

Alaska Native Mortality Report

4th Edition 1980-2018



ALASKA NATIVE
TRIBAL HEALTH
CONSORTIUM

EPIDEMIOLOGY CENTER

ANTHC Alaska Native Epidemiology Center

May 2021



ACKNOWLEDGEMENTS

The authors would like to express their sincere appreciation to the State of Alaska's Health Analytics & Vital Records section of the Alaska Department of Health and Social Services for providing the data for this report. Without the collaboration of the State of Alaska, reports such as this one would not be possible. This report was funded by cooperative agreements with the Indian Health Service (Grant Number U1B1IHS0008) and the Centers for Disease Control and Prevention (Grant Number NU58DP006379).

Suggested Citation:

Alaska Native Epidemiology Center. Alaska Native Mortality: 1980-2018. Anchorage (US): Alaska Native Epidemiology Center; 2021.

Copies are available online at:

anthc.org/epicenter/publications.html

For questions about this report please contact:

Alaska Native Epidemiology Center
Division of Community Health Services
Alaska Native Tribal Health Consortium
Phone: (907) 729-4567
Fax: (907) 729-4569
E-mail: anepicenter@anthc.org



Table of Contents

Chapter	Page Number
1. Introduction.....	1
2. Executive Summary.....	3
3. Leading Causes of Death.....	7
4. Age-Specific Mortality Rates.....	15
5. Years of Potential Life Lost.....	35
6. Mortality Rate Trends	
a. Statewide Trends.....	43
b. Regional Trends.....	51
7. Mortality Rates by Region.....	105
8. Excess Deaths.....	145
9. Life Expectancy at Birth.....	153
10. Detailed Leading Causes of Death	
a. All-Cause Mortality.....	159
b. Cancer Mortality.....	165
c. Heart Disease Mortality.....	171
d. Unintentional Injury Mortality.....	177
e. Suicide Mortality.....	183
f. COPD Mortality.....	189
g. Chronic Liver Disease Mortality.....	195
h. Cerebrovascular Disease Mortality.....	201
i. Alcohol Abuse Mortality.....	207
j. Homicide Mortality.....	213
k. Influenza/Pneumonia Mortality.....	219
11. Alcohol-Related Mortality.....	225
Appendix A – Methods and Data Sources.....	233
Appendix B – Data Tables.....	239
Appendix C – ICD Code Table.....	291
Appendix D – Region Definitions.....	295
Appendix E – Population Tables.....	297

List of Tables and Figures

Table/Figure (Chapter Titles in Bold)	Page Number
Leading Causes of Death	
Table 1a. Leading Causes of Death among Alaska Native People Compared to U.S. All Races, 2014-2018	8
Figure 1a. Leading Causes of Death among Alaska Native People Compared to U.S. All Races, 2014-2018	9
Table 1b. Leading Causes of Death among Alaska Native Females Compared to U.S. All Races Females, 2014-2018	10
Figure 1b. Leading Causes of Death among Alaska Native Females Compared to U.S. All Races Females, 2014-2018	11
Table 1c. Leading Causes of Death among Alaska Native Males Compared to U.S. All Races Males, 2014-2018	12
Figure 1c. Leading Causes of Death among Alaska Native Males Compared to U.S. All Races Males, 2014-2018	13
Age-Specific Rates	
Figure 2a. Alaska Native People Compared to U.S. All Races, 2014-2018 (All-Cause)	16
Figure 2b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (All-Cause)	16
Figure 2c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (All-Cause)	16
Figure 3a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Cancer)	17
Figure 3b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Cancer)	17
Figure 3c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Cancer)	17
Figure 4a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Heart Disease)	18
Figure 4b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Heart Disease)	18
Figure 4c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Heart Disease)	18
Figure 5a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Unintentional Injury)	19
Figure 5b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Unintentional Injury)	19
Figure 5c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Unintentional Injury)	19
Figure 6a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Suicide)	20
Figure 6b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Suicide)	20
Figure 6c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Suicide)	20
Figure 7a. Alaska Native People Compared to U.S. All Races, 2014-2018 (COPD)	21
Figure 7b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (COPD)	21
Figure 7c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (COPD)	21
Figure 8a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Chronic Liver Disease)	22
Figure 8b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Chronic Liver Disease)	22
Figure 8c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Chronic Liver Disease)	22
Figure 9a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Cerebrovascular Disease)	23
Figure 9b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Cerebrovascular Disease)	23
Figure 9c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Cerebrovascular Disease)	23
Figure 10a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Alcohol Abuse)	24
Figure 10b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Alcohol Abuse)	24
Figure 10c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Alcohol Abuse)	24
Figure 11a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Homicide)	25
Figure 11b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Homicide)	25
Figure 11c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Homicide)	25
Figure 12a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Influenza/Pneumonia)	26
Figure 12b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Influenza/Pneumonia)	26
Figure 12c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Influenza/Pneumonia)	26
Figure 13a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Diabetes)	27
Figure 13b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Diabetes)	27
Figure 13c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Diabetes)	27
Figure 14a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Alzheimer's Disease)	28
Figure 14b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Alzheimer's Disease)	28
Figure 14c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Alzheimer's Disease)	28
Figure 15a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Septicemia)	29
Figure 15b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Septicemia)	29
Figure 15c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Septicemia)	29

Table/Figure (Chapter Titles in Bold)	Page Number
Age-Specific Rates (continued)	
Figure 16a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Nephritis).....	30
Figure 16b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Nephritis).....	30
Figure 16c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Nephritis).....	30
Figure 17a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Hypertension).....	31
Figure 17b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Hypertension).....	31
Figure 17c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Hypertension).....	31
Figure 18a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Congenital Malformation).....	32
Figure 18b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Congenital Malformation).....	32
Figure 18c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Congenital Malformation).....	32
Figure 19a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Parkinson's Disease).....	33
Figure 19b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Parkinson's Disease).....	33
Figure 19c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Parkinson's Disease).....	33
Figure 20a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Perinatal Conditions).....	34
Figure 20b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Perinatal Conditions).....	34
Figure 20c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Perinatal Conditions).....	34
Years of Potential Life Lost (YPLL)	
Table 2a. Leading Causes of YPLL before Age 75 among Alaska Native People, 2014-2018.....	36
Figure 21a. Leading Causes of YPLL before Age 75 among Alaska Native People, 2014-2018.....	37
Table 2b. Leading Causes of YPLL before Age 75 among Alaska Native Females, 2014-2018.....	38
Figure 21b. Leading Causes of YPLL before Age 75 among Alaska Native Females, 2014-2018.....	39
Table 2c. Leading Causes of YPLL before Age 75 among Alaska Native Males, 2014-2018.....	40
Figure 21c. Leading Causes of YPLL before Age 75 among Alaska Native Males, 2014-2018.....	41
Mortality Rate Trends	
Table 3. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People Statewide, 1980-2018.....	45
Figure 22. Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	45
Figure 23. Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	46
Figure 24. Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	46
Figure 25. Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	47
Figure 26. Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	47
Figure 27. Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	48
Figure 28. Trend in Chronic Liver Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	48
Figure 29. Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	49
Figure 30. Trend in Alcohol Abuse Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	49
Figure 31. Trend in Homicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	50
Figure 32. Trend in Influenza/Pneumonia Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	50
Table 4. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Aleutians & Pribilofs Region, 1980-2014.....	53

Table/Figure (Chapter Titles in Bold)	Page Number
Mortality Rate Trends (continued)	
Figure 33. Aleutian & Pribilofs Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	53
Figure 34. Aleutian & Pribilofs Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	54
Figure 35. Aleutian & Pribilofs Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	54
Figure 36. Aleutian & Pribilofs Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	55
Table 5. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Anchorage-MatSu Region, 1980-2014	56
Figure 37. Anchorage-MatSu Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	56
Figure 38. Anchorage-MatSu Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	57
Figure 39. Anchorage-MatSu Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	57
Figure 40. Anchorage-MatSu Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	58
Figure 41. Anchorage-MatSu Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	58
Figure 42. Anchorage-MatSu Trend in Chronic Liver Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	59
Figure 43. Anchorage-MatSu Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	59
Figure 44. Anchorage-MatSu Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	60
Figure 45. Anchorage-MatSu Trend in Alcohol Abuse Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	60
Figure 46. Anchorage-MatSu Trend in Homicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	61
Figure 47. Anchorage-MatSu Trend in Influenza/Pneumonia Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	61
Table 6. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Arctic Slope Region, 1980-2014	62
Figure 48. Arctic Slope Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	62
Figure 49. Arctic Slope Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	63
Figure 50. Arctic Slope Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	63
Figure 51. Arctic Slope Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	64
Figure 52. Arctic Slope Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	64
Figure 53. Arctic Slope Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	65
Table 7. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Bristol Bay Region, 1980-2014	66
Figure 54. Bristol Bay Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	66
Figure 55. Bristol Bay Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	67

Table/Figure (Chapter Titles in Bold)	Page Number
Mortality Rate Trends (continued)	
Figure 56. Bristol Bay Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	67
Figure 57. Bristol Bay Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	68
Figure 58. Bristol Bay Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	68
Figure 59. Bristol Bay Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	69
Table 8. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Copper River-PWS Region, 1980-2014	70
Figure 60. Copper River-PWS Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	70
Figure 61. Copper River-PWS Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	71
Figure 62. Copper River-PWS Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	71
Figure 63. Copper River-PWS Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	72
Table 9. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Interior Region, 1980-2014	73
Figure 64. Interior Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	73
Figure 65. Interior Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	74
Figure 66. Interior Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	74
Figure 67. Interior Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	75
Figure 68. Interior Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	75
Figure 69. Interior Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	76
Figure 70. Interior Trend in Chronic Liver Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	76
Figure 71. Interior Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	77
Figure 72. Interior Trend in Alcohol Abuse Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	77
Figure 73. Interior Trend in Influenza/Pneumonia Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	78
Table 10. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Kenai Peninsula Region, 1980-2014	79
Figure 74. Kenai Peninsula Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	79
Figure 75. Kenai Peninsula Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	80
Figure 76. Kenai Peninsula Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	80
Figure 77. Kenai Peninsula Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	81
Table 11. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Kodiak Region, 1980-2014	82

Table/Figure (Chapter Titles in Bold)**Page Number****Mortality Rate Trends** (continued)

Figure 78. Kodiak Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	82
Figure 79. Kodiak Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	83
Figure 80. Kodiak Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	83
Figure 81. Kodiak Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	84
Table 12. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Northwest Arctic Region, 1980-2014.....	85
Figure 82. Northwest Arctic Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	85
Figure 83. Northwest Arctic Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	86
Figure 84. Northwest Arctic Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	86
Figure 85. Northwest Arctic Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	87
Figure 86. Northwest Arctic Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	87
Figure 87. Northwest Arctic Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	88
Figure 88. Northwest Arctic Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	88
Table 13. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Norton Sound Region, 1980-2014.....	89
Figure 89. Norton Sound Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	89
Figure 90. Norton Sound Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	90
Figure 91. Norton Sound Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	90
Figure 92. Norton Sound Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	91
Figure 93. Norton Sound Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	91
Figure 94. Norton Sound Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	92
Figure 95. Norton Sound Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	92
Table 14. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Southeast Region, 1980-2014.....	93
Figure 96. Southeast Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	93
Figure 97. Southeast Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	94
Figure 98. Southeast Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	94
Figure 99. Southeast Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	95
Figure 100. Southeast Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	95

Table/Figure (Chapter Titles in Bold)	Page Number
Mortality Rate Trends (continued)	
Figure 101. Southeast Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	96
Figure 102. Southeast Trend in Chronic Liver Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	96
Figure 103. Southeast Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	97
Table 15. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Yukon-Kuskokwim Region, 1980-2014.....	98
Figure 104. Yukon-Kuskokwim Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	98
Figure 105. Yukon-Kuskokwim Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	99
Figure 106. Yukon-Kuskokwim Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	99
Figure 107. Yukon-Kuskokwim Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	100
Figure 108. Yukon-Kuskokwim Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	100
Figure 109. Yukon-Kuskokwim Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	101
Figure 110. Yukon-Kuskokwim Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	101
Figure 111. Yukon-Kuskokwim Trend in Alcohol Abuse Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	102
Figure 112. Yukon-Kuskokwim Trend in Homicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	102
Figure 113. Yukon-Kuskokwim Trend in Influenza/Pneumonia Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018.....	103
Mortality Rates by Region	
Figure 114a. All-Cause Mortality Rates by Region, Alaska Native People, 2014-2018.....	107
Figure 114b. All-Cause Mortality Rates by Region, Alaska Native Females, 2014-2018.....	108
Figure 114c. All-Cause Mortality Rates by Region, Alaska Native Males, 2014-2018.....	109
Figure 115a. Cancer Mortality Rates by Region, Alaska Native People, 2014-2018.....	110
Figure 115b. Cancer Mortality Rates by Region, Alaska Native Females, 2014-2018.....	111
Figure 115c. Cancer Mortality Rates by Region, Alaska Native Males, 2014-2018.....	112
Figure 116a. Heart Disease Mortality Rates by Region, Alaska Native People, 2014-2018.....	113
Figure 116b. Heart Disease Mortality by Region, Alaska Native Females, 2014-2018.....	114
Figure 116c. Heart Disease Mortality Rates by Region, Alaska Native Males, 2014-2018.....	115
Figure 117a. Unintentional Injury Mortality Rates by Region, Alaska Native People, 2014-2018.....	116
Figure 117b. Unintentional Injury Mortality Rates by Region, Alaska Native Females, 2014-2018.....	117
Figure 117c. Unintentional Injury Mortality Rates by Region, Alaska Native Males, 2014-2018.....	118
Figure 118a. Suicide Mortality Rates by Region, Alaska Native People, 2014-2018.....	119
Figure 118b. Suicide Mortality Rates by Region, Alaska Native Females, 2014-2018.....	120
Figure 118c. Suicide Mortality Rates by Region, Alaska Native Males, 2014-2018.....	121
Figure 119a. COPD Mortality Rates by Region, Alaska Native People, 2014-2018.....	122
Figure 119b. COPD Mortality Rates by Region, Alaska Native Females, 2014-2018.....	123
Figure 119c. COPD Mortality Rates by Region, Alaska Native Males, 2014-2018.....	124
Figure 120a. Chronic Liver Disease Mortality Rates by Region, Alaska Native People, 2014-2018.....	125
Figure 120b. Chronic Liver Disease Mortality Rates by Region, Alaska Native Females, 2014-2018.....	126
Figure 120c. Chronic Liver Disease Mortality Rates by Region, Alaska Native Males, 2014-2018.....	126
Figure 121a. Cerebrovascular Disease Mortality Rates by Region, Alaska Native People, 2014-2018.....	127

Table/Figure (Chapter Titles in Bold)	Page Number
Mortality Rates by Region (continued)	
Figure 121b. Cerebrovascular Disease Mortality Rates by Region, Alaska Native Females, 2014-2018	128
Figure 121c. Cerebrovascular Disease Mortality Rates by Region, Alaska Native Males, 2014-2018	128
Figure 122a. Alcohol Abuse Mortality Rates by Region, Alaska Native People, 2014-2018	129
Figure 122b. Alcohol Abuse Mortality Rates by Region, Alaska Native Females, 2014-2018	130
Figure 122c. Alcohol Abuse Mortality Rates by Region, Alaska Native Males, 2014-2018	130
Figure 123a. Homicide Mortality Rates by Region, Alaska Native People, 2014-2018	131
Figure 123b. Homicide Mortality Rates by Region, Alaska Native Females, 2014-2018	131
Figure 123c. Homicide Mortality Rates by Region, Alaska Native Males, 2014-2018	132
Figure 124a. Influenza/Pneumonia Mortality Rates by Region, Alaska Native People, 2014-2018	133
Figure 124b. Influenza/Pneumonia Mortality Rates by Region, Alaska Native Females, 2014-2018	134
Figure 124c. Influenza/Pneumonia Mortality Rates by Region, Alaska Native Males, 2014-2018	134
Figure 125a. Diabetes Mortality Rates by Region, Alaska Native People, 2014-2018	135
Figure 125b. Diabetes Mortality Rates by Region, Alaska Native Females, 2014-2018	136
Figure 125c. Diabetes Mortality Rates by Region, Alaska Native Males, 2014-2018	136
Figure 126a. Alzheimer’s Disease Mortality Rates by Region, Alaska Native People, 2014-2018	137
Figure 126b. Alzheimer’s Disease Mortality Rates by Region, Alaska Native Females, 2014-2018	137
Figure 126c. Alzheimer’s Disease Mortality Rates by Region, Alaska Native Males, 2014-2018	138
Figure 127a. Septicemia Mortality Rates by Region, Alaska Native People, 2014-2018	138
Figure 127b. Septicemia Mortality Rates by Region, Alaska Native Females, 2014-2018	139
Figure 127c. Septicemia Mortality Rates by Region, Alaska Native Males, 2014-2018	139
Figure 128a. Nephritis Mortality Rates by Region, Alaska Native People, 2014-2018	140
Figure 128b. Nephritis Mortality Rates by Region, Alaska Native Females, 2014-2018	140
Figure 128c. Nephritis Mortality Rates by Region, Alaska Native Males, 2014-2018	140
Figure 129a. Hypertension Mortality Rates by Region, Alaska Native People, 2014-2018	141
Figure 129b. Hypertension Mortality Rates by Region, Alaska Native Females, 2014-2018	141
Figure 129c. Hypertension Mortality Rates by Region, Alaska Native Males, 2014-2018	141
Figure 130a. Congenital Malformation Mortality Rates by Region, Alaska Native People, 2014-2018	142
Figure 130b. Congenital Malformation Mortality Rates by Region, Alaska Native Females, 2014-2018	142
Figure 130c. Congenital Malformation Mortality Rates by Region, Alaska Native Males, 2014-2018	142
Figure 131a. Parkinson’s Disease Mortality Rates by Region, Alaska Native People, 2014-2018	143
Figure 131b. Parkinson’s Disease Mortality Rates by Region, Alaska Native Females, 2014-2018	143
Figure 131c. Parkinson’s Disease Mortality Rates by Region, Alaska Native Males, 2014-2018	143
Figure 132a. Perinatal Conditions Mortality Rates by Region, Alaska Native People, 2014-2018	144
Figure 132b. Perinatal Conditions Mortality Rates by Region, Alaska Native Females, 2014-2018	144
Figure 132c. Perinatal Conditions Mortality Rates by Region, Alaska Native Males, 2014-2018	144
Excess Deaths	
Table 16a. Leading Causes of Excess Death among Alaska Native People, Both Sexes Combined, 2014-2018	146
Figure 133a. Leading Causes of Excess Death among Alaska Native People, Both Sexes Combined, 2014-2018	147
Table 16b. Leading Causes of Excess Death among Alaska Native Females, 2014-2018	148
Figure 133b. Leading Causes of Excess Death among Alaska Native Females, 2014-2018	149
Table 16c. Leading Causes of Excess Death among Alaska Native Males, 2014-2018	150
Figure 133c. Leading Causes of Excess Death among Alaska Native Males, 2014-2018	151
Life Expectancy at Birth	
Figure 134. Life Expectancy at Birth by Region among Alaska Native People, 2014-2018	154
Figure 135a. Trend in Life Expectancy at Birth among Alaska Native People and U.S. All Races	155
Figure 135b. Trend in Life Expectancy at Birth among Alaska Native Females and U.S. All Races Females	155
Figure 135c. Trend in Life Expectancy at Birth among Alaska Native Males and U.S. All Races Males	156
Figure 136a. Life Expectancy by Age Groups, Alaska Native People and U.S. All Races, 2014-2018	156
Figure 136b. Life Expectancy by Age Groups, Alaska Native Females and U.S. All Races Females, 2014-2018	157
Figure 136c. Life Expectancy by Age Groups, Alaska Native Males and U.S. All Races Males, 2014-2018	157

