



Mortality



Mortality Highlights



Life expectancy for Alaska Native people has been increasing since the 1980's and is now 70.4 years.

Unintentional injuries account for nearly a quarter of all years of potential life lost from premature death.



The three leading causes of death for Alaska Native people were cancer, heart disease, and unintentional injury.

Alaska Native COPD mortality rates have increased since the 1980's.



Mortality Highlights



Alaska Native infant mortality rates have decreased since the 1980's. The infant mortality rate is currently 10.3 infant deaths per 1,000 live births.

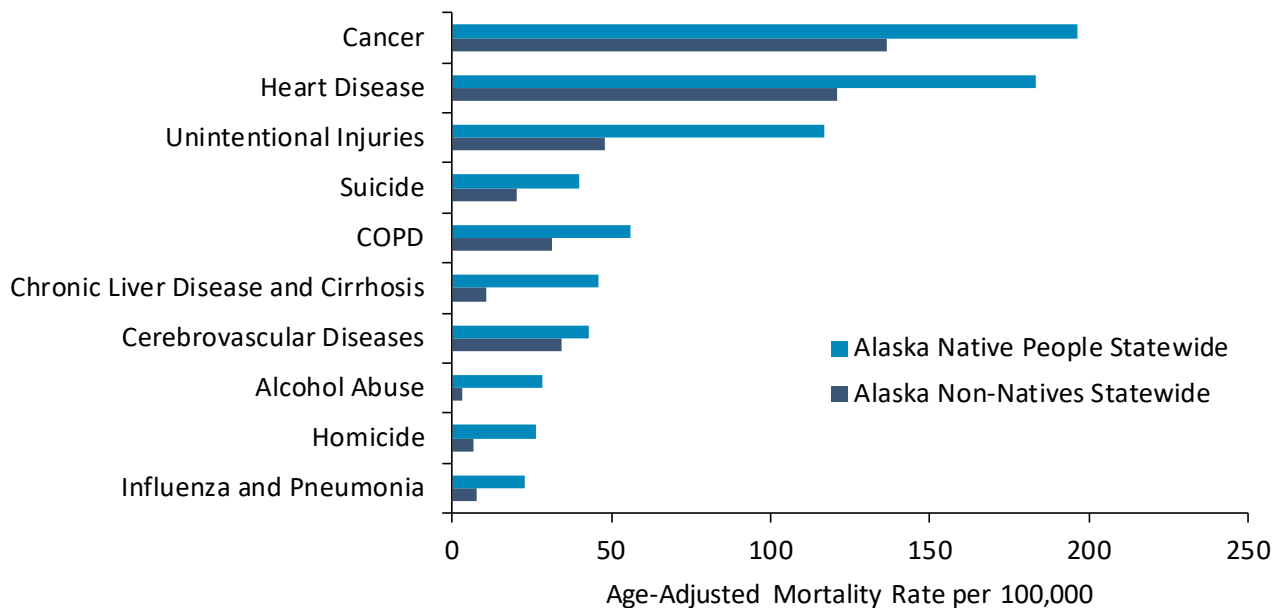
Alaska Native mortality rates for suicide have remained virtually unchanged since the 1980's.

Alaska Native mortality rates from all-causes, cancer, heart disease, and unintentional injury have decreased since the 1980's.



Leading Causes of Death

Figure 7a. Leading Causes of Death, 2016-2019



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-13

Definition

The leading causes of death are the underlying causes of death that account for the highest number of all deaths in a population in a given time period. The leading causes of death are presented in rank order and are ranked according to the number of deaths. Ranking the leading causes of death is a common way to look at mortality data and to monitor the burden of various diseases and behaviors. For the International Classification of Diseases-10 (ICD-10) code categorization used for each cause, see Appendix D.

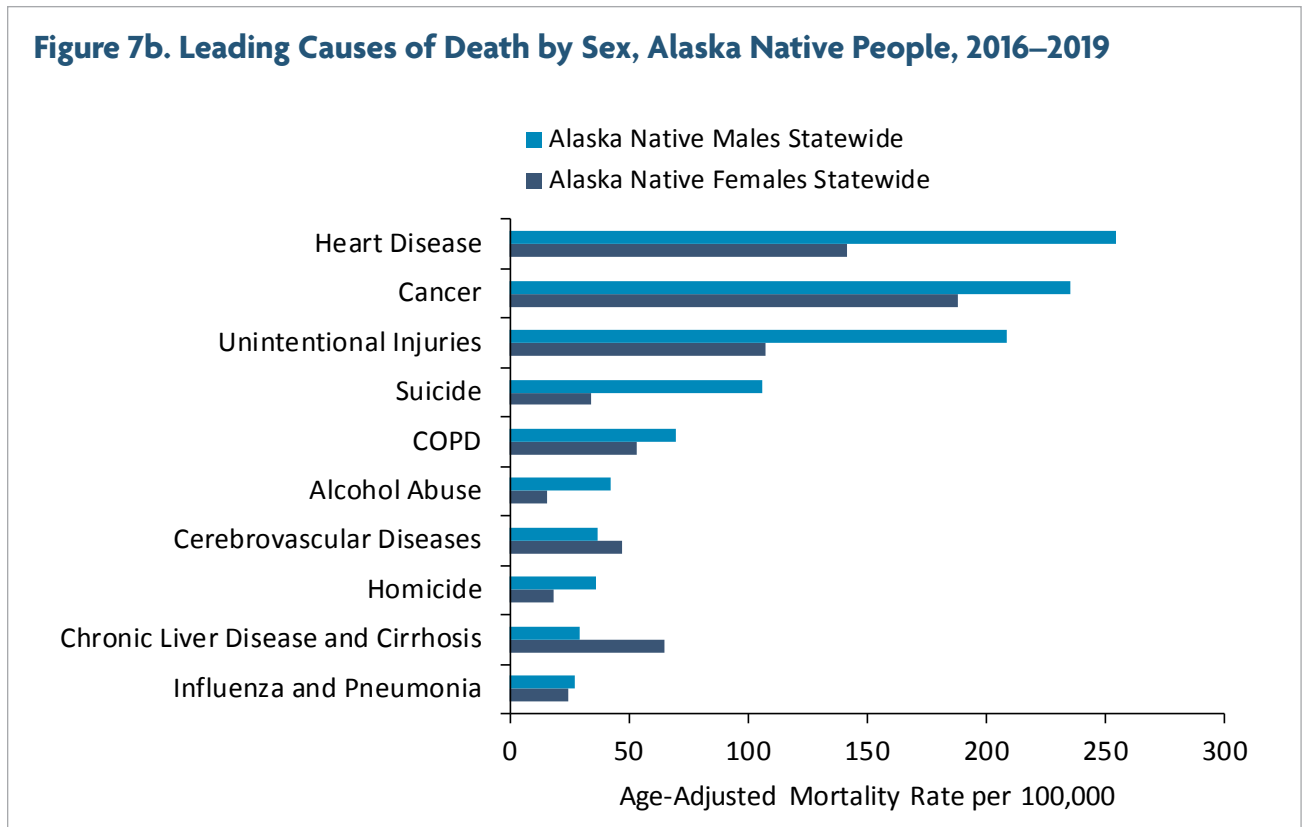
Summary

» During 2016–2019 cancer, heart disease, and unintentional injuries were the leading causes of death for Alaska Native people. These three causes of death accounted for nearly half (47.2%) of all deaths during this time period.

- » The Alaska Native mortality rates were significantly higher than the Alaska non-Native rates for all ten leading causes of death.
- » Compared with Alaska non-Native males, Alaska Native male mortality rates were significantly higher for nine of the ten leading causes of death (heart disease, cancer, unintentional injury, suicide, COPD, alcohol abuse, homicide, chronic liver disease/cirrhosis and influenza/pneumonia).
- » Compared with Alaska non-Native females, Alaska Native female mortality rates were significantly higher for nine of the ten leading causes of death (cancer, heart disease, unintentional injury, chronic liver disease/cirrhosis, COPD, cerebrovascular diseases, suicide, influenza/pneumonia and homicide).

Leading Causes of Death

Figure 7b. Leading Causes of Death by Sex, Alaska Native People, 2016–2019



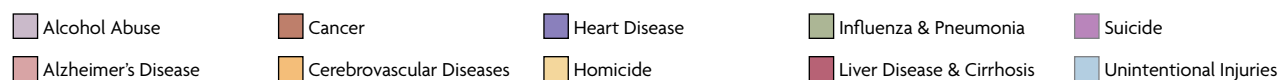
Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-14

Leading Causes of Death

Figure 7c. Leading Causes of Death and Age-Adjusted Mortality Rates per 100,000 by Population Group, 2016-2019

	Alaska Native People Statewide	Alaska Native Males	Alaska Native Females	Alaska Non-Natives Statewide
1	CANCER 196.3	HEART DISEASE 254.3	CANCER 188.2	CANCER 136.5
2	HEART DISEASE 183.3	CANCER 235.5	HEART DISEASE 141.7	HEART DISEASE 120.8
3	UNINTENTIONAL INJURIES 116.9	UNINTENTIONAL INJURIES 208.7	UNINTENTIONAL INJURIES 107.1	UNINTENTIONAL INJURIES 48.1
4	SUICIDE 39.9	SUICIDE 105.8	LIVER DISEASE & CIRRHOSIS 64.9	COPD 31.1
5	COPD 56.0	COPD 69.6	COPD 53.1	CEREBROVASCULAR DISEASES 34.5
6	LIVER DISEASE & CIRRHOSIS 46.0	ALCOHOL ABUSE 42.3	CEREBROVASCULAR DISEASES 46.9	SUICIDE 20.3
7	CEREBROVASCULAR DISEASES 43.0	CEREBROVASCULAR DISEASES 36.7	SUICIDE 34.1	LIVER DISEASE & CIRRHOSIS 10.5
8	ALCOHOL ABUSE 28.4	HOMICIDE 36.2	INFLUENZA & PNEUMONIA 24.2	HOMICIDE 6.9
9	HOMICIDE 26.2	LIVER DISEASE & CIRRHOSIS 29.6	ALZHEIMER'S DISEASE 27.8	INFLUENZA & PNEUMONIA 20.4
10	INFLUENZA & PNEUMONIA 23.0	INFLUENZA & PNEUMONIA 27.3	HOMICIDE 18.5	ALCOHOL ABUSE 3.0

Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-13 and Table C-14

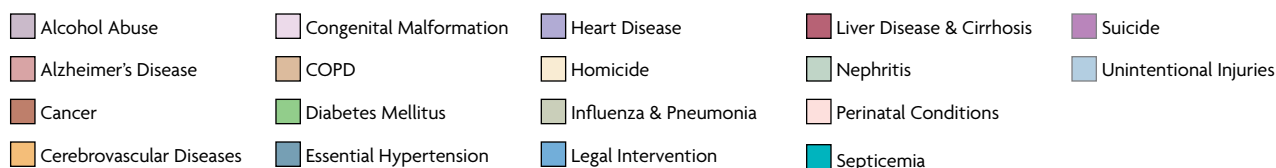


Leading Causes of Death

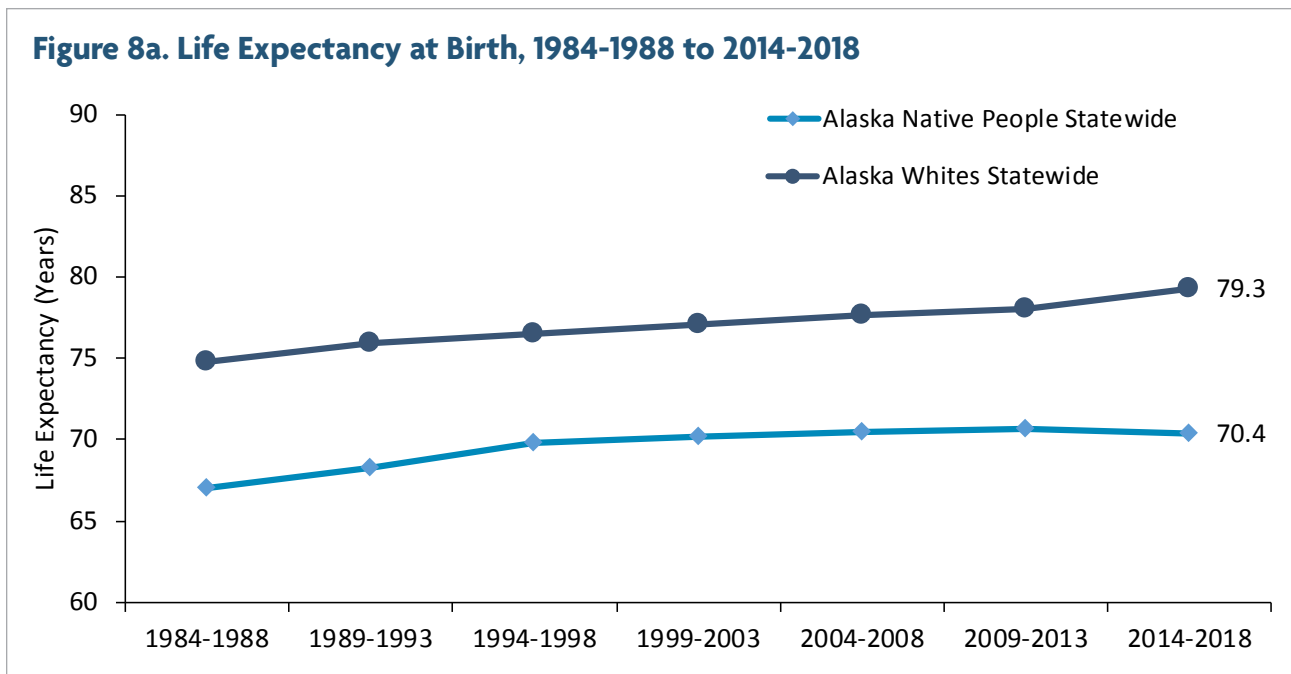
Figure 7d. Leading Causes of Death and Age-Specific Mortality Rates per 100,000 by Age Group, Alaska Native People, 2016-2019

