]	12 (43.3*) [42.6*]
	Southeast	10 (13.8*) [12.2*]	10 (13.8*) [13.3*]	13 (17.9*) [19.6*]	13 (18.1*) [18.6*]	24 (33.8) [31.9]
	Southwest	31 (73.3) [73.3]	29 (67.7) [62.9]	31 (73.2) [71.3]	19 (45.3*) [43.8*]	26 (62.7) [62.2]
Statewide	Total	210 (28.7) [28.8]	204 (27.8) [27.5]	220 (29.9) [30.7]	200 (27.2) [27.8]	204 (27.7) [27.8]

⁶² Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 84. Intentional Self-Harm Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Type⁶³

Туре	2019	2020	2021	2022	2023
Intentional Self-Harm	210 (28.7) [28.8]	204 (27.8) [27.5]	220 (29.9) [30.7]	200 (27.2) [27.8]	204 (27.7) [27.8]
Firearm Intentional Self-Harm	117 (16.0) [15.9]	133 (18.1) [17.8]	142 (19.3) [19.8]	114 (15.5) [15.9]	120 (16.3) [15.9]
Suffocation Intentional Self- Harm	64 (8.7) [9.1]	50 (6.8) [6.9]	64 (8.7) [9.0]	67 (9.1) [9.4]	60 (8.1) [8.5]
Poisoning Intentional Self-Harm	18 (2.5*) [2.5*]	13 (1.8*) [1.7*]	10 (1.4*) [1.4*]	14 (1.9*) [1.9*]	14 (1.9*) [1.8*]
All Other Intentional Self-Harm	11 (1.5*) [1.4*]	8 (1.1*) [1.1*]	4 (**) [**]	5 (**) [**]	10 (1.4*) [1.5*]

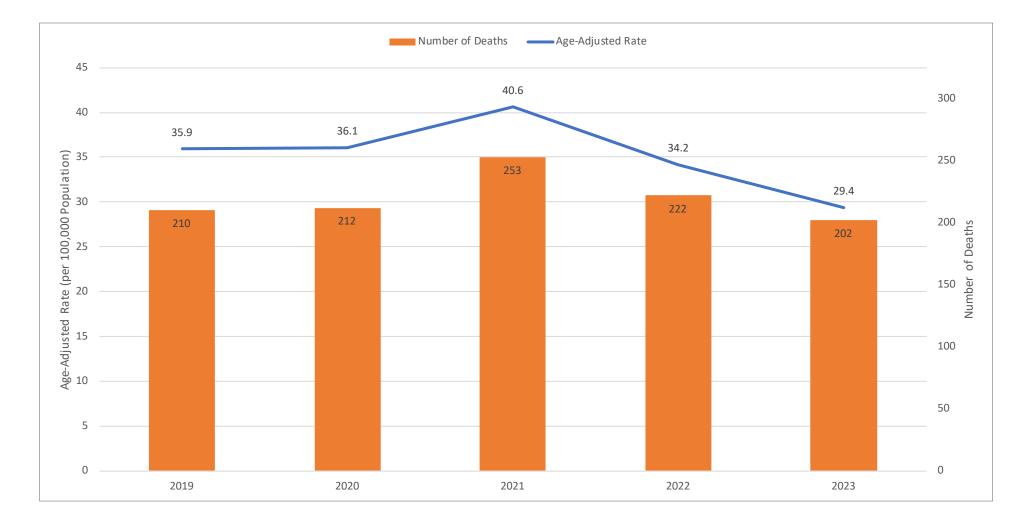
⁶³ Death rates are events per 100,000 population. Age-adjusted death rates are events per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Cerebrovascular Diseases⁶⁴

Cerebrovascular diseases (strokes) were the sixth leading cause of death in 2023 (202 deaths). Cerebrovascular diseases had an overall AADR of 29.4, down from 34.2 in 2022. The highest statistically reliable AADRs were found in men (30.5), AI/AN people (51.3), and residents of the Matanuska-Susitna region (31.6).

Figure 13. Cerebrovascular Diseases Number of Deaths and Age-Adjusted Death Rates by Year



⁶⁴ ICD-10 Codes: I60-I69.

Table 85. Cerebrovascular Diseases Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics⁶⁵

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	99 (26.2) [35.2]	110 (28.8) [37.8]	111 (29.0) [36.8]	102 (26.7) [31.5]	104 (27.2) [30.5]
	Female	111 (31.2) [36.1]	102 (29.0) [33.8]	142 (40.1) [43.7]	120 (33.8) [35.7]	98 (27.7) [28.0]
Race	White	135 (28.4) [31.9]	147 (31.0) [34.2]	172 (36.2) [37.6]	147 (31.0) [30.9]	134 (28.3) [26.1]
	Black	4 (**) [**]	7 (26.0*) [33.2*]	11 (40.8*) [60.8*]	4 (**) [**]	5 (**) [**]
	AI/AN	45 (39.7) [59.3]	30 (26.1) [40.6]	47 (40.9) [62.6]	43 (37.4) [50.0]	39 (34.0) [51.3]
	Asian/PI	17 (28.3*) [34.5*]	12 (19.8*) [23.3*]	17 (27.7*) [32.5*]	16 (25.9*) [31.5*]	19 (30.5*) [31.4*]
	Multiple	5 (**) [**]	9 (15.9*) [61.0*]	5 (**) [**]	9 (15.3*) [48.5*]	2 (**) [**]
	Hispanic	4 (**) [**]	7 (14.0*) [31.2*]	2 (**) [**]	7 (13.1*) [31.2*]	2 (**) [**]
Age	<5 Years	1 (**)	0	1 (**)	0	1 (**)
	5-14 Years	0	0	0	1 (**)	0
	15-24 Years	0	3 (**)	0	0	0
	25-34 Years	1 (**)	3 (**)	2 (**)	1 (**)	1 (**)
	35-44 Years	10 (10.3*)	7 (7.1*)	7 (6.9*)	10 (9.7*)	7 (6.7*)
	45-54 Years	11 (12.8*)	10 (11.8*)	11 (13.3*)	15 (18.3*)	11 (13.4*)
	55-64 Years	25 (25.6)	24 (25.1)	26 (27.9)	23 (25.1)	25 (28.5)
	65-74 Years	47 (75.7)	45 (69.0)	59 (84.7)	47 (65.1)	48 (65.5)
	75-84 Years	47 (207.0)	59 (251.4)	68 (266.3)	60 (213.5)	55 (185.4)
	85+ Years	68 (1,010.6)	61 (935.7)	79 (1,118.2)	65 (889.8)	54 (716.9)
Residence	Anchorage	70 (23.9) [31.1]	66 (22.7) [29.1]	104 (35.8) [41.6]	83 (28.6) [32.1]	78 (26.9) [29.0]
	Gulf Coast	27 (33.3) [29.9]	29 (35.5) [34.9]	27 (33.1) [29.3]	29 (35.2) [31.7]	23 (27.7) [21.8]
	Interior	42 (38.2) [53.2]	41 (37.5) [49.0]	41 (36.8) [45.6]	34 (30.7) [41.3]	27 (24.6) [26.2]
	Mat-Su	23 (21.5) [27.5]	33 (30.8) [39.7]	46 (42.2) [54.8]	32 (28.6) [35.1]	29 (25.5) [31.6]
	Northern	7 (25.5*) [51.2*]	6 (20.8*) [33.5*]	5 (**) [**]	7 (25.2*) [32.4*]	8 (28.9*) [60.0*]
	Southeast	25 (34.4) [32.9]	25 (34.6) [37.1]	21 (28.9) [28.7]	21 (29.2) [26.3]	26 (36.6) [31.4]
	Southwest	15 (35.5*) [66.8*]	12 (28.0*) [51.7*]	9 (21.3*) [47.2*]	16 (38.1*) [57.8*]	11 (26.5*) [52.2*]
Statewide	Total	210 (28.7) [35.9]	212 (28.9) [36.1]	253 (34.4) [40.6]	222 (30.1) [34.2]	202 (27.4) [29.4]

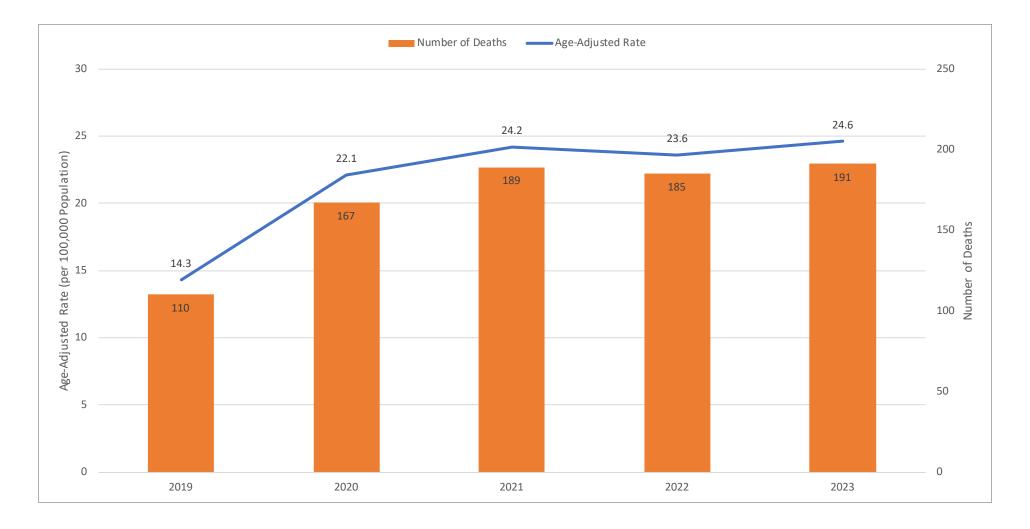
⁶⁵ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Chronic Liver Disease and Cirrhosis⁶⁶

Chronic liver disease and cirrhosis (CLDC) was the seventh leading cause of death in 2023 (191 deaths). CLDC had an overall AADR of 24.6, up from 23.6 in 2022. The highest statistically reliable AADRs were found in men (26.4), AI/AN people (65.8), and residents of the Southeast region (30.9). People ages 65-74 years had the highest reliable ASDR (53.2). The most common type of CLDC was alcoholic liver disease (148 deaths).

Figure 14. Chronic Liver Disease and Cirrhosis Number of Deaths and Age-Adjusted Death Rates by Year



⁶⁶ ICD-10 Codes: K70, K73-K74.

Table 86. Chronic Liver Disease and Cirrhosis Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics⁶⁷

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	52 (13.8) [13.1]	89 (23.3) [22.2]	109 (28.5) [25.3]	92 (24.1) [22.7]	106 (27.7) [26.4]
	Female	58 (16.3) [15.5]	78 (22.2) [22.1]	80 (22.6) [23.1]	93 (26.2) [24.7]	85 (24.0) [22.8]
Race	White	58 (12.2) [10.1]	80 (16.9) [14.2]	96 (20.2) [16.7]	93 (19.6) [15.9]	99 (20.9) [17.8]
	Black	2 (**) [**]	4 (**) [**]	1 (**) [**]	4 (**) [**]	3 (**) [**]
	AI/AN	43 (38.0) [42.3]	74 (64.5) [74.6]	76 (66.2) [74.9]	75 (65.3) [74.1]	70 (61.0) [65.8]
	Asian/PI	0	2 (**) [**]	0	1 (**) [**]	1 (**) [**]
	Multiple	6 (10.6*) [17.4*]	5 (**) [**]	9 (15.5*) [25.6*]	6 (10.2*) [17.4*]	12 (20.1*) [34.0*]
	Hispanic	5 (**) [**]	4 (**) [**]	3 (**) [**]	5 (**) [**]	6 (11.0*) [21.7*]
Age	<5 Years	0	0	0	0	0
	5-14 Years	0	0	0	0	0
	15-24 Years	2 (**)	1 (**)	0	1 (**)	0
	25-34 Years	8 (7.1*)	18 (16.1*)	20 (18.3)	28 (26.3)	28 (26.3)
	35-44 Years	21 (21.6)	35 (35.6)	26 (25.8)	32 (31.2)	38 (36.3)
	45-54 Years	22 (25.7)	46 (54.2)	51 (61.8)	36 (43.8)	37 (45.2)
	55-64 Years	31 (31.8)	44 (46.0)	54 (57.9)	54 (59.0)	37 (42.2)
	65-74 Years	20 (32.2)	19 (29.1*)	31 (44.5)	25 (34.6)	39 (53.2)
	75-84 Years	6 (26.4*)	4 (**)	7 (27.4*)	9 (32.0*)	11 (37.1*)
	85+ Years	0	0	0	0	1 (**)
Residence	Anchorage	47 (16.1) [16.0]	74 (25.4) [24.4]	74 (25.5) [23.9]	87 (30.0) [27.4]	69 (23.8) [23.0]
	Gulf Coast	14 (17.3*) [14.6*]	16 (19.6*) [16.9*]	24 (29.4) [25.6]	11 (13.3*) [10.8*]	16 (19.2*) [14.4*]
	Interior	14 (12.7*) [12.1*]	28 (25.6) [27.8]	22 (19.7) [18.8]	29 (26.2) [25.4]	33 (30.1) [29.0]
	Mat-Su	12 (11.2*) [10.3*]	20 (18.7) [16.7]	33 (30.2) [27.6]	24 (21.5) [20.1]	33 (29.0) [27.7]
	Northern	6 (21.8*) [25.5*]	5 (**) [**]	7 (24.7*) [28.1*]	9 (32.4*) [40.2*]	6 (21.6*) [23.3*]
	Southeast	10 (13.8*) [10.8*]	14 (19.4*) [17.6*]	18 (24.8*) [22.0*]	12 (16.7*) [12.8*]	25 (35.2) [30.9]
	Southwest	6 (14.2*) [14.0*]	10 (23.3*) [27.3*]	10 (23.6*) [24.3*]	13 (31.0*) [36.9*]	8 (19.3*) [19.0*]
Statewide	Total	110 (15.0) [14.3]	167 (22.8) [22.1]	189 (25.7) [24.2]	185 (25.1) [23.6]	191 (25.9) [24.6]

⁶⁷ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 87. Chronic Liver Disease and Cirrhosis Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Type⁶⁸

Туре	2019	2020	2021	2022	2023
Chronic Liver Disease And	110 (15.0) [14.3]	167 (22.8) [22.1]	189 (25.7) [24.2]	185 (25.1) [23.6]	191 (25.9) [24.6]
Cirrhosis					
Alcoholic Liver Disease	84 (11.5) [11.1]	139 (19.0) [18.9]	157 (21.3) [20.4]	146 (19.8) [18.9]	148 (20.1) [19.5]
All Other Chronic Liver Disease And Cirrhosis	26 (3.5) [3.2]	28 (3.8) [3.2]	32 (4.3) [3.8]	39 (5.3) [4.7]	43 (5.8) [5.2]

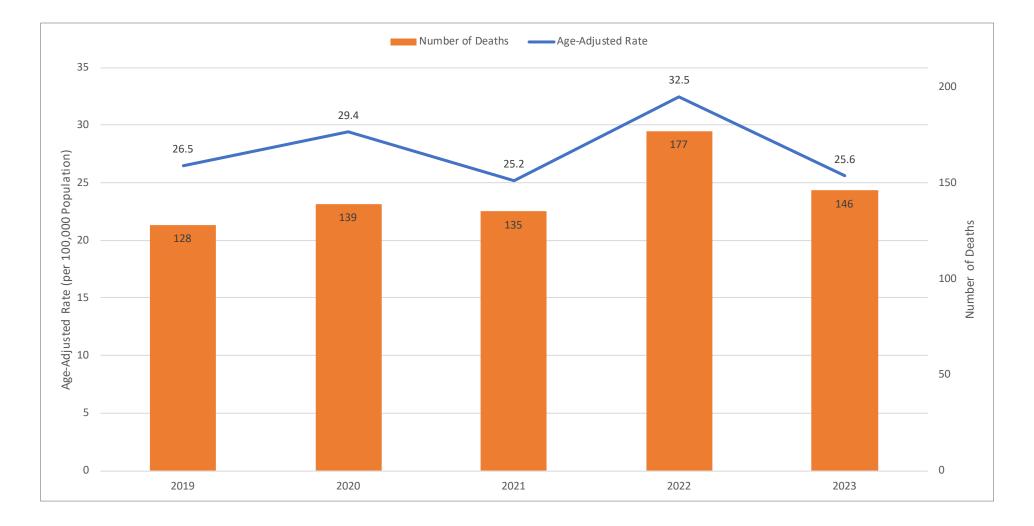
⁶⁸ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Alzheimer Disease⁶⁹

Alzheimer disease was the eighth leading cause of death in 2023 (146 deaths). Alzheimer disease had an overall AADR of 25.6, down from 32.5 in 2022. The highest statistically reliable AADRs were found in women (30.2), White people (28.0), and residents of the Matanuska-Susitna region (49.4).

Figure 15. Alzheimer Number of Deaths and Age-Adjusted Death Rates by Year



Alaska Health Analytics And Vital Records

⁶⁹ ICD-10 Code: G30.

Table 88. Alzheimer Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics⁷⁰

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	53 (14.1) [26.2]	55 (14.4) [27.1]	46 (12.0) [18.9]	66 (17.3) [26.9]	49 (12.8) [20.1]
	Female	75 (21.1) [27.1]	84 (23.9) [31.2]	89 (25.2) [30.2]	111 (31.3) [36.7]	97 (27.4) [30.2]
Race	White	105 (22.1) [27.9]	112 (23.6) [31.0]	103 (21.7) [25.3]	148 (31.2) [35.8]	122 (25.8) [28.0]
	Black	1 (**) [**]	7 (26.0*) [66.0*]	4 (**) [**]	5 (**) [**]	1 (**) [**]
	AI/AN	12 (10.6*) [24.1*]	15 (13.1*) [31.6*]	17 (14.8*) [27.4*]	16 (13.9*) [27.5*]	14 (12.2*) [20.3*]
	Asian/PI	4 (**) [**]	3 (**) [**]	5 (**) [**]	3 (**) [**]	5 (**) [**]
	Multiple	4 (**) [**]	2 (**) [**]	3 (**) [**]	2 (**) [**]	3 (**) [**]
	Hispanic	2 (**) [**]	5 (**) [**]	3 (**) [**]	2 (**) [**]	2 (**) [**]
Age	<5 Years	0	0	0	0	0
	5-14 Years	0	0	0	0	0
	15-24 Years	0	0	0	0	0
	25-34 Years	0	0	0	0	0
	35-44 Years	0	0	0	0	0
	45-54 Years	0	0	0	0	0
	55-64 Years	2 (**)	3 (**)	4 (**)	2 (**)	4 (**)
	65-74 Years	10 (16.1*)	12 (18.4*)	13 (18.7*)	17 (23.6*)	12 (16.4*)
	75-84 Years	44 (193.8)	33 (140.6)	52 (203.6)	52 (185.0)	49 (165.2)
	85+ Years	72 (1,070.0)	91 (1,395.9)	66 (934.2)	106 (1,451.1)	81 (1,075.4)
Residence	Anchorage	68 (23.2) [35.4]	70 (24.0) [35.6]	78 (26.9) [35.6]	94 (32.4) [42.1]	69 (23.8) [30.1]
	Gulf Coast	4 (**) [**]	17 (20.8*) [26.3*]	9 (11.0*) [11.8*]	16 (19.4*) [24.5*]	13 (15.6*) [15.5*]
	Interior	20 (18.2) [29.0]	12 (11.0*) [20.3*]	12 (10.8*) [17.0*]	19 (17.2*) [23.2*]	13 (11.8*) [15.8*]
	Mat-Su	25 (23.4) [37.5]	32 (29.9) [49.2]	26 (23.8) [34.6]	32 (28.6) [42.7]	38 (33.4) [49.4]
	Northern	2 (**) [**]	0	4 (**) [**]	1 (**) [**]	2 (**) [**]
	Southeast	8 (11.0*) [15.1*]	6 (8.3*) [8.7*]	6 (8.3*) [9.3*]	12 (16.7*) [16.8*]	10 (14.1*) [13.4*]
	Southwest	1 (**) [**]	2 (**) [**]	0	3 (**) [**]	1 (**) [**]
Statewide	Total	128 (17.5) [26.5]	139 (19.0) [29.4]	135 (18.3) [25.2]	177 (24.0) [32.5]	146 (19.8) [25.6]

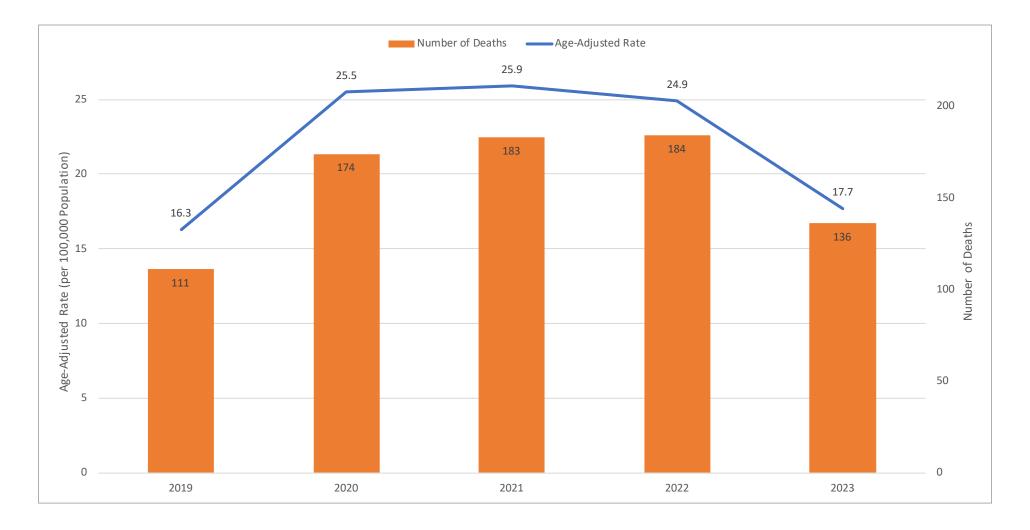
⁷⁰ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Diabetes Mellitus⁷¹

Diabetes mellitus was the ninth leading cause of death in 2023 (136 deaths). Diabetes mellitus had an overall AADR of 17.7, down from 24.9 in 2022. The highest statistically reliable AADRs were found in men (22.8), White people (16.4), and residents of the Interior region (19.5).