Table/Figure (Chapter Titles in Bold)	Page Number
Detailed Leading Causes of Death	
Table 17. All-Cause Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	160
Figure 137. All-Cause Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	160
Figure 138a. Alaska Native People Compared to U.S. All Races, 2014-2018 (All-Cause)	161
Figure 138b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (All-Cause)	161
Figure 138c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (All-Cause)	161
Table 18. Age-Specific All-Cause Mortality Rates among Alaska Native People, 2014-2018	162
Table 19. Trends in All-Cause Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018	162
Figure 139. Overall Change in All-Cause Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	163
Figure 140. All-Cause Mortality Rates by Region, Alaska Native People, 2014-2018	163
Figure 141. All-Cause Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018	164
Table 20. Cancer Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	166
Figure 142. Cancer Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	166
Figure 143a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Cancer)	167
Figure 143b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Cancer)	167
Figure 143c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Cancer)	167
Table 21. Age-Specific Cancer Mortality Rates among Alaska Native People, 2014-2018	168
Table 22. Trends in Cancer Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018	168
Figure 144. Overall Change in Cancer Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	169
Figure 145. Cancer Mortality Rates by Region, Alaska Native People, 2014-2018	169
Figure 146. Cancer Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018	170
Table 23. Heart Disease Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	172
Figure 147. Heart Disease Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	172
Figure 148a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Heart Disease)	173
Figure 148b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Heart Disease)	173
Figure 148c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Heart Disease)	173
Table 24. Age-Specific Heart Disease Mortality Rates among Alaska Native People, 2014-2018	174
Table 25. Trends in Heart Disease Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018	174
Figure 149. Overall Change in Heart Disease Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	175
Figure 150. Heart Disease Mortality Rates by Region, Alaska Native People, 2014-2018	175
Figure 151. Heart Disease Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018	176
Table 26. Unintentional Injury Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	178
Figure 152. Unintentional Injury Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	178
Figure 153a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Unintentional Injury)	179
Figure 153b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Unintentional Injury)	179
Figure 153c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Unintentional Injury)	179
Table 27. Age-Specific Unintentional Injury Mortality Rates among Alaska Native People, 2014-2018	180
Table 28. Trends in Unintentional Injury Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018	180
Figure 154. Overall Change in Unintentional Injury Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	181
Figure 155. Unintentional Injury Mortality Rates by Region, Alaska Native People, 2014-2018	181
Figure 156. Unintentional Injury Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018	182
Table 29. Suicide Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	184
Figure 157. Suicide Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	184

Table/Figure (Chapter Titles in Bold)	Page Number
Detailed Leading Causes of Death (continued)	
Figure 158a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Suicide)	185
Figure 158b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Suicide)	185
Figure 158c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Suicide)	185
Table 30. Age-Specific Suicide Mortality Rates among Alaska Native People, 2014-2018	186
Table 31. Trends in Suicide Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018	186
Figure 159. Overall Change in Suicide Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	187
Figure 160. Suicide Mortality Rates by Region, Alaska Native People, 2014-2018	187
Figure 161. Suicide Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018	188
Table 32. COPD Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	190
Figure 162. COPD Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	190
Figure 163a. Alaska Native People Compared to U.S. All Races, 2014-2018 (COPD)	191
Figure 163b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (COPD)	191
Figure 163c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (COPD)	191
Table 33. Age-Specific COPD Mortality Rates among Alaska Native People, 2014-2018	192
Table 34. Trends in COPD Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018	192
Figure 164. Overall Change in COPD Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	193
Figure 165. COPD Mortality Rates by Region, Alaska Native People, 2014 -2018	193
Figure 166. COPD Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018	194
Table 35. Chronic Liver Disease Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	196
Figure 167. Chronic Liver Disease Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	196
Figure 168a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Chronic Liver Disease)	197
Figure 168b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Chronic Liver Disease)	197
Figure 168c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Chronic Liver Disease)	197
Table 36. Age-Specific Chronic Liver Disease Mortality Rates among Alaska Native People, 2014-2018	198
Table 37. Trends in Chronic Liver Disease Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018	198
Figure 169. Overall Change in Chronic Liver Disease Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	199
Figure 170. Chronic Liver Disease Mortality Rates by Region, Alaska Native People, 2014-2018	199
Figure 171. Chronic Liver Disease Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018	200
Table 38. Cerebrovascular Disease Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	202
Figure 172. Cerebrovascular Disease Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	202
Figure 173a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Cerebrovascular Disease)	203
Figure 173b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Cerebrovascular Disease)	203
Figure 173c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Cerebrovascular Disease)	203
Table 39. Age-Specific Cerebrovascular Disease Mortality Rates among Alaska Native People, 2014-2018	204
Table 40. Trends in Cerebrovascular Disease Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018	204
Figure 174. Overall Change in Cerebrovascular Disease Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	205
Figure 175. Cerebrovascular Disease Mortality Rates by Region, Alaska Native People, 2014-2018	205
Figure 176. Cerebrovascular Disease Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018	206
Table 41. Alcohol Abuse Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	208
Figure 177. Alcohol Abuse Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	208
Figure 178a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Alcohol Abuse)	209
Figure 178b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Alcohol Abuse)	209
Figure 178c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Alcohol Abuse)	209

Table/Figure (Chapter Titles in Bold)	Page Number
Detailed Leading Causes of Death (continued)	
Table 42. Age-Specific Alcohol Abuse Mortality Rates among Alaska Native People, 2014-2018	210
Table 43. Trends in Alcohol Abuse Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018	210
Figure 179. Overall Change in Alcohol Abuse Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	211
Figure 180. Alcohol Abuse Mortality Rates by Region, Alaska Native People, 2014 -2018	211
Figure 181. Alcohol Abuse Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018	212
Table 44. Homicide Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	214
Figure 182. Homicide Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	214
Figure 183a. Alaska Native People Compared to U.S. All Races, 2014-2018 (Homicide)	215
Figure 183b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018 (Homicide)	215
Figure 183c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018 (Homicide)	215
Table 45. Age-Specific Homicide Mortality Rates among Alaska Native People, 2014-2018	216
Table 46. Trends in Homicide Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018	216
Figure 184. Overall Change in Homicide Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	217
Figure 185. Homicide Mortality Rates by Region, Alaska Native People, 2014-2018	217
Figure 186. Homicide Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018	218
Table 47. Influenza/Pneumonia Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	220
Figure 187. Influenza/Pneumonia Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018	220
Figure 188a. Alaska Native People Compared to U.S. All Races, 2014-2018	221
Figure 188b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018	221
Figure 188c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018	221
Table 48. Age-Specific Influenza/Pneumonia Mortality Rates among Alaska Native People, 2014-2018	222
Table 49. Trends in Influenza/Pneumonia Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018	222
Figure 189. Overall Change in Influenza/Pneumonia Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018	223
Figure 190. Influenza/Pneumonia Mortality Rates by Region, Alaska Native People, 2014-2018	223
Figure 191. Influenza/Pneumonia Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018	224
Alcohol-Related Mortality	
Table 50a. Leading Causes of Alcohol-Related Mortality by Underlying Cause of Death among Alaska Native People, 2014-2018	226
Figure 192a. Leading Causes of Alcohol-Related Mortality by Underlying Cause of Death among Alaska Native People, 2014-2018	227
Figure 193a. Leading Causes of Death with any Mention of Alcohol on the Death Certificate, Alaska Native People, 2014 -2018	227
Table 50b. Leading Causes of Alcohol-Related Mortality by Underlying Cause of Death among Alaska Native Females, 2014-2018	228
Figure 192b. Leading Causes of Alcohol-Related Mortality by Underlying Cause of Death among Alaska Native Females, 2014-2018	229
Figure 193b. Leading Causes of Death with any Mention of Alcohol on the Death Certificate, Alaska Native Females, 2014 -2018	229
Table 50c. Leading Causes of Alcohol-Related Mortality by Underlying Cause of Death among Alaska Native Males, 2014-2018	230
Figure 192c. Leading Causes of Alcohol-Related Mortality by Underlying Cause of Death among Alaska Native Males, 2014-2018	231

Table/Figure (Chapter Titles in Bold)**Page Number****Alcohol-Related Mortality** (continued)

Figure 193c. Leading Causes of Death with any Mention of Alcohol on the Death Certificate, Alaska Native Males, 2014 -2018.....	231
---	-----

Appendix B – Data Tables

Table 51a. Deaths among Alaska Native People, 0-4 Age Group, 2014-2018.....	239
Table 52a. Deaths among Alaska Native People, 5-14 Age Group, 2014-2018.....	239
Table 53a. Deaths among Alaska Native People, 15-24 Age Group, 2014-2018.....	239
Table 54a. Deaths among Alaska Native People, 25-44 Age Group, 2014-2018.....	240
Table 55a. Deaths among Alaska Native People, 45-54 Age Group, 2014-2018.....	240
Table 56a. Deaths among Alaska Native People, 55-64 Age Group, 2014-2018.....	241
Table 57a. Deaths among Alaska Native People, 65-74 Age Group, 2014-2018.....	242
Table 58a. Deaths among Alaska Native People, 75+ Age Group, 2014-2018.....	243
Table 51b. Deaths among Alaska Native Females, 0-4 Age Group, 2014-2018.....	244
Table 52b. Deaths among Alaska Native Females, 5-14 Age Group, 2014-2018.....	244
Table 53b. Deaths among Alaska Native Females, 15-24 Age Group, 2014-2018.....	244
Table 54b. Deaths among Alaska Native Females, 25-44 Age Group, 2014-2018.....	245
Table 55b. Deaths among Alaska Native Females, 45-54 Age Group, 2014-2018.....	245
Table 56b. Deaths among Alaska Native Females, 55-64 Age Group, 2014-2018.....	246
Table 57b. Deaths among Alaska Native Females, 65-74 Age Group, 2014-2018.....	246
Table 58b. Deaths among Alaska Native Females, 75+ Age Group, 2014-2018.....	247
Table 51c. Deaths among Alaska Native Males, 0-4 Age Group, 2014-2018.....	248
Table 52c. Deaths among Alaska Native Males, 5-14 Age Group, 2014-2018.....	248
Table 53c. Deaths among Alaska Native Males, 15-24 Age Group, 2014-2018.....	248
Table 54c. Deaths among Alaska Native Males, 25-44 Age Group, 2014-2018.....	249
Table 55c. Deaths among Alaska Native Males, 45-54 Age Group, 2014-2018.....	249
Table 56c. Deaths among Alaska Native Males, 55-64 Age Group, 2014-2018.....	250
Table 57c. Deaths among Alaska Native Males, 65-74 Age Group, 2014-2018.....	250
Table 58c. Deaths among Alaska Native Males, 75+ Age Group, 2014-2018.....	251
Table 59. Count of Deaths among Alaska Native People in the Aleutians & Pribilofs Region, 1980-2018.....	252
Table 60. Count of Deaths among Alaska Native People in the Anchorage-MatSu Region, 1980-2018.....	252
Table 61. Count of Deaths among Alaska Native People in the Arctic Slope Region, 1980-2018.....	252
Table 62. Count of Deaths among Alaska Native People in the Bristol Bay Region, 1980-2018.....	253
Table 63. Count of Deaths among Alaska Native People in the Copper River-PWS Region, 1980-2018.....	253
Table 64. Count of Deaths among Alaska Native People in the Interior Region, 1980-2018.....	253
Table 65. Count of Deaths among Alaska Native People in the Kenai Peninsula Region, 1980-2018.....	254
Table 66. Count of Deaths among Alaska Native People in the Kodiak Region, 1980-2018.....	254
Table 67. Count of Deaths among Alaska Native People in the Northwest Arctic Region, 1980-2018.....	254
Table 68. Count of Deaths among Alaska Native People in the Norton Sound Region, 1980-2018.....	254
Table 69. Count of Deaths among Alaska Native People in the Southeast Region, 1980-2018.....	255
Table 70. Count of Deaths among Alaska Native People in Yukon-Kuskokwim Region, 1980-2018.....	255
Table 71a. Deaths among Alaska Native People, Aleutians & Pribilofs, 2014-2018.....	256
Table 71b. Deaths among Alaska Native Females, Aleutians & Pribilofs, 2014-2018.....	256
Table 71c. Deaths among Alaska Native Males, Aleutians & Pribilofs, 2014-2018.....	257
Table 72a. Deaths among Alaska Native People, Anchorage-MatSu, 2014-2018.....	258
Table 72b. Deaths among Alaska Native Females, Anchorage-MatSu, 2014-2018.....	259
Table 72c. Deaths among Alaska Native Males, Anchorage-MatSu, 2014-2018.....	260
Table 73a. Deaths among Alaska Native People, Arctic Slope, 2014-2018.....	261
Table 73b. Deaths among Alaska Native Females, Arctic Slope, 2014-2018.....	261
Table 73c. Deaths among Alaska Native Males, Arctic Slope, 2014-2018.....	262
Table 74a. Deaths among Alaska Native People, Bristol Bay, 2014-2018.....	263
Table 74b. Deaths among Alaska Native Females, Bristol Bay, 2014-2018.....	264
Table 74c. Deaths among Alaska Native Males, Bristol Bay, 2014-2018.....	265

Table/Figure (Chapter Titles in Bold)	Page Number
Appendix B – Data Tables (continued)	
Table 75a. Deaths among Alaska Native People, Copper River-PWS, 2014-2018	266
Table 75b. Deaths among Alaska Native Females, Copper River-PWS, 2014-2018	266
Table 75c. Deaths among Alaska Native Males, Copper River-PWS, 2014-2018	267
Table 76a. Deaths among Alaska Native People, Interior, 2014-2018	268
Table 76b. Deaths among Alaska Native Females, Interior, 2014-2018	269
Table 76c. Deaths among Alaska Native Males, Interior, 2014-2018	270
Table 77a. Deaths among Alaska Native People, Kenai Peninsula, 2014-2018	271
Table 77b. Deaths among Alaska Native Females, Kenai Peninsula, 2014-2018	272
Table 77c. Deaths among Alaska Native Males, Kenai Peninsula, 2014-2018	273
Table 78a. Deaths among Alaska Native People, Kodiak, 2014-2018	274
Table 78b. Deaths among Alaska Native Females, Kodiak, 2014-2018	274
Table 78c. Deaths among Alaska Native Males, Kodiak, 2014-2018	275
Table 79a. Deaths among Alaska Native People, Northwest Arctic, 2014-2018	276
Table 79b. Deaths among Alaska Native Females, Northwest Arctic, 2014-2018	277
Table 79c. Deaths among Alaska Native Males, Northwest Arctic, 2014-2018	278
Table 80a. Deaths among Alaska Native People, Norton Sound, 2014-2018	279
Table 80b. Deaths among Alaska Native Females, Norton Sound, 2014-2018	280
Table 80c. Deaths among Alaska Native Males, Norton Sound, 2014-2018	280
Table 81a. Deaths among Alaska Native People, Southeast, 2014-2018	281
Table 81b. Deaths among Alaska Native Females, Southeast, 2014-2018	282
Table 81c. Deaths among Alaska Native Males, Southeast, 2014-2018	283
Table 82a. Deaths among Alaska Native People, Yukon-Kuskokwim, 2014-2018	284
Table 82b. Deaths among Alaska Native Females, Yukon-Kuskokwim, 2014-2018	285
Table 82c. Deaths among Alaska Native Males, Yukon-Kuskokwim, 2014-2018	286
Table 83a. Life Expectancy Trend among Alaska Native People, 1980-2018	287
Table 83b. Life Expectancy Trend among Alaska Native Females, 1980-2018	287
Table 83c. Life Expectancy Trend among Alaska Native Males, 1980-2018	287
Table 84a. Life Expectancy Table, Alaska Native People 2014-2018	288
Table 84b. Life Expectancy Table, Alaska Native Females 2014-2018	288
Table 84c. Life Expectancy Table, Alaska Native Males 2014-2018	289



Introduction

Reliable information on cause of death is essential to the development of policies and programs for prevention and control of disease and injury. It is also important for public health planning, healthcare resource allocation, and research.