	0-4 Years	5-14 Years	15-24 Years	25-44 Years	45-54 Years	55-64 Years	65-74 Years	75+ Years
1	PERINATAL CONDITIONS	UNINTENTIONAL INJURIES	SUICIDE	UNINTENTIONAL INJURIES	UNINTENTIONAL INJURIES	CANCER	CANCER	HEART DISEASE
#	23	13	102	252	90	195	241	309
Rate	38.8	11.0	106.7	160.2	152.1	339.5	773.2	2,041.2
2	CONGENITAL MALFORMATION	SUICIDE	UNINTENTIONAL INJURIES	SUICIDE	HEART DISEASE	HEART DISEASE	HEART DISEASE	CANCER
#	21	9	70	137	89	148	142	242
Rate	35.4	7.6	73.2	87.1	150.4	257.6	455.6	1,598.6
3	UNINTENTIONAL INJURIES	CANCER	HOMICIDE	LIVER DISEASE & CIRRHOSIS	CANCER	UNINTENTIONAL INJURIES	COPD	COPD
#	16	6	21	64	78	80	74	102
Rate	27.0	5.1	22.0	40.7	131.8	139.3	237.4	673.8
4	INFLUENZA & PNEUMONIA			HOMICIDE	LIVER DISEASE & CIRRHOSIS	LIVER DISEASE & CIRRHOSIS	CEREBROVASCULAR DISEASES	CEREBROVASCULAR DISEASES
#	5			60	56	43	34	102
Rate	8.4			38.2	94.6	74.9	109.1	673.8
5				HEART DISEASE	ALCOHOL ABUSE	COPD	UNINTENTIONAL INJURIES	ALZHEIMER'S DISEASE
#				54	21	41	25	55
Rate				34.3	35.5	71.4	80.2	363.3
6				CANCER	SUICIDE	ALCOHOL ABUSE	ALCOHOL ABUSE	UNINTENTIONAL INJURIES
#				35	20	40	24	54
Rate				22.3	33.8	69.6	77.0	356.7
7				ALCOHOL ABUSE	HOMICIDE	CEREBROVASCULAR DISEASES	LIVER DISEASE & CIRRHOSIS	INFLUENZA & PNEUMONIA
#				21	13	22	19	48
Rate				13.4	22.0	38.3	61.0	317.1
8				CEREBROVASCULAR DISEASES	DIABETES MELLITUS	DIABETES MELLITUS	DIABETES MELLITUS	DIABETES MELLITUS
#				8	11	13	16	26
Rate				5.1	18.6	22.6	51.3	171.8
9				INFLUENZA & PNEUMONIA	COPD	INFLUENZA & PNEUMONIA	INFLUENZA & PNEUMONIA	NEPHRITIS
#				7	9	11	16	26
Rate				4.5	15.2	19.1	51.3	171.8
10				LEGAL INTERVENTION	CEREBROVASCULAR DISEASES	SUICIDE	SEPTICEMIA	ESSENTIAL HYPERTENSION
#				5	7	10	13	22
Rate				3.2	11.8	17.4	41.7	145.3

Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section



Life Expectancy



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-15

Definition

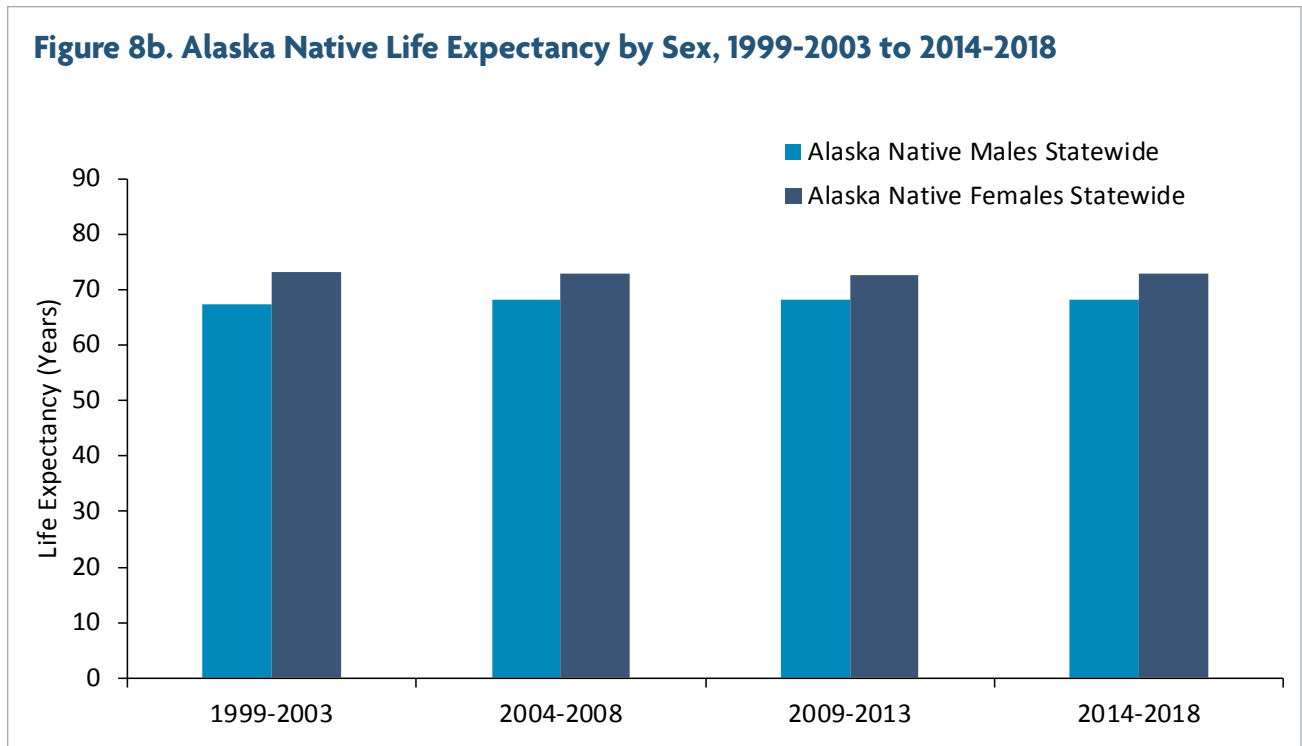
Life expectancy at birth is the average number of years a person is expected to live from birth, based on the year in which they were born. Life expectancy is an indicator of the overall mortality at all ages for a population.

Summary

- » Life expectancy at birth among Alaska Native people increased by 4.5 years since 1984–1988, reaching 70.4 years during 2014–2018.
- » Despite the increase in life expectancy among Alaska Native people, a gap of 8.9 years existed between Alaska Native and Alaska White life expectancies during 2014–2018.
- » Alaska Native females have a higher average life expectancy compared with males. This gender gap has remained stable since 1999–2003.
- » Life expectancy varied by Tribal health region, ranging from 68.2 to 74.4 years.

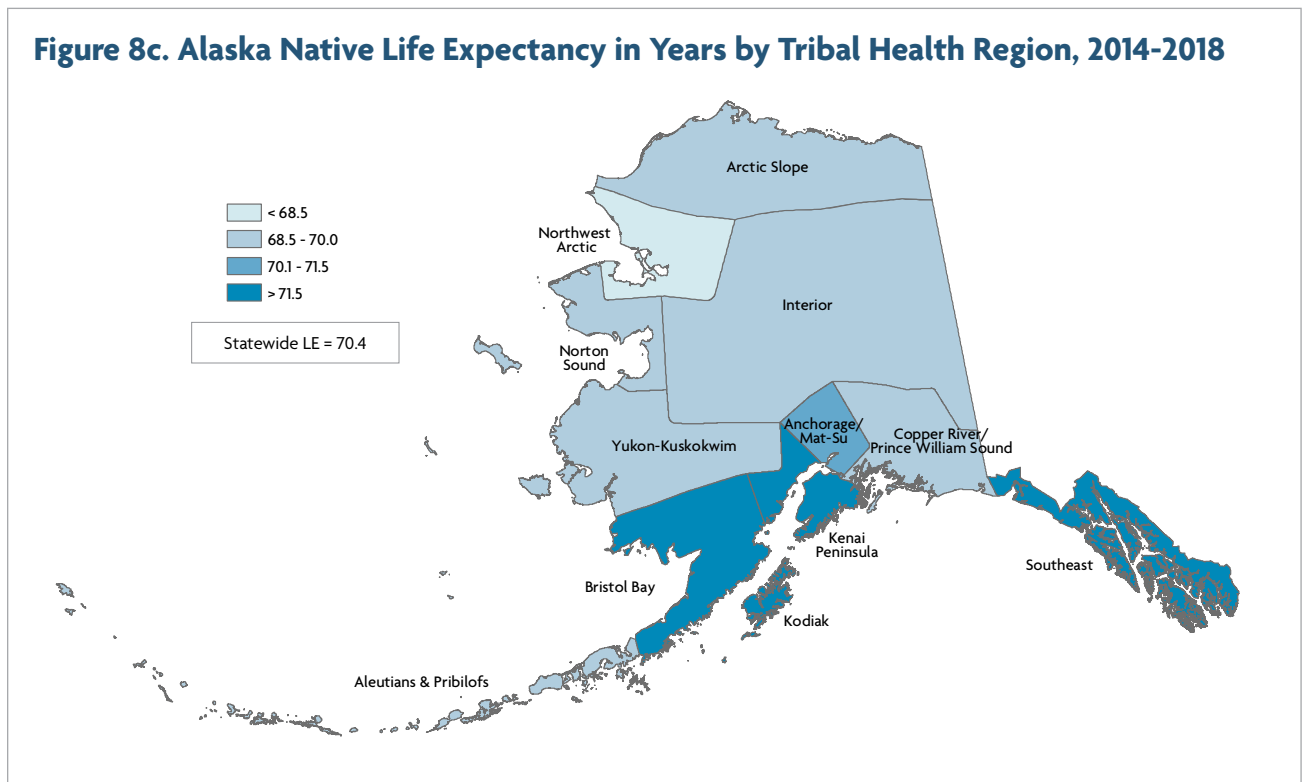
Life Expectancy

Figure 8b. Alaska Native Life Expectancy by Sex, 1999-2003 to 2014-2018



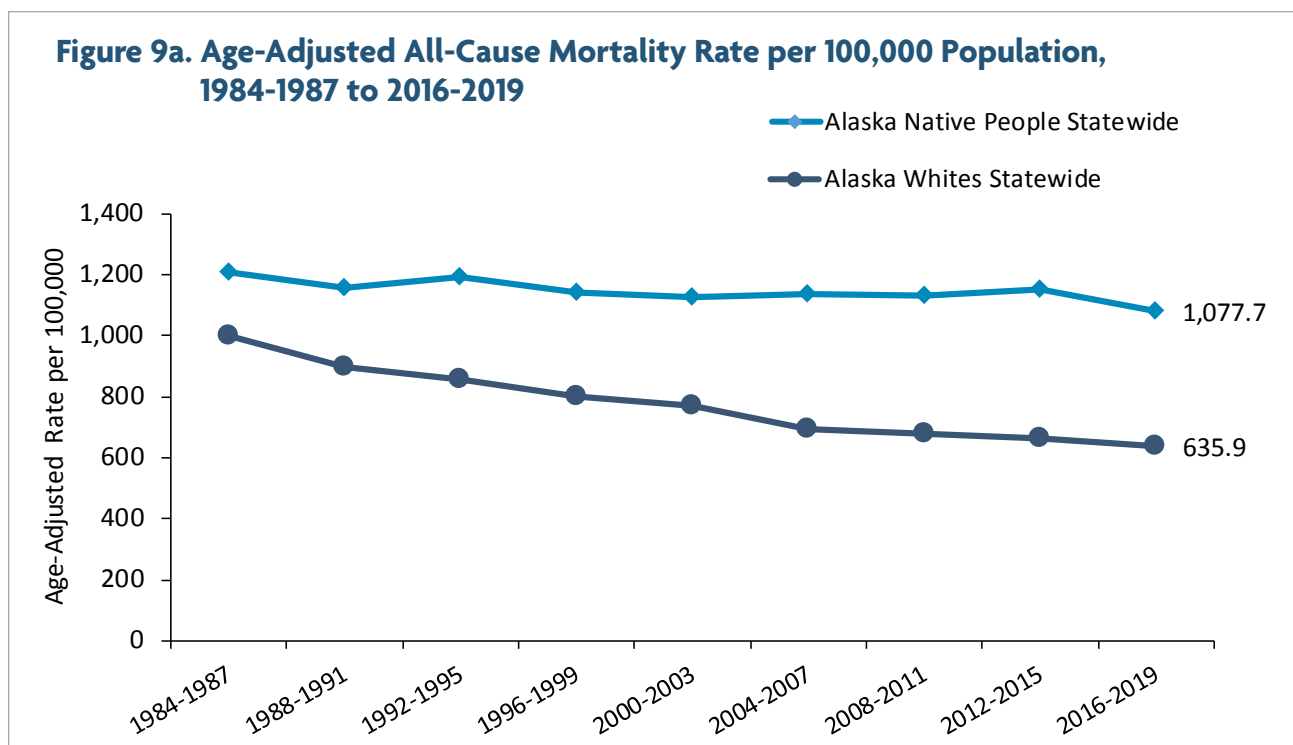
Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section