Figure 16. Diabetes Mellitus Number of Deaths and Age-Adjusted Death Rates by Year



⁷¹ ICD-10 Codes: E10-E14.

Table 89. Diabetes Mellitus Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics 72

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	67 (17.8) [18.3]	123 (32.2) [36.7]	109 (28.5) [31.8]	119 (31.2) [32.3]	82 (21.4) [22.8]
	Female	44 (12.4) [13.9]	51 (14.5) [14.8]	74 (20.9) [20.7]	65 (18.3) [18.1]	54 (15.3) [13.3]
Race	White	75 (15.8) [15.0]	118 (24.9) [23.0]	114 (24.0) [21.2]	124 (26.2) [22.3]	93 (19.7) [16.4]
	Black	4 (**) [**]	11 (40.9*) [54.1*]	6 (22.3*) [32.0*]	8 (29.7*) [26.8*]	3 (**) [**]
	AI/AN	12 (10.6*) [15.6*]	20 (17.4) [29.2]	28 (24.4) [34.4]	21 (18.3) [23.9]	15 (13.1*) [17.6*]
	Asian/PI	12 (20.0*) [19.3*]	15 (24.8*) [28.3*]	21 (34.2) [41.5]	19 (30.7*) [36.9*]	19 (30.5*) [30.5*]
	Multiple	3 (**) [**]	7 (12.3*) [30.8*]	9 (15.5*) [35.9*]	4 (**) [**]	3 (**) [**]
	Hispanic	7 (13.1*) [29.6*]	8 (16.0*) [42.9*]	10 (19.2*) [37.5*]	7 (13.1*) [25.7*]	2 (**) [**]
Age	<5 Years	0	0	0	0	0
	5-14 Years	0	0	0	0	0
	15-24 Years	0	0	1 (**)	2 (**)	1 (**)
	25-34 Years	2 (**)	5 (**)	4 (**)	3 (**)	4 (**)
	35-44 Years	4 (**)	9 (9.1*)	2 (**)	6 (5.8*)	2 (**)
	45-54 Years	9 (10.5*)	16 (18.9*)	14 (17.0*)	18 (21.9*)	9 (11.0*)
	55-64 Years	22 (22.6)	32 (33.5)	40 (42.9)	32 (35.0)	34 (38.7)
	65-74 Years	32 (51.6)	50 (76.7)	47 (67.5)	56 (77.6)	34 (46.4)
	75-84 Years	32 (141.0)	41 (174.7)	46 (180.1)	39 (138.8)	34 (114.6)
	85+ Years	10 (148.6*)	21 (322.1)	29 (410.5)	28 (383.3)	18 (239.0*)
Residence	Anchorage	45 (15.4) [15.7]	67 (23.0) [23.6]	63 (21.7) [22.7]	80 (27.6) [27.2]	61 (21.1) [19.4]
	Gulf Coast	12 (14.8*) [12.4*]	29 (35.5) [35.0]	30 (36.7) [29.8]	27 (32.7) [27.3]	19 (22.8*) [22.3*]
	Interior	19 (17.3*) [23.1*]	25 (22.8) [27.7]	31 (27.8) [28.8]	24 (21.7) [23.6]	21 (19.1) [19.5]
	Mat-Su	21 (19.7) [20.7]	28 (26.1) [27.7]	29 (26.6) [26.9]	34 (30.4) [30.4]	15 (13.2*) [11.9*]
	Northern	2 (**) [**]	5 (**) [**]	2 (**) [**]	1 (**) [**]	0
	Southeast	10 (13.8*) [13.6*]	18 (24.9*) [22.1*]	24 (33.0) [31.9]	14 (19.5*) [14.3*]	14 (19.7*) [16.2*]
	Southwest	2 (**) [**]	2 (**) [**]	4 (**) [**]	4 (**) [**]	6 (14.5*) [25.6*]
Statewide	Total	111 (15.1) [16.3]	174 (23.7) [25.5]	183 (24.9) [25.9]	184 (25.0) [24.9]	136 (18.5) [17.7]

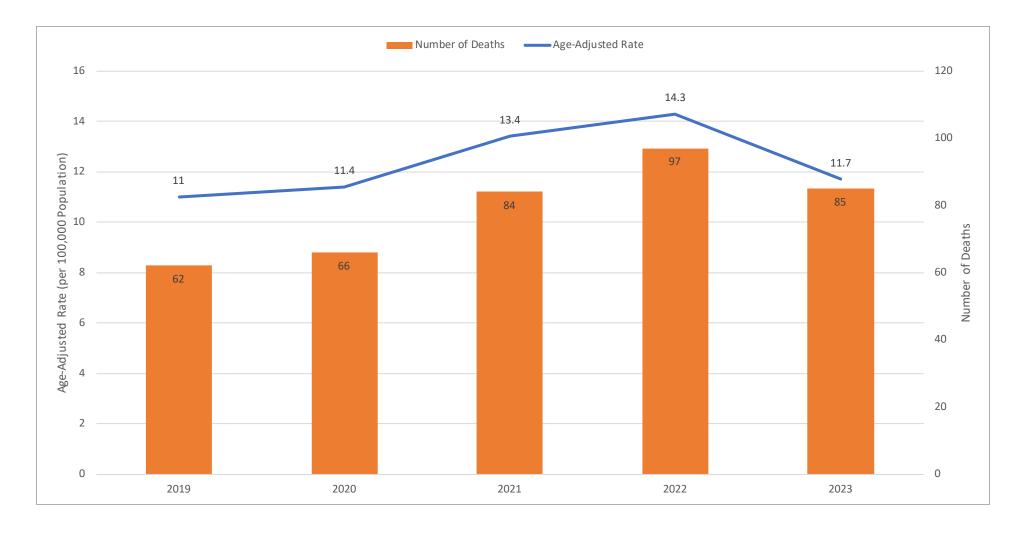
⁷² Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Nephritis, Nephrotic Syndrome And Nephrosis⁷³

Nephritis, nephrotic syndrome and nephrosis (kidney diseases) was the tenth leading cause of death in 2023 (85 deaths). Kidney diseases had an overall AADR of 11.7, down from 14.3 in 2022. The highest statistically reliable AADRs were found in men (12.4), White people (10.1), and residents of the Anchorage region (12.3).

Figure 17. Nephritis, Nephrotic Syndrome and Nephrosis Number of Deaths and Age-Adjusted Death Rates by Year



⁷³ ICD-10 Codes: N00-N07, N17-N19, N25-N27.

Table 90. Nephritis, Nephrotic Syndrome And Nephrosis Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics⁷⁴

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	26 (6.9) [9.9]	33 (8.7) [10.5]	48 (12.6) [16.6]	53 (13.9) [17.6]	44 (11.5) [12.4]
	Female	36 (10.1) [11.8]	33 (9.4) [11.5]	36 (10.2) [10.8]	44 (12.4) [11.8]	41 (11.6) [11.1]
Race	White	36 (7.6) [8.8]	40 (8.4) [9.7]	46 (9.7) [9.8]	67 (14.1) [12.9]	53 (11.2) [10.1]
	Black	5 (**) [**]	3 (**) [**]	5 (**) [**]	9 (33.4*) [55.0*]	3 (**) [**]
	AI/AN	13 (11.5*) [19.7*]	15 (13.1*) [20.6*]	19 (16.5*) [24.2*]	9 (7.8*) [12.1*]	15 (13.1*) [15.9*]
	Asian/PI	7 (11.7*) [16.8*]	5 (**) [**]	9 (14.7*) [19.7*]	9 (14.5*) [14.5*]	10 (16.0*) [18.4*]
	Multiple	1 (**) [**]	1 (**) [**]	3 (**) [**]	1 (**) [**]	3 (**) [**]
	Hispanic	2 (**) [**]	2 (**) [**]	2 (**) [**]	0	1 (**) [**]
Age	<5 Years	0	0	0	0	0
	5-14 Years	0	0	0	0	0
	15-24 Years	0	0	0	0	0
	25-34 Years	1 (**)	0	0	2 (**)	0
	35-44 Years	1 (**)	2 (**)	3 (**)	2 (**)	2 (**)
	45-54 Years	4 (**)	2 (**)	8 (9.7*)	4 (**)	4 (**)
	55-64 Years	4 (**)	5 (**)	8 (8.6*)	10 (10.9*)	10 (11.4*)
	65-74 Years	13 (20.9*)	15 (23.0*)	19 (27.3*)	25 (34.6)	29 (39.6)
	75-84 Years	19 (83.7*)	26 (110.8)	23 (90.1)	31 (110.3)	20 (67.4)
	85+ Years	20 (297.2)	16 (245.4*)	23 (325.5)	23 (314.9)	20 (265.5)
Residence	Anchorage	29 (9.9) [12.2]	28 (9.6) [12.5]	45 (15.5) [17.5]	44 (15.2) [16.0]	35 (12.1) [12.3]
	Gulf Coast	7 (8.6*) [9.8*]	1 (**) [**]	6 (7.3*) [8.3*]	12 (14.6*) [13.8*]	12 (14.4*) [10.6*]
	Interior	4 (**) [**]	4 (**) [**]	7 (6.3*) [5.4*]	9 (8.1*) [9.3*]	12 (10.9*) [12.7*]
	Mat-Su	12 (11.2*) [17.2*]	19 (17.7*) [24.8*]	13 (11.9*) [15.9*]	19 (17.0*) [19.7*]	16 (14.0*) [15.7*]
	Northern	5 (**) [**]	3 (**) [**]	1 (**) [**]	3 (**) [**]	1 (**) [**]
	Southeast	4 (**) [**]	7 (9.7*) [8.7*]	11 (15.1*) [15.6*]	7 (9.7*) [8.3*]	7 (9.8*) [7.7*]
	Southwest	1 (**) [**]	4 (**) [**]	1 (**) [**]	3 (**) [**]	2 (**) [**]
Statewide	Total	62 (8.5) [11.0]	66 (9.0) [11.4]	84 (11.4) [13.4]	97 (13.2) [14.3]	85 (11.5) [11.7]

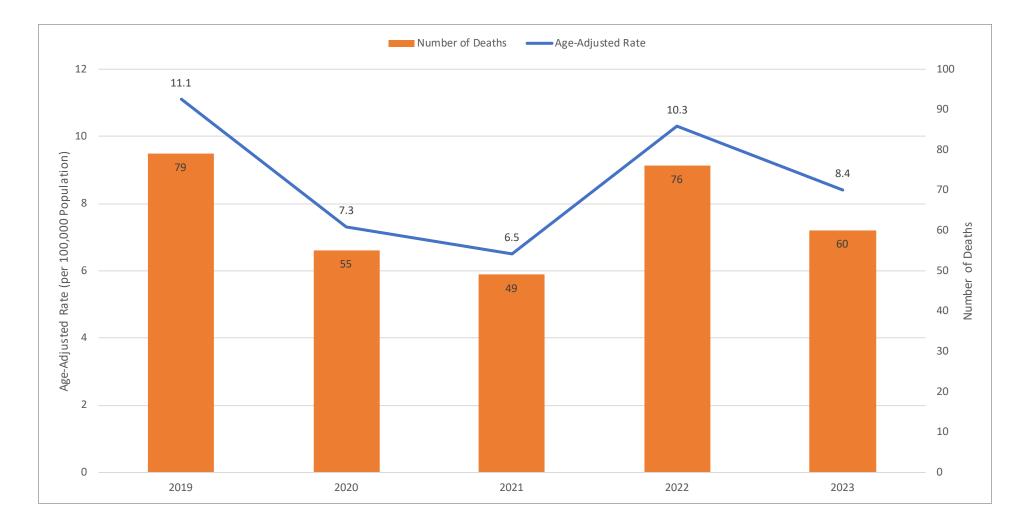
⁷⁴ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Assault⁷⁵

Assault (homicide), while not in the top ten for 2023, has been a LCOD in previous years and had 60 deaths. Assault had an overall AADR of 8.4, down from 10.3 in 2022. The highest statistically reliable AADRs were found in men (11.5), AI/AN people (21.5), and residents of the Anchorage region (8.2). People ages 25-34 years had the highest reliable ASDR (19.7). The most common type of assault mechanism was firearms (47 deaths).

Figure 18. Assault Number of Deaths and Age-Adjusted Death Rates by Year



⁷⁵ ICD-10 Codes: U01-U02, X85-Y09, Y871.

Table 91. Assault Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics 76

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	49 (13.0) [13.6]	36 (9.4) [9.1]	35 (9.2) [8.8]	51 (13.4) [13.1]	42 (11.0) [11.5]
	Female	30 (8.4) [8.3]	19 (5.4*) [5.3*]	14 (4.0*) [3.9*]	25 (7.0) [7.2]	18 (5.1*) [5.2*]
Race	White	31 (6.5) [6.3]	11 (2.3*) [2.1*]	19 (4.0*) [3.7*]	26 (5.5) [5.5]	23 (4.9) [5.0]
	Black	7 (26.1*) [25.8*]	4 (**) [**]	2 (**) [**]	6 (22.3*) [20.9*]	2 (**) [**]
	AI/AN	32 (28.3) [31.4]	29 (25.3) [26.6]	20 (17.4) [17.9]	28 (24.4) [24.6]	23 (20.0) [21.5]
	Asian/PI	5 (**) [**]	7 (11.6*) [9.9*]	1 (**) [**]	3 (**) [**]	7 (11.2*) [10.9*]
	Multiple	1 (**) [**]	4 (**) [**]	5 (**) [**]	13 (22.1*) [23.6*]	4 (**) [**]
	Hispanic	5 (**) [**]	1 (**) [**]	4 (**) [**]	5 (**) [**]	5 (**) [**]
Age	<5 Years	1 (**)	0	3 (**)	3 (**)	1 (**)
	5-14 Years	1 (**)	4 (**)	0	5 (**)	1 (**)
	15-24 Years	13 (13.9*)	8 (8.3*)	7 (7.1*)	14 (14.3*)	10 (10.1*)
	25-34 Years	21 (18.7)	15 (13.4*)	20 (18.3)	23 (21.6)	21 (19.7)
	35-44 Years	19 (19.6*)	10 (10.2*)	6 (5.9*)	15 (14.6*)	16 (15.3*)
	45-54 Years	14 (16.4*)	6 (7.1*)	4 (**)	4 (**)	5 (**)
	55-64 Years	7 (7.2*)	6 (6.3*)	4 (**)	7 (7.7*)	2 (**)
	65-74 Years	3 (**)	6 (9.2*)	4 (**)	4 (**)	2 (**)
	75-84 Years	0	0	1 (**)	1 (**)	1 (**)
	85+ Years	0	0	0	0	1 (**)
Residence	Anchorage	31 (10.6) [10.9]	19 (6.5*) [6.1*]	19 (6.5*) [6.0*]	23 (7.9) [7.7]	23 (7.9) [8.2]
	Gulf Coast	7 (8.6*) [9.5*]	3 (**) [**]	1 (**) [**]	5 (**) [**]	3 (**) [**]
	Interior	12 (10.9*) [11.6*]	6 (5.5*) [5.7*]	10 (9.0*) [8.6*]	23 (20.8) [20.6]	10 (9.1*) [8.9*]
	Mat-Su	11 (10.3*) [9.9*]	9 (8.4*) [8.4*]	7 (6.4*) [6.7*]	7 (6.3*) [6.6*]	6 (5.3*) [5.4*]
	Northern	2 (**) [**]	6 (20.8*) [19.6*]	2 (**) [**]	2 (**) [**]	9 (32.5*) [32.6*]
	Southeast	4 (**) [**]	4 (**) [**]	2 (**) [**]	2 (**) [**]	2 (**) [**]
	Southwest	11 (26.0*) [28.5*]	8 (18.7*) [18.7*]	8 (18.9*) [18.7*]	14 (33.4*) [33.3*]	7 (16.9*) [17.2*]
Statewide	Total	79 (10.8) [11.1]	55 (7.5) [7.3]	49 (6.7) [6.5]	76 (10.3) [10.3]	60 (8.1) [8.4]

⁷⁶ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 92. Assault Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Type⁷⁷

Туре	2019	2020	2021	2022	2023
Assault	79 (10.8) [11.1]	55 (7.5) [7.3]	49 (6.7) [6.5]	76 (10.3) [10.3]	60 (8.1) [8.4]
Firearms Assault	51 (7.0) [7.2]	27 (3.7) [3.7]	31 (4.2) [4.2]	41 (5.6) [5.5]	47 (6.4) [6.5]
Cutting/Piercing Assault	9 (1.2*) [1.2*]	10 (1.4*) [1.2*]	6 (0.8*) [0.7*]	9 (1.2*) [1.2*]	3 (**) [**]
Suffocation Assault	6 (0.8*) [0.8*]	6 (0.8*) [0.8*]	1 (**) [**]	4 (**) [**]	4 (**) [**]
All Other Assault	13 (1.8*) [1.8*]	11 (1.5*) [1.4*]	11 (1.5*) [1.4*]	22 (3.0) [3.1]	6 (0.8*) [0.9*]

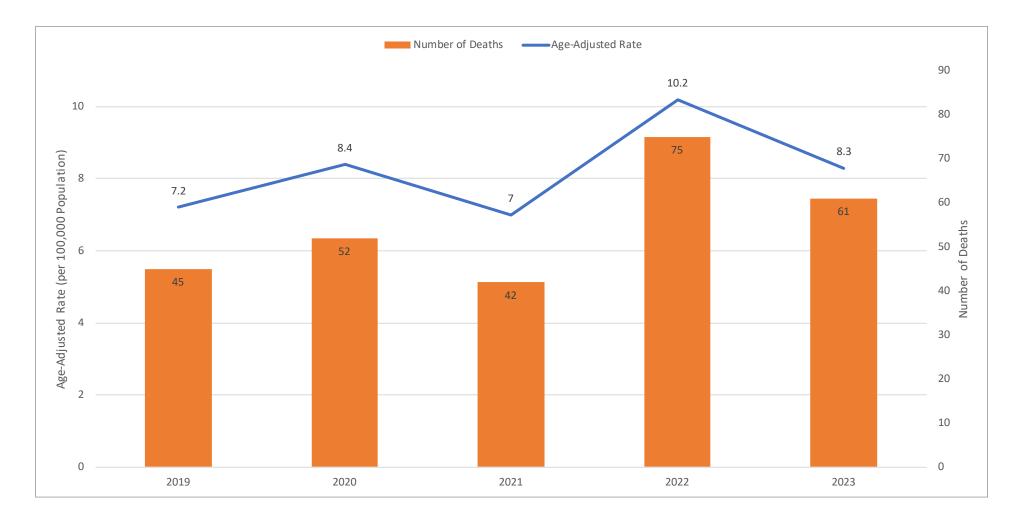
⁷⁷ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Influenza and Pneumonia⁷⁸

Influenza and pneumonia, while not in the top ten for 2023, have been a LCOD in previous years and had 61 deaths. Influenza and pneumonia had an overall AADR of 8.3, down from 10.2 in 2022. The highest statistically reliable AADRs were found in women (9.1), White people (5.3), and residents of the Anchorage region (8.0).

Figure 19. Influenza and Pneumonia Number of Deaths and Age-Adjusted Death Rates by Year



⁷⁸ ICD-10 Codes: J09-J18.