This report is intended to help health professionals, policy-makers, and researchers identify priorities for action. In addition, the information contained in this publication is relevant to a broader audience. As such, the media, educators, and members of the public with an interest in mortality statistics may also find this report valuable. We hope that these data will be used to improve the health and well-being of Alaska Native people.

This publication provides information about key mortality indicators among Alaska Native people. It includes detailed information on leading causes of death, life expectancy, and other related measures, including years of potential life lost and excess deaths. In addition, some chapters include statistics for causes that are not among the top ten leading causes of death. This information is presented by sex, age group, service region and trends over time. Data for this report were based on death certificate data provided by the State of Alaska's Health Analytics & Vital Records section of the Alaska Department of Health and Social Services.

For a detailed explanation of the methodology used in creating and analyzing these statistics, please see Appendix A. Data tables are contained in Appendix B. For the International Classification of Diseases-10 (ICD10) code categorization, see Appendix C. Region definitions are available in Appendix D. Population denominators are included in Appendix E.



Executive Summary

All-Cause Mortality Rate

- The Alaska Native people all-cause mortality rate, both sexes combined, during the period 2014-2018, was 51% higher than the U.S. all races rate (2014-2018).
- Alaska Native people, both sexes combined, had significantly higher rates than U.S. all races for all ten of the leading causes of death (i.e. cancer, heart disease, unintentional injury, suicide, chronic obstructive pulmonary disease, chronic liver disease, cerebrovascular disease, alcohol abuse, homicide, and influenza/pneumonia)
- Rate ratios of Alaska Native people compared to U.S. all races were highest for alcohol abuse (8.0), chronic liver disease (3.1), suicide (3.0), and homicide (2.8).
- All-cause mortality rates were significantly higher for the Anchorage-MatSu service region as compared to the rest of the state. All-cause rates were significantly lower for the Bristol Bay, Interior, Kenai Peninsula, and Southeast service regions as compared to the rest of the state.
- The all-cause mortality rate for Alaska Native people declined significantly (9%) between 1980-1983 and 2014-2018. U.S. all races also experienced a significant decline (26%) during this period.
- The Alaska Native all-cause mortality rate increased 4% since the last five-year period, 2009-2013.

Years of Potential Life Lost (YPLL)

- Alaska Native people experienced an average of 26.8 years of potential life lost from all causes during the 2014-2018 time period.
- Unintentional injury (YPLL=23,323) caused the greatest number of years of potential life lost among Alaska Native people, both sexes combined, and among females (YPLL=8,243) and males (YPLL=15,080), separately.

Excess Deaths

- The three leading causes of excess deaths among Alaska Native people, both sexes combined, were unintentional injury, cancer, and heart disease.
- The total excess deaths among Alaska Native people, both sexes combined, represented 41.9% of all deaths among Alaska Native people.

Life Expectancy

- Life expectancy for Alaska Native people born during 2014-2018 is estimated to be 70.4 years.
- Among Alaska Native people, both sexes combined, life expectancy was 8.2 years shorter than U.S. all races. In females, Alaska Native life expectancy was 72.8 years (8.3 years shorter than U.S. all races females) and in males, life expectancy was 68.1 years (8 years shorter than U.S. all races males).

First Leading Cause of Death – Cancer

- Cancer was the leading cause of death among Alaska Native people, both sexes combined, as well as among Alaska Native females, for the 2014-2018 time period.
- The cancer mortality rate for Alaska Native people, both sexes combined, was significantly higher than for U.S. all races (RR=1.3).
- There was a decrease (8%) in the Alaska Native cancer mortality rate during 1980-1983 and 2014-2018, although this decrease was not statistically significant. U.S. all races experienced a significant decrease (23%) in the cancer mortality rate during that period.

Second Leading Cause of Death – Heart Disease

- Heart disease was the second leading cause of death among Alaska Native people, both sexes combined, as well as among Alaska Native females. It became the leading cause of death among Alaska Native males in the most recent time period (2014-2018).
- The heart disease mortality rate was significantly higher for Alaska Native people, both sexes combined (RR=1.2), females (RR=1.2), and males (RR=1.3).
- The heart disease mortality rate among Alaska Native people, both sexes combined, declined significantly (24%) during 1980-1983 and 2014-2018. The U.S. all races rate declined significantly (58%) during this period.

Third Leading Cause of Death – Unintentional Injury

- Unintentional injury was the third leading cause of death for Alaska Native people, both sexes combined, as well as for both sexes separately.
- Among Alaska Native people, both sexes combined, the unintentional injury mortality rate was 2.5 times the U.S. all races rate. The rate for Alaska Native females was 2.8 times the U.S. all races female rate. The rate for Alaska Native males was 2.3 times the U.S. all races male rate.
- Unintentional injury deaths resulted in an average of 36.3 years of potential life lost.
- The unintentional injury mortality rate significantly declined by 38% for Alaska Native people, both sexes combined, during 1980-1983 and 2014-2018. The U.S. all races rate declined 4% during that period.

Fourth Leading Cause of Death – Suicide

- Suicide was the fourth leading cause of death among Alaska Native people, both sexes combined, as well as among Alaska Native males.
- The suicide mortality rate among Alaska Native people, both sexes combined, was 3.0 times the rate for U.S. all races. The rate ratios were 3.5 for Alaska Native females and 2.7 for Alaska Native males compared to U.S. all races females and males, respectively.
- Alaska Native people, both sexes combined, experienced a non-significant decrease (3%) in the suicide mortality rate during 1980-1983 and 2014-2018. U.S. all races experienced a non-significant increase (4%) during that period.

Fifth Leading Cause of Death – Chronic Obstructive Pulmonary Disease (COPD)

- COPD was the fifth leading cause of death among Alaska Native people, both sexes combined, as well as for both sexes separately.
- Alaska Native people, both sexes combined, experienced a COPD mortality rate 1.7 times the U.S. all races rate. The mortality rate among Alaska Native females was 1.5 times the rate among U.S. all races females. The mortality rate among Alaska Native males was 2.0 times the rate among U.S. all races males.
- The Alaska Native COPD mortality rate increased significantly (164%) during 1980-1983 and 2014-2018. The COPD mortality rate among U.S. all races increased significantly (33%) during that period.

Sixth Leading Cause of Death – Chronic Liver Disease

- Chronic liver disease was the sixth leading cause of death among Alaska Native people, both sexes combined. It ranked fourth among Alaska Native females and ninth among Alaska Native males.
- The chronic liver disease mortality rate among Alaska Native people, both sexes combined, was 3.1 times the U.S. all races rate. The rate for Alaska Native females was 6.1 times the U.S. all races female rate. The rate for Alaska Native males was 1.5 times the U.S. all races male rate.
- The chronic liver disease mortality rate for Alaska Native people increased significantly (19%) during 1980-1983 and 2014-2018. The rate declined 16% among U.S. all races during that period.

Seventh Leading Cause of Death – Cerebrovascular Disease

- Cerebrovascular disease was the seventh leading cause of death among Alaska Native people, both sexes combined.
- Alaska Native people, both sexes combined, experienced a cerebrovascular disease mortality rate 1.4 times the U.S. all races rate. Alaska Native females had a mortality rate 1.4 times the U.S. all races female rate. The rate for Alaska Native males was 1.3 times the U.S. all races male rate.
- The cerebrovascular disease rate significantly declined (20%) among Alaska Native people, both sexes combined, during 1980-1983 and 2014-2018. The rate among U.S. all races significantly declined by 56% during that period.

Eighth Leading Cause of Death – Alcohol Abuse

- Alcohol abuse was the eighth leading cause of death among Alaska Native people, both sexes combined.
- The alcohol abuse mortality rate among Alaska Native people, both sexes combined, was 8.0 times the U.S. all races rate. Alaska Native females had a rate 12.5 times the U.S. all races female rate. The rate for Alaska Native males was 6.4 times the U.S. all races male rate.

- Among Alaska Native people, both sexes combined, the alcohol abuse mortality rate declined significantly (30%) during 1980-1983 and 2014-2018. The alcohol abuse mortality rate increased 25% among U.S. all races, although this change was not significant.

Ninth Leading Cause of Death – Homicide

- Homicide was the ninth leading cause of death among Alaska Native people, both sexes combined.
- Among Alaska Native people, both sexes combined, the homicide mortality rate was 2.8 times the U.S. all races rate. The mortality rate for Alaska Native females was 4.6 times the rate for U.S. all races females. The rate for Alaska Native males was 2.3 times the U.S. all races male rate.
- There was a significant decline (56%) in the homicide mortality rates for Alaska Native people, both sexes combined, during 1980-1983 and 2014-2018. U.S. all races experienced a significant decline (19%) during that period.

Tenth Leading Cause of Death – Influenza and Pneumonia

- Influenza and Pneumonia were the tenth leading cause of death among Alaska Native people, both sexes combined.
- The influenza and pneumonia mortality rate among Alaska Native people, both sexes combined, was 1.9 times the U.S. all races rate. The rate for Alaska Native females was 1.8 times the U.S. all races female rate while the rate for Alaska Native males were 1.6 times the U.S. all races male rate.
- The influenza and pneumonia mortality rate among Alaska Native people, both sexes combined, declined significantly (47%) during 1980-1984 and 2014-2018. The rate among U.S. all races declined significantly (50%) during that period.

Leading Causes of Death

Main Findings

- Alaska Native people had significantly higher rates than the U.S. all races rates for all leading causes of death. The top leading causes of death were, in order: cancer, heart disease, unintentional injury, suicide, COPD, chronic liver disease and cirrhosis, cerebrovascular disease, alcohol abuse, homicide, and influenza and pneumonia.
- Cancer continued as the leading cause of death among Alaska Native people, both sexes combined, as well as for Alaska Native females.
- The heart disease mortality rate continued to be significantly higher among Alaska Native people, both sexes combined, as well as for Alaska Native males than the corresponding rates among U.S. all races. For the first time, the heart disease mortality rate among Alaska Native females is significantly higher than the U.S. all races female rate. Notably, heart disease is now the leading cause of death among Alaska Native males.
- The Alaska Native unintentional injury rate, both sexes combined, was 2.5 times the U.S. all races rate.
- The Alaska Native suicide rate, both sexes combined, was 3.0 times the U.S. all races rate.
- The Alaska Native chronic obstructive pulmonary disease mortality rate, both sexes combined, was 1.7 times the U.S. all races rate.
- The chronic liver disease mortality rate for Alaska Native people, both sexes combined, were 3.1 times the U.S. all races rate. The rate for Alaska Native females was 6.1 times higher than those for U.S. all races females. The rate for Alaska Native males was 1.5 times the rate for U.S. all races males.
- The Alaska Native cerebrovascular disease mortality rate, both sexes combined, was 1.4 times the U.S. all races rate.
- The Alaska Native alcohol abuse mortality rate, both sexes combined, was 8.0 times the U.S. all races rate.
- The Alaska Native influenza and pneumonia mortality rate, both sexes combined, was 1.9 times the U.S. all races rate.

Overview

This section lists the ten leading causes of death among Alaska Native people for the five-year period, 2014-2018. Table 1a displays this information for both sexes combined, Table 1b for females, and Table 1c for males. This section also contains Figures 1a-c comparing rates for Alaska Native people and U.S. all races for each of the leading causes of death in rank order. Data for these figures are available in Tables 1a-c.

LEADING CAUSES OF DEATH

Table 1a. Leading Causes of Death among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

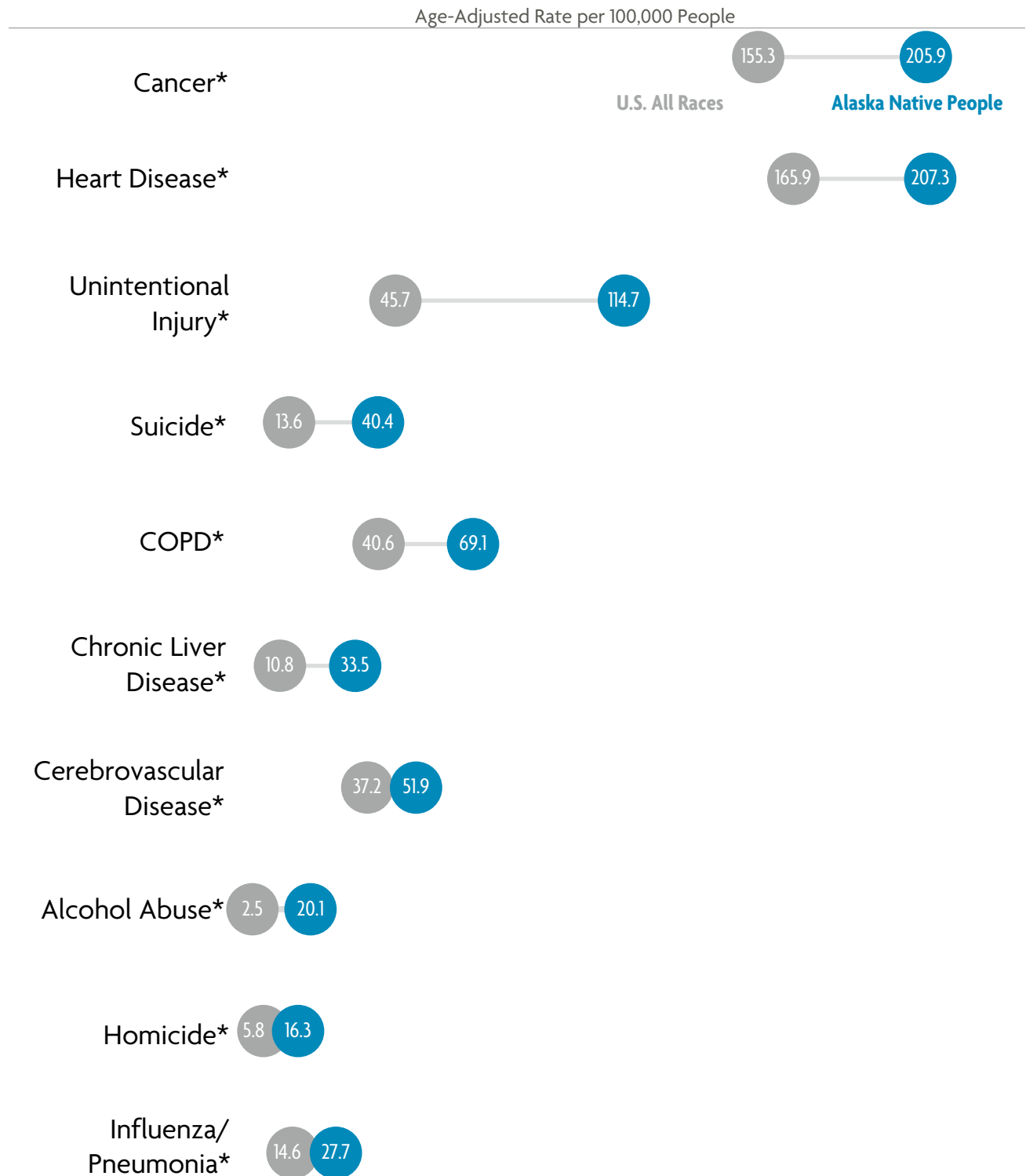
	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	979	18.1%	205.9	2,984,050	21.7%	155.3	1.3	1.25 - 1.58
2 Heart Disease	893	16.5%	207.3	3,186,288	23.2%	165.9	1.2	1.17 - 1.33
3 Unintentional Injury	698	12.9%	114.7	780,936	5.7%	45.7	2.5	2.33 - 2.70
4 Suicide	302	5.6%	40.4	227,501	1.7%	13.6	3.0	2.66 - 3.33
5 COPD	277	5.1%	69.1	776,425	5.7%	40.6	1.7	1.51 - 1.92
6 Chronic Liver Disease	203	3.8%	33.5	203,622	1.5%	10.8	3.1	2.71 - 3.56
7 Cerebrovascular Disease	200	3.7%	51.9	709,761	5.2%	37.2	1.4	1.22 - 1.60
8 Alcohol Abuse	126	2.3%	20.1	46,566	0.3%	2.5	8.0	6.74 - 9.56
9 Homicide	115	2.1%	16.3	91,367	0.7%	5.8	2.8	2.34 - 3.37
10 Influenza and Pneumonia	104	1.9%	27.7	278,618	2.0%	14.6	1.9	1.57 - 2.30
All Others	1,499	27.8%	333.7	4,450,870	32.4%	236.2	1.4	1.38 - 1.46
All-Cause	5,396	100.0%	1120.7	13,736,004	100.0%	728.3	1.5	1.50 - 1.58

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

LEADING CAUSES OF DEATH

Figure 1a. Leading Causes of Death among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

LEADING CAUSES OF DEATH

Table 1b. Leading Causes of Death among Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