Figure 8c. Alaska Native Life Expectancy in Years by Tribal Health Region, 2014-2018



Data Source: Alaska Health Analytics and Vital Records Section
Appendix Table C-16

All-Cause Mortality



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-17

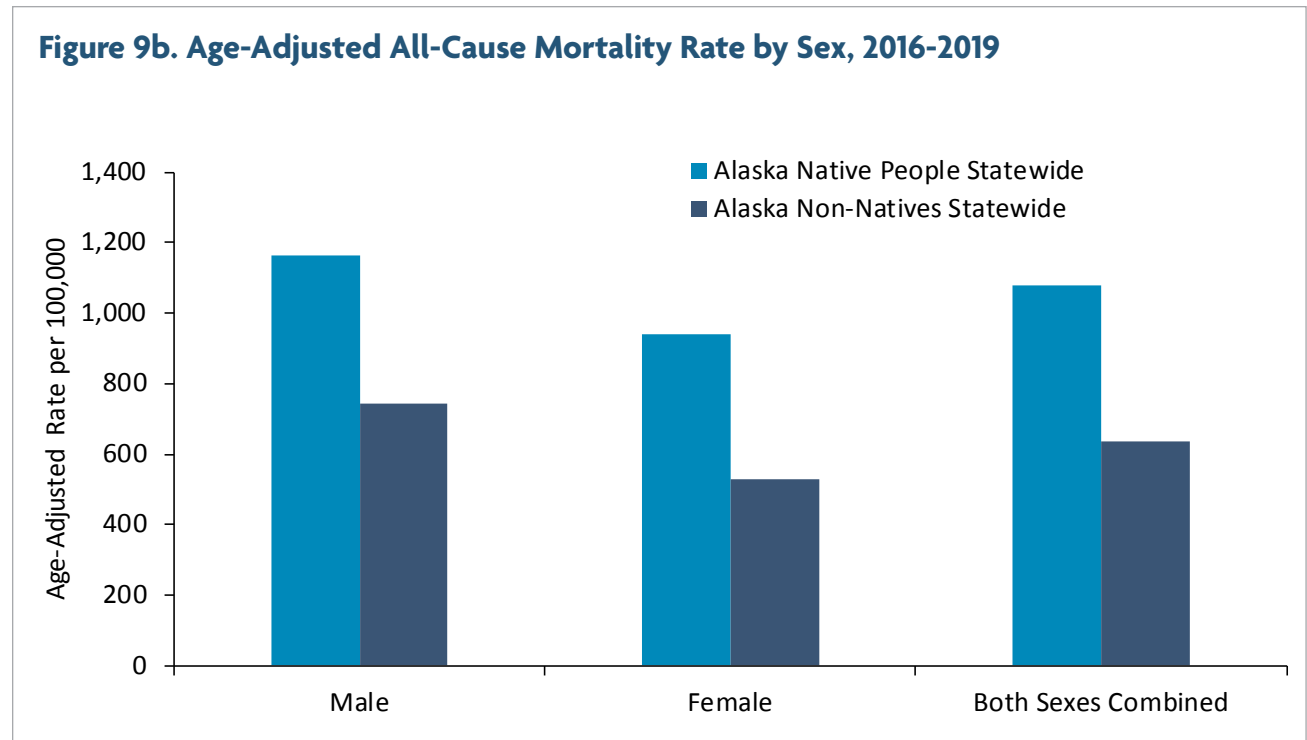
Definition

All-cause mortality is the death rate from all causes of death for a population in a given time period.

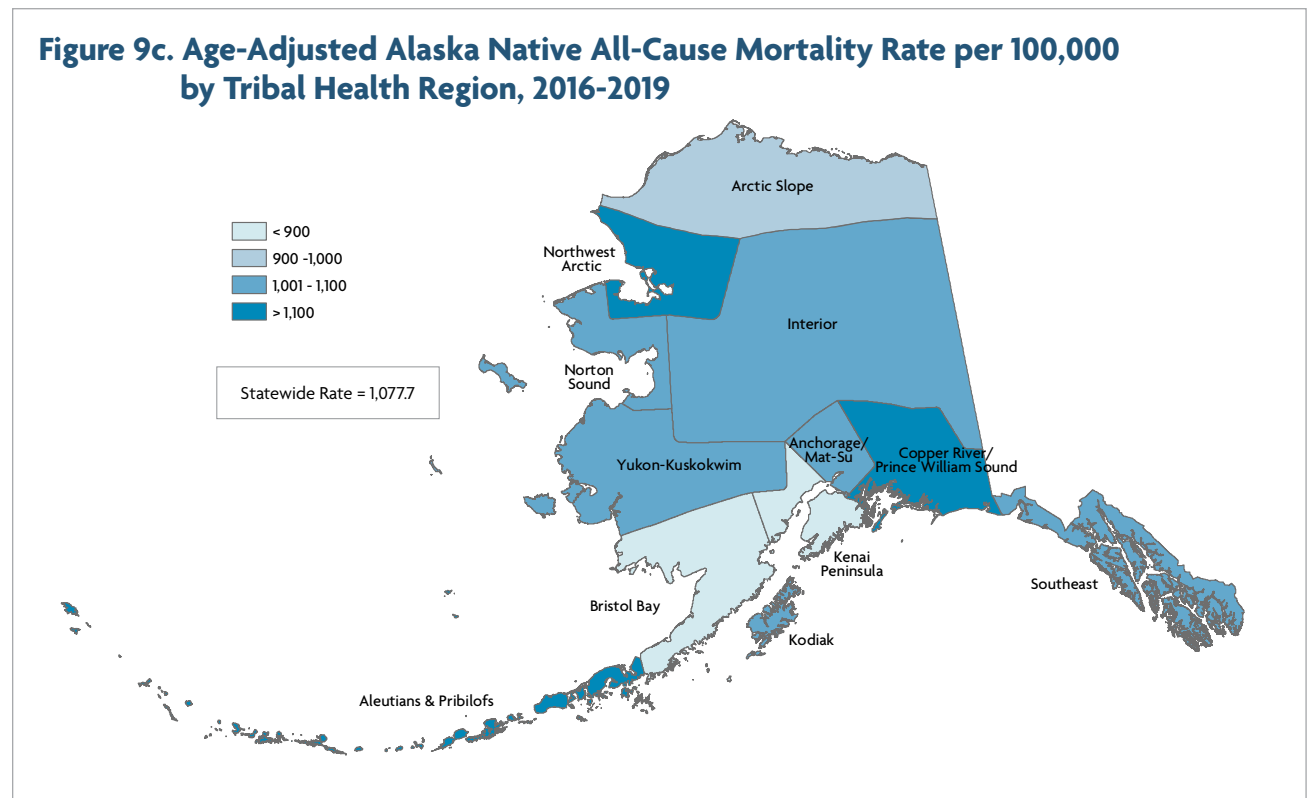
Summary

- » During 2016–2019, the all-cause mortality rate among Alaska Native people was 1,077.7 per 100,000 population.
- » Between 1984–1987 and 2016–2019, the all-cause mortality rate among Alaska Native people has decreased.
- » Between 1984–1987 and 2016–2019, a greater rate of decrease in the all-cause mortality rate among Alaska non-Native people compared with Alaska Native people widened the disparity between populations. The Alaska Native all-cause mortality rate was 1.7 times higher than the non-Native rate during 2016–2019.
- » The 2016–2019 all-cause mortality rate varied by Tribal health region, ranging from 847.5 to 1,299.4 deaths per 100,000.

All-Cause Mortality



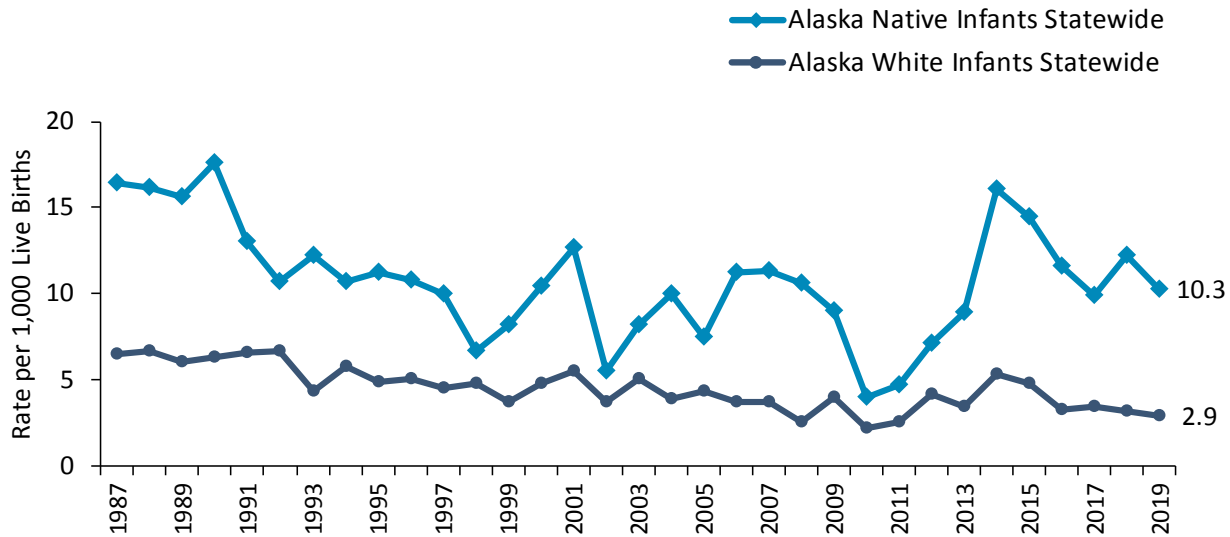
Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-18



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-19

Infant Mortality

Figure 10a. Infant Mortality Rate, 1987-2019



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-20

Definition

The infant mortality rate (IMR) is the number of children under one year of age who died divided by the number of live births during the year. It is used to compare and monitor the health and well-being of populations throughout the world.² Specifically, this rate may be an indicator of the quality and accessibility of primary health care available to pregnant women and infants as well as reflecting on the impact poverty and substandard living conditions have on maternal and infant health.³ Infant mortality can be affected by factors such as level of education of the mother, household income, sanitary conditions, prenatal and postnatal care, and other factors.^{2,4}

Summary

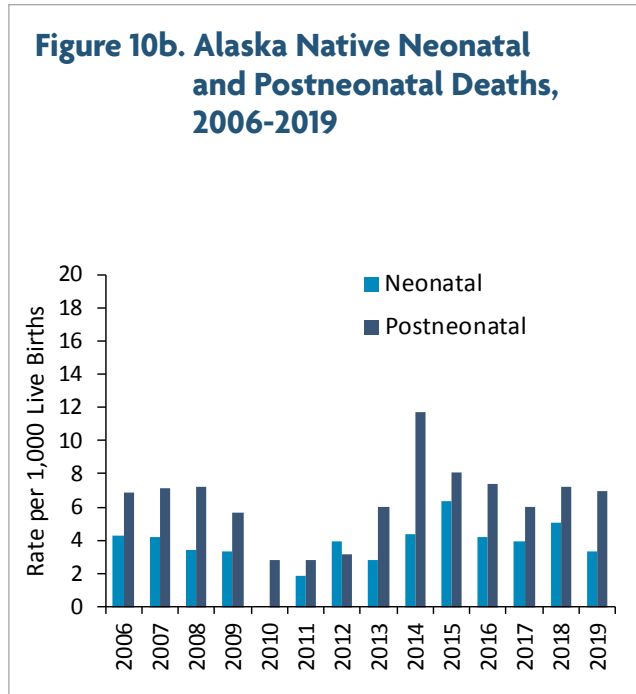
- » Between 1987 and 2019, the Alaska Native infant mortality rate declined 37.2% to 10.3 infant deaths per 1,000 live births.
- » Alaska Native infants experienced higher mortality in the post-neonatal period (28 days to 1 year of age) than in the neonatal period (<28 days of age).
- » The leading causes of Alaska Native infant deaths during 2005–2019 were perinatal conditions (22.2%), congenital malformations (16.1%), and sudden infant death syndrome (SIDS) (16.1%).
- » During 2015–2019, rates of infant mortality varied by Tribal health region, ranging from 8.5 to 18.2 per 1,000 live births.