Table 93. Influenza and Pneumonia Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics⁷⁹

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	20 (5.3) [6.3]	25 (6.6) [8.8]	23 (6.0) [8.2]	50 (13.1) [13.1]	28 (7.3) [7.3]
	Female	25 (7.0) [7.8]	27 (7.7) [8.0]	19 (5.4*) [6.0*]	25 (7.0) [7.2]	33 (9.3) [9.1]
Race	White	25 (5.3) [5.3]	23 (4.8) [4.7]	23 (4.8) [4.9]	39 (8.2) [7.1]	29 (6.1) [5.3]
	Black	0	2 (**) [**]	0	0	2 (**) [**]
	AI/AN	16 (14.1*) [21.5*]	25 (21.8) [32.4]	18 (15.7*) [26.0*]	29 (25.2) [30.8]	19 (16.5*) [20.0*]
	Asian/PI	0	2 (**) [**]	0	3 (**) [**]	4 (**) [**]
	Multiple	2 (**) [**]	0	1 (**) [**]	4 (**) [**]	4 (**) [**]
	Hispanic	2 (**) [**]	2 (**) [**]	0	1 (**) [**]	0
Age	<5 Years	2 (**)	2 (**)	1 (**)	2 (**)	0
	5-14 Years	1 (**)	0	0	0	1 (**)
	15-24 Years	0	1 (**)	0	0	0
	25-34 Years	0	1 (**)	1 (**)	3 (**)	1 (**)
	35-44 Years	4 (**)	4 (**)	3 (**)	6 (5.8*)	4 (**)
	45-54 Years	4 (**)	0	1 (**)	4 (**)	7 (8.5*)
	55-64 Years	4 (**)	7 (7.3*)	5 (**)	18 (19.7*)	9 (10.3*)
	65-74 Years	12 (19.3*)	13 (19.9*)	6 (8.6*)	17 (23.6*)	16 (21.8*)
	75-84 Years	10 (44.0*)	10 (42.6*)	11 (43.1*)	12 (42.7*)	15 (50.6*)
	85+ Years	8 (118.9*)	14 (214.8*)	14 (198.2*)	13 (178.0*)	8 (106.2*)
Residence	Anchorage	14 (4.8*) [5.8*]	20 (6.9) [8.1]	11 (3.8*) [4.5*]	33 (11.4) [11.5]	23 (7.9) [8.0]
	Gulf Coast	11 (13.6*) [12.0*]	6 (7.4*) [6.9*]	9 (11.0*) [11.8*]	10 (12.1*) [10.7*]	8 (9.6*) [7.0*]
	Interior	3 (**) [**]	5 (**) [**]	4 (**) [**]	12 (10.8*) [11.5*]	6 (5.5*) [6.6*]
	Mat-Su	6 (5.6*) [5.8*]	4 (**) [**]	7 (6.4*) [7.6*]	7 (6.3*) [5.0*]	13 (11.4*) [11.6*]
	Northern	2 (**) [**]	3 (**) [**]	4 (**) [**]	3 (**) [**]	1 (**) [**]
	Southeast	4 (**) [**]	6 (8.3*) [8.1*]	2 (**) [**]	3 (**) [**]	3 (**) [**]
	Southwest	5 (**) [**]	8 (18.7*) [37.6*]	5 (**) [**]	7 (16.7*) [29.5*]	6 (14.5*) [19.1*]
Statewide	Total	45 (6.1) [7.2]	52 (7.1) [8.4]	42 (5.7) [7.0]	75 (10.2) [10.2]	61 (8.3) [8.3]

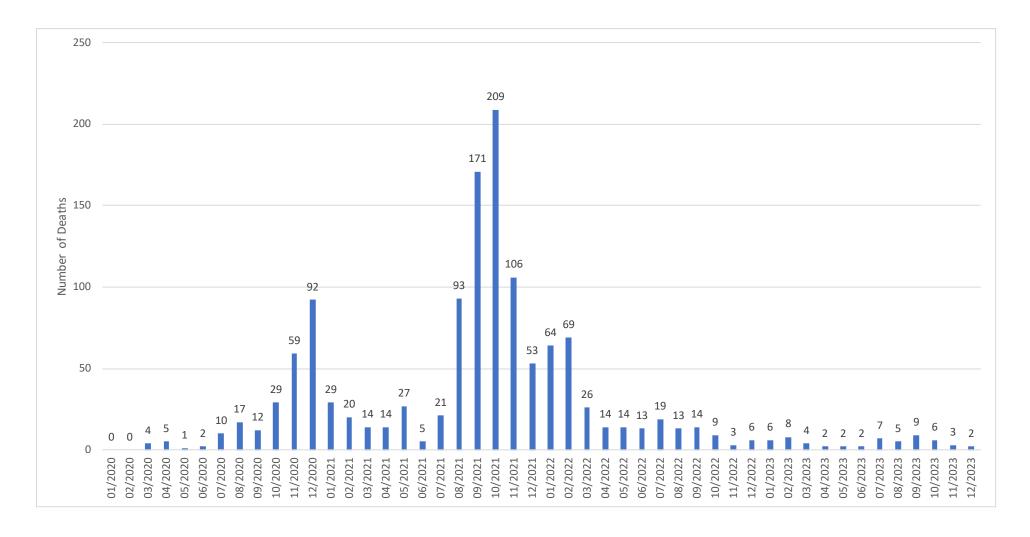
⁷⁹ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

COVID-1980

COVID-19, while not in the top ten for 2023, has been a LCOD in previous years. In 2023, COVID-19 was the underlying cause of 56 deaths. COVID-19 deaths were highest in September (9 deaths). COVID-19 had an overall AADR of 8.2, down from 37.3 in 2022. The highest statistically reliable AADRs were found in men (10.2), White people (6.6), and residents of the Anchorage region (8.9). People ages 75-84 years had the highest reliable ASDR (84.3). Including deaths where COVID-19 was a contributing cause, there were also an additional 43 deaths, for a total of 99 COVID-19 and COVID-19-related deaths in 2023.

Figure 20. COVID-19 Deaths by Month



⁸⁰ ICD-10 Code: U071.

⁸¹ More information on COVID-19 in Alaska, including the latest data on cases, hospitalizations, deaths, testing, and vaccinations can be found at https://covid19.alaska.gov/.

Table 94. COVID-19 Related and Non-COVID-19 Deaths by Month

Year	Cause	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2020	COVID-19	0	0	4	5	2	3	13	21	13	34	70	100	265
	Underlying	0	0	4	5	1	2	10	17	12	29	59	92	231
	Contributing	0	0	0	0	1	1	3	4	1	5	11	8	34
	Non-COVID-19	443	384	367	364	405	378	423	421	421	452	447	431	4,936
	All Causes	443	384	371	369	407	381	436	442	434	486	517	531	5,201
2021	COVID-19	36	22	15	19	31	5	23	104	185	226	115	60	841
	Underlying	29	20	14	14	27	5	21	93	171	209	106	53	762
	Contributing	7	2	1	5	4	0	2	11	14	17	9	7	79
	Non-COVID-19	450	364	413	418	407	416	447	490	452	516	495	514	5,382
	All Causes	486	386	428	437	438	421	470	594	637	742	610	574	6,223
2022	COVID-19	76	83	32	20	21	17	25	23	18	11	6	9	341
	Underlying	64	69	26	14	14	13	19	13	14	9	3	6	264
	Contributing	12	14	6	6	7	4	6	10	4	2	3	3	77
	Non-COVID-19	476	376	441	420	415	451	465	434	435	465	449	556	5,383
	All Causes	552	459	473	440	436	468	490	457	453	476	455	565	5,724
2023	COVID-19	10	13	8	8	5	5	10	7	13	11	6	3	99
	Underlying	6	8	4	2	2	2	7	5	9	6	3	2	56
	Contributing	4	5	4	6	3	3	3	2	4	5	3	1	43
	Non-COVID-19	507	425	457	450	425	431	396	422	465	466	497	493	5,434
	All Causes	517	438	465	458	430	436	406	429	478	477	503	496	5,533

Table 95. COVID-19 Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics⁸²

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	0	140 (36.7) [47.6]	483 (126.3) [134.6]	144 (37.7) [39.9]	33 (8.6) [10.2]
	Female	0	91 (25.9) [28.5]	279 (78.9) [78.2]	120 (33.8) [34.1]	23 (6.5) [6.5]
Race	White	0	90 (19.0) [21.4]	446 (93.9) [83.4]	164 (34.6) [31.6]	34 (7.2) [6.6]
	Black	0	6 (22.3*) [42.1*]	15 (55.7*) [60.8*]	8 (29.7*) [38.7*]	1 (**) [**]
	AI/AN	0	82 (71.5) [107.8]	173 (150.6) [202.8]	68 (59.2) [79.0]	16 (13.9*) [18.4*]
	Asian/PI	0	39 (64.4) [78.9]	87 (141.8) [159.9]	9 (14.5*) [16.5*]	2 (**) [**]
	Multiple	0	6 (10.6*) [30.9*]	23 (39.6) [99.9]	6 (10.2*) [16.5*]	1 (**) [**]
ŀ	Hispanic	0	9 (18.0*) [42.8*]	26 (50.0) [116.8]	11 (20.6*) [43.1*]	0
-	<5 Years	0	0	0	1 (**)	0
	5-14 Years	0	0	0	0	0
	15-24 Years	0	0	2 (**)	3 (**)	0
	25-34 Years	0	2 (**)	26 (23.9)	2 (**)	0
	35-44 Years	0	10 (10.2*)	43 (42.6)	8 (7.8*)	2 (**)
	45-54 Years	0	9 (10.6*)	84 (101.8)	17 (20.7*)	2 (**)
	55-64 Years	0	29 (30.3)	141 (151.1)	31 (33.9)	9 (10.3*)
	65-74 Years	0	61 (93.6)	212 (304.3)	84 (116.4)	7 (9.6*)
	75-84 Years	0	68 (289.7)	162 (634.4)	63 (224.2)	25 (84.3)
	85+ Years	0	52 (797.7)	92 (1,302.2)	55 (752.9)	11 (146.0*)
Residence	Anchorage	0	116 (39.8) [45.0]	282 (97.1) [101.2]	96 (33.1) [33.3]	23 (7.9) [8.9]
	Gulf Coast	0	27 (33.1) [34.7]	87 (106.6) [87.1]	31 (37.6) [31.6]	7 (8.4*) [8.6*]
	Interior	0	25 (22.8) [31.9]	106 (95.0) [107.0]	38 (34.3) [37.0]	13 (11.8*) [12.8*]
	Mat-Su	0	33 (30.8) [37.9]	171 (156.7) [162.6]	49 (43.8) [47.9]	1 (**) [**]
	Northern	0	4 (**) [**]	23 (81.1) [143.0]	11 (39.6*) [76.6*]	3 (**) [**]
	Southeast	0	7 (9.7*) [8.9*]	45 (61.9) [52.5]	26 (36.2) [33.0]	6 (8.4*) [7.1*]
	Southwest	0	18 (42.0*) [95.7*]	48 (113.4) [188.2]	13 (31.0*) [61.8*]	3 (**) [**]
Statewide	Total	0	231 (31.5) [37.5]	762 (103.5) [106.1]	264 (35.8) [37.3]	56 (7.6) [8.2]

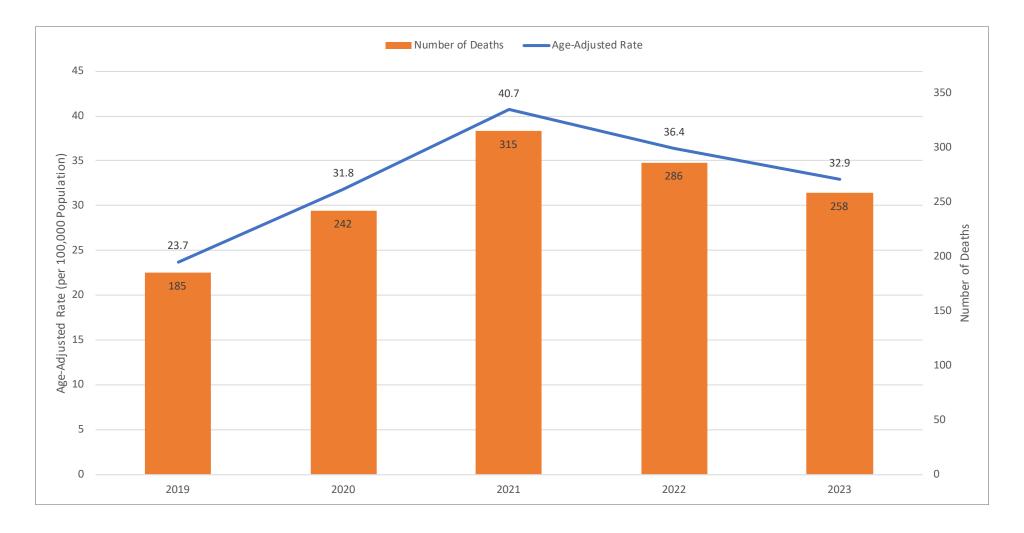
⁸² Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Alcohol-Induced⁸³

Alcohol-induced mortality (which contains several LCOD categories and is not ranked) includes causes such as alcohol poisoning, alcoholic liver disease, and mental and behavioral disorders due to alcohol. It does not include alcohol related injuries, or other causes indirectly related to alcohol use. In 2023, there were 258 alcohol-induced deaths, with an AADR of 32.9, down from 36.4 in 2022. The highest statistically reliable AADRs were found in men (38.6), AI/AN people (117.2), and residents of the Interior region (37.0). People ages 55-64 years had the highest reliable ASDR (70.7).

Figure 21. Alcohol-Induced Number of Deaths and Age-Adjusted Death Rates by Year



⁸³ ICD-10 Codes: E244, F10, G312, G621, G721, I426, K292, K70, K852, K860, R780, X45, X65, Y15.

Table 96. Alcohol-Induced Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics⁸⁴

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	113 (30.0) [27.9]	132 (34.6) [32.2]	201 (52.6) [48.4]	156 (40.9) [38.1]	158 (41.3) [38.6]
	Female	72 (20.2) [19.3]	110 (31.3) [31.3]	114 (32.2) [32.7]	130 (36.6) [34.8]	100 (28.2) [27.1]
Race	White	72 (15.1) [12.4]	92 (19.4) [16.6]	127 (26.7) [22.5]	115 (24.3) [19.4]	103 (21.8) [18.2]
	Black	5 (**) [**]	4 (**) [**]	3 (**) [**]	4 (**) [**]	3 (**) [**]
	AI/AN	93 (82.1) [90.4]	133 (115.9) [131.2]	158 (137.5) [155.9]	148 (128.8) [143.5]	125 (108.8) [117.2]
	Asian/PI	1 (**) [**]	1 (**) [**]	1 (**) [**]	0	4 (**) [**]
	Multiple	11 (19.4*) [31.3*]	10 (17.6*) [22.8*]	16 (27.5*) [45.1*]	13 (22.1*) [38.8*]	15 (25.1*) [43.7*]
	Hispanic	6 (11.3*) [14.5*]	5 (**) [**]	6 (11.5*) [13.6*]	5 (**) [**]	2 (**) [**]
Age	<5 Years	0	0	0	0	0
	5-14 Years	1 (**)	0	0	0	0
	15-24 Years	5 (**)	3 (**)	3 (**)	2 (**)	1 (**)
	25-34 Years	20 (17.8)	28 (25.0)	37 (33.9)	44 (41.4)	38 (35.7)
	35-44 Years	30 (30.9)	49 (49.8)	46 (45.6)	46 (44.8)	56 (53.5)
	45-54 Years	40 (46.7)	60 (70.7)	81 (98.2)	58 (70.6)	48 (58.6)
	55-64 Years	52 (53.3)	72 (75.3)	85 (91.1)	85 (92.9)	62 (70.7)
	65-74 Years	32 (51.6)	22 (33.7)	50 (71.8)	38 (52.7)	47 (64.1)
	75-84 Years	5 (**)	8 (34.1*)	12 (47.0*)	13 (46.3*)	5 (**)
	85+ Years	0	0	1 (**)	0	1 (**)
Residence	Anchorage	74 (25.3) [24.2]	95 (32.6) [31.3]	111 (38.2) [36.9]	123 (42.4) [39.2]	111 (38.3) [35.7]
	Gulf Coast	16 (19.7*) [17.8*]	26 (31.9) [26.7]	30 (36.7) [31.6]	20 (24.3) [19.9]	21 (25.3) [18.8]
	Interior	27 (24.5) [23.3]	38 (34.7) [37.4]	53 (47.5) [47.4]	48 (43.4) [41.5]	43 (39.2) [37.0]
	Mat-Su	17 (15.9*) [14.8*]	21 (19.6) [18.6]	37 (33.9) [31.4]	27 (24.2) [21.6]	31 (27.2) [25.9]
	Northern	12 (43.7*) [44.4*]	8 (27.7*) [28.1*]	14 (49.4*) [63.7*]	18 (64.8*) [67.3*]	9 (32.5*) [34.4*]
	Southeast	18 (24.8*) [18.8*]	30 (41.5) [35.4]	42 (57.8) [48.3]	26 (36.2) [27.8]	25 (35.2) [33.0]
	Southwest	20 (47.3) [46.8]	24 (56.0) [63.8]	27 (63.8) [64.1]	23 (54.8) [65.3]	17 (41.0*) [44.0*]
Statewide	Total	185 (25.2) [23.7]	242 (33.0) [31.8]	315 (42.8) [40.7]	286 (38.8) [36.4]	258 (35.0) [32.9]

⁸⁴ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 97. Alcohol-Induced Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Type⁸⁵

Туре	2019	2020	2021	2022	2023
Alcohol-Induced	185 (25.2) [23.7]	242 (33.0) [31.8]	315 (42.8) [40.7]	286 (38.8) [36.4]	258 (35.0) [32.9]
Alcohol Poisoning	32 (4.4) [4.3]	29 (4.0) [3.8]	27 (3.7) [3.7]	22 (3.0) [3.2]	18 (2.4*) [2.4*]
Accidental Alcohol Poisoning	30 (4.1) [4.1]	29 (4.0) [3.8]	26 (3.5) [3.6]	21 (2.9) [3.1]	17 (2.3*) [2.3*]
Intentional Self-Harm Alcohol Poisoning	1 (**) [**]	0	0	0	0
Undetermined Alcohol Poisoning	1 (**) [**]	0	1 (**) [**]	1 (**) [**]	1 (**) [**]
Alcoholic Liver Disease	84 (11.5) [11.1]	139 (19.0) [18.9]	157 (21.3) [20.4]	146 (19.8) [18.9]	148 (20.1) [19.5]
Mental and Behavioral Disorders Due to Use of Alcohol	60 (8.2) [7.1]	62 (8.5) [7.7]	112 (15.2) [13.9]	99 (13.4) [11.9]	79 (10.7) [9.4]
All Other Alcohol-Induced	9 (1.2*) [1.2*]	12 (1.6*) [1.4*]	19 (2.6*) [2.6*]	19 (2.6*) [2.4*]	13 (1.8*) [1.7*]

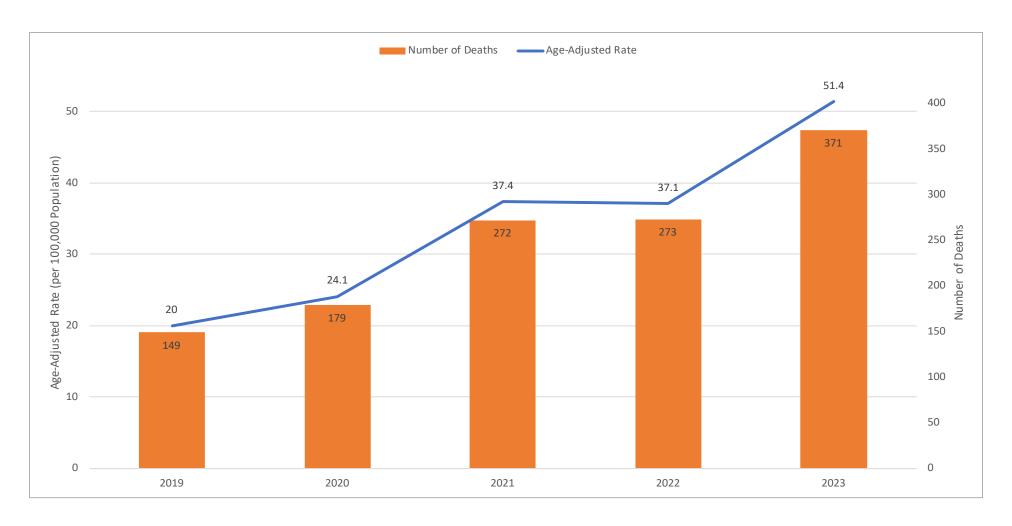
⁸⁵ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Drug-Induced86

Drug-induced mortality (which contains several LCOD categories and is not ranked) includes causes such as drug poisoning (overdose, regardless of intent), and mental or behavioral disorders from the use of drugs. It does not include drug related injuries, or other causes indirectly related to drug use. In 2023, there were 371 drug-induced deaths, with an AADR of 51.4, up from 37.1 in 2022. The highest statistically reliable AADRs were found in men (60.9), AI/AN people (121.0), and residents of the Anchorage region (72.9). People ages 35-44 years had the highest reliable ASDR (114.7).

Figure 22. Drug-Induced Number of Deaths and Age-Adjusted Death Rates by Year



⁸⁶ ICD-10 Codes: 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-J704, L105, L270-L271, M102, M320, M804, M814, M835, M871, R502, R781-R785, X40-X44X, X60-X64X, X85, Y10-Y14X.