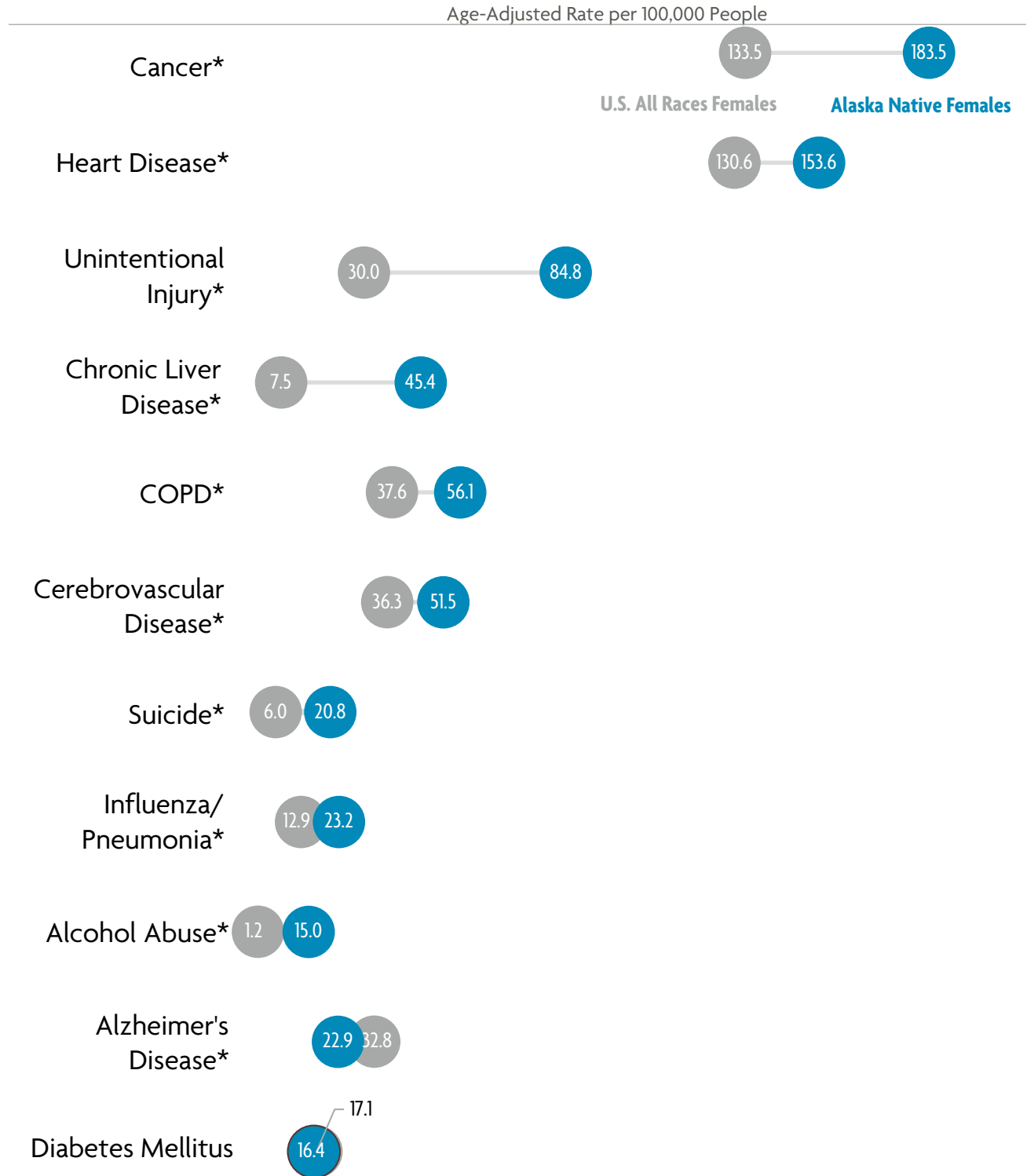
	Alaska Native Females			U.S. All Races Females			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	478	19.7%	183.5	1,413,665	21.0%	133.5	1.4	1.26 - 1.50
2 Heart Disease	352	14.5%	153.6	1,484,661	22.0%	130.6	1.2	1.06 - 1.31
3 Unintentional Injury	254	10.5%	84.8	281,207	4.2%	30.0	2.8	2.50 - 3.20
4 Chronic Liver Disease	140	5.8%	45.4	73,876	1.1%	7.5	6.1	5.13 - 7.14
5 COPD	129	5.3%	56.1	411,171	6.1%	37.6	1.5	1.26 - 1.77
6 Cerebrovascular Disease	110	4.5%	51.5	412,158	6.1%	36.3	1.4	1.18 - 1.71
7 Suicide	77	3.2%	20.8	51,075	0.8%	6.0	3.5	2.78 - 4.34
8 Influenza/Pneumonia	49	2.0%	23.2	144,877	2.2%	12.9	1.8	1.36 - 2.38
9 Alcohol Abuse	48	2.0%	15.0	10,933	0.2%	1.2	12.5	9.39- 16.56
10 Alzheimer's Disease	42	1.7%	22.9	390,922	5.8%	32.8	0.7	0.52 - 0.94
10 Diabetes Mellitus	42	1.7%	16.4	182,741	2.7%	17.1	1.0	0.71 - 1.30
All Others	742	30.6%	266.3	2,062,002	30.6%	189.4	1.4	1.32 - 1.47
All-Cause	2,421	100.0%	949.9	6,736,547	100.0%	617.8	1.5	1.48 - 1.60

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

LEADING CAUSES OF DEATH

Figure 1b. Leading Causes of Death among Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

LEADING CAUSES OF DEATH

Table 1c. Leading Causes of Death among Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

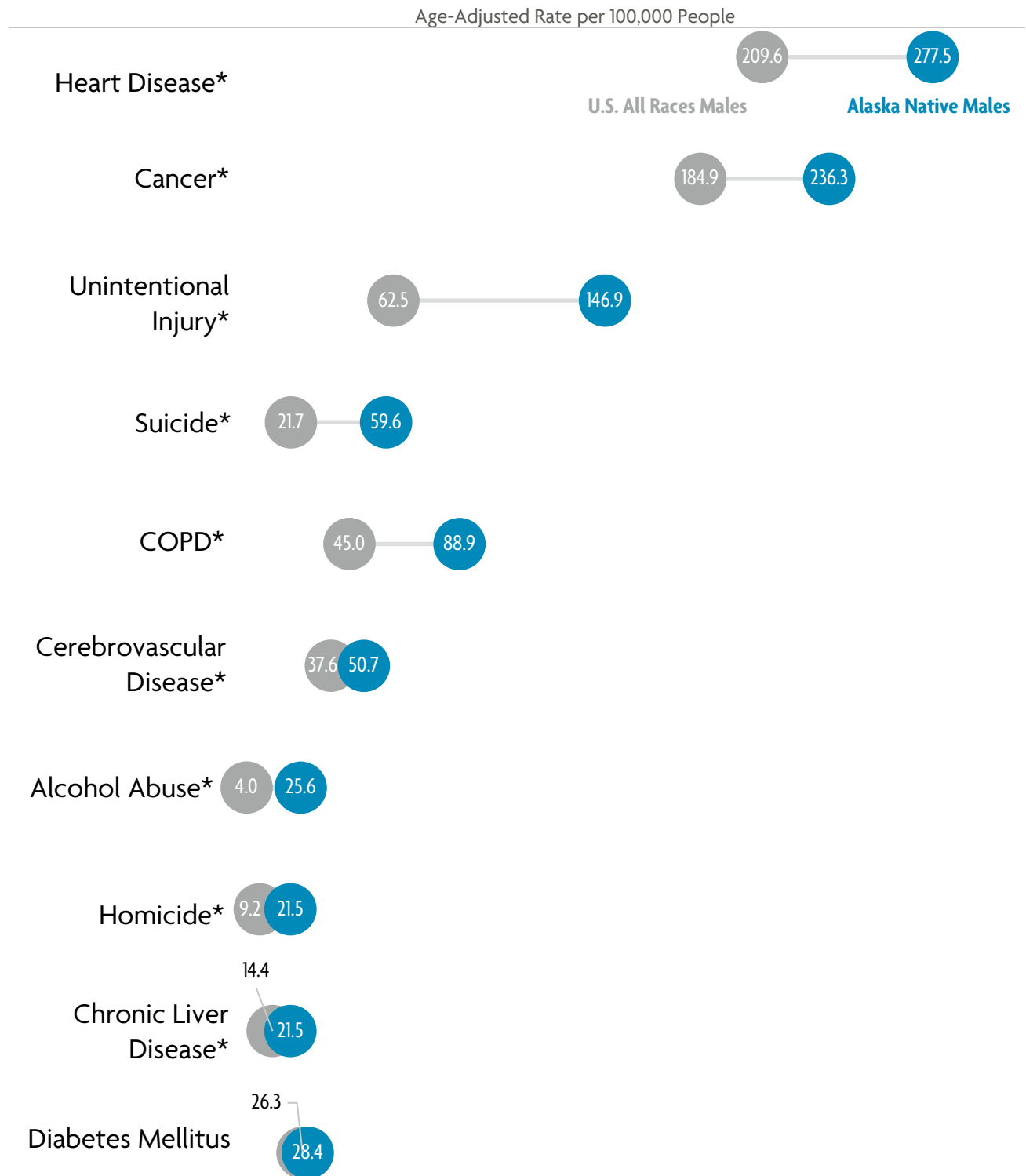
	Alaska Native Males			U.S. All Races Males			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	541	18.2%	277.5	1,702,627	24.2%	209.6	1.3	1.22 - 1.44
2 Cancer	501	16.8%	236.3	1,570,385	22.5%	184.9	1.3	1.17 - 1.39
3 Unintentional Injury	444	14.9%	146.9	499,729	7.4%	62.5	2.3	2.14 - 2.58
4 Suicide	225	7.6%	59.6	176,426	2.5%	21.7	2.7	2.41 - 3.13
5 COPD	148	5.0%	88.9	365,254	5.2%	45.0	2.0	1.68 - 2.32
6 Cerebrovascular Disease	90	3.0%	50.7	297,603	4.2%	37.6	1.3	1.10 - 1.66
7 Alcohol Abuse	78	2.6%	25.6	36,633	0.5%	4.0	6.4	5.12 - 7.98
8 Homicide	77	2.6%	21.5	762,636	1.1%	9.2	2.3	1.87 - 2.92
9 Chronic Liver Disease	63	2.1%	21.5	129,746	1.8%	14.4	1.5	1.16 - 1.91
10 Diabetes Mellitus	58	2.0%	28.4	221,850	3.1%	26.3	1.1	0.83 - 1.40
All Others	749	25.2%	378.1	1,914,167	27.3%	244.5	1.5	1.48 - 1.63
All-Cause	2,974	100.0%	1334.9	6,999,457	100.0%	859.7	1.6	1.50 - 1.61

¹ Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

LEADING CAUSES OF DEATH

Figure 1c. Leading Causes of Death among Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$



Age-Specific Mortality Rates

Main Findings

- For ages 75+ years, heart disease was the leading cause of death for Alaska Native people, both sexes combined.
- For ages 55-74 years, cancer was the leading cause of death for Alaska Native people, both sexes combined.
- For ages 15-24 years, suicide was the leading cause of death among Alaska Native people, both sexes combined
- For ages 5-14 years, 25-44 years, and 45-54 years, unintentional injury was the leading cause of death among Alaska Native people, both sexes combined.
- For ages 0-4 years, perinatal conditions was the leading cause of death among Alaska Native people, both sexes combined.
- Compared to U.S. all races, Alaska Native people had significantly higher rates of all-cause mortality for all age groups (except for the 5-14 year old age group), both sexes combined, as well as females and males separately. For the 5-14 year age group, all-cause mortality rates were not significantly different for both sexes combined, as well as females and males separately, compared to U.S. all races in the same age groups.
- The greatest disparity for all-cause mortality between Alaska Native people and U.S. all races occurred in the 15-24 year age group for both sexes combined, as well as females and males separately. This disparity was due to high rates of suicide (RR=7.4), unintentional injury (RR=2.4), and homicide (RR=1.7) among Alaska Native people in this age group.

Overview

This chapter compares cause-specific mortality rates for Alaska Native people and U.S. all races by age groups for the five-year period, 2014-2018. The top 18 leading causes of death are included in this chapter, with at least 30 deaths per cause over the five-year time period. This chapter presents causes in descending rank order. Figures 2a-20a compare rates among Alaska Native people to U.S. all races, both sexes combined. Figures 2b-20b display this information for females, and Figures 2c-20c for males. Data for these figures are available in Appendix B. Tables 51a-58a show mortality data for both sexes combined. Tables 51b-58b show mortality data for females. Tables 51c-58c show mortality data for males.

All-Cause Age-Specific Mortality Rates

Figure 2a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

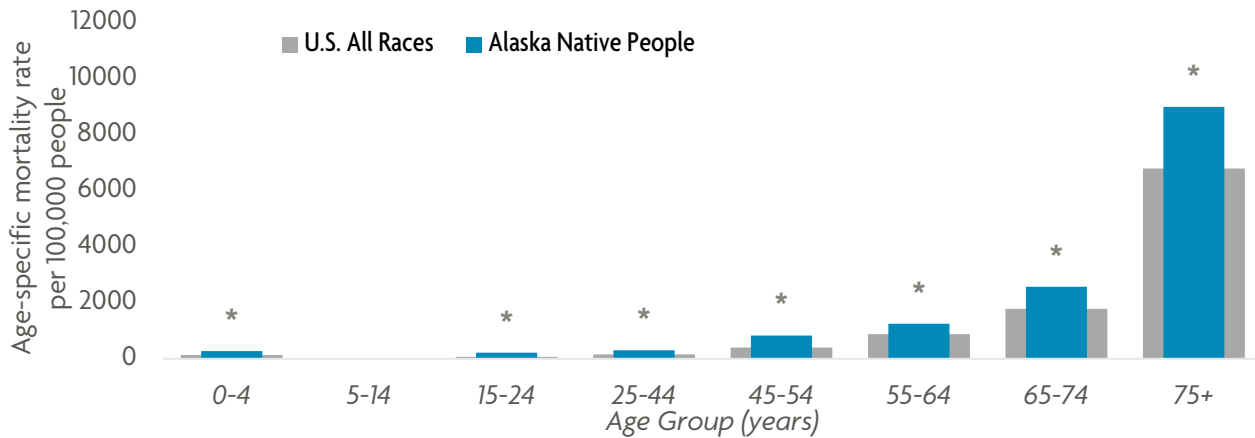


Figure 2b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

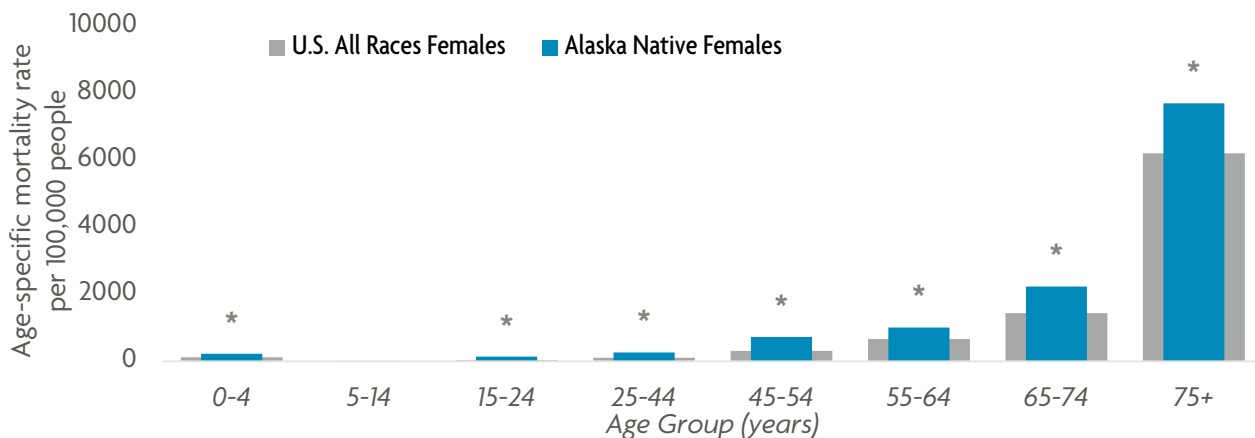
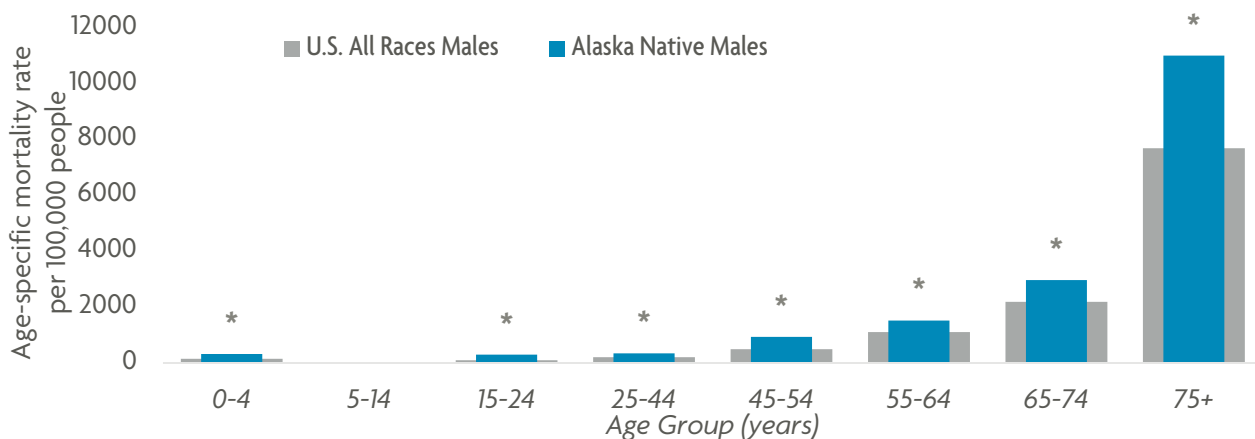


Figure 2c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Cancer Age-Specific Mortality Rates