Related Objectives

Reduce the rate of infant deaths to 5.0 infant deaths per 1,000 live births. - *HEALTHY PEOPLE 2030, OBJECTIVE MICH-02*

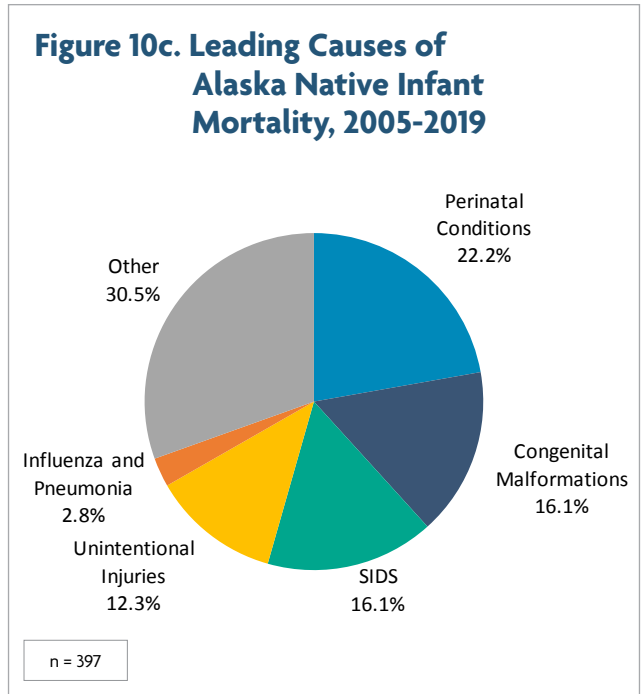
Infant Mortality

Figure 10b. Alaska Native Neonatal and Postneonatal Deaths, 2006-2019



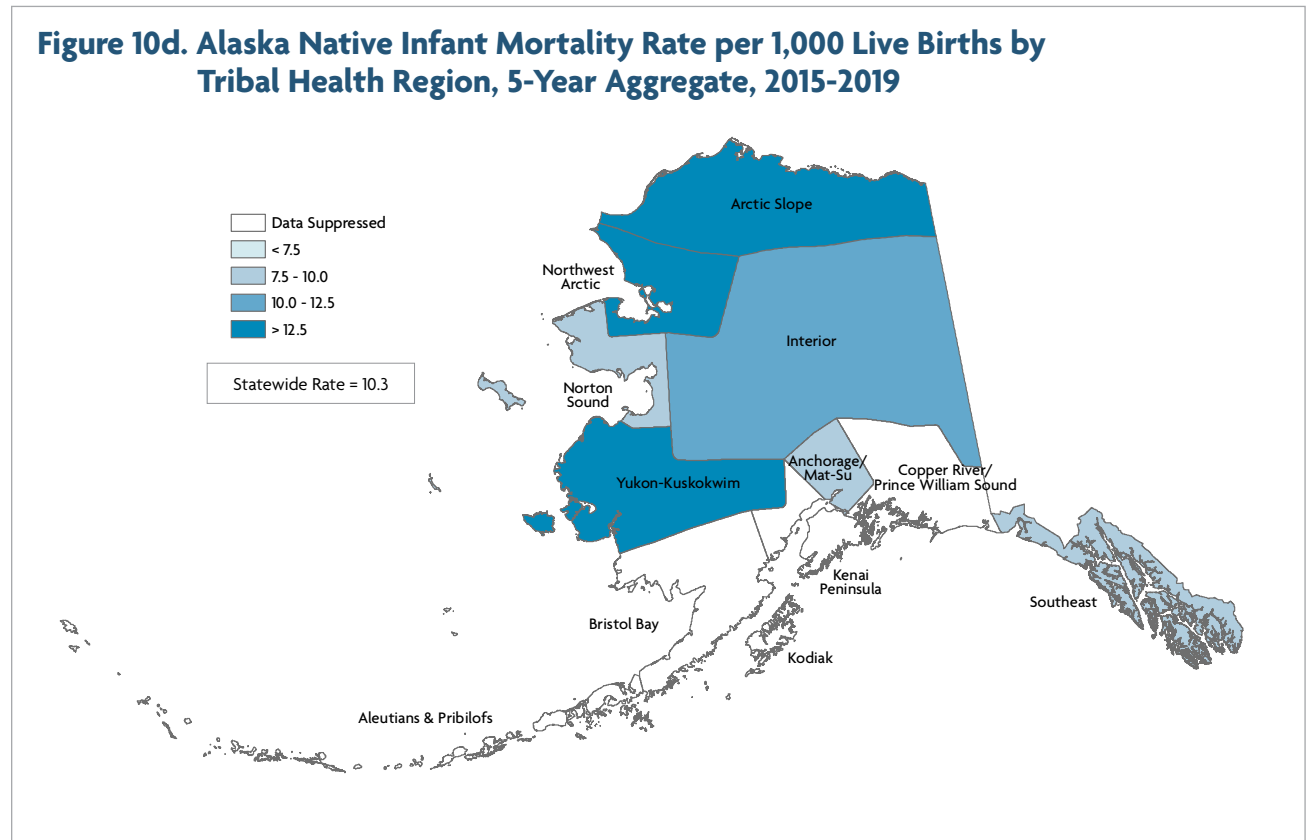
Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-21

Figure 10c. Leading Causes of Alaska Native Infant Mortality, 2005-2019



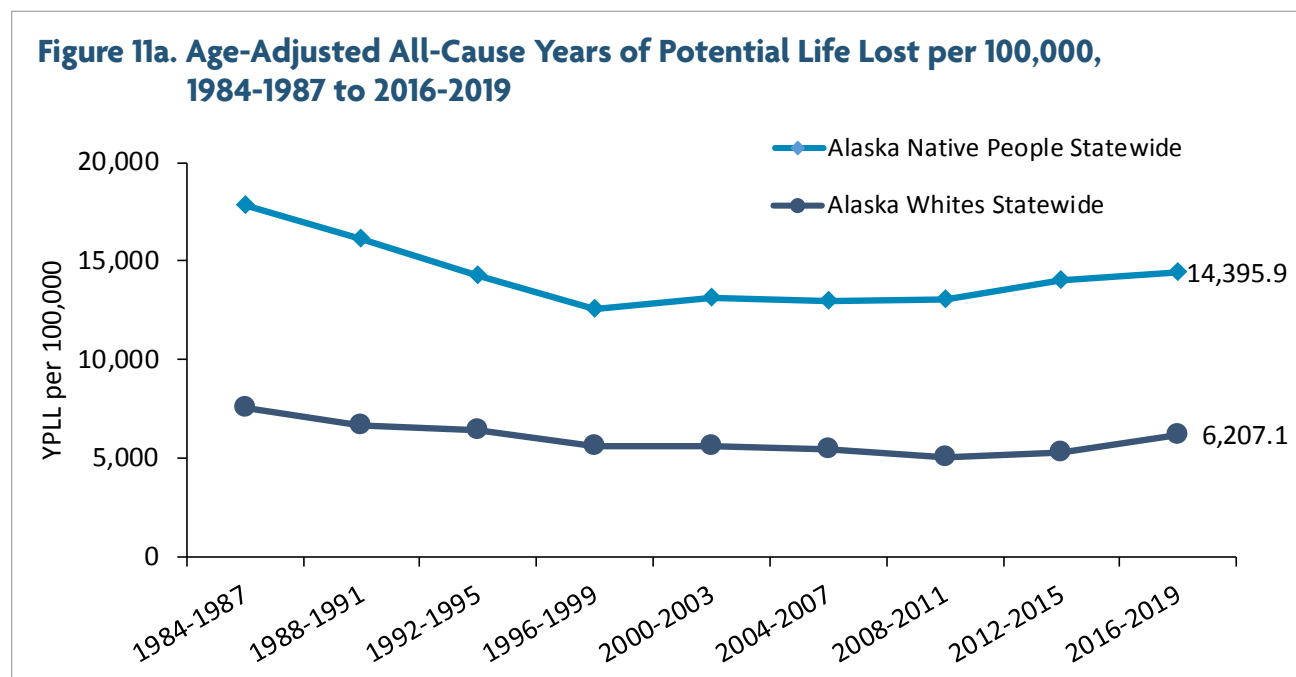
Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-22

Figure 10d. Alaska Native Infant Mortality Rate per 1,000 Live Births by Tribal Health Region, 5-Year Aggregate, 2015-2019



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-23

Years of Potential Life Lost



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-24

Definition

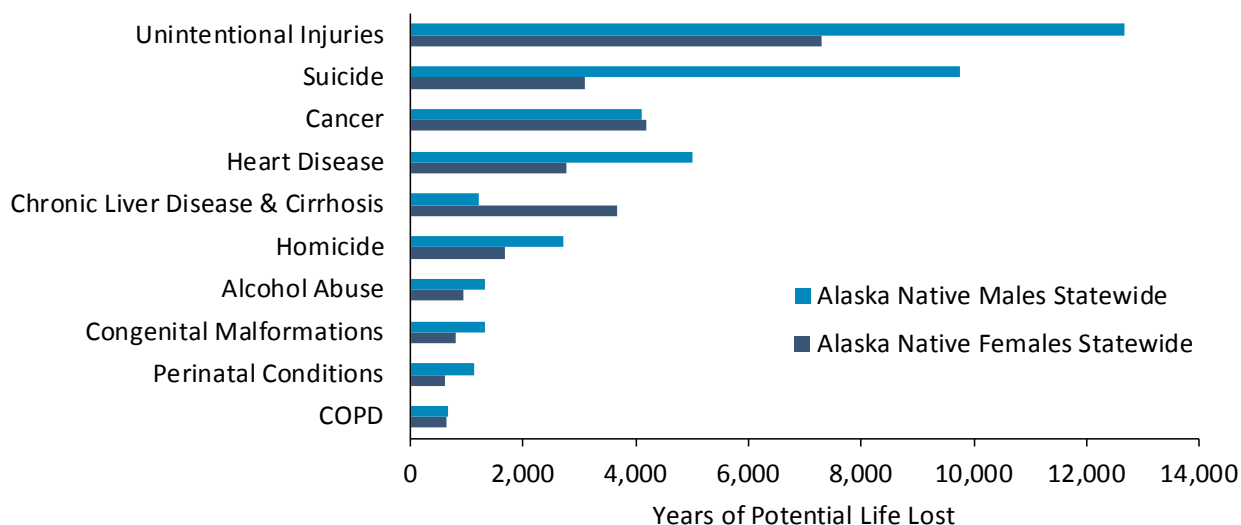
Years of potential life lost (YPLL) measures premature mortality. It represents the total number of years not lived by persons who died before the age of 75 years. YPLL is an alternative measure of mortality that places more emphasis on deaths that occur at younger ages. The leading causes of YPLL are the leading causes of death ranked according to those that accounted for the highest number of YPLL.

Summary

- » During 2016–2019, there were 85,393 Alaska Native YPLL from all causes.
- » The rate of Alaska Native YPLL has appeared to be increasing since 2012–2015.
- » Alaska Native people experienced significantly higher YPLL rates as compared to Alaska non-Natives in all time periods.
- » The leading causes of YPLL among Alaska Native people, in rank order, were unintentional injuries, suicide, cancer and heart disease. These causes contributed to the highest number of YPLL of all causes. Unintentional injuries accounted for nearly a quarter (23.4%) of all YPLL.