Table 98. Drug-Induced Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics⁸⁷

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	100 (26.5) [25.8]	115 (30.2) [29.7]	167 (43.7) [43.7]	176 (46.1) [45.9]	232 (60.6) [60.9]
	Female	49 (13.8) [13.9]	64 (18.2) [17.9]	105 (29.7) [30.3]	97 (27.3) [27.5]	139 (39.3) [40.8]
Race	White	86 (18.1) [17.1]	94 (19.8) [18.8]	138 (29.1) [28.2]	131 (27.6) [25.9]	176 (37.2) [35.5]
	Black	6 (22.3*) [22.6*]	12 (44.7*) [41.3*]	7 (26.0*) [24.5*]	9 (33.4*) [33.1*]	22 (81.6) [79.9]
	AI/AN	37 (32.7) [35.1]	46 (40.1) [42.7]	91 (79.2) [85.8]	90 (78.3) [86.9]	126 (109.7) [121.0]
	Asian/PI	3 (**) [**]	2 (**) [**]	1 (**) [**]	2 (**) [**]	5 (**) [**]
M	Multiple	17 (30.0*) [39.7*]	16 (28.2*) [41.2*]	33 (56.8) [79.3]	35 (59.5) [81.0]	31 (52.0) [73.3]
	Hispanic	1 (**) [**]	5 (**) [**]	6 (11.5*) [11.7*]	13 (24.4*) [25.3*]	20 (36.6) [39.7]
Age	<5 Years	1 (**)	0	0	1 (**)	3 (**)
	5-14 Years	0	0	0	0	0
	15-24 Years	9 (9.6*)	22 (22.7)	26 (26.4)	18 (18.4*)	31 (31.2)
	25-34 Years	51 (45.4)	45 (40.2)	78 (71.6)	64 (60.2)	72 (67.6)
	35-44 Years	36 (37.1)	39 (39.6)	60 (59.4)	75 (73.1)	120 (114.7)
	45-54 Years	20 (23.4)	33 (38.9)	57 (69.1)	47 (57.2)	67 (81.8)
	55-64 Years	21 (21.5)	32 (33.5)	36 (38.6)	51 (55.7)	54 (61.5)
	65-74 Years	9 (14.5*)	7 (10.7*)	12 (17.2*)	15 (20.8*)	22 (30.0)
	75-84 Years	2 (**)	1 (**)	3 (**)	1 (**)	1 (**)
	85+ Years	0	0	0	1 (**)	1 (**)
Residence	Anchorage	61 (20.9) [19.7]	97 (33.3) [33.1]	128 (44.1) [43.6]	139 (47.9) [46.9]	209 (72.2) [72.9]
	Gulf Coast	18 (22.2*) [21.7*]	17 (20.8*) [18.8*]	35 (42.9) [45.6]	24 (29.1) [29.1]	30 (36.1) [35.5]
	Interior	21 (19.1) [19.0]	15 (13.7*) [12.5*]	28 (25.1) [23.5]	29 (26.2) [27.8]	29 (26.4) [26.4]
	Mat-Su	24 (22.5) [23.9]	25 (23.3) [23.4]	39 (35.7) [37.1]	31 (27.7) [27.3]	41 (36.0) [36.3]
	Northern	5 (**) [**]	4 (**) [**]	4 (**) [**]	7 (25.2*) [26.0*]	10 (36.1*) [35.6*]
	Southeast	12 (16.5*) [15.6*]	13 (18.0*) [18.8*]	28 (38.5) [40.7]	25 (34.8) [36.5]	32 (45.0) [44.3]
	Southwest	8 (18.9*) [24.1*]	8 (18.7*) [20.0*]	9 (21.3*) [22.3*]	18 (42.9*) [44.0*]	18 (43.4*) [44.9*]
Statewide	Total	149 (20.3) [20.0]	179 (24.4) [24.1]	272 (37.0) [37.4]	273 (37.1) [37.1]	371 (50.4) [51.4]

⁸⁷ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 99. Drug-Induced Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Type⁸⁸

Туре	2019	2020	2021	2022	2023
Drug-Induced	149 (20.3) [20.0]	179 (24.4) [24.1]	272 (37.0) [37.4]	273 (37.1) [37.1]	371 (50.4) [51.4]
Drug Poisoning	132 (18.0) [17.9]	160 (21.8) [21.9]	260 (35.3) [35.9]	254 (34.5) [34.6]	358 (48.6) [49.7]
Accidental Drug Poisoning	112 (15.3) [15.1]	140 (19.1) [19.1]	246 (33.4) [34.0]	233 (31.6) [31.6]	334 (45.3) [46.6]
Intentional Self-Harm Drug Poisoning	14 (1.9*) [1.9*]	11 (1.5*) [1.5*]	7 (1.0*) [1.0*]	9 (1.2*) [1.3*]	13 (1.8*) [1.7*]
Assault Drug Poisoning	0	0	0	0	0
Undetermined Drug Poisoning	6 (0.8*) [0.9*]	9 (1.2*) [1.3*]	7 (1.0*) [0.9*]	12 (1.6*) [1.7*]	11 (1.5*) [1.4*]
Mental and Behavioral Disorders Due to Use of Drugs	17 (2.3*) [2.2*]	19 (2.6*) [2.2*]	12 (1.6*) [1.5*]	19 (2.6*) [2.5*]	13 (1.8*) [1.6*]
All Other Drug-Induced	0	0	0	0	0

⁸⁸ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Drug Poisoning⁸⁹

Within drug-induced deaths, drug poisoning (overdose) was specifically responsible for 358 deaths. Because multiple drugs can be involved in a single death, drug poisoning type categories are based on multiple cause of death analysis and are not mutually exclusive. Narcotic opioids were involved in 282 drug poisoning deaths, up from 185 in 2022. Non-methadone synthetic opioids, a narcotic class that includes drugs such as illicit fentanyl, was the most common opioid, involved in 266 deaths, up from 158 in 2022. Psychostimulants, a psychotropic class that includes drugs such as illicit methamphetamine, was involved in 196 overdose deaths, up from 142 in 2022.⁹⁰

Table 100. Drug Poisoning Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Type⁹¹

Туре	2019	2020	2021	2022	2023
Drug Poisoning	132 (18.0) [17.9]	160 (21.8) [21.9]	260 (35.3) [35.9]	254 (34.5) [34.6]	358 (48.6) [49.7]
Narcotics	88 (12.0) [11.6]	118 (16.1) [16.0]	203 (27.6) [28.0]	191 (25.9) [25.8]	288 (39.1) [40.1]
Opioids	83 (11.3) [11.0]	112 (15.3) [15.2]	199 (27.0) [27.6]	185 (25.1) [24.9]	282 (38.3) [39.3]
Heroin	44 (6.0) [5.9]	35 (4.8) [4.8]	66 (9.0) [9.1]	39 (5.3) [5.3]	16 (2.2*) [2.1*]
Natural and Semi-Synthetic	42 (5.7) [5.4]	38 (5.2) [4.8]	72 (9.8) [9.8]	48 (6.5) [6.5]	33 (4.5) [4.5]
Methadone	9 (1.2*) [1.2*]	8 (1.1*) [1.1*]	12 (1.6*) [1.6*]	10 (1.4*) [1.2*]	14 (1.9*) [1.9*]
Non-Methadone Synthetic	24 (3.3) [3.3]	69 (9.4) [9.7]	151 (20.5) [21.2]	158 (21.5) [21.3]	266 (36.1) [37.4]
Fentanyl	16 (2.2*) [2.2*]	66 (9.0) [9.3]	146 (19.8) [20.5]	153 (20.8) [20.6]	262 (35.6) [36.8]
Cocaine	7 (1.0*) [0.9*]	22 (3.0) [3.0]	13 (1.8*) [1.6*]	21 (2.9) [2.9]	29 (3.9) [3.8]
Sedatives	25 (3.4) [3.5]	27 (3.7) [3.7]	21 (2.9) [3.0]	38 (5.2) [5.2]	51 (6.9) [7.0]
Benzodiazepines	18 (2.5*) [2.6*]	21 (2.9) [2.9]	13 (1.8*) [1.8*]	31 (4.2) [4.3]	34 (4.6) [4.7]
Psychotropics	73 (10.0) [9.8]	77 (10.5) [10.5]	173 (23.5) [24.1]	153 (20.8) [21.0]	216 (29.3) [29.5]
Antidepressants	10 (1.4*) [1.4*]	9 (1.2*) [1.1*]	13 (1.8*) [1.9*]	16 (2.2*) [2.2*]	27 (3.7) [3.5]
Antipsychotics	1 (**) [**]	4 (**) [**]	6 (0.8*) [0.9*]	7 (1.0*) [1.0*]	12 (1.6*) [1.6*]
Psychostimulants	64 (8.7) [8.6]	70 (9.5) [9.7]	163 (22.1) [22.7]	142 (19.3) [19.5]	196 (26.6) [26.9]
Methamphetamine	59 (8.1) [7.8]	65 (8.9) [9.0]	159 (21.6) [22.1]	129 (17.5) [17.8]	191 (25.9) [26.2]

⁸⁹ ICD-10 Codes: X40-X44, X60-X64, X85, Y10-Y14 with T400-T409, T420-T428, or T430-T439 as a contributing cause. Fentanyl and methamphetamine estimates based on scans of the descriptive cause of death, significant conditions, and injury description text fields.

⁹⁰ Additional information on drug overdoses in Alaska can be found in the <u>2023 Drug Overdose Mortality Update</u>.

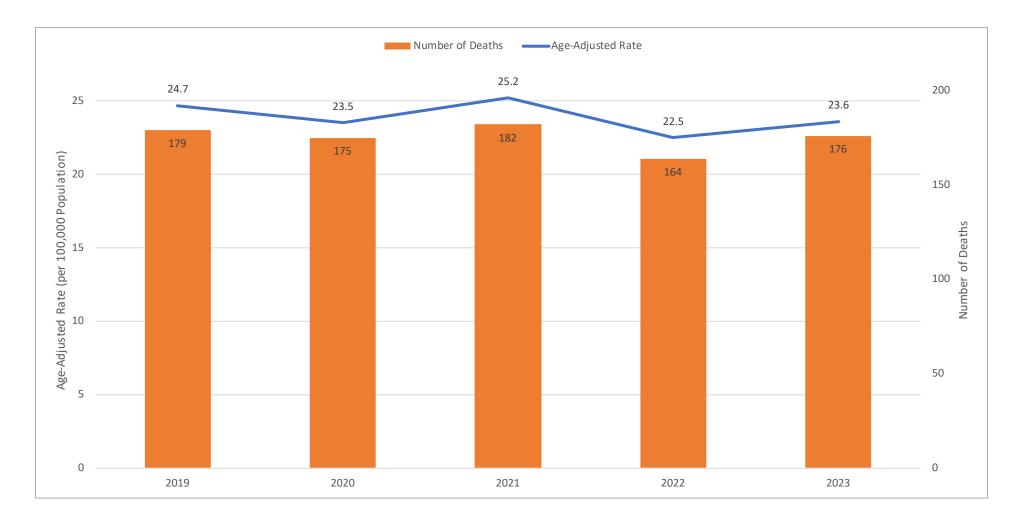
⁹¹ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Firearm⁹²

Firearm mortality (which contains several LCOD categories and is not ranked) includes deaths due to the discharge of a firearm. In 2023, there were 176 firearm deaths, with an AADR of 23.6, up from 22.5 in 2022. The highest statistically reliable AADRs were found in men (37.8), AI/AN people (37.3), and residents of the Interior region (35.1). People ages 25-34 years had the highest reliable ASDR (44.2).

Figure 23. Firearm Discharge Number of Deaths and Age-Adjusted Death Rates by Year



⁹² ICD-10 Codes: U014, W32-W34, X72-X74, X93-X95, Y22-Y24, Y350.

Table 101. Firearm Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics 93

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	147 (39.0) [39.6]	145 (38.0) [37.4]	149 (39.0) [39.3]	138 (36.2) [36.8]	146 (38.1) [37.8]
	Female	32 (9.0) [8.8]	30 (8.5) [8.4]	33 (9.3) [9.8]	26 (7.3) [7.3]	30 (8.5) [8.4]
Race	White	96 (20.2) [19.1]	96 (20.2) [19.1]	101 (21.3) [21.0]	93 (19.6) [19.4]	99 (20.9) [19.9]
	Black	8 (29.8*) [27.5*]	6 (22.3*) [20.4*]	6 (22.3*) [18.7*]	7 (26.0*) [22.7*]	4 (**) [**]
	AI/AN	50 (44.2) [47.6]	47 (41.0) [38.2]	48 (41.8) [41.9]	39 (33.9) [32.2]	43 (37.4) [37.3]
	Asian/PI	8 (13.3*) [12.8*]	7 (11.6*) [10.8*]	5 (**) [**]	7 (11.3*) [12.5*]	14 (22.4*) [20.6*]
	Multiple	10 (17.7*) [19.3*]	18 (31.7*) [39.3*]	14 (24.1*) [20.9*]	16 (27.2*) [44.0*]	14 (23.5*) [25.9*]
	Hispanic	10 (18.8*) [21.3*]	8 (16.0*) [14.6*]	11 (21.2*) [19.3*]	6 (11.3*) [10.3*]	11 (20.1*) [18.5*]
Age	<5 Years	0	0	0	1 (**)	1 (**)
	5-14 Years	2 (**)	8 (7.8*)	1 (**)	6 (5.8*)	4 (**)
	15-24 Years	41 (43.9)	37 (38.2)	47 (47.7)	35 (35.7)	29 (29.2)
	25-34 Years	44 (39.2)	47 (41.9)	48 (44.0)	37 (34.8)	47 (44.2)
	35-44 Years	28 (28.8)	21 (21.3)	34 (33.7)	29 (28.3)	30 (28.7)
	45-54 Years	27 (31.5)	18 (21.2*)	16 (19.4*)	17 (20.7*)	18 (22.0*)
	55-64 Years	24 (24.6)	18 (18.8*)	9 (9.6*)	16 (17.5*)	20 (22.8)
	65-74 Years	8 (12.9*)	17 (26.1*)	16 (23.0*)	13 (18.0*)	16 (21.8*)
	75-84 Years	3 (**)	9 (38.3*)	10 (39.2*)	7 (24.9*)	9 (30.3*)
	85+ Years	2 (**)	0	1 (**)	3 (**)	2 (**)
Residence	Anchorage	67 (22.9) [23.2]	62 (21.3) [20.8]	48 (16.5) [16.1]	44 (15.2) [15.1]	59 (20.4) [19.8]
	Gulf Coast	17 (21.0*) [20.1*]	18 (22.1*) [22.9*]	20 (24.5) [26.1]	23 (27.9) [30.5]	12 (14.4*) [13.6*]
	Interior	31 (28.2) [30.3]	25 (22.8) [21.6]	42 (37.6) [36.2]	45 (40.7) [38.5]	40 (36.4) [35.1]
	Mat-Su	31 (29.0) [27.3]	35 (32.7) [32.8]	30 (27.5) [29.0]	27 (24.2) [26.0]	23 (20.2) [20.2]
	Northern	11 (40.0*) [40.3*]	13 (45.0*) [42.5*]	10 (35.3*) [33.0*]	4 (**) [**]	11 (39.7*) [40.0*]
	Southeast	6 (8.3*) [8.8*]	4 (**) [**]	12 (16.5*) [18.5*]	9 (12.5*) [12.0*]	14 (19.7*) [18.9*]
	Southwest	14 (33.1*) [33.4*]	18 (42.0*) [38.2*]	20 (47.2) [44.9]	11 (26.2*) [25.1*]	17 (41.0*) [41.1*]
Statewide	Total	179 (24.4) [24.7]	175 (23.9) [23.5]	182 (24.7) [25.2]	164 (22.3) [22.5]	176 (23.9) [23.6]

⁹³ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 102. Firearm Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Type⁹⁴

Туре	2019	2020	2021	2022	2023
Firearm	179 (24.4) [24.7]	175 (23.9) [23.5]	182 (24.7) [25.2]	164 (22.3) [22.5]	176 (23.9) [23.6]
Accidental Discharge	2 (**) [**]	3 (**) [**]	2 (**) [**]	3 (**) [**]	2 (**) [**]
Intentional Self-Harm Discharge	117 (16.0) [15.9]	133 (18.1) [17.8]	142 (19.3) [19.8]	114 (15.5) [15.9]	120 (16.3) [15.9]
Assault Discharge	51 (7.0) [7.2]	27 (3.7) [3.7]	31 (4.2) [4.2]	41 (5.6) [5.5]	47 (6.4) [6.5]
Undetermined Discharge	5 (**) [**]	7 (1.0*) [1.0*]	6 (0.8*) [0.7*]	3 (**) [**]	5 (**) [**]
Legal Intervention Discharge	4 (**) [**]	5 (**) [**]	1 (**) [**]	3 (**) [**]	2 (**) [**]

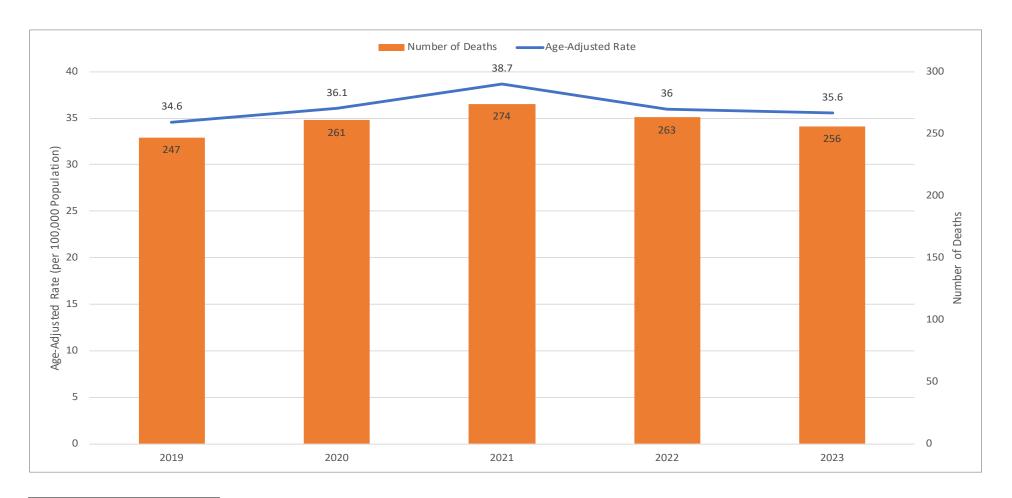
⁹⁴ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Traumatic Brain Injury⁹⁵

Traumatic brain injury (TBI) mortality (which contains several LCOD categories and is not ranked) includes injury deaths involving a bump, blow, or jolt to the head, or a penetrating injury to the head. ⁹⁶ Because multiple injuries can be involved in a single death, TBI type categories are based on multiple cause of death analysis and are not mutually exclusive. In 2023, there were 256 TBI deaths, with an AADR of 35.6, down slightly from 36 in 2022. The highest statistically reliable AADRs were found in men (53.3), AI/AN people (55.4), and residents of the Interior region (48.2). People ages 75-84 years had the highest reliable ASDR (87.6). The most common type of TBI was open wound of the head (131 deaths) followed by other and unspecified injuries of the head (112 deaths).





⁹⁵ ICD-10 Codes: U01–U03, V01–Y36, Y85–Y87, Y89 with S010–S019, S020, S021, S023, S027–S029, S040, S060–S069, S070, S071, S078, S079, S097-S099, T901, T902, T904, T905, T908, T909 as a contributing cause.

⁹⁶ Centers for Disease Control and Prevention. Traumatic Brain Injury and Concussion

Table 103. Traumatic Brain Injury Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Demographic Characteristics 97

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	179 (47.5) [49.0]	191 (50.1) [51.9]	216 (56.5) [58.6]	195 (51.1) [52.0]	197 (51.5) [53.3]
	Female	68 (19.1) [19.4]	70 (19.9) [19.7]	58 (16.4) [17.7]	68 (19.2) [19.1]	59 (16.7) [17.2]
Race	White	143 (30.0) [28.3]	151 (31.8) [30.6]	153 (32.2) [31.5]	160 (33.8) [32.4]	164 (34.7) [34.1]
	Black	5 (**) [**]	5 (**) [**]	3 (**) [**]	7 (26.0*) [24.2*]	7 (26.0*) [33.5*]
	AI/AN	61 (53.9) [58.7]	72 (62.8) [62.0]	78 (67.9) [73.0]	64 (55.7) [55.6]	60 (52.2) [55.4]
	Asian/PI	13 (21.7*) [23.0*]	10 (16.5*) [18.3*]	12 (19.6*) [21.6*]	9 (14.5*) [16.4*]	7 (11.2*) [11.7*]
	Multiple	17 (30.0*) [40.0*]	21 (37.0) [59.9]	21 (36.1) [44.7]	19 (32.3*) [52.7*]	13 (21.8*) [28.7*]
	Hispanic	11 (20.7*) [39.6*]	11 (22.0*) [22.9*]	9 (17.3*) [17.2*]	8 (15.0*) [13.6*]	15 (27.5*) [29.3*]
Age	<5 Years	1 (**)	1 (**)	4 (**)	6 (13.4*)	4 (**)
	5-14 Years	3 (**)	13 (12.7*)	3 (**)	5 (**)	3 (**)
	15-24 Years	47 (50.3)	43 (44.4)	61 (62.0)	40 (40.8)	36 (36.3)
	25-34 Years	51 (45.4)	49 (43.7)	48 (44.0)	53 (49.8)	49 (46.0)
	35-44 Years	31 (31.9)	37 (37.6)	42 (41.6)	39 (38.0)	46 (44.0)
	45-54 Years	36 (42.0)	24 (28.3)	30 (36.4)	29 (35.3)	27 (33.0)
	55-64 Years	38 (39.0)	35 (36.6)	24 (25.7)	32 (35.0)	28 (31.9)
	65-74 Years	17 (27.4*)	32 (49.1)	26 (37.3)	31 (43.0)	23 (31.4)
	75-84 Years	15 (66.1*)	17 (72.4*)	26 (101.8)	16 (56.9*)	26 (87.6)
	85+ Years	8 (118.9*)	10 (153.4*)	10 (141.5*)	12 (164.3*)	14 (185.9*)
Residence	Anchorage	99 (33.8) [34.6]	80 (27.5) [27.9]	86 (29.6) [30.4]	68 (23.5) [23.9]	93 (32.1) [32.1]
	Gulf Coast	33 (40.7) [41.3]	33 (40.4) [39.5]	32 (39.2) [41.5]	45 (54.6) [55.6]	24 (28.9) [26.8]
	Interior	40 (36.3) [37.7]	40 (36.6) [35.4]	56 (50.2) [50.7]	51 (46.1) [45.6]	53 (48.3) [48.2]
	Mat-Su	41 (38.4) [37.9]	46 (43.0) [44.0]	34 (31.2) [31.2]	53 (47.4) [48.7]	36 (31.6) [34.4]
	Northern	11 (40.0*) [39.0*]	17 (58.9*) [54.8*]	17 (60.0*) [64.5*]	10 (36.0*) [40.9*]	11 (39.7*) [38.2*]
	Southeast	10 (13.8*) [16.5*]	17 (23.5*) [24.2*]	23 (31.6) [33.2]	16 (22.3*) [21.0*]	24 (33.8) [33.9]
	Southwest	12 (28.4*) [29.0*]	28 (65.3) [65.0]	26 (61.4) [60.9]	19 (45.3*) [43.7*]	15 (36.2*) [42.9*]
Statewide	Total	247 (33.7) [34.6]	261 (35.6) [36.1]	274 (37.2) [38.7]	263 (35.7) [36.0]	256 (34.7) [35.6]

⁹⁷ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 104. Traumatic Brain Injury Deaths (Crude Death Rate) [Age-Adjusted Death Rate] by Type⁹⁸

Туре	2019	2020	2021	2022	2023
Traumatic Brain Injury	247 (33.7) [34.6]	261 (35.6) [36.1]	274 (37.2) [38.7]	263 (35.7) [36.0]	256 (34.7) [35.6]
Open Wound Of Head	130 (17.7) [17.9]	140 (19.1) [18.9]	145 (19.7) [20.0]	129 (17.5) [17.6]	131 (17.8) [17.4]
Fracture Of Skull And Facial Bones	25 (3.4) [3.6]	17 (2.3*) [2.3*]	36 (4.9) [4.9]	30 (4.1) [4.1]	19 (2.6*) [2.3*]
Intracranial Injury	96 (13.1) [13.7]	95 (13.0) [13.7]	114 (15.5) [15.9]	92 (12.5) [13.0]	101 (13.7) [14.3]
Crushing Injury Of Head	1 (**) [**]	1 (**) [**]	0	0	0
Other And Unspecified Injuries Of Head	112 (15.3) [15.9]	112 (15.3) [15.4]	115 (15.6) [16.8]	131 (17.8) [17.9]	112 (15.2) [16.3]
Sequelae Of Injuries Of Head	2 (**) [**]	3 (**) [**]	6 (0.8*) [0.9*]	3 (**) [**]	8 (1.1*) [1.1*]

⁹⁸ Crude death rates are deaths per 100,000 population. Age-adjusted death rates are deaths per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Child and Adolescent Death Rates⁹⁹

Death rates for children ages <5 five years old can be reported on an age-specific basis relative to population, or preferably (given this age group's proximity to birth) on a death cohort basis relative to the number of live births that occurred in the same event year. Between 2021-2023, the three-year average under-five death rate (U5DR), which measures the number of deaths among children ages <5 years per 1,000 live births, was 8.6, up from 7.8 between 2020-2022. The highest statistically reliable average U5DRs were found in boys (9.6), AI/AN children (16.5), and residents of the Southwest region (16.9).