Figure 3a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

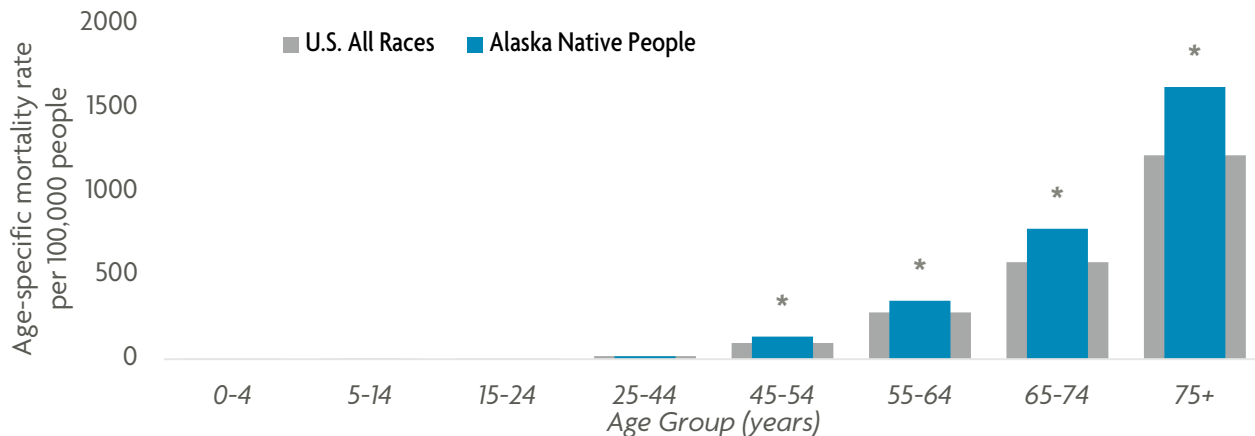


Figure 3b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

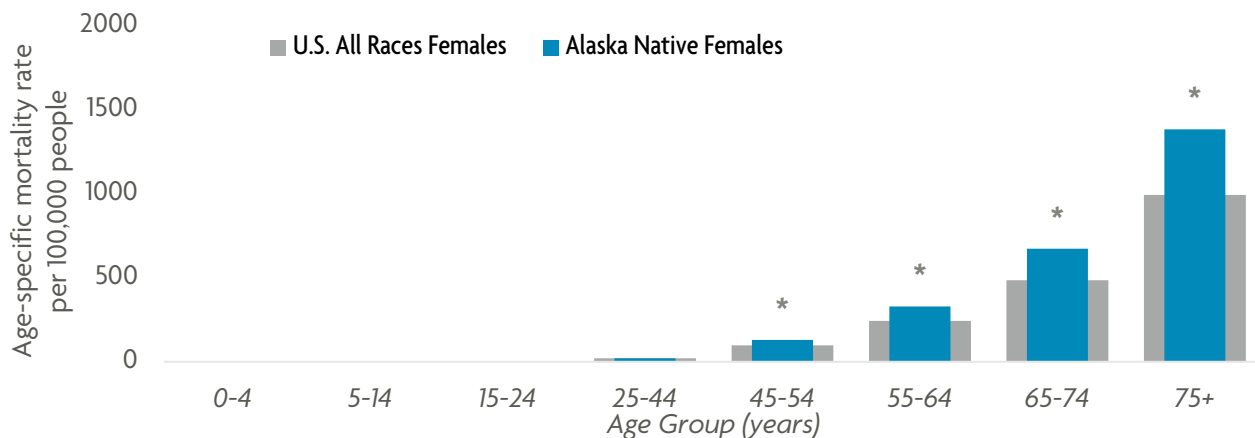
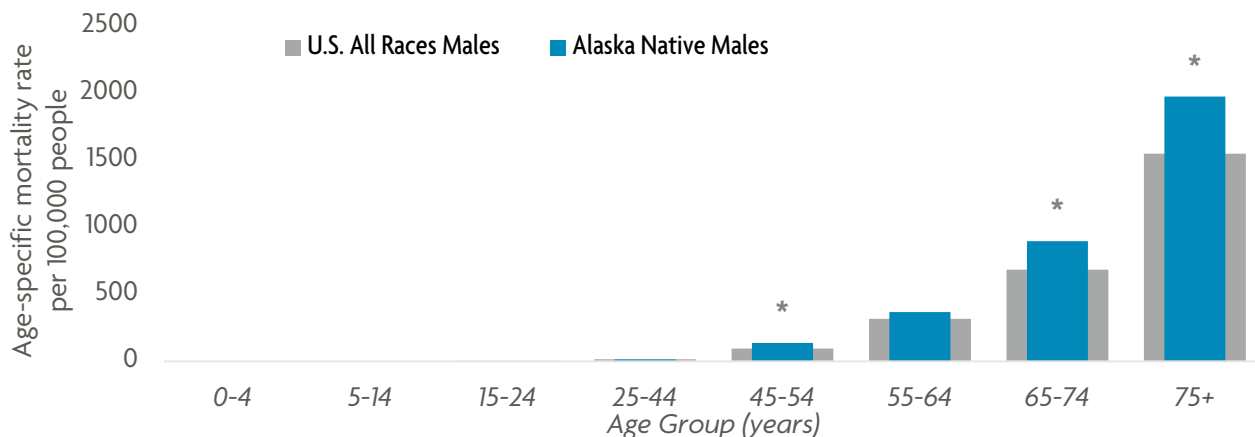


Figure 3c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Heart Disease Age-Specific Mortality Rates

Figure 4a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

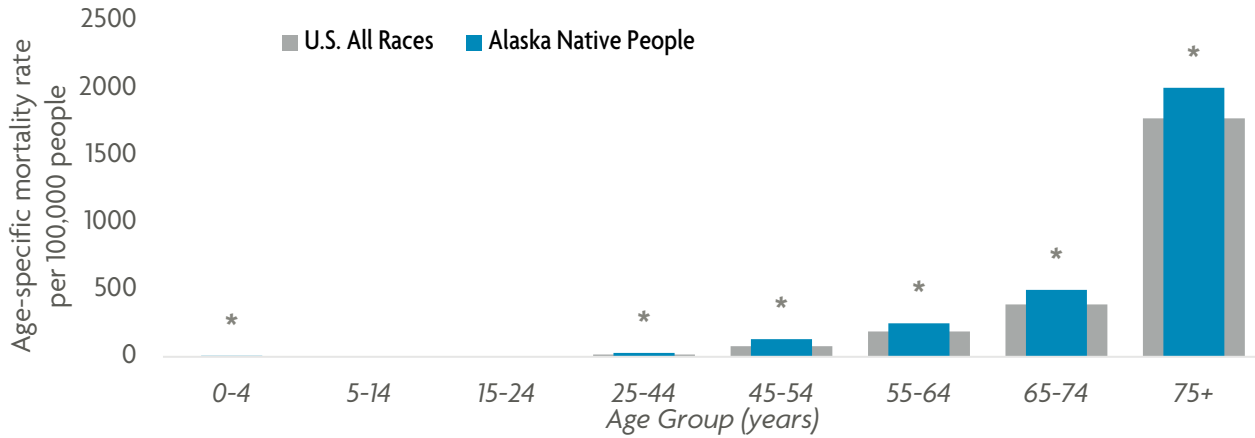


Figure 4b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

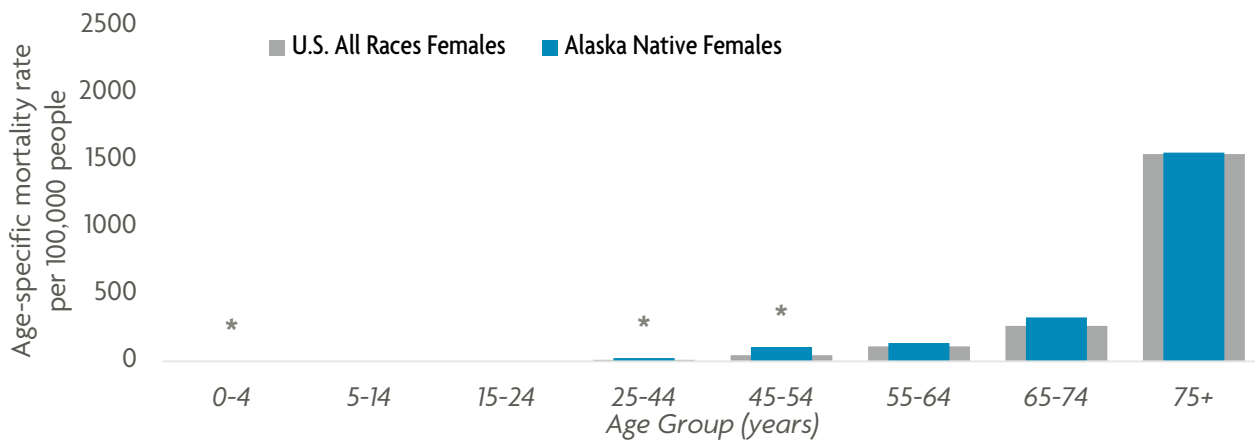
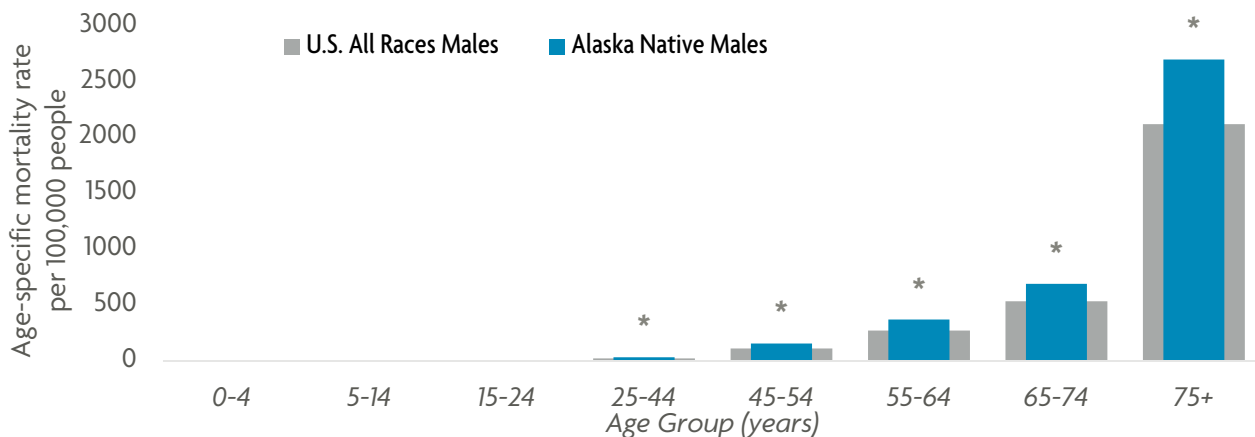


Figure 4c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Unintentional Injury Age-Specific Mortality Rates

Figure 5a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

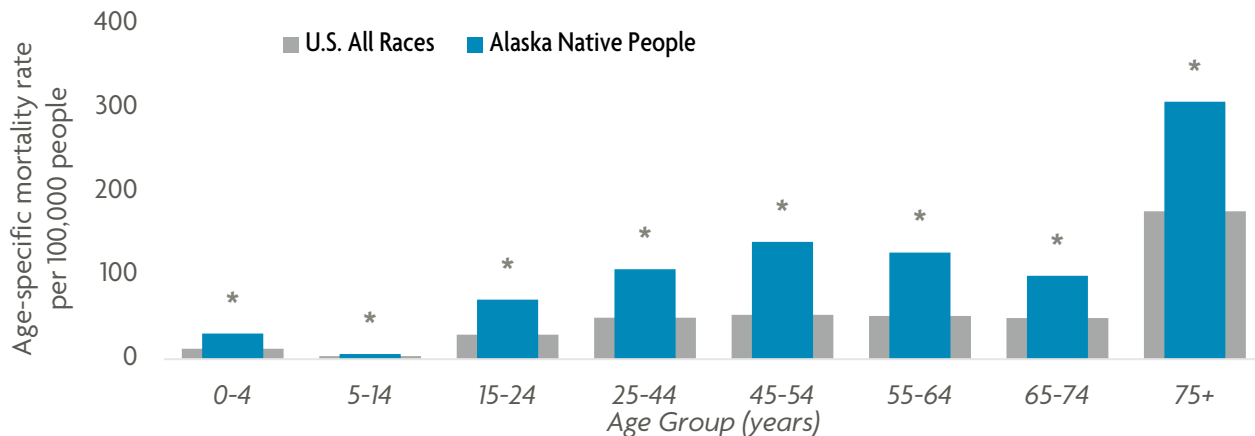


Figure 5b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

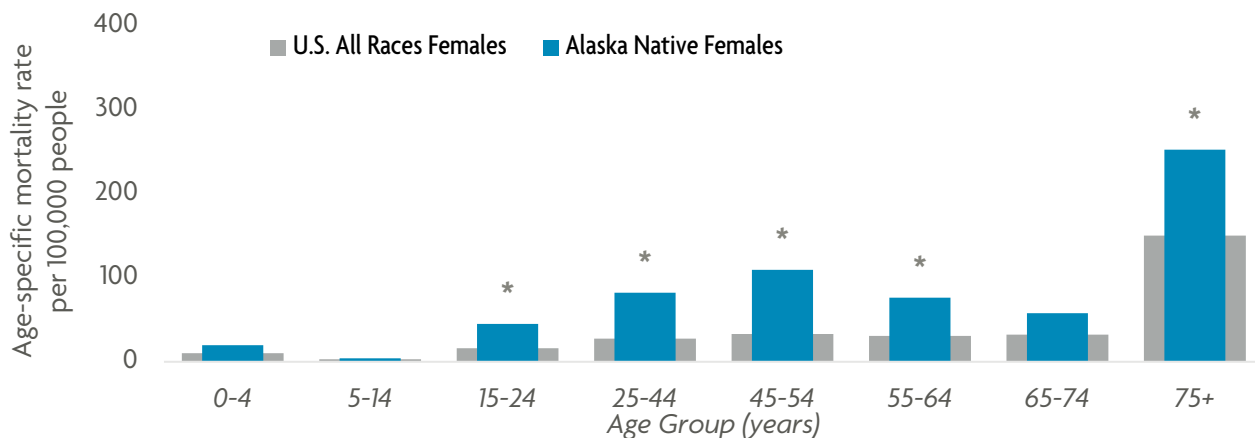
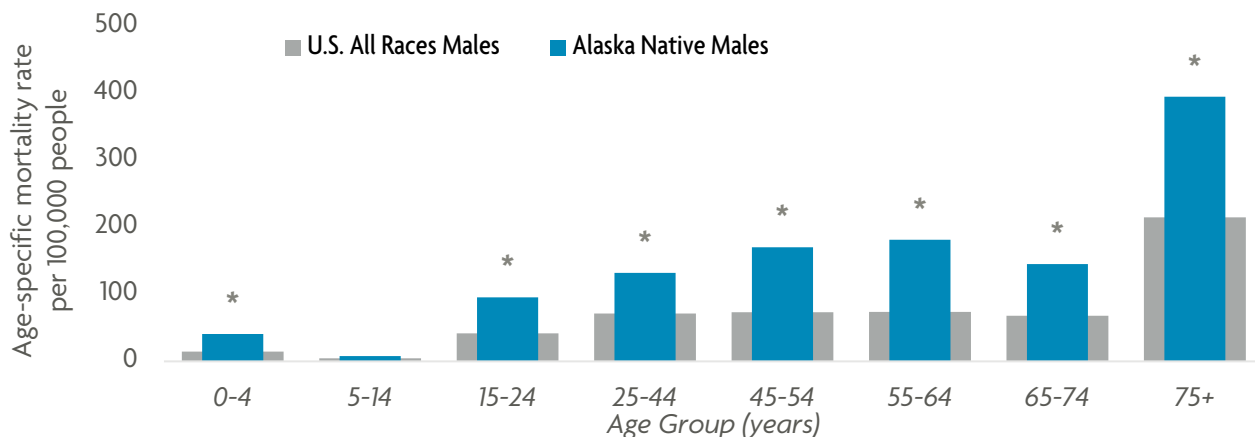


Figure 5c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Suicide Age-Specific Mortality Rates