Years of Potential Life Lost

Figure 11b. Leading Causes of Years of Potential Life Lost by Sex, 2016-2019



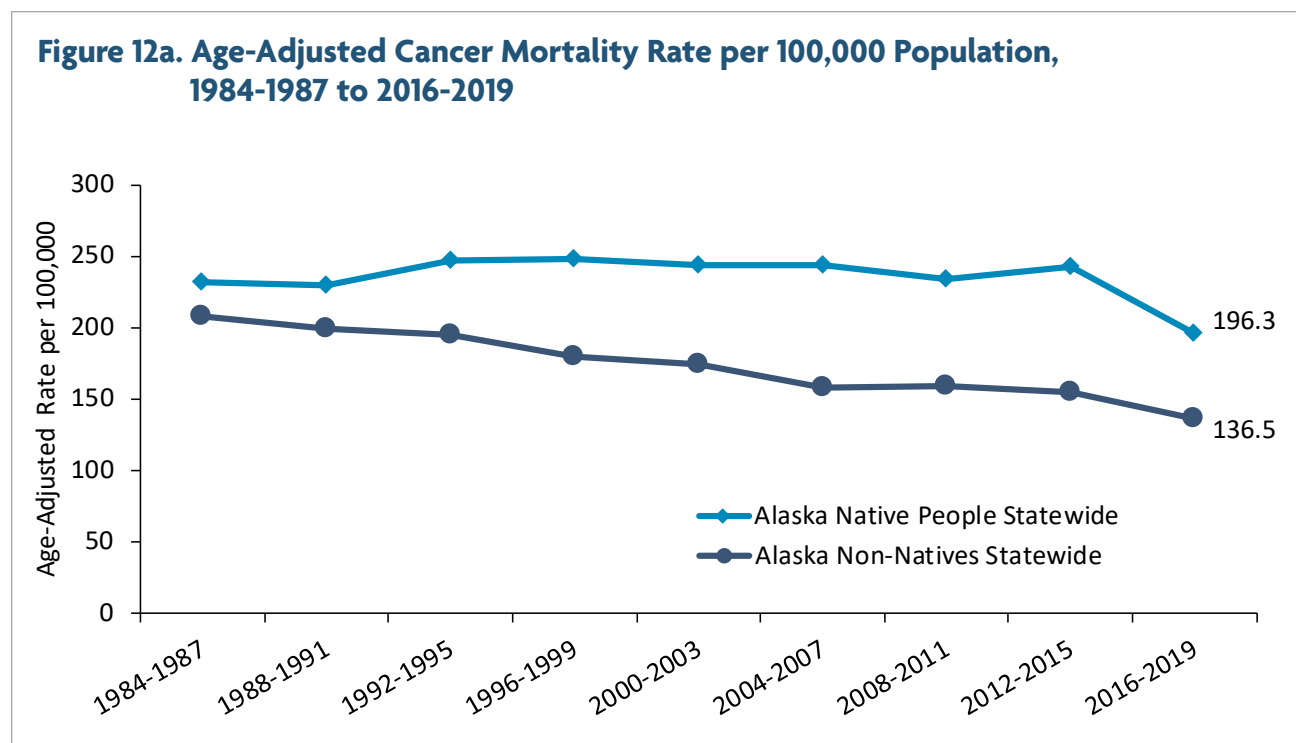
Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-25

Figure 11c. Leading Causes of Years of Potential Life Lost, by Population Group, Mean Years of Life Lost, 2016-2019

	Alaska Native People Statewide	Alaska Native Males	Alaska Native Females	Alaska Non-Natives Statewide
1	Unintentional Injuries 36.5	Unintentional Injuries 36.5	Unintentional Injury 36.6	Unintentional Injuries 31.0
2	Suicide 45.6	Suicide 46.2	Cancer 15.2	Cancer 12.7
3	Cancer 14.8	Heart Disease 17.2	Liver Disease & Cirrhosis 27.3	Heart Disease 13.5
4	Heart Disease 17.6	Cancer 14.4	Suicide 43.7	Suicide 33.5
5	Liver Disease & Cirrhosis 26.6	Homicide 39.9	Heart Disease 18.4	Homicide 38.8
6	Homicide 41.1	Alcohol Abuse 18.0	Homicide 43.2	Liver Disease & Cirrhosis 18.7
7	Alcohol Abuse 21.1	Congenital Malformations 59.7	Alcohol Abuse 27.8	Diabetes Mellitus 13.1
8	Congenital Malformations 60.7	Liver Disease & Cirrhosis 24.8	Congenital Malformations 62.3	Perinatal Conditions 74.7
9	Perinatal Conditions 75.0	Perinatal Conditions 75.0	COPD 11.0	COPD 52.7
10	COPD 10.1	COPD 9.4	Cerebrovascular Diseases 16.7	Congenital Malformations 10.1

Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-24 and C-25

Cancer Mortality



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-26

Definition

Cancer mortality is the rate of death due to malignant neoplasms (cancer) per 100,000 population. Cancer deaths include ICD-10 codes C00–C97.

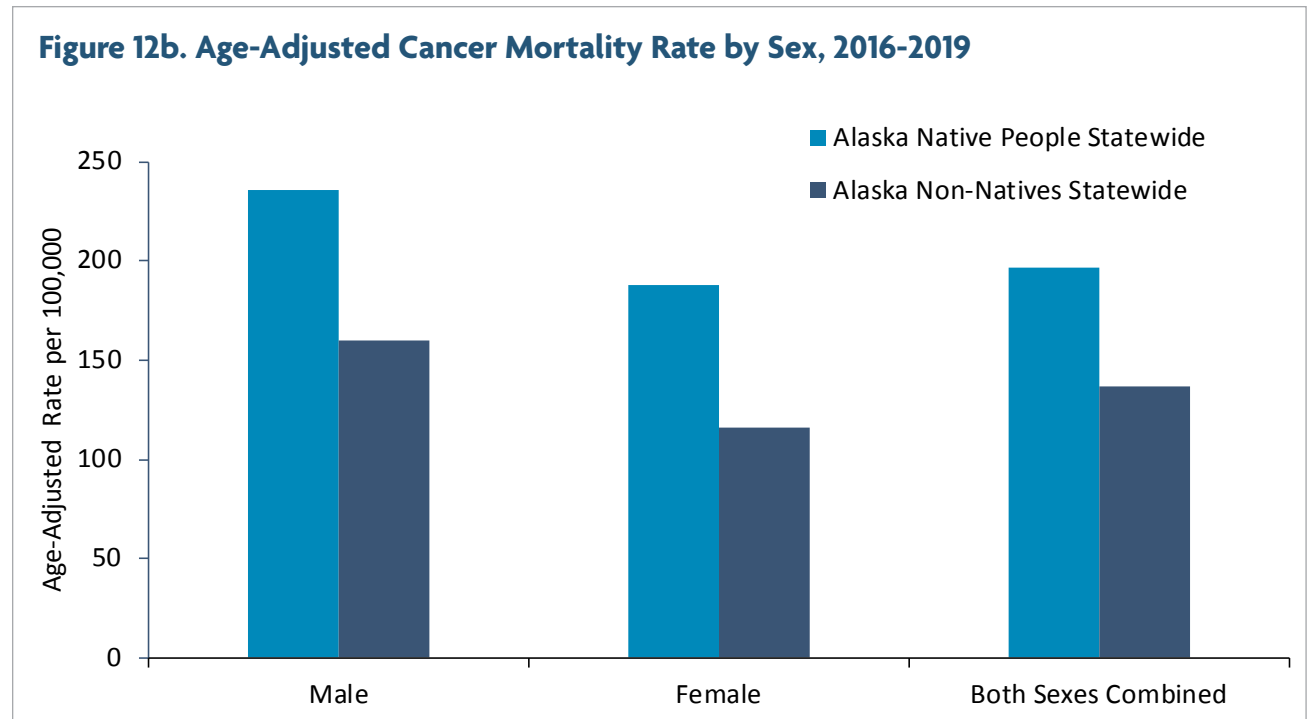
Related Objectives

Reduce the cancer mortality rate to 127.4 per 100,000 population. - *HEALTHY ALASKANS 2030, OBJECTIVE #1*. Reduce the overall cancer death rate to 122.7 per 100,000 population. - *HEALTHY PEOPLE 2030, OBJECTIVE C-01*

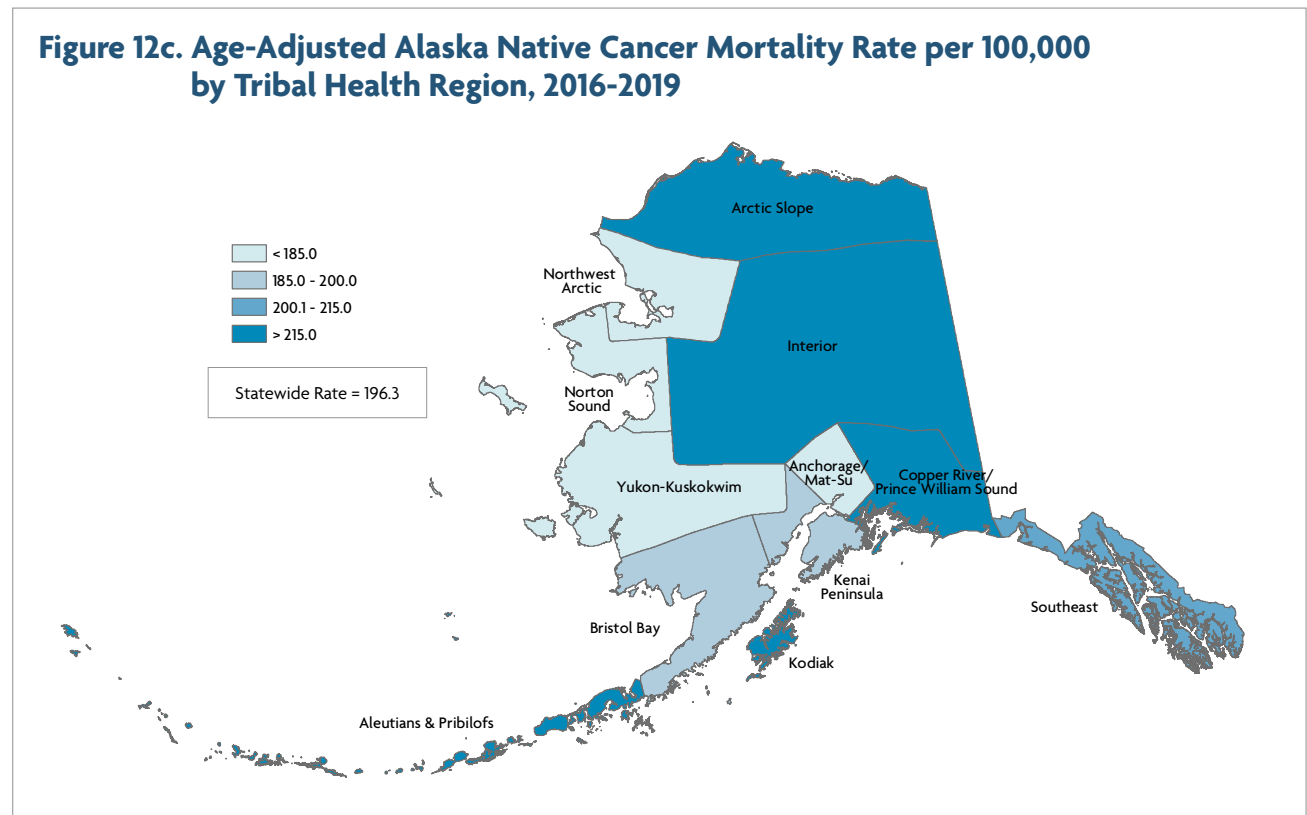
Summary

- » During 2016–2019, cancer was the leading cause of death among Alaska Native people with a mortality rate of 196.3 per 100,000. This was significantly higher than among Alaska non-Natives (136.5 per 100,000).
- » The cancer mortality rate among Alaska Native people has appeared to decline between 1984–1987 and 2016–2019. Since 1992-1995, cancer mortality rates had been significantly higher among Alaska Native people compared to Alaska non-Natives for all time periods shown.
- » Cancer mortality rates varied by Tribal health region, ranging from 179.9 to 271.0 deaths per 100,000.

Cancer Mortality

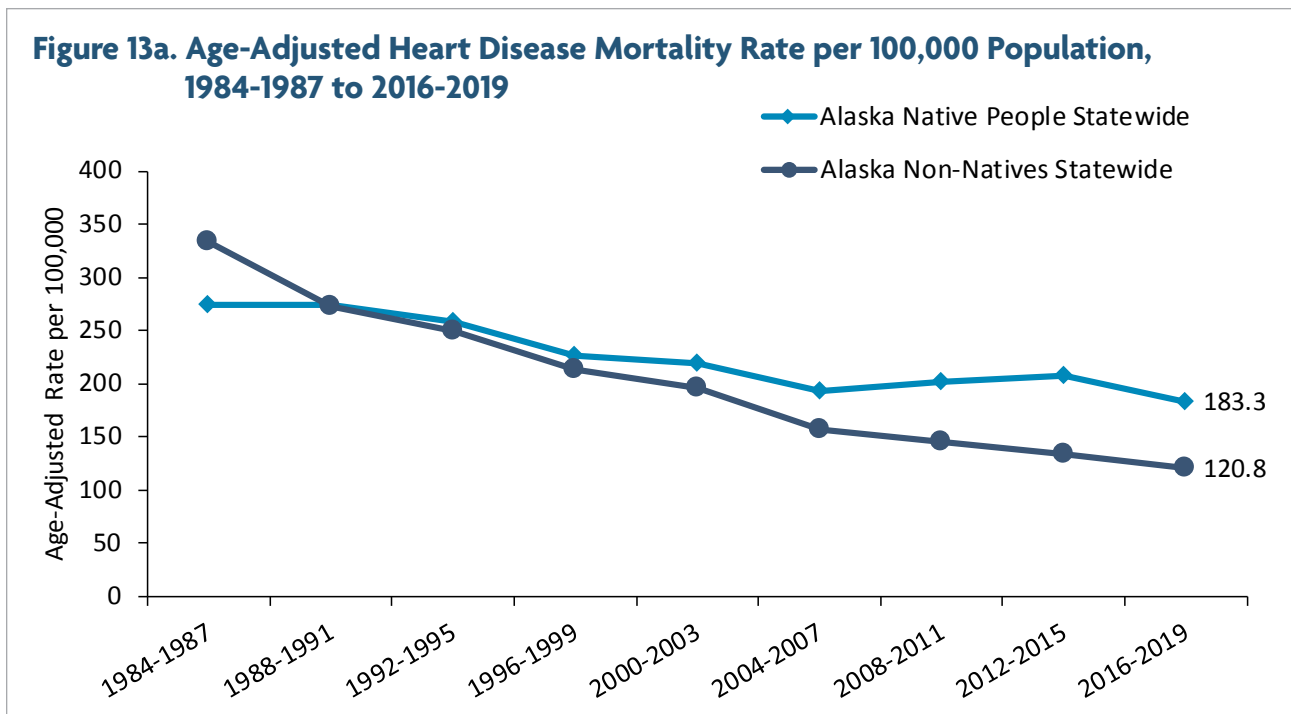


Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-27



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-28

Heart Disease Mortality



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-29

Definition

Heart disease mortality is the rate of death due to diseases of the heart per 100,000 population. Heart disease deaths include ICD-10 codes I00-I09, I11, I13, and I20-I51.