Death rates for children ages 5-14 years and teens ages 15-19 years are reported on an age-specific basis. Between 2021-2023, the three-year average ASDR for children ages 5-14 years was 16.9, down from 22.0 between 2020-2022. The highest statistically reliable average ASDRs for this age group were found in boys (22.1), and AI/AN children (36.4). The average ASDR rate for teens ages 15-19 years was 92.9, down from 96.8 in 2020-2022. The highest statistically reliable average ASDRs for this age group were found in boys (101), AI/AN teens (227.8), and residents of the Southwest region (238.3).

⁹⁹ Due to relatively low annual numbers of child and adolescent deaths in Alaska, rates are based on a three-year rolling sum of deaths.

Table 105. <5 Years Child Deaths (Age-Specific Death Rate) [Under-Five Death Rate] by Demographic Characteristics 100

Demographic	Characteristic	2017-2019	2018-2020	2019-2021	2020-2022	2021-2023
Sex	Male	120 (153.7) [7.6]	114 (149.5) [7.5]	115 (155.2) [7.8]	126 (175.5) [8.7]	137 (196.1) [9.6]
	Female	100 (132.6) [6.8]	87 (119.5) [6.1]	97 (138.3) [7.0]	94 (139.3) [6.8]	102 (154.7) [7.6]
Race	White	78 (95.8) [4.7]	66 (83.9) [4.1]	72 (95.5) [4.5]	77 (107.3) [4.9]	84 (122.0) [5.5]
	Black	9 (151.1*) [9.1*]	9 (157.0*) [9.7*]	5 (**) [**]	5 (**) [**]	5 (**) [**]
	AI/AN	88 (293.7) [15.0]	80 (273.3) [13.9]	88 (313.4) [15.6]	81 (303.6) [14.7]	90 (360.0) [16.5]
	Asian/PI	12 (94.6*) [4.0*]	6 (48.8*) [2.1*]	11 (91.3*) [4.1*]	16 (133.3*) [6.0*]	20 (162.8) [7.6]
	Multiple	25 (106.5) [7.8]	29 (125.9) [9.2]	29 (125.1) [9.5]	32 (135.6) [10.6]	31 (126.7) [10.4]
	Hispanic	19 (102.5*) [7.9*]	21 (120.9) [9.0]	15 (90.9*) [6.5*]	17 (105.6*) [7.3*]	24 (143.7) [10.1]
Residence	Anchorage	71 (116.3) [5.9]	62 (105.5) [5.3]	70 (124.3) [6.2]	75 (139.3) [6.8]	83 (159.0) [7.7]
	Gulf Coast	20 (129.1) [7.0]	16 (107.0*) [5.8*]	15 (104.7*) [5.5*]	20 (145.9) [7.5]	22 (164.3) [8.2]
	Interior	32 (135.9) [6.2]	30 (130.4) [6.2]	25 (110.8) [5.2]	28 (127.4) [5.9]	30 (139.7) [6.4]
	Mat-Su	20 (85.4) [4.9]	15 (66.1*) [3.7*]	22 (100.1) [5.4]	25 (116.5) [6.1]	29 (134.7) [7.1]
	Northern	26 (378.0) [16.9]	23 (328.9) [15.7]	17 (242.1*) [11.9*]	16 (229.7*) [11.5*]	20 (300.8) [15.1]
	Southeast	15 (121.3*) [6.9*]	14 (117.5*) [6.7*]	17 (149.7*) [8.4*]	16 (147.5*) [8.1*]	16 (154.2*) [8.1*]
	Southwest	35 (325.2) [13.9]	40 (372.9) [16.0]	46 (431.4) [18.8]	40 (380.8) [16.8]	39 (382.6) [16.9]
Statewide	Total	220 (143.3) [7.2]	201 (134.9) [6.8]	212 (147.0) [7.4]	220 (157.9) [7.8]	239 (176.0) [8.6]

¹⁰⁰ Age-specific rates are three-year deaths per 100,000 population. Under-five death rates are three-year deaths per 1,000 live births.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 106. 5-14 Years Child Deaths (Age-Specific Death Rate) by Demographic Characteristics 101

Demographic	Characteristic	2017-2019	2018-2020	2019-2021	2020-2022	2021-2023
Sex	Male	48 (29.3)	52 (32.2)	46 (28.7)	47 (29.6)	35 (22.1)
	Female	31 (20.1)	30 (19.7)	21 (13.9)	21 (14.0)	17 (11.3*)
Race	White	31 (18.1)	32 (19.0)	26 (15.7)	25 (15.2)	15 (9.2*)
	Black	2 (**)	1 (**)	0	1 (**)	2 (**)
	AI/AN	30 (47.7)	31 (49.2)	28 (44.3)	29 (45.8)	23 (36.4)
	Asian/PI	4 (**)	3 (**)	3 (**)	2 (**)	3 (**)
	Multiple	10 (21.4*)	12 (25.8*)	9 (19.5*)	9 (19.6*)	8 (17.5*)
	Hispanic	7 (23.1*)	9 (30.2*)	7 (23.7*)	8 (27.1*)	3 (**)
Residence	Anchorage	27 (22.1)	34 (28.4)	23 (19.6)	21 (18.1)	16 (13.9*)
	Gulf Coast	6 (18.6*)	7 (21.9*)	7 (22.0*)	7 (22.1*)	8 (25.1*)
	Interior	10 (21.5*)	6 (13.2*)	6 (13.3*)	6 (13.3*)	6 (13.2*)
	Mat-Su	14 (26.9*)	10 (19.3*)	8 (15.4*)	6 (11.5*)	3 (**)
	Northern	11 (72.3*)	10 (65.3*)	9 (59.0*)	13 (85.8*)	10 (67.3*)
	Southeast	2 (**)	4 (**)	3 (**)	3 (**)	1 (**)
	Southwest	9 (41.0*)	11 (50.0*)	11 (49.9*)	12 (54.4*)	8 (36.7*)
Statewide	Total	79 (24.8)	82 (26.1)	67 (21.5)	68 (22.0)	52 (16.9)

Age-specific death rates are three-year deaths per 100,000 population.
 * Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 107. Teen Deaths (Age-Specific Death Rate) by Demographic Characteristics 102

Demographic	Characteristic	2017-2019	2018-2020	2019-2021	2020-2022	2021-2023
Sex	Male	110 (146.9)	104 (139.2)	104 (138.8)	84 (110.3)	78 (101.0)
	Female	29 (42.9)	34 (50.5)	46 (68.0)	56 (81.8)	58 (83.8)
Race	White	45 (57.7)	43 (55.8)	44 (57.1)	43 (55.3)	41 (52.0)
	Black	7 (124.3*)	5 (**)	5 (**)	3 (**)	2 (**)
	AI/AN	58 (207.8)	58 (205.5)	66 (230.2)	66 (224.0)	68 (227.8)
	Asian/PI	7 (53.9*)	8 (61.1*)	8 (60.6*)	8 (60.4*)	5 (**)
	Multiple	15 (83.6*)	19 (104.8*)	22 (119.4)	20 (105.5)	18 (91.4*)
	Hispanic	5 (**)	6 (50.1*)	6 (50.6*)	4 (**)	5 (**)
Residence	Anchorage	40 (71.0)	42 (75.0)	49 (87.6)	46 (81.8)	41 (72.6)
	Gulf Coast	10 (67.9*)	10 (68.0*)	9 (60.8*)	8 (52.9*)	7 (45.6*)
	Interior	19 (90.3*)	20 (96.8)	19 (93.3*)	23 (113.2)	24 (116.5)
	Mat-Su	11 (50.1*)	10 (45.5*)	12 (53.7*)	14 (60.9*)	14 (58.6*)
	Northern	16 (268.1*)	16 (252.2*)	21 (307.2)	21 (285.6)	18 (238.0*)
	Southeast	9 (70.7*)	10 (79.2*)	8 (63.4*)	7 (54.9*)	9 (69.8*)
	Southwest	34 (351.9)	30 (310.0)	32 (329.5)	21 (214.8)	23 (238.3)
Statewide	Total	139 (97.6)	138 (97.2)	150 (105.2)	140 (96.8)	136 (92.9)

Age-specific death rates are three-year deaths per 100,000 population.
 * Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Infant Death Rates¹⁰³

Death rates for infants ages <1 year are reported on a death cohort basis relative to the number of live births that occurred in the same event year. Between 2021-2023, the three-year average infant death rate (IDR), which measures the number of deaths among infants ages <1 year per 1,000 live births, was 7.2, up from 6.6 between 2020-2022. The highest statistically reliable average IDRs were found in boys (8.1), AI/AN infants (13.4), and residents of the Southwest region (14.3).

The average IDR rate for neonatal infants ages 0-27 days was 4.0, up slightly from 3.9 in 2020-2022. The highest statistically reliable average IDRs for this age group were found in boys (4.3) and AI/AN infants (6.1). The average IDR rate for postneonatal infants ages 28+ days was 3.2, up from 2.7 between 2020-2022. The highest statistically reliable average IDRs for this age group were found in boys (3.8) and AI/AN infants (7.3).

¹⁰³ Due to relatively low annual numbers of infant deaths in Alaska, rates are based on a three-year rolling sum of deaths.

Table 108. Infant Deaths (Infant Death Rate) by Demographic Characteristics 104

Demographic	Characteristic	2017-2019	2018-2020	2019-2021	2020-2022	2021-2023
Sex	Male	91 (5.8)	92 (6.1)	94 (6.3)	108 (7.5)	116 (8.1)
	Female	77 (5.2)	72 (5.0)	79 (5.7)	79 (5.7)	83 (6.2)
Race	White	60 (3.6)	54 (3.3)	60 (3.8)	69 (4.4)	71 (4.7)
	Black	8 (8.1*)	8 (8.6*)	5 (**)	5 (**)	5 (**)
	AI/AN	61 (10.4)	61 (10.6)	66 (11.7)	65 (11.8)	73 (13.4)
	Asian/PI	11 (3.7*)	5 (**)	9 (3.3*)	12 (4.5*)	15 (5.7*)
	Multiple	21 (6.5)	26 (8.2)	26 (8.5)	27 (8.9)	26 (8.7)
	Hispanic	15 (6.3*)	19 (8.2*)	14 (6.0*)	15 (6.4*)	22 (9.2)
Age	<27 Days (Neonatal)	96 (3.2)	97 (3.3)	107 (3.7)	111 (3.9)	111 (4.0)
	28+ Days (Postneonatal)	72 (2.4)	67 (2.3)	66 (2.3)	76 (2.7)	88 (3.2)
Residence	Anchorage	54 (4.5)	52 (4.5)	60 (5.3)	65 (5.9)	71 (6.6)
	Gulf Coast	17 (6.0*)	13 (4.7*)	12 (4.4*)	19 (7.1*)	18 (6.7*)
	Interior	26 (5.1)	28 (5.8)	21 (4.4)	23 (4.8)	24 (5.1)
	Mat-Su	14 (3.4*)	11 (2.7*)	17 (4.2*)	21 (5.1)	24 (5.9)
	Northern	16 (10.4*)	16 (10.9*)	13 (9.1*)	14 (10.1*)	15 (11.3*)
	Southeast	12 (5.5*)	12 (5.8*)	15 (7.4*)	15 (7.6*)	14 (7.1*)
	Southwest	28 (11.1)	31 (12.4)	35 (14.3)	30 (12.6)	33 (14.3)
Statewide	Total	168 (5.5)	164 (5.6)	173 (6.0)	187 (6.6)	199 (7.2)

Infant death rates are three-year infant deaths per 1,000 live births.
 * Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 109. Neonatal Infant Deaths (Infant Death Rate) by Demographic Characteristics 105

Demographic	Characteristic	2017-2019	2018-2020	2019-2021	2020-2022	2021-2023
Sex	Male	51 (3.2)	52 (3.4)	55 (3.7)	57 (3.9)	61 (4.3)
	Female	45 (3.1)	45 (3.2)	52 (3.7)	54 (3.9)	50 (3.7)
Race	White	48 (2.9)	42 (2.6)	46 (2.9)	47 (3.0)	48 (3.2)
	Black	5 (**)	6 (6.5*)	3 (**)	5 (**)	3 (**)
	AI/AN	21 (3.6)	24 (4.2)	30 (5.3)	31 (5.6)	33 (6.1)
	Asian/PI	5 (**)	4 (**)	8 (3.0*)	10 (3.7*)	10 (3.8*)
	Multiple	11 (3.4*)	13 (4.1*)	14 (4.6*)	12 (4.0*)	13 (4.4*)
	Hispanic	10 (4.2*)	13 (5.6*)	11 (4.7*)	9 (3.9*)	12 (5.0*)
Residence	Anchorage	36 (3.0)	38 (3.3)	42 (3.7)	41 (3.7)	41 (3.8)
	Gulf Coast	10 (3.5*)	8 (2.9*)	9 (3.3*)	9 (3.4*)	9 (3.4*)
	Interior	14 (2.7*)	15 (3.1*)	15 (3.1*)	17 (3.6*)	14 (3.0*)
	Mat-Su	10 (2.4*)	7 (1.7*)	10 (2.5*)	12 (2.9*)	16 (3.9*)
	Northern	8 (5.2*)	9 (6.1*)	7 (4.9*)	7 (5.0*)	6 (4.5*)
	Southeast	10 (4.6*)	11 (5.3*)	10 (4.9*)	9 (4.6*)	7 (3.5*)
	Southwest	7 (2.8*)	8 (3.2*)	14 (5.7*)	16 (6.7*)	18 (7.8*)
Statewide	Total	96 (3.2)	97 (3.3)	107 (3.7)	111 (3.9)	111 (4.0)

 $^{^{105}}$ Infant death rates are three-year infant deaths per 1,000 live births.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 110. Postneonatal Infant Deaths (Infant Death Rate) by Demographic Characteristics 106

Demographic	Characteristic	2017-2019	2018-2020	2019-2021	2020-2022	2021-2023
Sex	Male	40 (2.5)	40 (2.6)	39 (2.6)	51 (3.5)	55 (3.8)
	Female	32 (2.2)	27 (1.9)	27 (1.9)	25 (1.8)	33 (2.5)
Race	White	12 (0.7*)	12 (0.7*)	14 (0.9*)	22 (1.4)	23 (1.5)
	Black	3 (**)	2 (**)	2 (**)	0	2 (**)
	AI/AN	40 (6.8)	37 (6.4)	36 (6.4)	34 (6.2)	40 (7.3)
	Asian/PI	6 (2.0*)	1 (**)	1 (**)	2 (**)	5 (**)
	Multiple	10 (3.1*)	13 (4.1*)	12 (3.9*)	15 (4.9*)	13 (4.4*)
	Hispanic	5 (**)	6 (2.6*)	3 (**)	6 (2.6*)	10 (4.2*)
Residence	Anchorage	18 (1.5*)	14 (1.2*)	18 (1.6*)	24 (2.2)	30 (2.8)
	Gulf Coast	7 (2.5*)	5 (**)	3 (**)	10 (3.7*)	9 (3.4*)
	Interior	12 (2.3*)	13 (2.7*)	6 (1.3*)	6 (1.3*)	10 (2.1*)
	Mat-Su	4 (**)	4 (**)	7 (1.7*)	9 (2.2*)	8 (2.0*)
	Northern	8 (5.2*)	7 (4.8*)	6 (4.2*)	7 (5.0*)	9 (6.8*)
	Southeast	2 (**)	1 (**)	5 (**)	6 (3.0*)	7 (3.5*)
	Southwest	21 (8.3)	23 (9.2)	21 (8.6)	14 (5.9*)	15 (6.5*)
Statewide	Total	72 (2.4)	67 (2.3)	66 (2.3)	76 (2.7)	88 (3.2)

 $^{^{106}}$ Infant death rates are three-year infant deaths per 1,000 live births.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Fetal Death Rates¹⁰⁷

Fetal deaths are defined under Alaska Statute (AS) 18.50.950 as "death before the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy", excluding induced termination. AS 18.50.240 requires the filing of a fetal death certificate for each death where gestation lasts at least 20 weeks. Fetal deaths at <20 weeks gestation, or where the gestational age was unknown, are not reported.

Fetal death rates are reported on a death cohort basis relative to the number of fetal deaths plus the number of live births that occurred in the same event year. Between 2021-2023, the three-year average fetal death rate (FDR), which measures the number of fetal deaths per 1,000 live births plus fetal deaths, was 5.4, down from 5.8 between 2020-2022. The highest statistically reliable average FDRs were found in Al/AN women (8.0), women ages 35-39 years (5.4), and residents of the Anchorage region (5.5).

¹⁰⁷ Due to relatively low annual numbers of fetal deaths in Alaska, rates are based on a three-year rolling sum of deaths.

¹⁰⁸ Alaska Statute Title 18, Chapter 50, Section 950. Definitions.

¹⁰⁹ Alaska Statute Title 18, Chapter 50, Section 240. Fetal Death Registration.

Table 111. Fetal Deaths (Fetal Death Rate) by Demographic Characteristics 110

Demographic	Characteristic	2017-2019	2018-2020	2019-2021	2020-2022	2021-2023
Sex	Male	88 (5.6)	78 (5.1)	83 (5.6)	84 (5.8)	81 (5.6)
	Female	84 (5.7)	74 (5.2)	79 (5.6)	79 (5.7)	68 (5.0)
Race	White	73 (4.3)	58 (3.6)	61 (3.8)	69 (4.4)	69 (4.5)
	Black	11 (11.0*)	7 (7.5*)	9 (9.8*)	7 (8.0*)	7 (8.5*)
	AI/AN	56 (9.5)	56 (9.7)	61 (10.7)	56 (10.1)	44 (8.0)
	Asian/PI	19 (6.3*)	17 (6.0*)	13 (4.8*)	10 (3.7*)	11 (4.1*)
	Multiple	7 (2.2*)	7 (2.2*)	9 (2.9*)	11 (3.6*)	11 (3.7*)
	Hispanic	8 (3.3*)	5 (**)	6 (2.6*)	5 (**)	6 (2.5*)
Mother Age	15-19 Years	13 (9.9*)	10 (8.3*)	14 (12.0*)	15 (13.2*)	14 (12.7*)
	20-24 Years	30 (4.6)	26 (4.2)	32 (5.3)	34 (5.8)	29 (5.1)
	25-29 Years	54 (5.6)	53 (5.8)	53 (6.0)	44 (5.2)	36 (4.5)
	30-34 Years	28 (3.4)	25 (3.1)	33 (4.2)	39 (4.9)	42 (5.3)
	35-39 Years	20 (5.0)	18 (4.5*)	19 (4.6*)	20 (4.8)	23 (5.4)
	40-44 Years	15 (18.2*)	9 (11.0*)	5 (**)	4 (**)	4 (**)
Residence	Anchorage	61 (5.0)	53 (4.5)	59 (5.2)	61 (5.5)	59 (5.5)
	Gulf Coast	18 (6.3*)	13 (4.7*)	16 (5.9*)	17 (6.3*)	19 (7.1*)
	Interior	26 (5.0)	25 (5.2)	27 (5.6)	26 (5.4)	20 (4.2)
	Mat-Su	23 (5.6)	15 (3.6*)	17 (4.2*)	16 (3.9*)	20 (4.9)
	Northern	12 (7.8*)	13 (8.8*)	12 (8.4*)	13 (9.3*)	13 (9.7*)
	Southeast	11 (5.0*)	12 (5.7*)	9 (4.4*)	5 (**)	2 (**)
	Southwest	23 (9.0)	23 (9.1)	25 (10.1)	24 (10.0)	17 (7.3*)
Statewide	Total	175 (5.7)	154 (5.2)	165 (5.7)	164 (5.8)	152 (5.4)

¹¹⁰ Fetal death rates are three-year fetal deaths per 1,000 live births plus fetal deaths.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Years of Potential Life Lost

Years of Potential Life Lost (YPLL) is a measure of premature death that represents the number of years between an expected natural lifespan of 75 years and the age of people who die before that time. For example, someone who dies at age 65 would have 75 - 65 = 10 YPLL. Someone who dies at age 10 would have 75 - 10 = 65 YPLL. This places more weight on mortality among younger populations as YPLL decreases with age. In 2023 there were 69,820 YPLL among Alaska residents overall, or about 12.6 years per death.