Figure 6a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

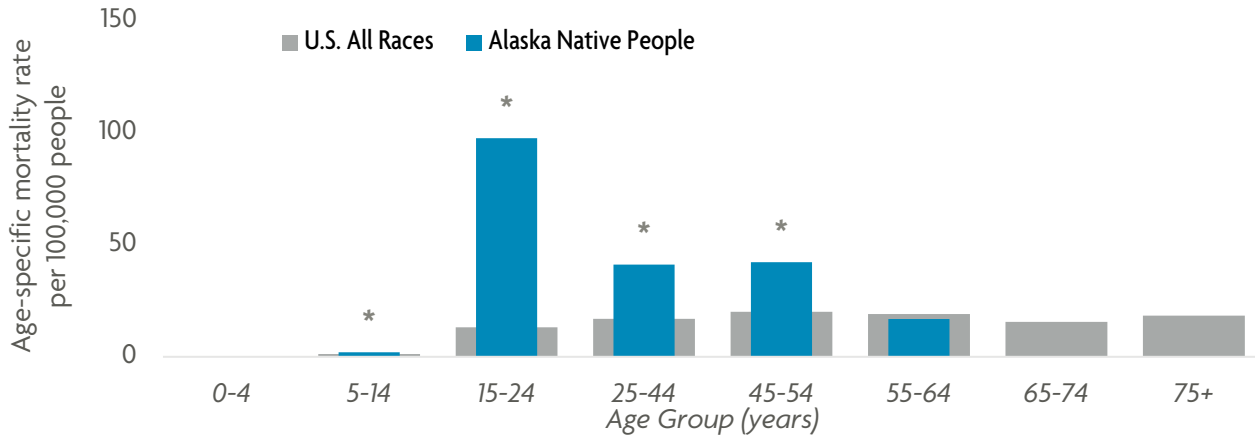


Figure 6b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

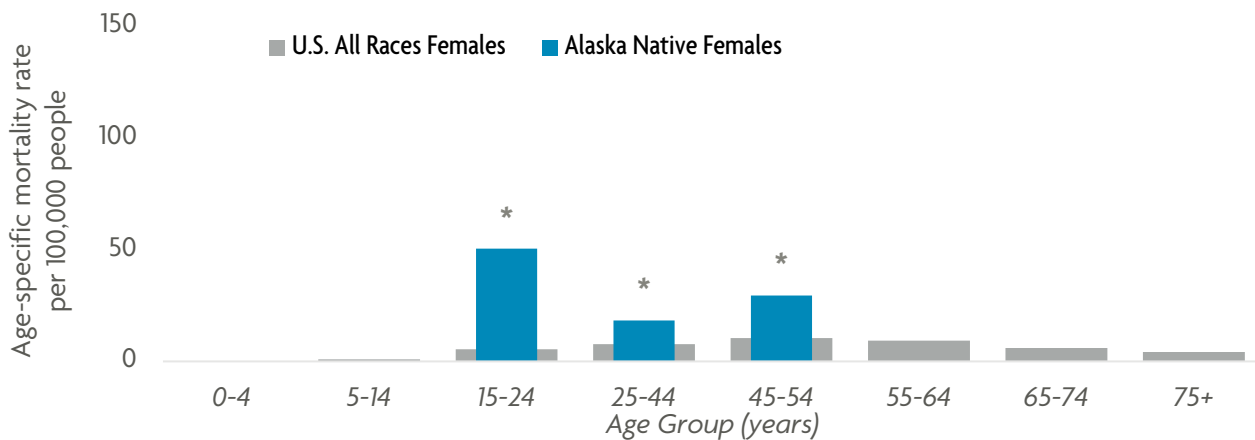
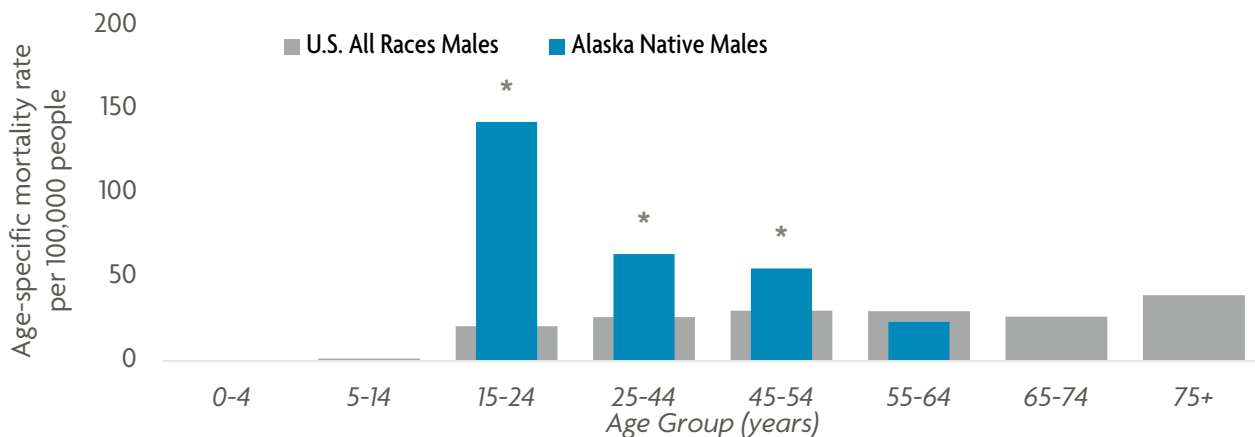


Figure 6c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

COPD Age-Specific Mortality Rates

Figure 7a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

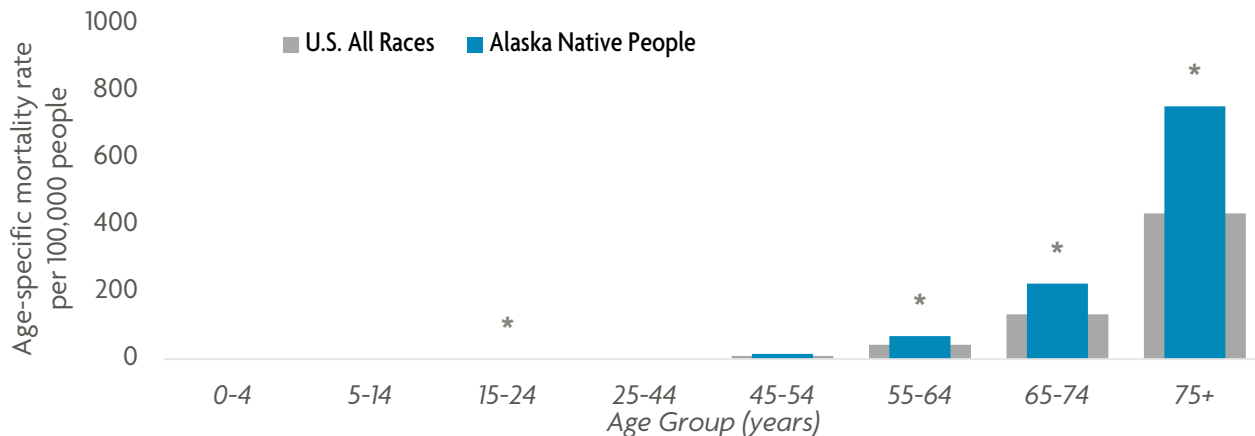


Figure 7b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

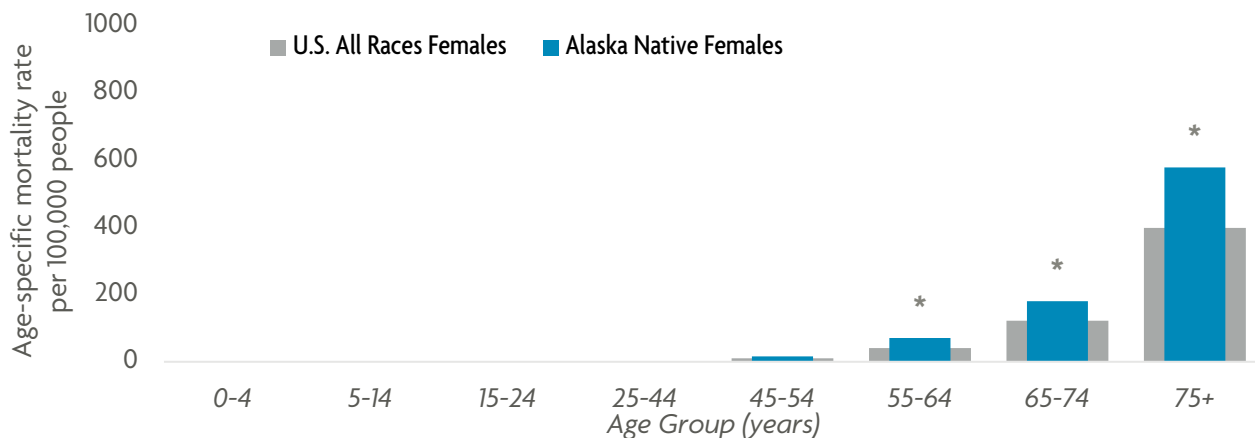
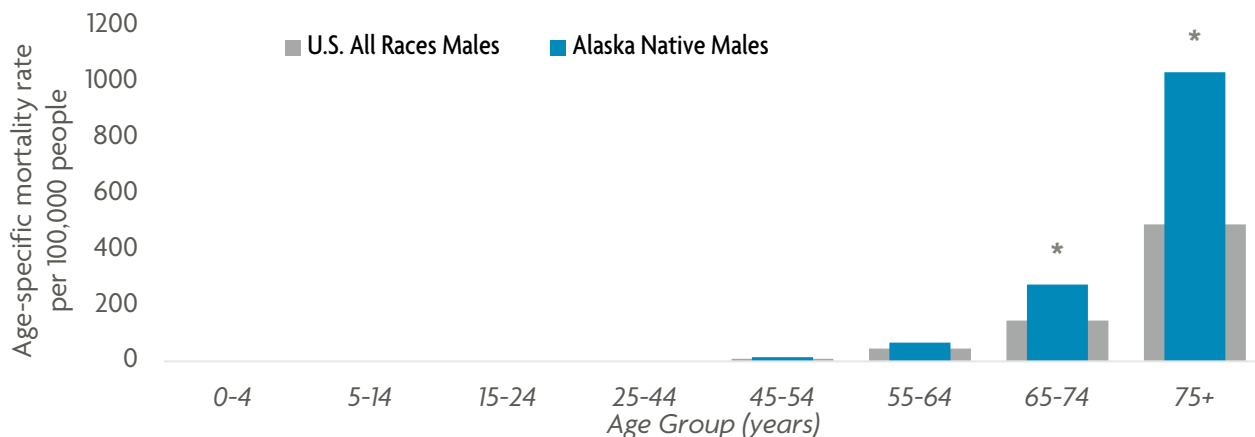


Figure 7c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Chronic Liver Disease Age-Specific Mortality Rates

Figure 8a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

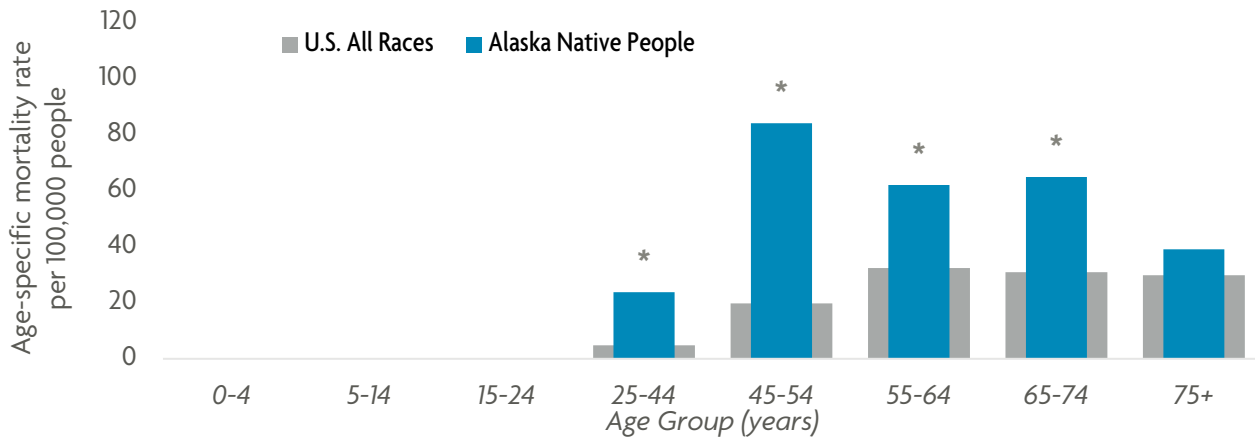


Figure 8b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

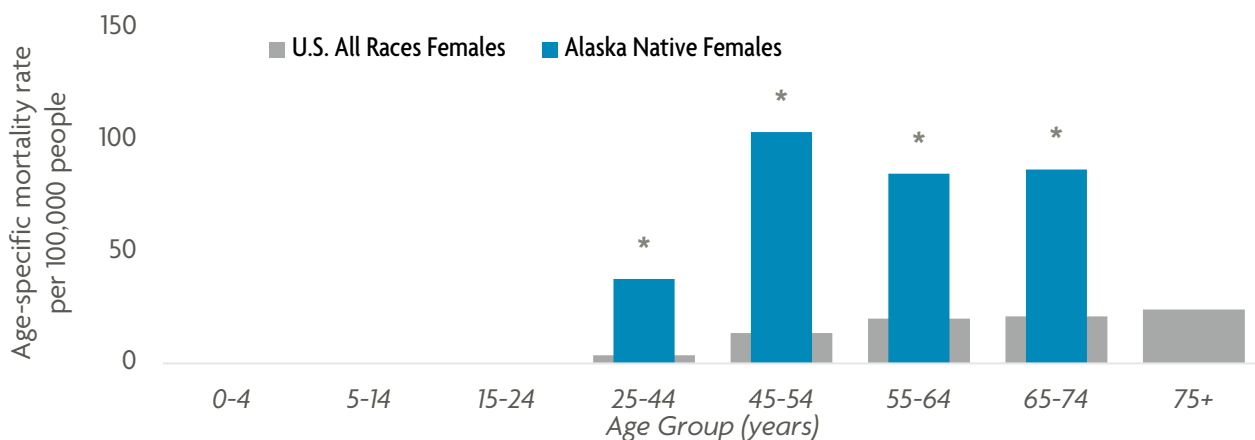
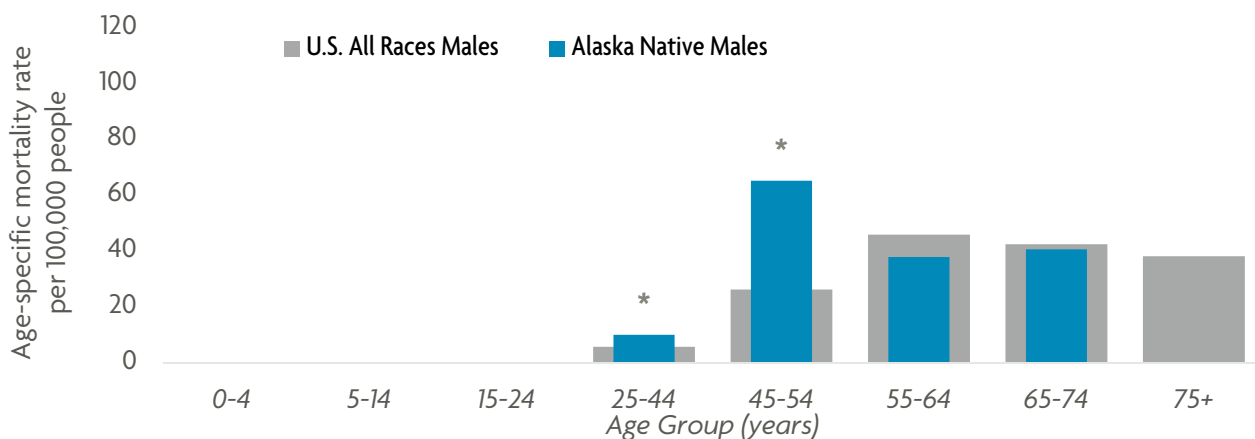


Figure 8c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Cerebrovascular Disease Age-Specific Mortality Rates

Figure 9a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

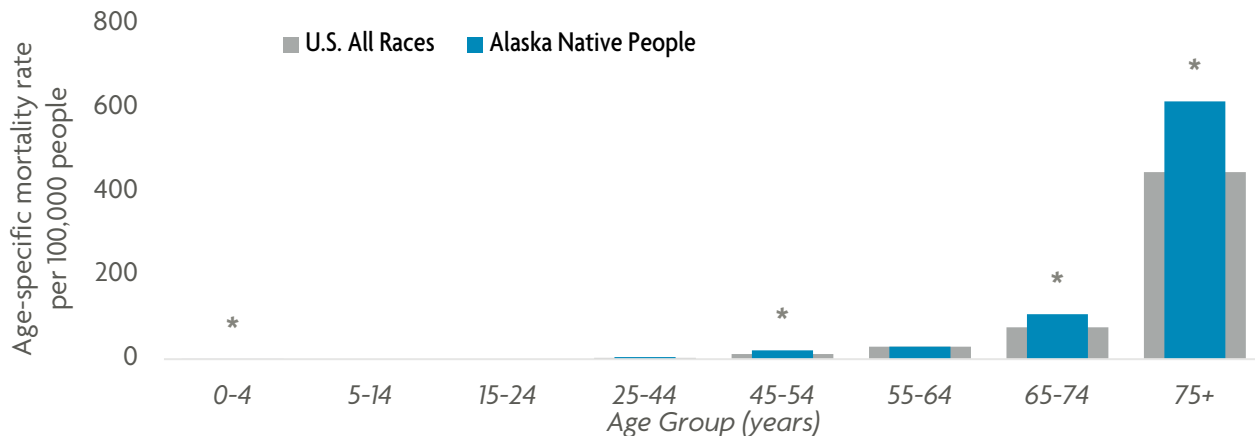


Figure 9b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

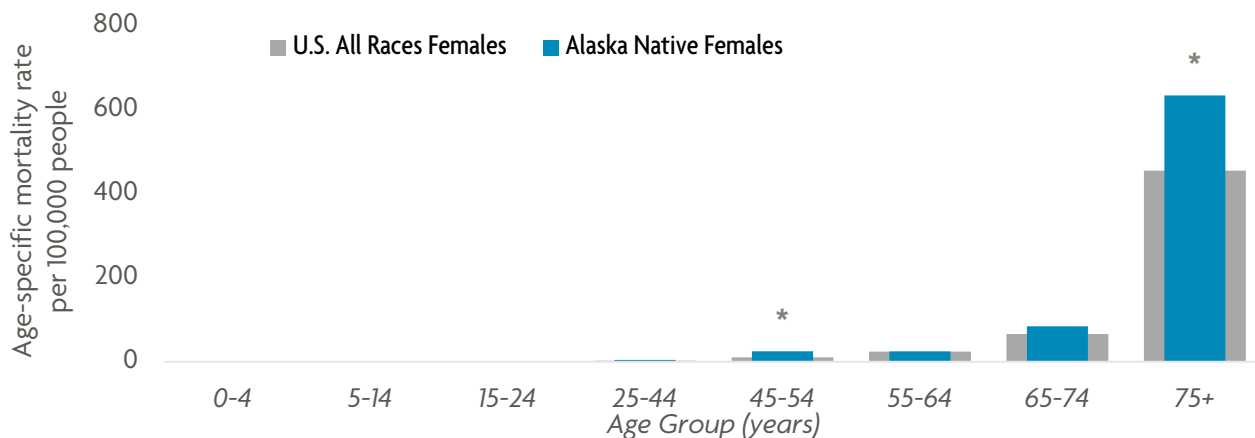
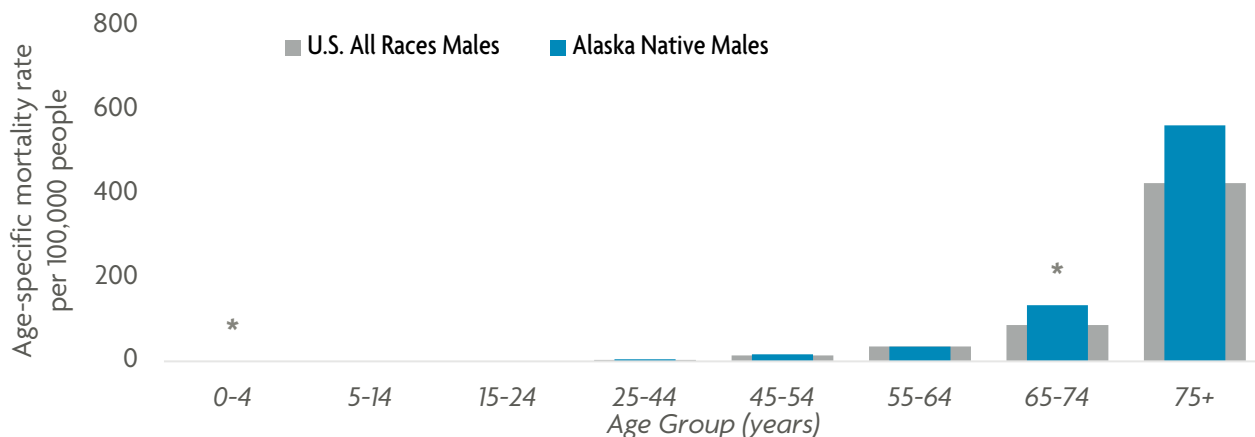