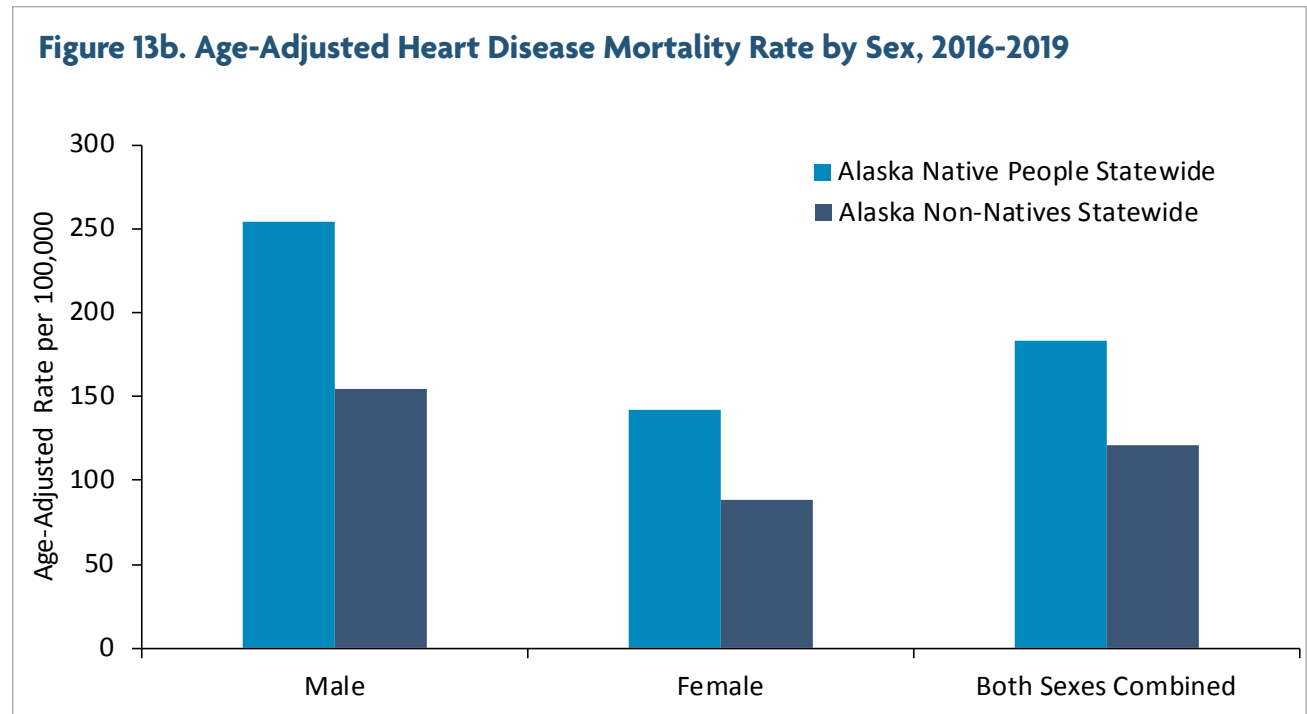
Related Objectives

Reduce coronary heart disease deaths to 71.1 per 100,000 population. - *HEALTHY PEOPLE 2030, OBJECTIVE HDS-02*

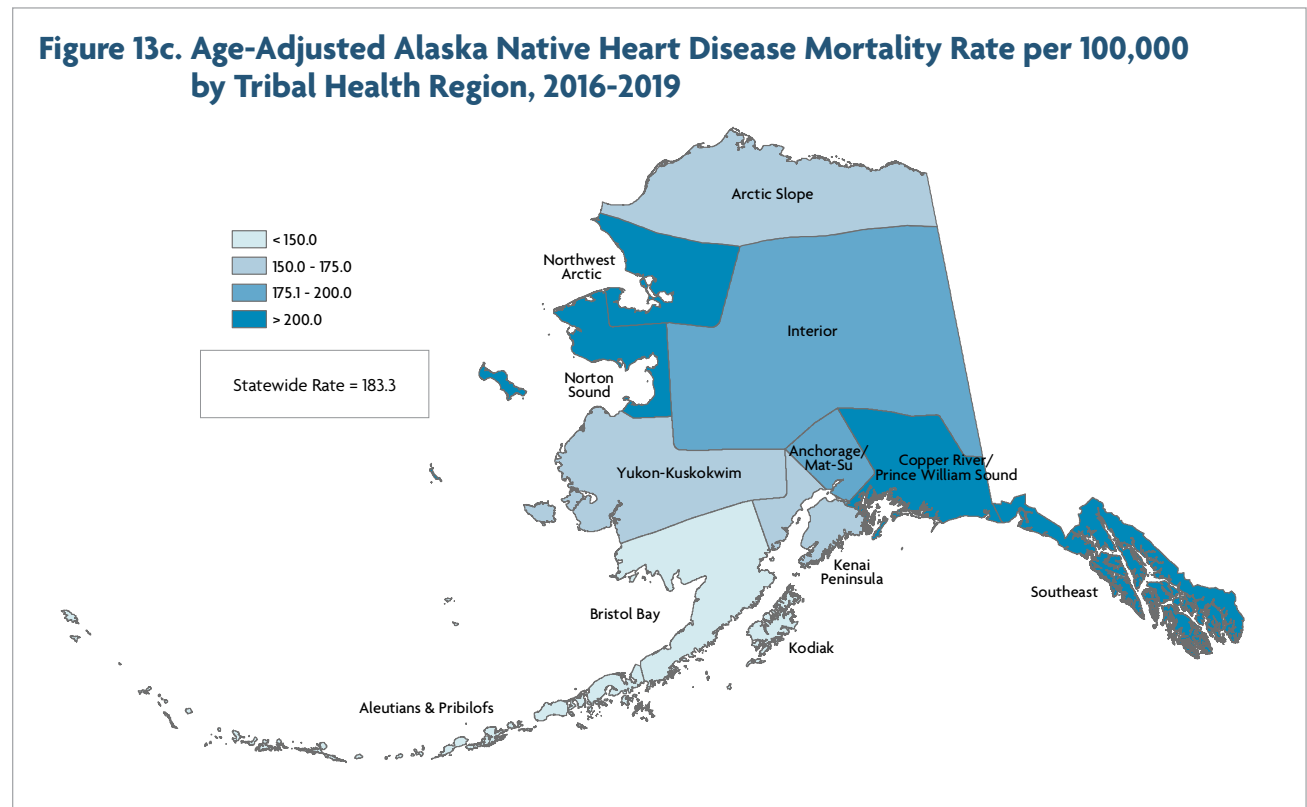
Summary

- » During 2016–2019, heart disease was the second leading cause of death among Alaska Native people, with a mortality rate of 183.3 per 100,000. This was significantly higher than among Alaska non-Natives (120.8 per 100,000).
- » Between the 1984–1987 and 2016–2019 time periods, heart disease mortality rates among Alaska Native people decreased but are still significantly higher compared with Alaska non-Natives.
- » The heart disease mortality rate among Alaska Native males is higher than the heart disease mortality rate among Alaska Native females.
- » Heart disease mortality rates varied by Tribal health region, ranging from 120.4 to 239.9 deaths per 100,000.

Heart Disease Mortality



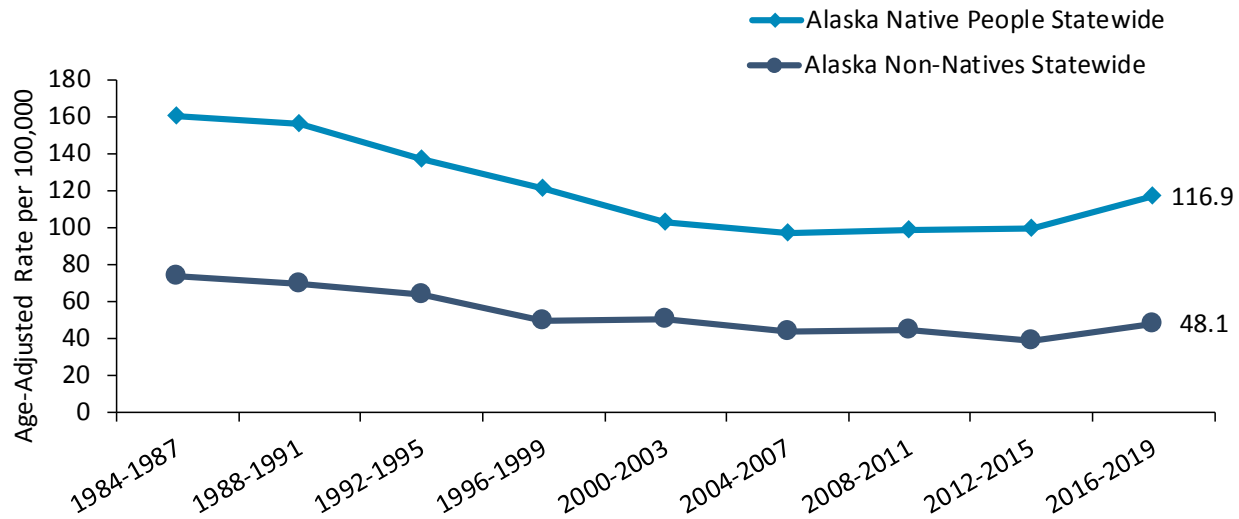
Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-30



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-31

Unintentional Injury Mortality

Figure 14a. Age-Adjusted Unintentional Injury Mortality Rate per 100,000 Population, 1984-1987 to 2016-2019



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-32

Definition

Unintentional injury mortality is the total number of deaths due to unintentional injuries per 100,000 persons. Unintentional injury deaths include ICD-10 codes V01–X59 and Y85–Y86.

Related Objectives

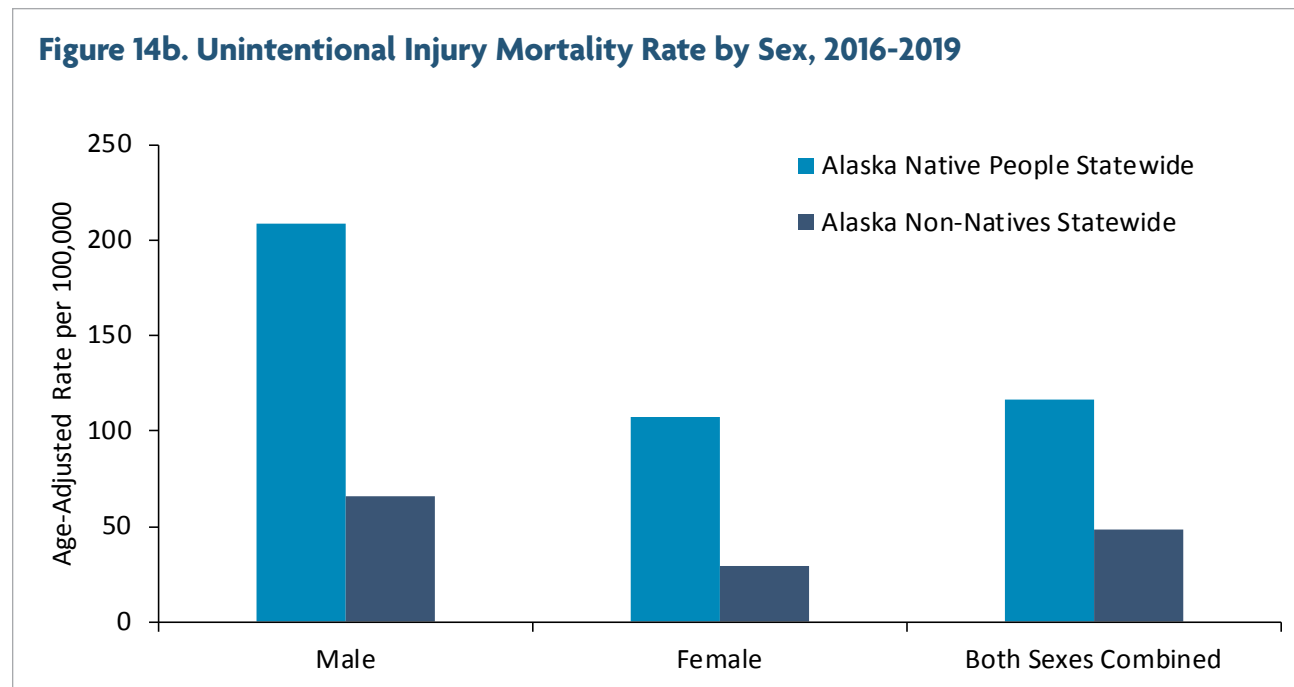
Reduce the unintentional injury mortality rate to 56.5 per 100,000 population. - *HEALTHY ALASKANS 2030, OBJECTIVE #12*