Accidents were the leading cause of premature death, at 18,698 YPLL, or about 27.5 years per death. Accidents were the leading cause of premature death among both men and women, as well as White, Black, AI/AN, multiple race, and Hispanic people, people ages 15-54 years, and residents of all regions. Malignant neoplasms were the leading cause of premature deaths among Asian/PI people, and people ages 55-74 years. Certain conditions originating in the perinatal period were the leading cause among people ages <5 years.

Alaska's age-adjusted YPLL rate, which represents the number of YPLL per 100,000 Alaska residents under 75 years (standardized by U.S. year 2000 standard population levels) was 9,932.4. The highest statistically reliable age-adjusted YPLL rates were found in men (11,993.3), AI/AN people (23,590.3), and residents of the Southwestern region (14,930.4). People ages 55-64 years had the highest reliable age-specific YPLL rate (14,515.9).

Table 112. Top Ten Leading Causes of Years of Potential Life Lost (Years) [Years per Death] 111

Rank	2019	2020	2021	2022	2023
#1	Accidents (11,913) [27.5]	Accidents (12,862) [27.7]	Accidents (16,354) [27.7]	Accidents (15,374) [27.4]	Accidents (18,698) [27.5]
#2	Intentional Self-Harm (7,840) [37.3]	Malignant Neoplasms (8,684) [8.3]	Diseases Of Heart (8,925) [8.8]	Diseases Of Heart (8,415) [8.3]	Malignant Neoplasms (8,140) [7.7]
#3	Malignant Neoplasms (7,827) [7.7]	Diseases Of Heart (7,386) [8.1]	Intentional Self-Harm (8,287) [37.7]	Malignant Neoplasms (8,368) [7.8]	Diseases Of Heart (6,826) [7.5]
#4	Diseases Of Heart (6,526) [7.8]	Intentional Self-Harm (7,319) [35.9]	COVID-19 (8,120) [10.7]	Intentional Self-Harm (7,138) [35.7]	Intentional Self-Harm (6,798) [33.3]
#5	Assault (2,967) [37.6]	Chronic Liver Disease And Cirrhosis (4,046) [24.2]	Malignant Neoplasms (7,687) [7.0]	Chronic Liver Disease And Cirrhosis (4,318) [23.3]	Chronic Liver Disease And Cirrhosis (4,284) [22.4]
#6	Chronic Liver Disease And Cirrhosis (2,329) [21.2]	Assault (2,027) [36.9]	Chronic Liver Disease And Cirrhosis (4,113) [21.8]	Assault (3,147) [41.4]	Assault (2,322) [38.7]
#7	Congenital Malformations, Deformations And Chromosomal Abnormalities (1,738) [56.1]	Diabetes Mellitus (1,670) [9.6]	Assault (1,936) [39.5]	COVID-19 (1,946) [7.4]	Certain Conditions Originating In The Perinatal Period (2,025) [75.0]
#8	Cerebrovascular Diseases (1,345) [6.4]	Chronic Lower Respiratory Diseases (1,509) [7.4]	Certain Conditions Originating In The Perinatal Period (1,725) [75.0]	Diabetes Mellitus (1,662) [9.0]	Cerebrovascular Diseases (1,246) [6.2]
#9	Chronic Lower Respiratory Diseases (1,129) [5.6]	Cerebrovascular Diseases (1,423) [6.7]	Congenital Malformations, Deformations And Chromosomal Abnormalities (1,468) [63.8]	Certain Conditions Originating In The Perinatal Period (1,648) [74.9]	Chronic Lower Respiratory Diseases (1,202) [4.8]
#10	Diabetes Mellitus (995) [9.0]	COVID-19 (1,387) [6.0]	Diabetes Mellitus (1,442) [7.9]	Cerebrovascular Diseases (1,377) [6.2]	Diabetes Mellitus (1,183) [8.7]
Overall	All Causes (57,988) [12.5]	All Causes (64,821) [12.5]	All Causes (77,902) [12.5]	All Causes (70,193) [12.3]	All Causes (69,820) [12.6]

 $^{^{111}\ **}$ Causes based on <6 deaths are not reported.

Table 113. 2023 Top Three Leading Causes of Years of Potential Life Lost (Years) [Years per Death] by Demographic Characteristics 112

Demographic	Characteristic	#1	#2	#3	Overall
Sex	Male	Accidents (12,433) [27.8]	Intentional Self-Harm (5,155) [32.4]	Diseases Of Heart (4,671) [8.2]	All Causes (44,027) [13.5]
	Female	Accidents (6,265) [27.1]	Malignant Neoplasms (3,507) [8.5]	Diseases Of Heart (2,155) [6.4]	All Causes (25,793) [11.4]
Race	White	Accidents (8,521) [23.5]	Malignant Neoplasms (5,132) [6.8]	Diseases Of Heart (3,319) [5.8]	All Causes (32,747) [9.4]
	Black	Accidents (938) [36.1]	Malignant Neoplasms (199) [10.5]	Diseases Of Heart (159) [6.9]	All Causes (2,276) [17.5]
	AI/AN	Accidents (7,119) [32.2]	Intentional Self-Harm (2,863) [42.1]	Diseases Of Heart (2,168) [10.9]	All Causes (24,393) [19.1]
	Asian/PI	Malignant Neoplasms (539) [12.3]	Diseases Of Heart (495) [11.0]	Intentional Self-Harm (384) [38.4]	All Causes (3,558) [13.9]
	Multiple	Accidents (1,314) [33.7]	Intentional Self-Harm (614) [38.4]	Malignant Neoplasms (393) [13.6]	All Causes (4,635) [21.6]
	Hispanic	Accidents (926) [38.6]	Intentional Self-Harm (385) [42.8]	**	All Causes (3,387) [22.1]
Age	<5 Years	Certain Conditions Originating In The Perinatal Period (2,025) [75.0]	Congenital Malformations, Deformations And Chromosomal Abnormalities (973) [74.8]	**	All Causes (6,044) [74.6]
	5-14 Years	**	**	**	All Causes (1,240) [65.3]
	15-24 Years	Accidents (3,197) [54.2]	Intentional Self-Harm (2,309) [55.0]	Assault (531) [53.1]	All Causes (7,222) [54.3]
	25-34 Years	Accidents (4,632) [44.5]	Intentional Self-Harm (1,855) [46.4]	Chronic Liver Disease And Cirrhosis (1,227) [43.8]	All Causes (11,397) [44.7]
	35-44 Years	Accidents (5,994) [35.5]	Intentional Self-Harm (1,381) [35.4]	Chronic Liver Disease And Cirrhosis (1,370) [36.1]	All Causes (13,912) [35.4]
	45-54 Years	Accidents (2,446) [25.5]	Diseases Of Heart (1,549) [25.4]	Malignant Neoplasms (1,548) [25.0]	All Causes (10,376) [25.2]
	55-64 Years	Malignant Neoplasms (3,076) [14.4]	Diseases Of Heart (2,415) [14.8]	Accidents (1,337) [16.3]	All Causes (12,737) [14.9]
	65-74 Years	Malignant Neoplasms (1,950) [5.5]	Diseases Of Heart (1,330) [5.7]	Accidents (463) [6.0]	All Causes (6,892) [5.4]
Residence	Anchorage	Accidents (8,596) [28.4]	Malignant Neoplasms (3,418) [8.8]	Diseases Of Heart (2,937) [8.3]	All Causes (29,221) [13.4]
	Gulf Coast	Accidents (1,473) [23.4]	Malignant Neoplasms (934) [6.4]	Diseases Of Heart (634) [5.8]	All Causes (5,705) [8.8]
	Interior	Accidents (2,399) [26.1]	Intentional Self-Harm (1,244) [32.7]	Diseases Of Heart (964) [8.1]	All Causes (9,870) [12.8]
	Mat-Su	Accidents (2,069) [24.1]	Malignant Neoplasms (1,291) [7.6]	Diseases Of Heart (932) [6.5]	All Causes (8,733) [10.4]
	Northern	Accidents (1,014) [37.6]	Intentional Self-Harm (543) [45.3]	Assault (326) [36.2]	All Causes (3,992) [20.1]
	Southeast	Accidents (1,678) [25.0]	Malignant Neoplasms (996) [7.3]	Intentional Self-Harm (574) [23.9]	All Causes (6,154) [10.2]
	Southwest	Accidents (1,394) [37.7]	Intentional Self-Harm (1,047) [40.3]	Diseases Of Heart (495) [10.5]	All Causes (5,963) [20.8]
Statewide	Total	Accidents (18,698) [27.5]	Malignant Neoplasms (8,140) [7.7]	Diseases Of Heart (6,826) [7.5]	All Causes (69,820) [12.6]

 $^{^{112}}$ ** Causes based on <6 deaths are not reported.

Table 114. 2023 Years of Potential Life Lost (YPLL Rate) [Age-Adjusted YPLL Rate] by Demographic Characteristics¹¹³

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	36,712 (10,098.4) [9,894.7]	40,766 (11,095.3) [10,886.5]	49,340 (13,438.8) [13,232.8]	44,599 (12,220.4) [12,063.3]	44,027 (12,058.4) [11,993.3]
	Female	21,276 (6,262.1) [6,096.3]	24,055 (7,159.5) [7,011.3]	28,562 (8,491.4) [8,445.1]	25,594 (7,614.0) [7,487.9]	25,793 (7,711.0) [7,667.2]
Race	White	28,628 (6,317.2) [5,784.9]	30,505 (6,758.1) [6,230.1]	37,694 (8,383.0) [7,795.7]	32,965 (7,384.3) [6,854.3]	32,747 (7,375.7) [6,897.3]
	Black	1,993 (7,583.7) [7,473.4]	2,536 (9,661.7) [9,626.9]	1,702 (6,480.6) [6,525.5]	2,200 (8,394.7) [8,173.1]	2,276 (8,679.4) [8,814.9]
	AI/AN	19,059 (17,350.2) [18,135.3]	21,606 (19,417.8) [20,570.4]	26,567 (23,904.7) [25,607.5]	24,533 (22,114.0) [23,749.1]	24,393 (22,028.1) [23,590.3]
	Asian/PI	2,774 (4,781.4) [4,633.6]	3,388 (5,793.5) [5,678.3]	4,701 (7,962.9) [7,770.7]	3,423 (5,760.2) [5,763.3]	3,558 (5,949.2) [5,848.3]
	Multiple	4,403 (7,865.2) [10,071.9]	5,266 (9,399.2) [11,724.8]	5,745 (10,004.2) [12,943.7]	5,345 (9,197.8) [11,843.6]	4,635 (7,874.1) [10,696.6]
	Hispanic	1,971 (3,755.6) [4,355.4]	2,491 (5,061.7) [5,202.8]	2,562 (5,013.2) [5,564.7]	3,135 (5,988.1) [6,359.2]	3,387 (6,313.6) [6,187.5]
Age	<5 Years	4,910 (9,855.7)	4,631 (9,627.1)	6,270 (13,545.0)	5,521 (12,297.3)	6,044 (13,548.5)
	5-14 Years	1,408 (1,334.3)	2,296 (2,242.2)	649 (627.9*)	1,499 (1,449.3)	1,240 (1,218.5*)
	15-24 Years	6,934 (7,418.7)	7,266 (7,499.3)	7,847 (7,972.0)	7,092 (7,236.0)	7,222 (7,274.8)
	25-34 Years	10,358 (9,229.9)	10,812 (9,650.2)	13,604 (12,481.4)	12,531 (11,779.2)	11,397 (10,708.3)
	35-44 Years	8,787 (9,051.2)	10,239 (10,407.0)	13,428 (13,301.4)	11,803 (11,504.6)	13,912 (13,303.0)
	45-54 Years	8,334 (9,733.9)	10,380 (12,235.7)	13,129 (15,914.3)	10,815 (13,167.7)	10,376 (12,666.6)
	55-64 Years	11,628 (11,925.1)	13,055 (13,662.1)	15,058 (16,134.7)	13,745 (15,023.5)	12,737 (14,515.9)
	65-74 Years	5,629 (9,070.0)	6,142 (9,420.7)	7,917 (11,364.7)	7,187 (9,958.4)	6,892 (9,403.6)
Residence	Anchorage	21,609 (7,689.8) [7,407.8]	25,314 (9,061.2) [8,846.1]	29,758 (10,724.3) [10,499.5]	26,517 (9,611.5) [9,351.6]	29,221 (10,630.7) [10,617.9]
	Gulf Coast	5,993 (7,828.1) [7,409.1]	6,234 (8,077.4) [7,726.3]	8,067 (10,498.0) [10,291.4]	7,625 (9,873.2) [9,577.8]	5,705 (7,356.4) [6,748.9]
	Interior	7,618 (7,180.1) [7,020.2]	8,036 (7,621.0) [7,546.6]	11,260 (10,514.2) [10,531.5]	9,889 (9,344.4) [9,301.3]	9,870 (9,419.8) [9,315.9]
	Mat-Su	7,538 (7,348.3) [7,242.7]	8,312 (8,089.9) [7,893.5]	10,877 (10,413.0) [10,321.3]	9,080 (8,509.8) [8,395.7]	8,733 (8,045.9) [7,865.8]
	Northern	3,763 (13,958.8) [14,566.3]	3,757 (13,281.7) [13,579.9]	3,945 (14,218.8) [14,344.6]	4,770 (17,547.1) [17,814.9]	3,992 (14,724.7) [14,670.1]
	Southeast	4,668 (6,789.5) [6,306.1]	6,127 (8,946.4) [8,406.4]	6,839 (9,977.8) [9,678.5]	5,463 (8,111.8) [7,552.7]	6,154 (9,280.0) [9,030.2]
	Southwest	6,633 (16,043.4) [16,222.5]	6,946 (16,579.9) [16,805.6]	7,061 (17,077.4) [17,222.0]	6,747 (16,485.4) [17,130.7]	5,963 (14,744.2) [14,930.4]
Statewide	Total	57,988 (8,245.1) [8,066.0]	64,821 (9,215.3) [9,041.9]	77,902 (11,073.3) [10,953.3]	70,193 (10,011.8) [9,871.7]	69,820 (9,979.8) [9,932.4]

¹¹³ YPLL rates are years per 100,000 population. Age-adjusted YPLL rates are years per 100,000 population, standardized by U.S. year 2000 standard population levels.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Life Expectancy

Life expectancy (LE) represents the number of years that infants ages <1 year, born in a given event year, could expect to live if they were to experience the same age-specific death rates as all persons who died during their birth year. In 2023, Alaska resident LE was 77.2 years, up from 76.8 in 2022. LE for men was 74.8 years, up slightly from 74.6 in 2022. LE for women was 80.0 years, up from 79.4 in 2022. Al/AN people had the lowest LE by race at 66.6 years, up from 65.9 in 2022.

Table 115. Life Expectancy by Demographic Characteristics

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	76.4	75.1	73.0	74.6	74.8
	Female	80.8	80.0	78.3	79.4	80.0
Race	White	80.7	80.1	78.4	79.6	79.9
	Black	78.1	76.3	78.3	76.2	78.2
	AI/AN	69.5	67.3	64.2	65.9	66.6
	Asian/PI	82.9	81.2	78.7	82.3	82.4
	Multiple	75.9	74.5	72.8	74.7	76.4
	Hispanic	82.8	81.5	81.1	81.0	80.9
Statewide	Total	78.5	77.4	75.4	76.8	77.2

Table 116. 2023 Period Life Table 114

Age	Deaths	Population	n	ах	mx	qx	рх	ix	dx	lx	tx	ех
<1 Year	66	8,741	1	0.5	0.007315	0.007315	0.992685	100,000	732	99,634	7,720,540	77.2
1-4 Years	15	35,869	4	2.0	0.000418	0.001671	0.998329	99,268	166	396,742	7,620,906	76.8
5-9 Years	8	50,174	5	2.5	0.000159	0.000797	0.999203	99,103	79	495,315	7,224,164	72.9
10-14 Years	11	51,594	5	2.5	0.000213	0.001065	0.998935	99,024	106	494,854	6,728,848	68.0
15-19 Years	39	49,281	5	2.5	0.000791	0.003949	0.996051	98,918	391	493,614	6,233,994	63.0
20-24 Years	94	49,993	5	2.5	0.001880	0.009357	0.990643	98,527	922	490,332	5,740,381	58.3
25-29 Years	97	49,966	5	2.5	0.001941	0.009660	0.990340	97,605	943	485,670	5,250,048	53.8
30-34 Years	158	56,465	5	2.5	0.002798	0.013894	0.986106	96,663	1,343	479,956	4,764,378	49.3
35-39 Years	185	55,206	5	2.5	0.003351	0.016616	0.983384	95,320	1,584	472,638	4,284,422	44.9
40-44 Years	208	49,372	5	2.5	0.004213	0.020845	0.979155	93,736	1,954	463,794	3,811,784	40.7
45-49 Years	188	40,657	5	2.5	0.004624	0.022856	0.977144	91,782	2,098	453,665	3,347,990	36.5
50-54 Years	223	41,259	5	2.5	0.005405	0.026664	0.973336	89,684	2,391	442,442	2,894,325	32.3
55-59 Years	345	41,403	5	2.5	0.008333	0.040813	0.959187	87,293	3,563	427,557	2,451,883	28.1
60-64 Years	511	46,342	5	2.5	0.011027	0.053654	0.946346	83,730	4,492	407,419	2,024,326	24.2
65-69 Years	616	41,712	5	2.5	0.014768	0.071211	0.928789	79,238	5,643	382,081	1,616,907	20.4
70-74 Years	653	31,579	5	2.5	0.020678	0.098309	0.901691	73,595	7,235	349,887	1,234,826	16.8
75-79 Years	592	19,339	5	2.5	0.030612	0.142178	0.857822	66,360	9,435	308,212	884,939	13.3
80-84 Years	555	10,328	5	2.5	0.053737	0.236866	0.763134	56,925	13,484	250,916	576,727	10.1
85+ Years	969	7,532	15	7.5	0.128651	1.000000	0.000000	43,441	43,441	325,811	325,811	7.5

$$a_x = n/2$$

 m_x : Age-specific death rate for the interval. Infant death rate is calculated on a death cohort basis per number of live births.

 $m_{<1 \text{ year}}$ = Deaths / Live Births

$$m_x$$
 = Deaths / Population

q_x: Probability of dying in the interval.

$$q_{<1 \text{ year}} = m_{<1 \text{ year}}$$

$$q_{85+ \, years} = 1$$

$$q_x = 2 * n * m_x / (2 + n * m_x)$$

p_x: Probability of surviving in the interval.

$$p_x = 1 - q_x$$

i_x: Number surviving in the interval.

$$i_{<1 \text{ year}} = 100,000$$

$$i_x = i_{x-1} * p_{x-1}$$

d_x: Number dying in the interval.

$$d_x = i_x - i_{x+1}$$

l_x: Person-years lived in the interval.

$$I_x = n * I_{x+1} + d_x * a_x$$

 t_x : Cumulative person-years lived in the interval and all subsequent intervals.

$$t_x = t_{x+1} + I_x$$

ex: Life expectancy at the beginning of the interval.

$$e_x = t_{x+1} / i_x$$

 $^{^{114}}$ n: Width of the age interval. Assumes an upper bound age of 100 and width of 15 for 85+ years. a_x : Fraction of the age interval lived by those in the cohort population who die in the interval. Assumed equal to the age interval midpoint.

Chapter 4: Other Vital Events

Alaska Occurrence Marriages

In 2023, 4,668 marriage ceremonies occurred in Alaska, including 4,264 marriages between opposite sex partners (91%), 73 marriages between same-sex partners (2%), and 331 where gender was not specified (7%). Marriages between two Alaska resident partners made up 81% of marriages, while two non-Alaska resident partners made up 14%. The marriage rate, which measure the number of marriages per 1,000 Alaskan residents, was 6.3, down from 6.5 in 2022. The Gulf Coast region had the highest marriage rate by ceremony location (8.6). Between 2019-2023, marriages were most common between partners ages 20-24 years (3,240).