Figure 9c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Alcohol Abuse Age-Specific Mortality Rates

Figure 10a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

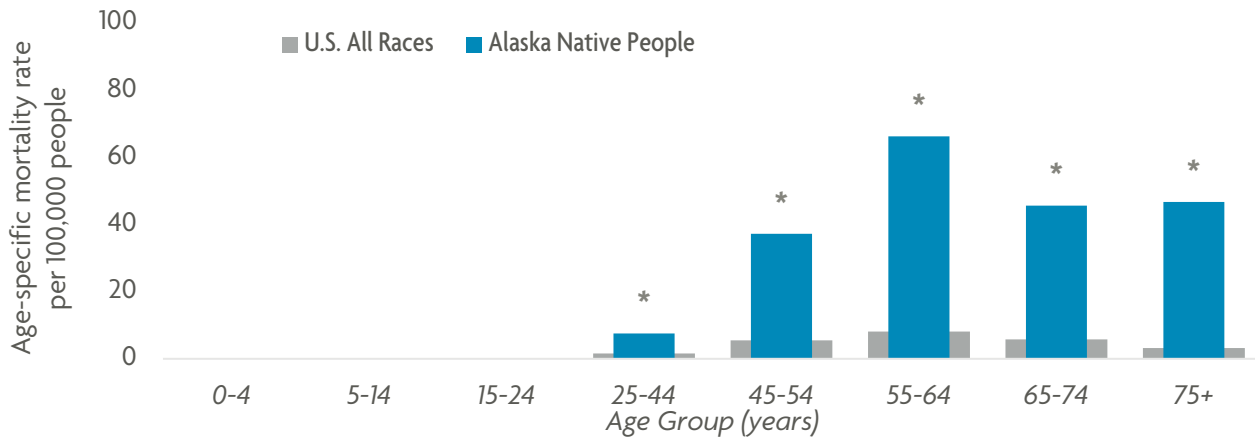


Figure 10b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

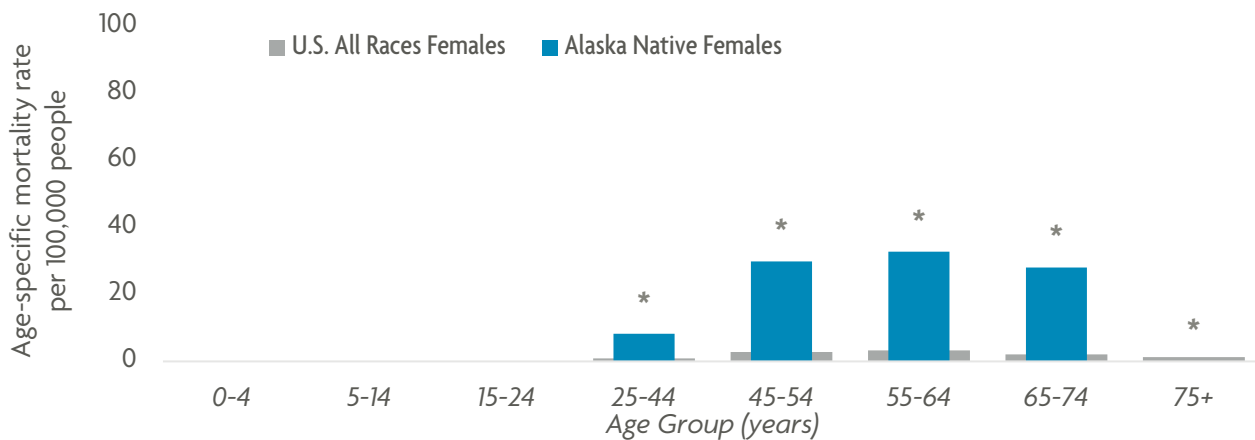
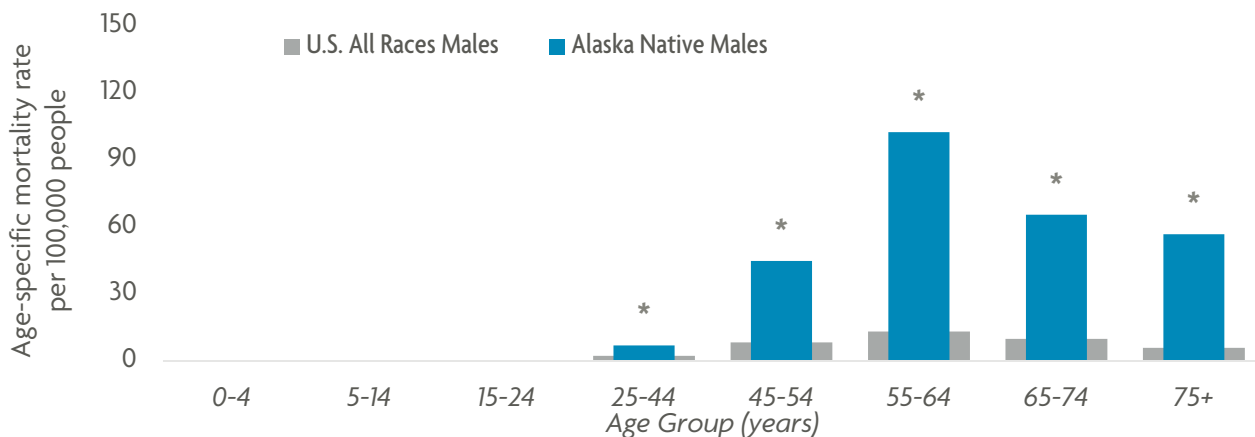


Figure 10c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Homicide Age-Specific Mortality Rates

Figure 11a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

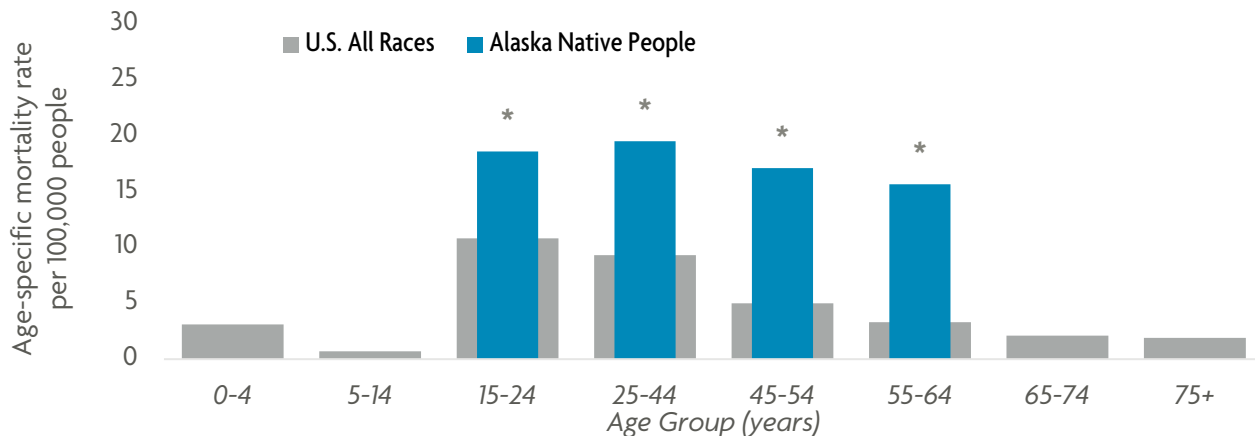


Figure 11b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

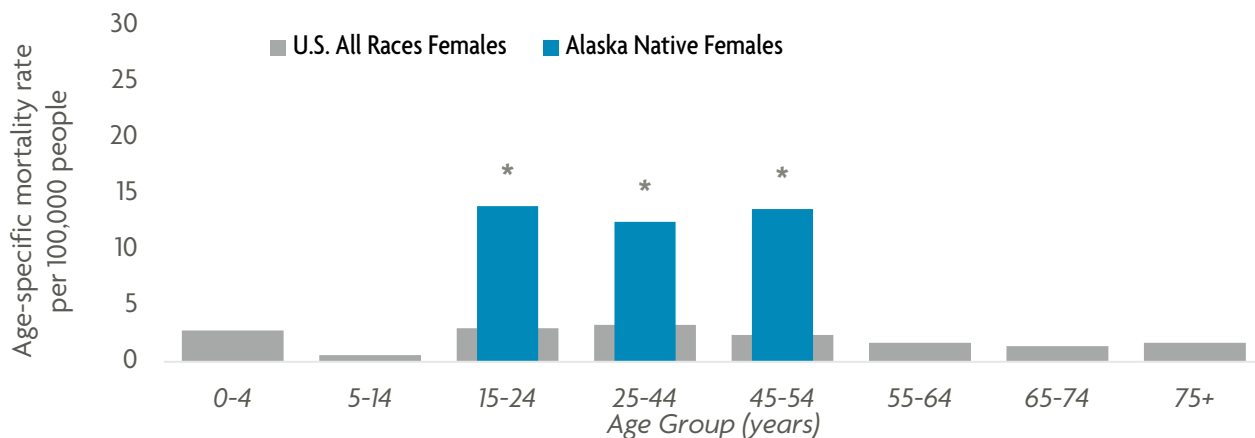
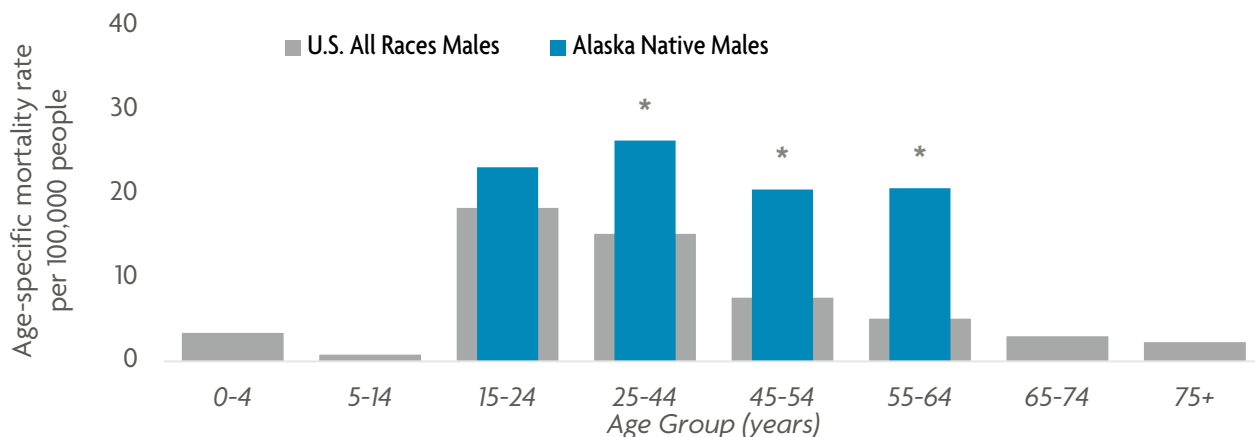


Figure 11c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Influenza/Pneumonia Age-Specific Mortality Rates

Figure 12a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

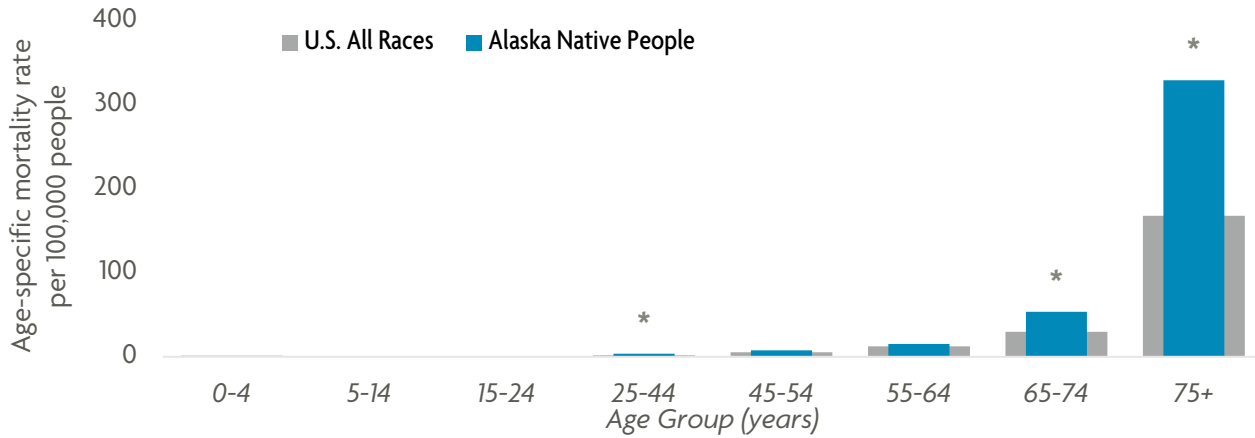


Figure 12b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

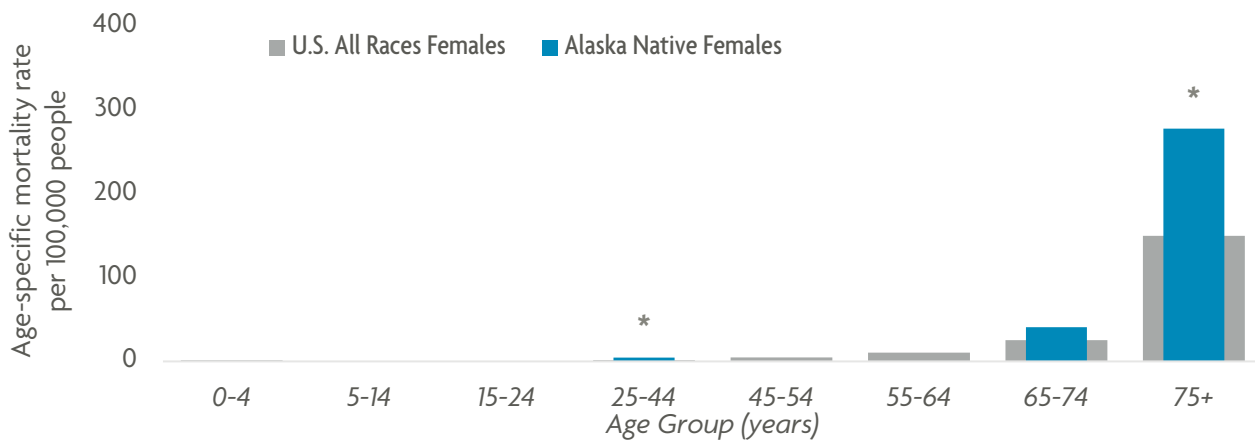
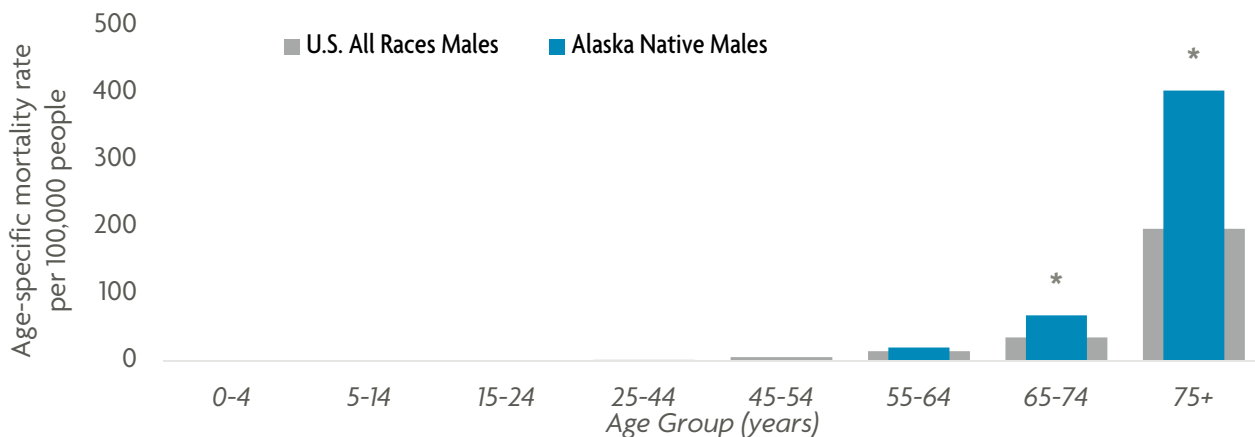


Figure 12c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Diabetes Age-Specific Mortality Rates