Reduce unintentional injury deaths to 36.4 deaths per 100,000 population. - *HEALTHY PEOPLE 2030, OBJECTIVE IVP-03*

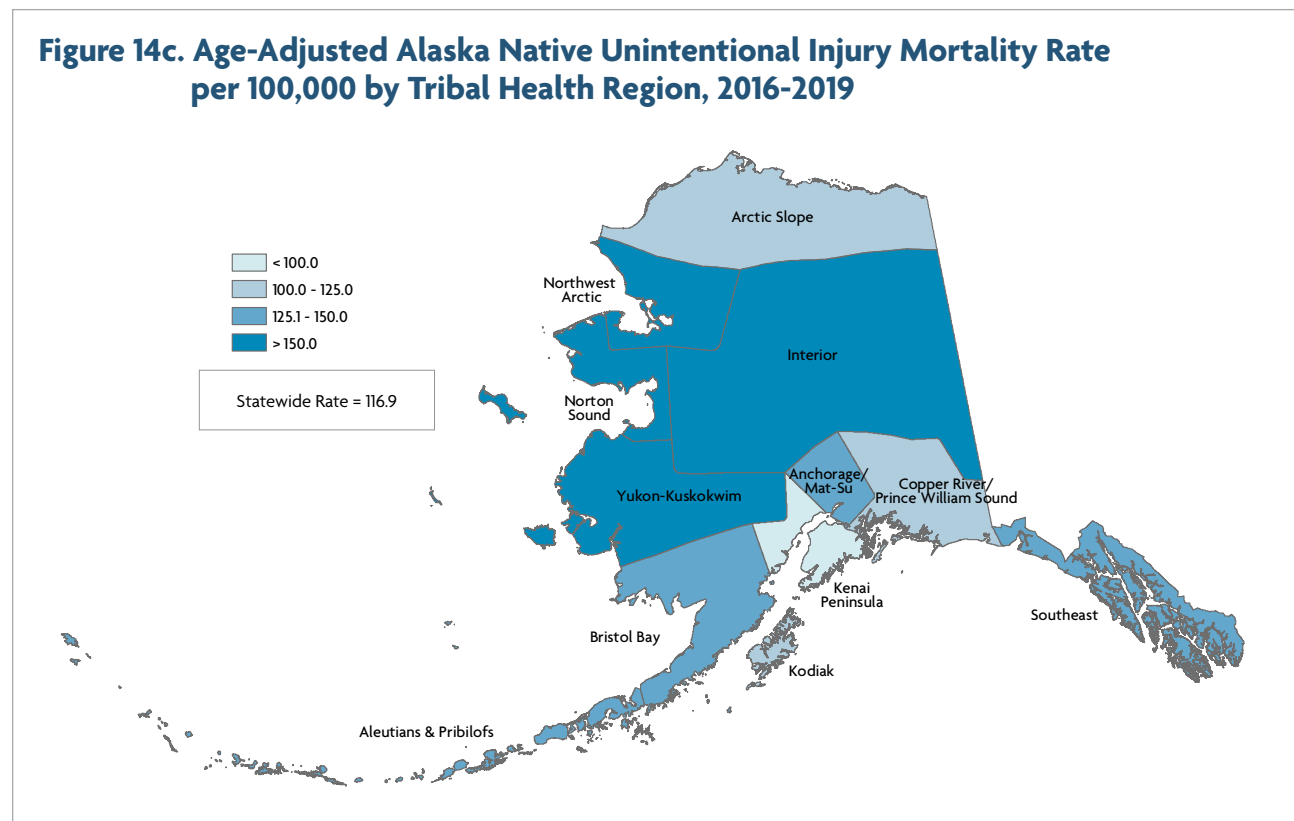
Summary

- » During 2016–2019, unintentional injury was the third leading cause of death among Alaska Native people, with a mortality rate of 116.9 per 100,000. This was significantly higher than among Alaska non-Natives (48.1 per 100,000).
- » During 2016–2019, the unintentional injury mortality rate for Alaska Native people was 2.4 times that of Alaska non-Natives.
- » Unintentional injury mortality rates varied by Tribal health region, ranging from 72.0 to 214.6 deaths per 100,000.

Unintentional Injury Mortality

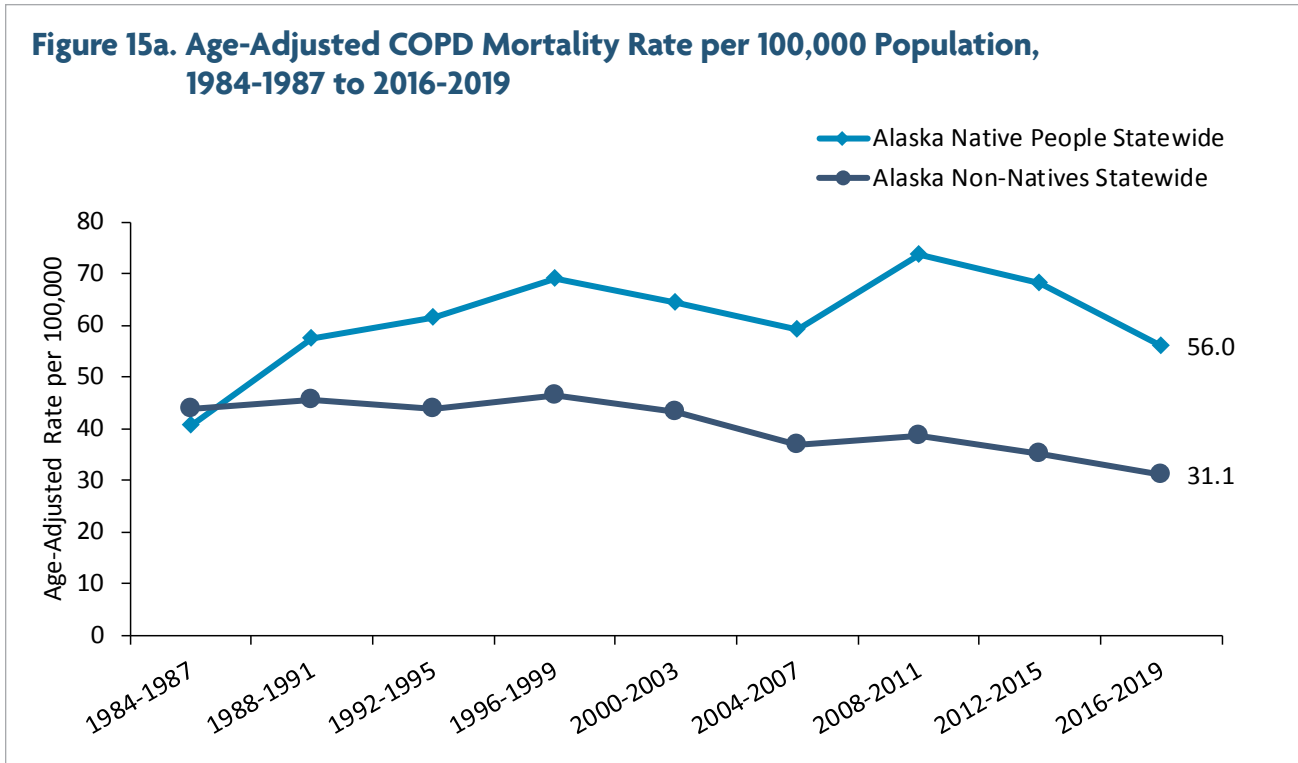


Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-33



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-34

COPD Mortality



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-35

Definition

Chronic obstructive pulmonary disease (COPD) mortality is the rate of death due to COPD per 100,000 population. COPD deaths include ICD-10 codes J40-J47.

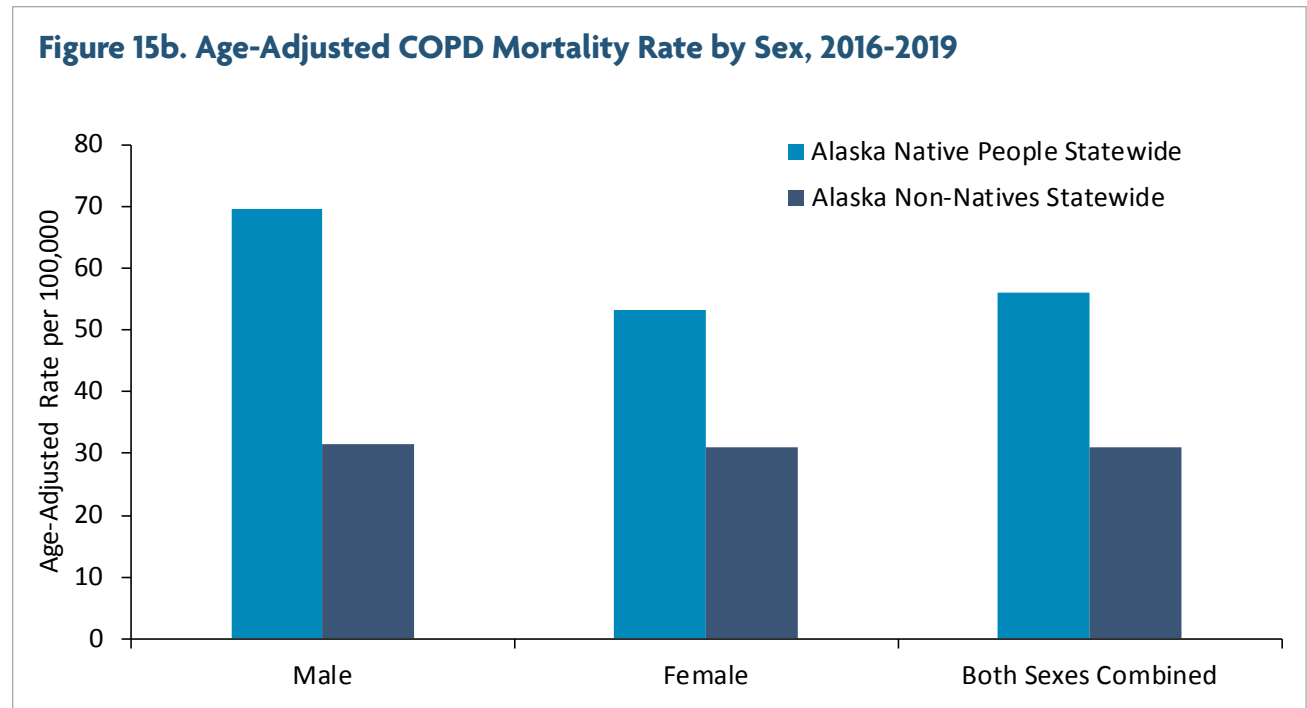
Related Objectives

Reduce deaths from COPD in adults to 107.2 per 100,000 population. - *HEALTHY PEOPLE 2030, OBJECTIVE RD-05*