Table 117. Marriages (%) by Orientation

Orientation	2019	2020	2021	2022	2023
Opposite Sex	4,536 (95%)	3,886 (93%)	4,314 (93%)	4,436 (92%)	4,264 (91%)
Same Sex	71 (1%)	61 (1%)	74 (2%)	81 (2%)	73 (2%)
Not Specified	174 (4%)	232 (6%)	256 (6%)	299 (6%)	331 (7%)
Total	4,781 (100%)	4,179 (100%)	4,644 (100%)	4,816 (100%)	4,668 (100%)

Table 118. Marriages (%) by Alaska Residents

Residents	2019	2020	2021	2022	2023
Two Residents	4,036 (84%)	3,604 (86%)	3,841 (83%)	3,868 (80%)	3,778 (81%)
One Resident	247 (5%)	326 (8%)	261 (6%)	276 (6%)	251 (5%)
Two Non-Residents	498 (10%)	249 (6%)	542 (12%)	672 (14%)	639 (14%)
Total	4,781 (100%)	4,179 (100%)	4,644 (100%)	4,816 (100%)	4,668 (100%)

Table 119. Marriages (Marriage Rate) by Demographic Characteristics 116

Demographic	Characteristic	2019	2020	2021	2022	2023
Ceremony Loc.	Anchorage	1,860 (6.4)	1,613 (5.5)	1,626 (5.6)	1,763 (6.1)	1,654 (5.7)
	Gulf Coast	598 (7.4)	514 (6.3)	692 (8.5)	710 (8.6)	713 (8.6)
	Interior	841 (7.6)	788 (7.2)	817 (7.3)	784 (7.1)	753 (6.9)
	Mat-Su	776 (7.3)	780 (7.3)	950 (8.7)	884 (7.9)	893 (7.8)
	Northern	72 (2.6)	51 (1.8)	48 (1.7)	53 (1.9)	56 (2.0)
	Southeast	490 (6.8)	339 (4.7)	396 (5.4)	497 (6.9)	498 (7.0)
	Southwest	133 (3.1)	78 (1.8)	104 (2.5)	111 (2.6)	85 (2.0)
Statewide	Total	4,781 (6.5)	4,179 (5.7)	4,644 (6.3)	4,816 (6.5)	4,668 (6.3)

¹¹⁵ Partner gender is not a collected field on marriage certificates but is estimated using gendered terms, if provided. The partner identifying as the "groom" is assumed male, the "bride" is assumed female, and "spouse" is assumed gender neutral (not specified). Alaska began registering same-sex marriages on October 13th, 2014.

¹¹⁶ Marriage rates are marriages per 1,000 population.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 120. 2019-2023 Marriages (%) by Partner Ages

Age	<15	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+	Total
<15	0 (0)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
15-19	0 (0)	377 (37%)	371 (7%)	28 (<1%)	4 (<1%)	1 (<1%)	2 (<1%)	0 (0%)	0 (0%)	0 (0%)	783 (3%)
20-24	0 (0)	549 (54%)	3,240 (65%)	895 (17%)	144 (3%)	56 (2%)	9 (<1%)	4 (<1%)	3 (<1%)	1 (<1%)	4,901 (21%)
25-29	0 (0)	65 (6%)	1,069 (21%)	2,817 (54%)	1,086 (25%)	268 (11%)	74 (5%)	16 (1%)	14 (2%)	9 (<1%)	5,418 (23%)
30-34	0 (0)	11 (1%)	237 (5%)	1,044 (20%)	1,860 (44%)	728 (29%)	207 (13%)	60 (6%)	23 (3%)	13 (<1%)	4,183 (18%)
35-39	0 (0)	7 (<1%)	62 (1%)	300 (6%)	731 (17%)	801 (31%)	363 (24%)	118 (11%)	43 (5%)	29 (2%)	2,454 (11%)
40-44	0 (0)	0 (0%)	15 (<1%)	104 (2%)	266 (6%)	389 (15%)	370 (24%)	196 (18%)	69 (8%)	33 (2%)	1,442 (6%)
45-49	0 (0)	0 (0%)	5 (<1%)	30 (<1%)	79 (2%)	179 (7%)	278 (18%)	282 (26%)	155 (18%)	85 (6%)	1,093 (5%)
50-54	0 (0)	0 (0%)	4 (<1%)	12 (<1%)	55 (1%)	73 (3%)	115 (7%)	217 (20%)	259 (30%)	162 (11%)	897 (4%)
55+	0 (0)	0 (0%)	6 (<1%)	11 (<1%)	45 (1%)	55 (2%)	118 (8%)	189 (17%)	309 (35%)	1,184 (78%)	1,917 (8%)
Total	0 (0)	1,009 (100%)	5,009 (100%)	5,241 (100%)	4,270 (100%)	2,550 (100%)	1,536 (100%)	1,082 (100%)	875 (100%)	1,516 (100%)	23,088 (100%)

Alaska Occurrence Separations

In 2023, 2,290 legal separations occurred in Alaska, including 2,118 separations between opposite sex partners (92%), 40 separations between same-sex partners (2%), and 132 where gender was not specified (6%). There are three administrative procedures for terminating a marriage in Alaska: dissolution, divorce, and annulment. Divorces made up 58% of separations while dissolutions made up 42% percent. The separation rate, which measure the number of separations per 1,000 Alaskan residents, was 3.1, up slightly from 3.0 in 2022. The Interior region had the highest separation rate by court filing location (3.9).

Table 121. Separations (%) by Orientation

Orientation	2019	2020	2021	2022	2023
Opposite Sex	2,528 (93%)	2,234 (93%)	2,100 (91%)	2,056 (92%)	2,118 (92%)
Same Sex	35 (1%)	33 (1%)	41 (2%)	46 (2%)	40 (2%)
Not Specified	160 (6%)	145 (6%)	175 (8%)	132 (6%)	132 (6%)
Total	2,723 (100%)	2,412 (100%)	2,316 (100%)	2,234 (100%)	2,290 (100%)

Table 122. Separations (%) by Type

Туре	2019	2020	2021	2022	2023
Divorce	1,508 (55%)	1,328 (55%)	1,340 (58%)	1,254 (56%)	1,328 (58%)
Dissolution	1,206 (44%)	1,080 (45%)	970 (42%)	977 (44%)	958 (42%)
Annulment	8 (<1%)	4 (<1%)	6 (<1%)	3 (<1%)	4 (<1%)
Total	2,723 (100%)	2,412 (100%)	2,316 (100%)	2,234 (100%)	2,290 (100%)

Table 123. Separations (Separation Rate) by Demographic Characteristics 118

Demographic	Characteristic	2019	2020	2021	2022	2023
Court Loc.	Anchorage	1,261 (4.3)	1,175 (4.0)	1,018 (3.5)	1,008 (3.5)	1,048 (3.6)
	Gulf Coast	260 (3.2)	250 (3.1)	221 (2.7)	213 (2.6)	218 (2.6)
	Interior	512 (4.7)	361 (3.3)	460 (4.1)	475 (4.3)	427 (3.9)
	Mat-Su	389 (3.6)	316 (3.0)	324 (3.0)	302 (2.7)	373 (3.3)
	Northern	38 (1.4)	28 (1.0)	42 (1.5)	30 (1.1)	40 (1.4)
	Southeast	221 (3.0)	239 (3.3)	209 (2.9)	171 (2.4)	161 (2.3)
	Southwest	42 (1.0)	40 (0.9)	42 (1.0)	34 (0.8)	23 (0.6)
Statewide	Total	2,723 (3.7)	2,412 (3.3)	2,316 (3.1)	2,234 (3.0)	2,290 (3.1)

¹¹⁷ Partner gender is not a collected field on separation certificates but is estimated using gendered terms, if provided. The partner identifying as the "husband" is assumed male, the "wife" is assumed female, and "spouse" is assumed gender neutral (not specified).

¹¹⁸ Separation rates are separations per 1,000 population.

^{*} Rates based on <20 events are statistically unreliable and should be used with caution. ** Rates based on <6 events are not reported.

Table 124. 2019-2023 Separations (%) by Partner Ages

Age	<15	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+	Total
<15	0 (0)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<1%)	0 (0%)	0 (0%)	0 (0%)	1 (<1%)
15-19	0 (0)	4 (11%)	18 (2%)	1 (<1%)	2 (<1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	25 (<1%)
20-24	0 (0)	31 (89%)	696 (69%)	271 (16%)	43 (2%)	12 (<1%)	4 (<1%)	1 (<1%)	1 (<1%)	3 (<1%)	1,077 (9%)
25-29	0 (0)	0 (0%)	229 (23%)	929 (56%)	382 (21%)	105 (6%)	20 (1%)	11 (<1%)	7 (<1%)	5 (<1%)	1,708 (14%)
30-34	0 (0)	0 (0%)	43 (4%)	326 (20%)	903 (49%)	443 (24%)	122 (8%)	44 (4%)	15 (2%)	14 (<1%)	1,932 (16%)
35-39	0 (0)	0 (0%)	10 (<1%)	77 (5%)	327 (18%)	822 (44%)	386 (25%)	134 (11%)	50 (5%)	25 (2%)	1,858 (16%)
40-44	0 (0)	0 (0%)	1 (<1%)	29 (2%)	115 (6%)	317 (17%)	608 (40%)	296 (24%)	119 (12%)	61 (4%)	1,569 (13%)
45-49	0 (0)	0 (0%)	4 (<1%)	10 (<1%)	30 (2%)	105 (6%)	242 (16%)	435 (35%)	259 (27%)	123 (7%)	1,222 (10%)
50-54	0 (0)	0 (0%)	2 (<1%)	5 (<1%)	20 (1%)	44 (2%)	102 (7%)	200 (16%)	293 (30%)	250 (15%)	930 (8%)
55+	0 (0)	0 (0%)	2 (<1%)	5 (<1%)	26 (1%)	30 (2%)	40 (3%)	118 (10%)	223 (23%)	1,160 (70%)	1,624 (14%)
Total	0 (0)	35 (100%)	1,007 (100%)	1,653 (100%)	1,855 (100%)	1,880 (100%)	1,526 (100%)	1,241 (100%)	970 (100%)	1,649 (100%)	11,975 (100%)

Alaska Occurrence Adoptions

In 2023, 651 adoptions were granted in the state. Alaska-born children adopted by parents in another state who have not requested a change to the child's Alaska birth certificate, or non-Alaska-born children without an Alaska birth certificate adopted in Alaska are not reported. Alaska or other US jurisdiction State Courts granted 80% of adoptions, Alaska Native Tribal courts granted 5%, and 15% were cultural adoptions granted by Alaska Native Village Councils. The adoption rate, which measure the number of adoptions per 1,000 Alaskan residents, was 0.9, unchanged since 2020. The highest statistically reliable rates of adoption were among Al/AN people (2.8), and infants under one year (6.3).

Table 125. Adoptions (%) by Type

Туре	2019	2020	2021	2022	2023
State Court	655 (79%)	497 (76%)	527 (80%)	542 (80%)	523 (80%)
Cultural	142 (17%)	130 (20%)	94 (14%)	110 (16%)	98 (15%)
Tribal Court	30 (4%)	27 (4%)	36 (5%)	28 (4%)	30 (5%)
Total	827 (100%)	654 (100%)	657 (100%)	680 (100%)	651 (100%)

Table 126. Adoptions (Adoption Rate) by Demographic Characteristics 119

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	381 (1.0)	291 (0.8)	317 (0.8)	340 (0.9)	307 (0.8)
	Female	445 (1.3)	363 (1.0)	340 (1.0)	340 (1.0)	341 (1.0)
Race	White	322 (0.7)	246 (0.5)	261 (0.5)	268 (0.6)	225 (0.5)
	AI/AN	387 (3.4)	329 (2.9)	295 (2.6)	299 (2.6)	324 (2.8)
	Asian/PI	40 (0.7)	21 (0.3)	28 (0.5)	39 (0.6)	31 (0.5)
	Black	13 (0.5*)	7 (0.3*)	15 (0.6*)	11 (0.4*)	5 (**)
	Multiple	54 (1.0)	43 (0.8)	50 (0.9)	53 (0.9)	48 (0.8)
	Hispanic	43 (0.8)	23 (0.5)	28 (0.5)	38 (0.7)	22 (0.4)
Age	<5 Years	335 (6.7)	267 (5.6)	252 (5.4)	262 (5.8)	234 (5.2)
	<1 Year	104 (11.0)	88 (9.6)	68 (7.9)	81 (9.7)	55 (6.3)
	1-4 Years	231 (5.7)	179 (4.6)	184 (4.9)	181 (5.0)	179 (5.0)
	5-9 Years	232 (0.3)	168 (0.2)	186 (0.3)	172 (0.2)	160 (0.2)
	10-14 Years	171 (3.2)	138 (2.7)	131 (2.5)	150 (2.9)	154 (3.0)
	15-19 Years	73 (1.6)	54 (1.1)	61 (1.3)	73 (1.5)	76 (1.5)
	20+ Years	13 (0.0*)	25 (0.0)	24 (0.0)	22 (0.0)	19 (0.0*)
Statewide	Total	827 (1.1)	654 (0.9)	657 (0.9)	680 (0.9)	651 (0.9)

¹¹⁹ Adoption rates are adoptions per 1,000 population.

Appendices

Appendix A: Glossary

Adoption Rate: The number of adoptions divided by the estimated population, multiplied by a constant of proportionality (e.g., 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 (AADR): A weighted average of age-specific death rates adjusted using one standard age distribution (e.g., the U.S. year 2000 standard population). This standardization allows comparisons to be made between populations with different age distributions (see Appendix B for additional information).

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

Cause of Death, Underlying (UCOD): 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.

Cause of Death, Contributing (CCOD): All other non-underlying causes in the train of morbid events resulting in death.

Cause of Death, Leading (LCOD): Categories of disease and injury used for the analysis of mortality. Alaska's LCOD are determined by collapsing over 8,000 International Classification of Disease, 10th Revision cause of death codes into 52 cause categories recommended by the CDC for the general analysis of mortality, and into 71 cause categories recommended for the analysis of infant mortality. Leading causes of death are based on the underlying cause of death to prevent a single death from being tabulated in more than one category.

Cause of Death, Multiple (MCOD): Cause analysis that considers both underlying and contributing cause codes to explore comorbidities or show total cause-related death. Because deaths by MCOD are not mutually exclusive a single death can be counted in multiple categories.

Certifying/Pronouncing Physician: Physicians can play different roles in medical certification. A pronouncing physician is a physician who determines that the patient is legally dead but was not in charge of the patient's care for the illness or condition that resulted in death. The attending physician is responsible for completing the cause-of-death section. If a pronouncing physician is involved, the attending physician plays the role of a certifying physician. If no pronouncing physician is involved, the attending physician plays the role of both the pronouncing and certifying physician.

Characteristics of Labor and Delivery: Information about the course of labor and delivery (e.g., induction of labor, augmentation of labor, steroids, antibiotics received by the mother during delivery, clinical chorioamnionitis (inflammation of the membranes or placenta) diagnosed during labor or maternal temperature greater than or equal to 38°C, epidural or spinal anesthesia during labor).

Cohort: A group of individuals that share a common trait. The under-five and infant death rates in this report are calculated using the death cohort method. The death cohort method is determined by dividing the number of deaths by the number of live births in a given calendar year. For example, to calculate the death cohort infant death rate for the last three-year period, divide the total number of infant deaths in those years by the total number of live births that occurred during the same three-year period, and multiply the result by a constant of proportionality.

Conditions of the Newborn: Disorders or significant morbidity experienced by the newborn (e.g., assisted ventilation required immediately following delivery, assisted ventilation required for more than six hours, neonatal intensive care unit (NICU) admission, newborn given surfactant replacement therapy, antibiotics received by the newborn for suspected neonatal sepsis, seizure or serious neurologic dysfunction).

Congenital Anomalies: Malformations of the newborn diagnosed prenatally or after delivery. (e.g., anencephaly, meningomyelocele / spina bifida, cyanotic congenital heart disease, congenital diaphragmatic hernia, omphalocele, gastroschisis, limb reduction defect, cleft lip with or without cleft palate, cleft palate

alone, Down syndrome, suspected chromosomal disorder, hypospadias).

Constant of Proportionality: A constant number (e.g., 1,000 or 100,000) that is multiplied by a proportion (rate) to help better contextualize of proportional levels. (e.g., 200 deaths divided by a resident population of 200,000 = 0.001 deaths per resident, which may be more difficult to understand than 0.001 * 100,000 = 100 deaths per 100,000 residents).

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

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

Death: Irreversible cessation of circulatory and respiratory functions, or irreversible cessation of all functions of the entire brain, including the brain stem.

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. Fetal deaths at <20 weeks gestation, or where the gestational age was unknown, are not reported.

Fetal Death Rate (FDR): The number of fetal deaths, divided by sum of the number of live births and fetal deaths, multiplied by a constant of proportionality (e.g., 1,000). Fetal death rates in this report are a three-year moving average.

Fertility Rate (FR): The number of live births among women ages 15-44 years divided by the number of women ages 15 and 44 years, multiplied by a constant of proportionality (e.g., 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 to 41 weeks gestational age are considered full-term. This report uses the obstetrician reported gestation date.

Infant Death: Deaths occurring between 0 and 364 days of birth (<1 year). Infant deaths can be further divided into neonatal infant deaths, which occur in the first 27 days, and postneonatal infant deaths, which occur 28+ days after birth.

Infant Death Rate (IDR): The number of deaths among infants ages <1 year divided by the number of live births, multiplied by a constant of proportionality (e.g., 1,000). Infant death rates in this report are a three-year moving average.

International Classification of Diseases (ICD): The World Health Organization-developed manual for categorizing and coding diseases and injuries. Tenth Revision (ICD-10) codes were adopted by Alaska in 1999. Deaths before 1999 were coded using the Ninth Revision (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.

Low Birth Weight (LBW): An infant born weighing less than 2,500 grams (approximately 5.5 pounds). LBW births can be further divided into extreme LBW (<1,000 grams), very LBW (1,000-1,499 grams), and moderate LBW (1,500-2,499 grams).

Manner of Death: The manner of death describes the way in which death occurred, as determined by the physician or medical examiner who certifies the death record. Manner must be classified as Natural, Accident, Suicide, Homicide, Could Not Be Determined, or Pending Investigation (Unknown). Non-natural manners of death, including Accident, Suicide, or Homicide, are referred to the Alaska State Medical Examiner Office for certification.

The "manner" of death does not necessarily refer to the same thing as the "cause" of death. Cause of death is considered a medical diagnosis that should describe the conditions, diseases, and injuries in the train of morbid events that resulted in death. Depending on the specific pathology involved, a certifier may classify the manner of death in a way that doesn't appear to match the cause. For example, the number of deaths where manner equals "Accident" may not equal the number of deaths where underlying cause equals "Accident" (ICD-10 Codes: V01-X59, Y85, and Y86). Although the term "Accident" is used in both places, in this context, it technically refers to two distinct aspects of the death record.

Marriage Rate: The number of marriages divided by the estimated population, multiplied by a constant of proportionality (e.g., 1,000). This report includes all

marriages licensed and performed in Alaska, regardless of partner residency status.

Maternal Infection: Infections present at the time of the pregnancy diagnosis or a confirmed diagnosis during the pregnancy with or without documentation of treatment (e.g., Gonorrhea, Syphilis, Chlamydia, Hepatitis B, Hepatitis C).

Maternal COVID-19 infection data collection began April of 2020. Data for this year are incomplete. Data may not include home testing positives, asymptomatic cases, and diagnoses not reported to the birth certifier.

Maternal Morbidity: Serious complications experienced by the mother associated with labor and delivery (e.g., maternal transfusion, third- or fourth-degree perineal laceration, ruptured uterus, unplanned hysterectomy, admission to an intensive care unit).

Obstetric Procedures: Medical treatment or invasive or manipulative procedure performed during this pregnancy to treat the pregnancy or to manage labor or delivery (e.g., cervical cerclage to stitch the cervix, tocolysis medications to delay delivery, or external cephalic procedures to convert the fetus from a nonvertex presentation when the infant would not be delivered head-first.

Onset of Labor: The initial onset of the process through which the fetus, membranes, umbilical cord, and placenta are expelled from the uterus. Typically indicated by regular, painful uterine contractions resulting in progressive cervical effacement and dilatation. Premature rupture of the membranes (ROM) occurs when the membranes break before the 37th week of pregnancy. Precipitous labor is when the infant is delivered less than three hours from the onset of regular contractions, while prolonged labor is when the infant is delivered 20 or more hours after.

Place of Occurrence: The location where an event (e.g., a birth or death) physically occurred. When an event occurs on a moving conveyance such as a boat or plane, the event is considered to have occurred where the infant or decedent is removed from the conveyance.

Place of Residence: The location where an individual (e.g., a mother or decedent) claimed actual residence at the time of an event. This 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.

Pregnancy Risk Factors: Risk factors of the mother during pregnancy (e.g., diabetes (glucose intolerance), prepregnancy diabetes, gestational diabetes, hypertension (elevated blood pressure), prepregnancy hypertension, gestational hypertension, eclampsia (blood-pressure related seizures), previous preterm births, pregnancy resulted from infertility treatment, fertility-enhancing drugs, assisted reproductive technology (ART), mother had a previous cesarean delivery).

Prenatal Care (PNC): Visits during pregnancy to health care providers to assess maternal and fetal health. May include physical exams, weight checks, ultrasound exams, or other diagnostic tests.

Preterm Birth: An infant born prior to the 37th week of gestation. Preterm births can be further divided into extreme preterm (<28 weeks), very preterm (28-31 weeks), moderate preterm (32-33 weeks), and late preterm (34-36 weeks).

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 based on maternal characteristics.

Separation Rate: The number of separations divided by the estimated population, multiplied by a constant of proportionality (e.g., 1,000). Separations in Alaska include divorces, dissolutions, and annulments.

Standard Population: The age distributions used as weights to create age-adjusted statistics. Age-adjusted rates in the Vital Statistics Annual Report are calculated using U.S. year 2000 standard population levels.

Teen Birth Rate (TBR): The number of live births to women ages 15-19 years divided by the estimated population of women ages 15-19 years, multiplied by a constant of proportionality (e.g., 1,000).

Under-Five Death Rate (U5DR): The number of deaths among children ages <5 years divided by the number of

live births each year, multiplied by a constant of proportionality (e.g., 1,000). Under-five death rates in this report are a three-year moving average.

Vital Events: Vital events in this report include Alaska resident live births, deaths, and fetal deaths, and Alaska occurrence marriages, separations, and adoptions.

Years of Potential Life Lost (YPLL): Years of Potential Life Lost is a measure of premature death that represents the number of years between an expected natural lifespan of 75 years and the age of people who die before that time.

Years of Potential Life Lost (YPLL) Rate: The number of YPLL among people ages <75 years divided by the estimated population ages <75 years, multiplied by a constant of proportionality (e.g., 100,000). Like death rates, YPLL rates can also be age-adjusted by taking a weighted average of age-specific YPLL rates adjusted using one standard age distribution.

Appendix B: Technical Notes

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 self-reported or reported by third-parties (smoking during pregnancy, marital status of deceased, etc.).

HAVRS makes every effort to complete, verify, and correct information that is missing, invalid, or inconsistent. Ultimately, the reliability of the data depends on everyone who is involved in the data collection, storage and retrieval pipeline. This includes HAVRS staff, medical professionals, magistrates, funeral directors, marriage commissioners, judges, and everyone involved in, or witness to, a vital event.

It is not uncommon for data in the Vital Statistics
Annual Report to be revised or adjusted over time. This
may be due to additional records being received and
registered after publication dates, records being
amended or even deleted if errors are identified, or
population estimates used to calculate rates being
revised. It is important to note when the data being
referred to was last updated to ensure the most recent
information available is being used.

Data may also appear to differ from other reports or data sources depending on the specific case definitions or reporting methods used. For example, the number of deaths in the Alaska Vital Statistics Report includes Alaska resident events only, while other reports or data sources may report Alaska occurrence events or events regardless of residency status. It is important to note how the data being referred to was defined to ensure that valid comparisons are made.

Comparing Populations

Comparing the number of events for two separate demographic groups or geographic locations may not be meaningful by itself. For example, we can assume that Anchorage will have more births than Juneau because Anchorage has the larger population. However, a more meaningful metric would be 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 0.0167 births for every person living in Juneau.

Since small decimal numbers can be 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 if the same number is used when 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 0.0167 * 1,000 or 16.7 births per 1,000 population. Rates are typically 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, which provides a more meaningful insight than counts alone.

The birth rates described in the prior paragraph are considered "crude" rates because they compare events to the total population. An even more meaningful comparison would use only the female population of

common reproductive age (i.e., women ages 15-44 years). Let us assume that the number of fertile women ages 15-44 years 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 per 1,000. The Juneau fertility rate would be (500 / 7,300) * 1,000 or 68.5 births per 1,000. While Anchorage would have a lower crude birth rate than Juneau in this example, the Anchorage fertility rate would be higher than in Juneau. This is because the ratio of women of reproductive 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 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.

Age-Adjustment Using Standard Populations

The age-adjusted death rate (AADR) is a death rate that controls for the effects of differences in the age distributions of populations. For example, a geographic area with a higher population of children and young adults would generally be expected to have a lower death rate than a population with a higher percentage of senior citizens, all other factors equal. The AADR standardizes crude death rates between these two areas to show what rates would be if both populations had identical age distributions. This is a more meaningful measure than crude death rates when you expect different groups of people to have different age distributions.

The AADRs in this report were calculated using the U.S. year 2000 standard population level. ¹²⁰. The year 2000 is widely used in public health research, although the

year used is ultimately unimportant provided the same weighting standard is used when comparing results. For example, rates adjusted using year 2000 weights would not be directly comparable to rates standardized using year 2010 or 2020 weights.

Rates are adjusted using the direct age-adjustment method, which is the same as calculating a weighted average. First, the age-specific death rate (ASDR) is calculated by dividing the number of deaths in each age group by the Alaska resident population for that age group, and multiplying by a constant of proportionality (i.e., 100,000). A weighted ASDR is then calculated by multiplying the ASDR for each age group by that group's proportion of the U.S. year 2000 standard population (these weights should sum to one). The sum of the weighted ASDRs represents the AADR.

¹²⁰ <u>Centers of Disease Control and Prevention. Age</u>
Adjustment Using the 2000 Projected U.S. Population.

Table 127. 2023 Age Adjusted Death Rate Using U.S. Year 2000 Standard Population 121

Age	Deaths (A)	Population (B)	Age-Specific Death Rate (C)	U.S. Year 2000 Standard Population (Thousands) (D)	Standard Population Weight (E)	Weighted Age- Specific Death Rate (F)
00-04	81	44,610	181.6	18,987	0.069136	12.6
05-14	19	101,768	18.7	39,977	0.145565	2.7
15-24	133	99,274	134.0	38,077	0.138646	18.6
25-34	255	106,431	239.6	37,233	0.135573	32.5
35-44	393	104,578	375.8	44,659	0.162613	61.1
45-54	411	81,916	501.7	37,030	0.134834	67.7
55-64	856	87,745	975.6	23,961	0.087247	85.1
65-74	1,269	73,291	1,731.5	18,136	0.066037	114.3
75-84	1,147	29,667	3,866.2	12,315	0.044841	173.4
85+	969	7,532	12,865.1	4,259	0.015508	199.5
Total	5,533	736,812	750.9	274,634	1.000000	767.4

Column B: Population during period.

¹²¹ Column A: Deaths during period.

Column C: Age-specific death rate (A/B * 100,000).

Column D: U.S. year 2000 standard population (in thousands).

Column E: Standard population weight (D/sum of D).

Column F: Weighted age-specific death rate (C*E). The sum of F is the age-adjusted rate.

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 rolling averages.

Rolling Sums and Averages

Calculations of multiple year rolling averages can be performed when single-year rates are not reliable due to a small number of observations, or due to large fluctuations in the number of events from year to year. Rolling sums and averages can help to smooth out statistics 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, if 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 would be 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.

Premature Death and Years of Potential Life Lost

Years of potential life lost (YPLL) is the difference between an age representing the expected natural lifespan of an individual, and the age of a decedent who dies before that time. The age 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 age used in this report.

YPLL is a useful way to estimate the impact of premature death because it emphasizes mortality in younger populations. For example, an infant ages <1 years who dies before their first birthday will have 75 minus 0 = 75 YPLL. An adult ages 35 years will have 75

minus 35 = 40 YPLL. Finally, a senior ages 75 will have 75 minus 75 = 0 YPLL.

Adequacy of Prenatal Care Utilization

The Kotelchuck Adequacy of Prenatal Care Utilization (APNCU) index makes use of two pieces of PNC information obtained from birth certificate data: when PNC began (adequacy of initiation) and the number of PNC visits from when PNC began until delivery (adequacy of received services). ¹²² The APNCU index classifies the adequacy of initiation under the assumption that PNC 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 PNC 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.

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 PNC 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.

¹²² Kotelchuck M. An evaluation of the Kessner Adequacy of Prenatal Care Index and a proposed Adequacy of Prenatal Care Utilization Index.

Appendix C: Population

In 2023, Alaska's resident population was 736,812 persons, up from 736,508 persons in 2022. This included 382,789 men (52%), and 354,023 women (48%), or approximately 108 men per 100 women. By race and ethnicity, Alaska's population distribution was 64% White, 4% Black, 16% Al/AN, 8% Asian/PI, and 8% multiple race people. Hispanic people of any race made up 7%. Children ages <15 years, made up 20% of Alaska's population. While seniors ages 65+ years made up 15%. Most of Alaska's population was concentrated in the Anchorage region (39%). This was followed by the Interior and Matanuska-Susitna regions (both at 15%).

Table 128. Population by Demographic Characteristics

Demographic	Characteristic	2019	2020	2021	2022	2023
Sex	Male	377,146 (51%)	381,417 (52%)	382,436 (52%)	381,725 (52%)	382,789 (52%)
	Female	355,588 (49%)	351,974 (48%)	353,674 (48%)	354,783 (48%)	354,023 (48%)
Race	White	475,987 (65%)	474,487 (65%)	474,811 (65%)	473,951 (64%)	472,964 (64%)
	Black	26,859 (4%)	26,873 (4%)	26,943 (4%)	26,924 (4%)	26,970 (4%)
	AI/AN	113,242 (15%)	114,741 (16%)	114,875 (16%)	114,898 (16%)	114,837 (16%)
	Asian/PI	60,029 (8%)	60,582 (8%)	61,339 (8%)	61,870 (8%)	62,395 (8%)
	Multiple	56,617 (8%)	56,708 (8%)	58,142 (8%)	58,865 (8%)	59,646 (8%)
	Hispanic	53,243 (7%)	49,989 (7%)	51,963 (7%)	53,287 (7%)	54,625 (7%)
Age	<5 Years	49,819 (7%)	48,104 (7%)	46,290 (6%)	44,896 (6%)	44,610 (6%)
	5-14 Years	105,525 (14%)	102,398 (14%)	103,353 (14%)	103,427 (14%)	101,768 (14%)
	15-24 Years	93,467 (13%)	96,889 (13%)	98,432 (13%)	98,010 (13%)	99,274 (13%)
	25-34 Years	112,222 (15%)	112,039 (15%)	108,994 (15%)	106,382 (14%)	106,431 (14%)
	35-44 Years	97,081 (13%)	98,386 (13%)	100,952 (14%)	102,594 (14%)	104,578 (14%)
	45-54 Years	85,618 (12%)	84,834 (12%)	82,498 (11%)	82,133 (11%)	81,916 (11%)
	55-64 Years	97,509 (13%)	95,556 (13%)	93,327 (13%)	91,490 (12%)	87,745 (12%)
	65-74 Years	62,062 (8%)	65,197 (9%)	69,663 (9%)	72,170 (10%)	73,291 (10%)
	75-84 Years	22,702 (3%)	23,469 (3%)	25,536 (3%)	28,101 (4%)	29,667 (4%)
	85+ Years	6,729 (<1%)	6,519 (<1%)	7,065 (<1%)	7,305 (<1%)	7,532 (1%)
Residence	Anchorage	292,487 (40%)	291,247 (40%)	290,440 (39%)	289,972 (39%)	289,653 (39%)
	Gulf Coast	81,048 (11%)	81,619 (11%)	81,643 (11%)	82,474 (11%)	83,154 (11%)
	Interior	110,067 (15%)	109,425 (15%)	111,561 (15%)	110,665 (15%)	109,801 (15%)
	Mat-Su	106,782 (15%)	107,081 (15%)	109,099 (15%)	111,795 (15%)	113,920 (15%)
	Northern	27,484 (4%)	28,870 (4%)	28,346 (4%)	27,787 (4%)	27,723 (4%)
	Southeast	72,571 (10%)	72,286 (10%)	72,688 (10%)	71,873 (10%)	71,077 (10%)
	Southwest	42,295 (6%)	42,863 (6%)	42,333 (6%)	41,942 (6%)	41,484 (6%)
Statewide	Total	732,734 (100%)	733,391 (100%)	736,110 (100%)	736,508 (100%)	736,812 (100%)

Appendix D: Race

Prior to 2021, the Vital Statistics Annual Report presented race using NCHS-provided "bridged" race categories. Race 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". 123

Alaska began collecting multiple-choice race data in 2013 for births and 2014 for other events when it adopted the current (2003 revision) U.S. standard certificate forms. Race information prior to these revisions was collected using a single-choice race selection method. Bridged race categories represent a hypothetical single-choice race based on what individuals who selected multiple races would be predicted to identify as had they used the older single choice method. This allows multiple-race responses (e.g., White plus AI/AN) to be proportionally distributed into a single race category (e.g., AI/AN) to allow analysis of race-specific statistics that are comparable to data collected using the older forms.

NCHS has discontinued reporting bridged race population estimates as of 2020 and bridged race coding of vital events as of 2021. Individuals that identified as more than one race are now counted in the "Multiple" race category. While the multiple-choice race method is more accurate and allows greater expression of racial identity, there are important differences in the racial distributions of both population and vital event data compared to the previously reported bridged race method. Race data reported by bridged races in Vital Statistics Annual Reports before 2021 are not comparable to data reported by race alone in the Vital Statistics 2021 Annual Report and thereafter.

Event counts by a race alone will be lower than counts by bridged races due to the redistribution of multiple race records. The size of that decrease depends on a variety of factors such as the combinations of races reported, and the algorithm used by NCHS to distribute multiple race people into a bridged race category. Between 2016-2020, average population counts by race

(alone) compared to the same race (bridged) were 5% lower for White people, 29% lower for Black people, 12% lower for Al/AN people, and 9% lower for Asian/PI people. Average birth counts were 9% lower for White people, 39% lower for Black people, 14% lower for Al/AN people, and 7% lower for Asian/PI people. Average death counts were 3% lower for White people, 9% lower for Black people, 6% lower for Al/AN people, and 6% lower for Asian/PI people.

In terms of event rates (for example, events per 1,000 or 100,000 population for crude birth and death rates, respectively), differences between race (alone) and race (bridged) estimates depend on whether the relative change in the population denominator is greater or less than the change in the event count numerator. This means that unlike event counts, differences in rates by race (alone) can be either higher or lower than rates by race (bridged). Between 2016-2020, average crude birth rates were 4% lower for White people, 11% lower for Black people, 2% lower for Al/AN people, and 2% higher for Asian/PI people. Average crude death rates were 2% higher for White people, 20% higher for Black people, 5% higher for Al/AN people, and 3% higher for Asian/PI people.

¹²³ <u>Centers for Disease Control and Prevention. U.S. Census</u> Populations with Bridged Race Categories.

Figure 25. Percent Difference Between Race (Alone) vs Race (Bridged) Statistics, 2016-2020 Average

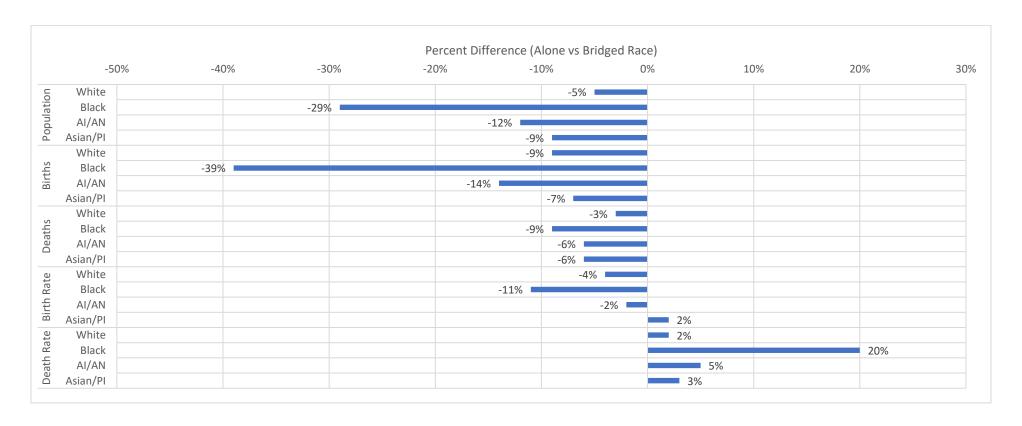


Table 129. Population by Race (Alone vs Bridged)

Year	White (Alone)	White (Bridged)	White (% Diff.)	Black (Alone)	Black (Bridged)	Black (% Diff.)	AI/AN (Alone)	AI/AN (Bridged)	AI/AN (% Diff.)	Asian/PI (Alone)	Asian/PI (Bridged)	Asian/PI (% Diff.)
2016	488,670	514,892	-5%	26,951	35,510	-27%	112,999	127,569	-12%	57,278	62,666	-9%
2017	483,839	510,332	-5%	27,216	36,080	-28%	113,074	127,744	-12%	59,205	64,764	-9%
2018	479,457	506,244	-5%	27,213	36,227	-28%	113,270	127,832	-12%	59,377	65,064	-9%
2019	475,987	502,940	-6%	26,859	36,116	-29%	113,242	127,833	-12%	60,029	65,845	-9%
2020	474,487	499,488	-5%	26,873	35,853	-29%	114,741	127,526	-11%	60,582	66,036	-9%
Total	2,402,440	2,533,896	-5%	135,112	179,786	-28%	567,326	638,504	-12%	296,471	324,375	-9%

Table 130. Births by Race (Alone vs Bridged)

Year	White (Alone)	White (Bridged)	White (% Diff.)	Black (Alone)	Black (Bridged)	Black (% Diff.)	AI/AN (Alone)	AI/AN (Bridged)	AI/AN (% Diff.)	Asian/PI (Alone)	Asian/PI (Bridged)	Asian/PI (% Diff.)
2016	6,276	6,914	-10%	335	483	-36%	2,177	2,480	-13%	1,025	1,115	-8%
2017	5,795	6,343	-9%	358	522	-37%	1,967	2,292	-15%	1,046	1,118	-7%
2018	5,551	6,112	-10%	303	473	-44%	1,950	2,256	-15%	983	1,054	-7%
2019	5,407	5,919	-9%	326	485	-39%	1,944	2,235	-14%	952	1,031	-8%
2020	5,258	5,777	-9%	298	452	-41%	1,850	2,115	-13%	894	955	-7%
Total	28,287	31,065	-9%	1,620	2,415	-39%	9,888	11,378	-14%	4,900	5,273	-7%

Table 131. Crude Birth Rates by Race (Alone vs Bridged)¹²⁴

Year	White (Alone)	White (Bridged)	White (% Diff.)	Black (Alone)	Black (Bridged)	Black (% Diff.)	AI/AN (Alone)	AI/AN (Bridged)	AI/AN (% Diff.)	Asian/PI (Alone)	Asian/PI (Bridged)	Asian/PI (% Diff.)
2016	12.8	13.4	-4%	12.4	13.6	-9%	19.3	19.4	-1%	17.9	17.8	1%
2017	12.0	12.4	-4%	13.2	14.5	-10%	17.4	17.9	-3%	17.7	17.3	2%
2018	11.6	12.1	-4%	11.1	13.1	-16%	17.2	17.6	-2%	16.6	16.2	2%
2019	11.4	11.8	-4%	12.1	13.4	-10%	17.2	17.5	-2%	15.9	15.7	1%
2020	11.1	11.6	-4%	11.1	12.6	-13%	16.1	16.6	-3%	14.8	14.5	2%
Total	11.8	12.3	-4%	12.0	13.4	-11%	17.4	17.8	-2%	16.5	16.3	2%

 $^{^{\}rm 124}$ Crude birth rates are live births per 1,000 population.

Table 132. Deaths by Race (Alone vs Bridged)

Year	White (Alone)	White (Bridged)	White (% Diff.)	Black (Alone)	Black (Bridged)	Black (% Diff.)	AI/AN (Alone)	AI/AN (Bridged)	AI/AN (% Diff.)	Asian/PI (Alone)	Asian/PI (Bridged)	Asian/PI (% Diff.)
2016	2,942	3,030	-3%	116	124	-7%	994	1,057	-6%	210	224	-6%
2017	2,879	2,961	-3%	121	133	-9%	1,019	1,070	-5%	195	209	-7%
2018	2,931	3,027	-3%	134	147	-9%	961	1,033	-7%	174	183	-5%
2019	2,990	3,105	-4%	128	139	-8%	1,034	1,102	-6%	216	226	-5%
2020	3,246	3,362	-4%	157	173	-10%	1,221	1,306	-7%	271	292	-7%
Total	14,988	15,485	-3%	656	716	-9%	5,229	5,568	-6%	1,066	1,134	-6%

Table 133. Crude Death Rates by Race (Alone vs Bridged)¹²⁵

Year	White (Alone)	White (Bridged)	White (% Diff.)	Black (Alone)	Black (Bridged)	Black (% Diff.)	AI/AN (Alone)	AI/AN (Bridged)	AI/AN (% Diff.)	Asian/PI (Alone)	Asian/PI (Bridged)	Asian/PI (% Diff.)
2016	602.0	588.5	2%	430.4	349.2	21%	879.7	828.6	6%	366.6	357.5	3%
2017	595.0	580.2	3%	444.6	368.6	19%	901.2	837.6	7%	329.4	322.7	2%
2018	611.3	597.9	2%	492.4	405.8	19%	848.4	808.1	5%	293.0	281.3	4%
2019	628.2	617.4	2%	476.6	384.9	21%	913.1	862.1	6%	359.8	343.2	5%
2020	684.1	673.1	2%	584.2	482.5	19%	1,064.1	1,024.1	4%	447.3	442.2	1%
Total	623.9	611.1	2%	485.5	398.3	20%	921.7	872.0	6%	359.6	349.6	3%

 $^{^{\}rm 125}$ Crude death rates are deaths per 100,000 population.