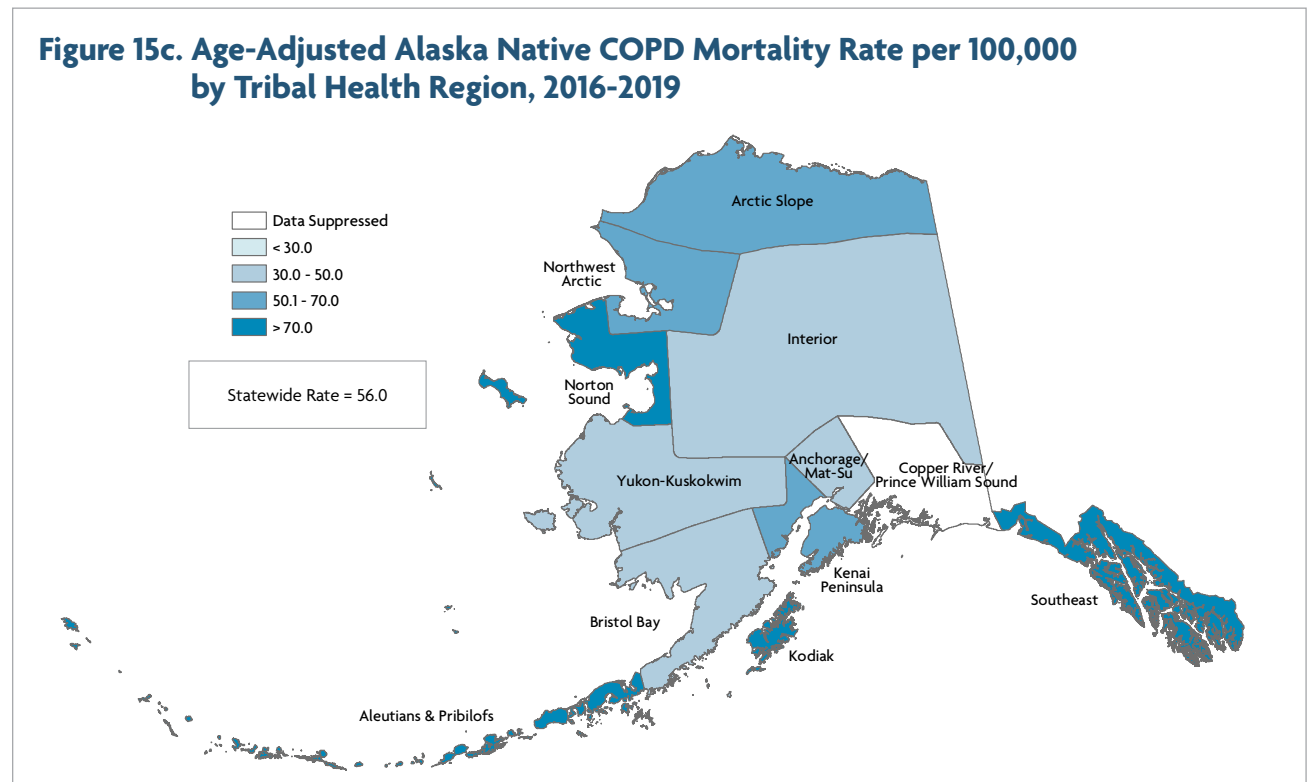
Summary

- » During 2016–2019, COPD was the fifth leading cause of death among Alaska Native people, with a mortality rate of 56.0 per 100,000. This was significantly higher than among Alaska non-Natives (31.1 per 100,000).
- » COPD mortality rates among Alaska Native people appear to have increased since 1984–1987.
- » COPD mortality rates varied by Tribal health region, ranging from 56.0 to 116.8 deaths per 100,000.

COPD Mortality

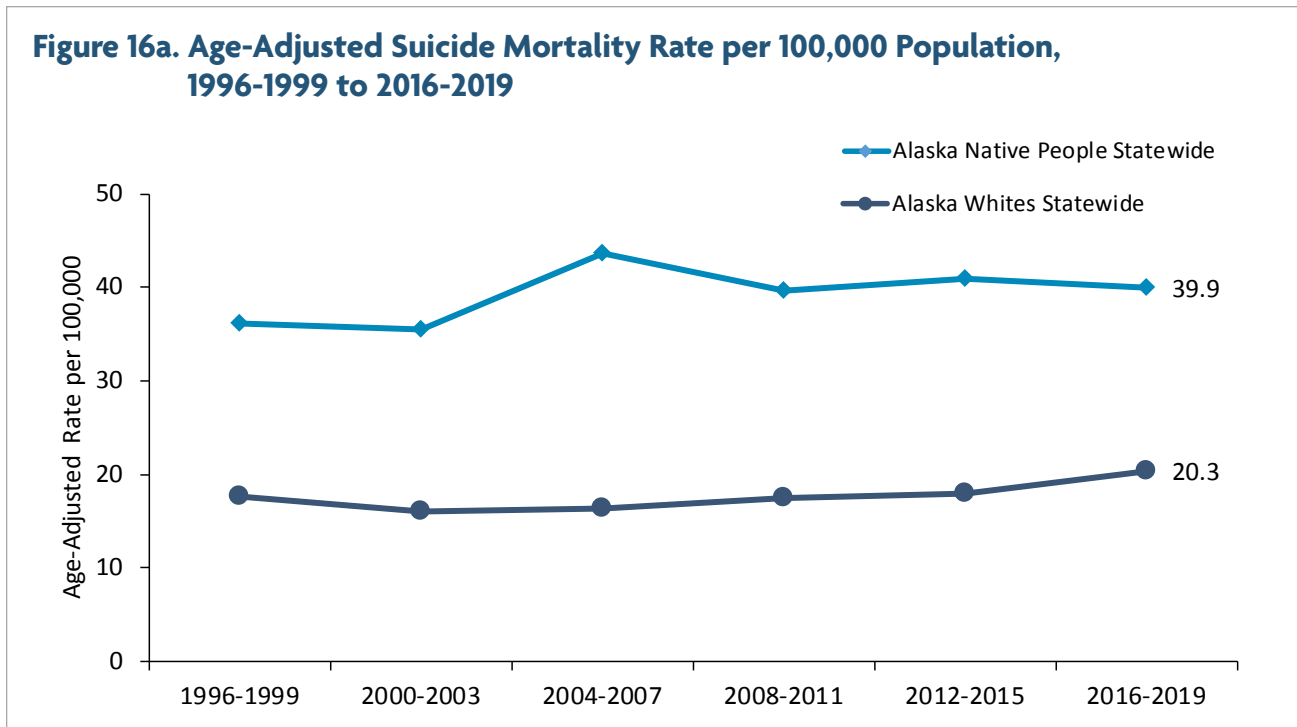


Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-36



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-37

Suicide Mortality



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-38

Definition

The suicide mortality rate is the total number of deaths due to suicide per 100,000 population. Suicide is defined as the action of intentionally taking one’s own life. Suicide deaths include ICD–10 codes X60–X84, Y870, and U03.

Related Objectives

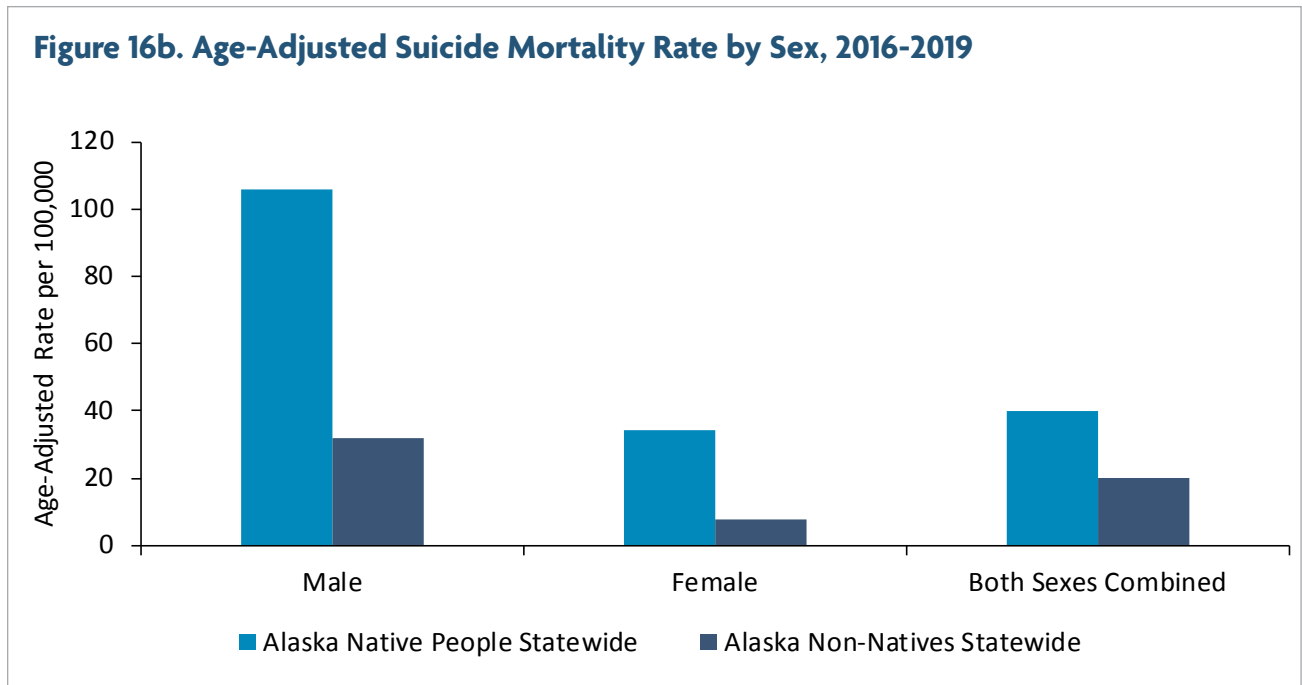
Reduce the suicide mortality rate to 25.0 per 100,000 population. - *HEALTHY ALASKANS 2030, OBJECTIVE #25*. Reduce the suicide rate to 12.8 suicides per 100,000 population. - *HEALTHY PEOPLE 2030, GOAL MHMD-01*

Summary

- » During 2016–2019, suicide was the fourth leading cause of death among Alaska Native people with a rate of 39.9 per 100,000. This was significantly higher than among Alaska non-Natives (20.3 per 100,000).
- » During 2016–2019, Alaska Native males experienced disproportionately higher suicide mortality rates (105.8 per 100,000) than Alaska Native females (34.1 per 100,000).
- » The suicide mortality rate among Alaska Native people varied by Tribal health region, ranging from 29.6 to 118.3 deaths per 100,000.

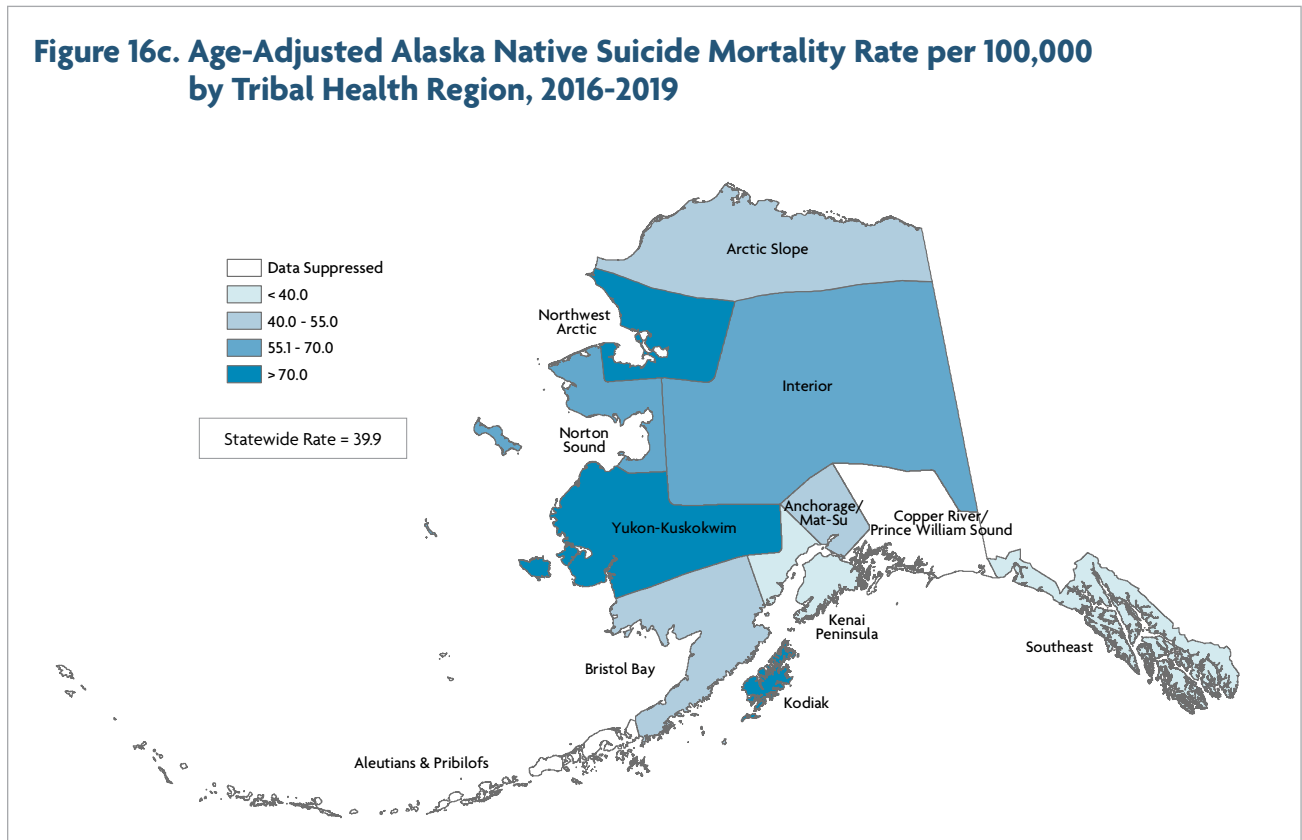
Suicide Mortality

Figure 16b. Age-Adjusted Suicide Mortality Rate by Sex, 2016-2019



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
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Figure 16c. Age-Adjusted Alaska Native Suicide Mortality Rate per 100,000 by Tribal Health Region, 2016-2019



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-40