Figure 13a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

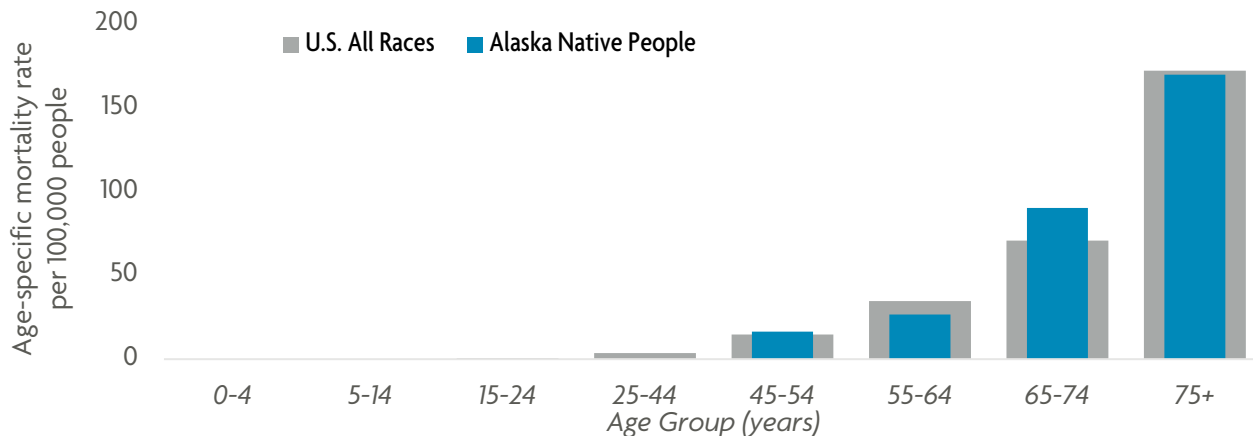


Figure 13b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

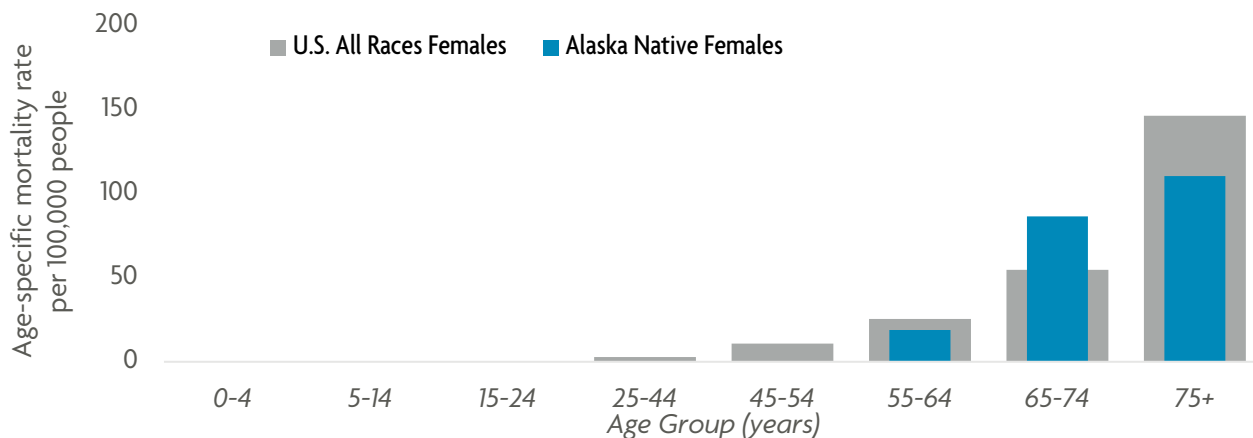
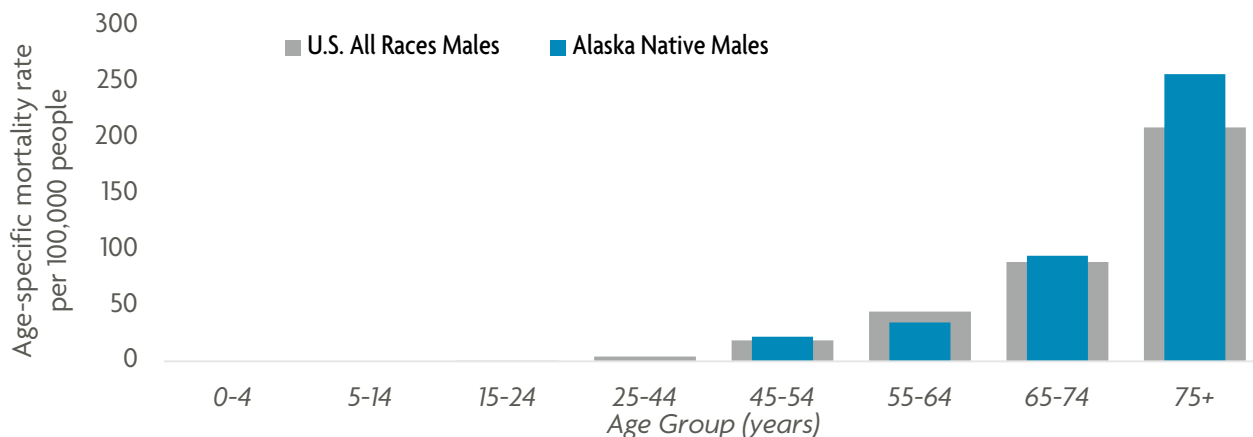


Figure 13c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Alzheimer’s Disease Age-Specific Mortality Rates

Figure 14a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



Figure 14b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

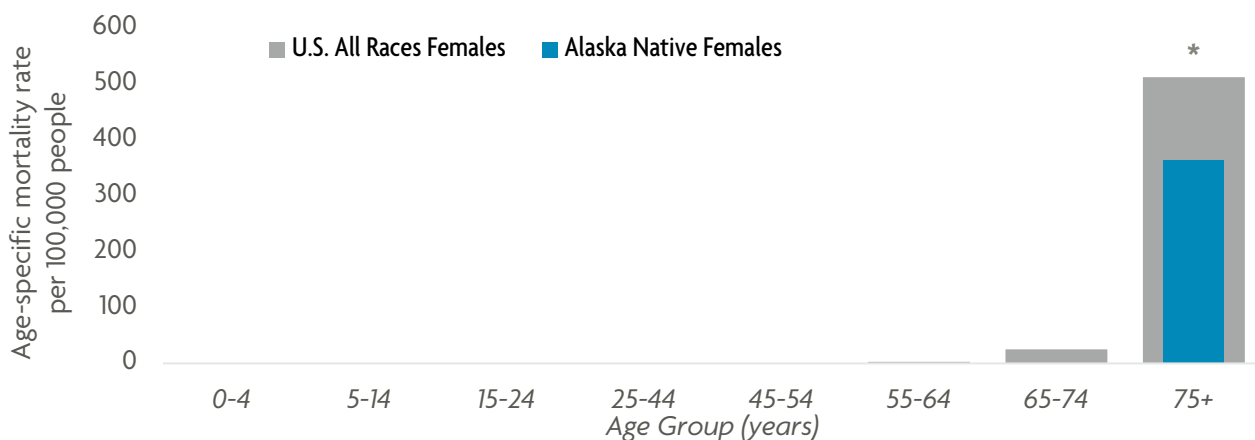
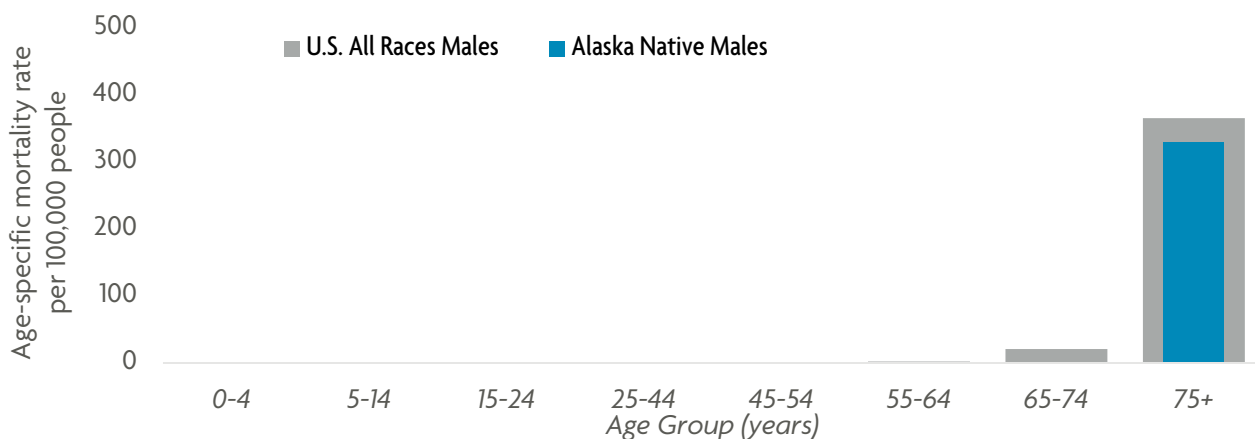


Figure 14c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Septicemia Age-Specific Mortality Rates

Figure 15a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

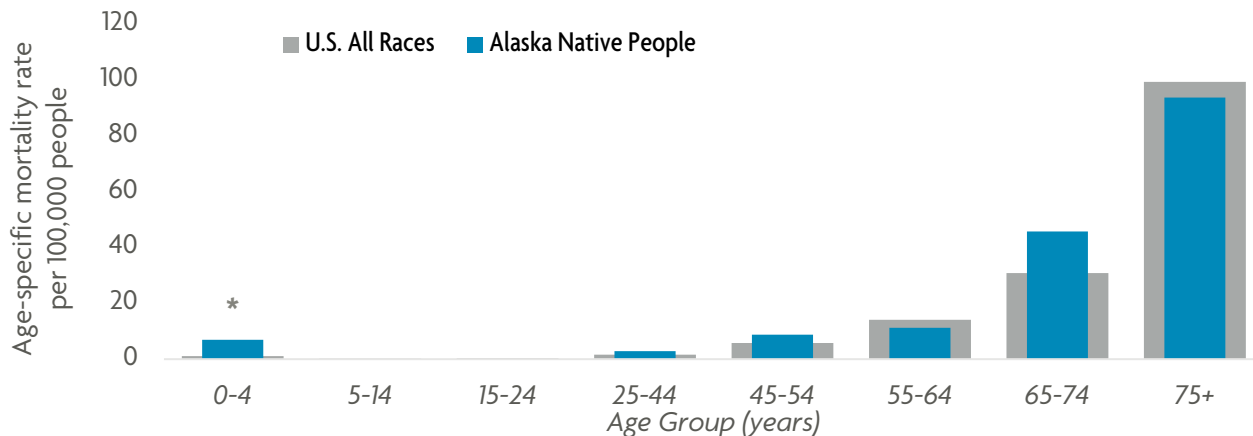


Figure 15b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

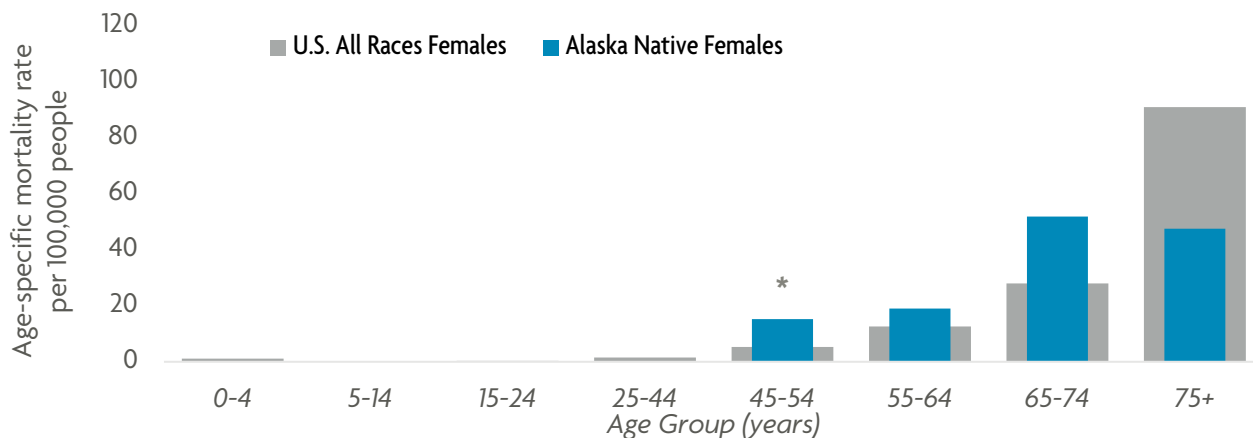
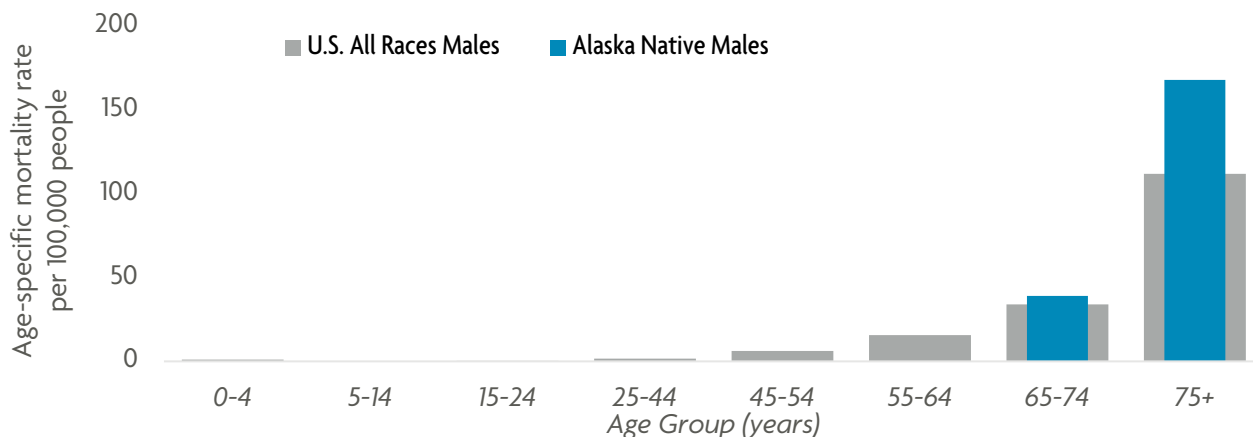


Figure 15c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Nephritis Age-Specific Mortality Rates

Figure 16a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



Figure 16b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

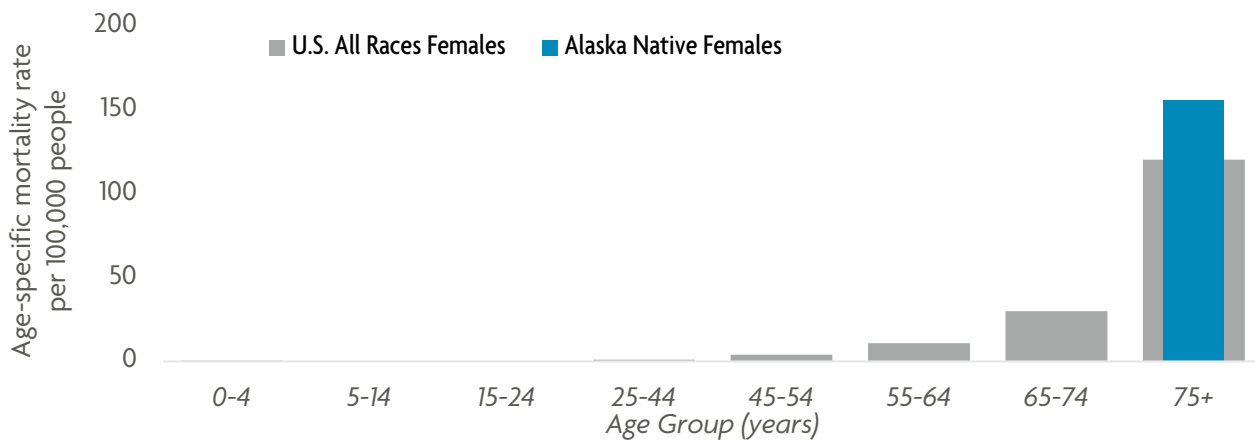
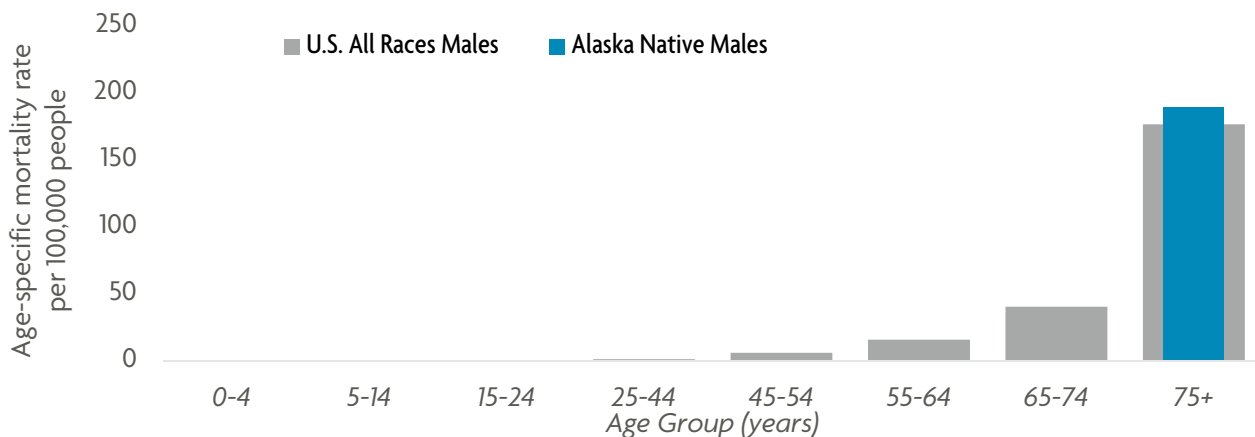


Figure 16c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Hypertension Age-Specific Mortality Rates

Figure 17a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

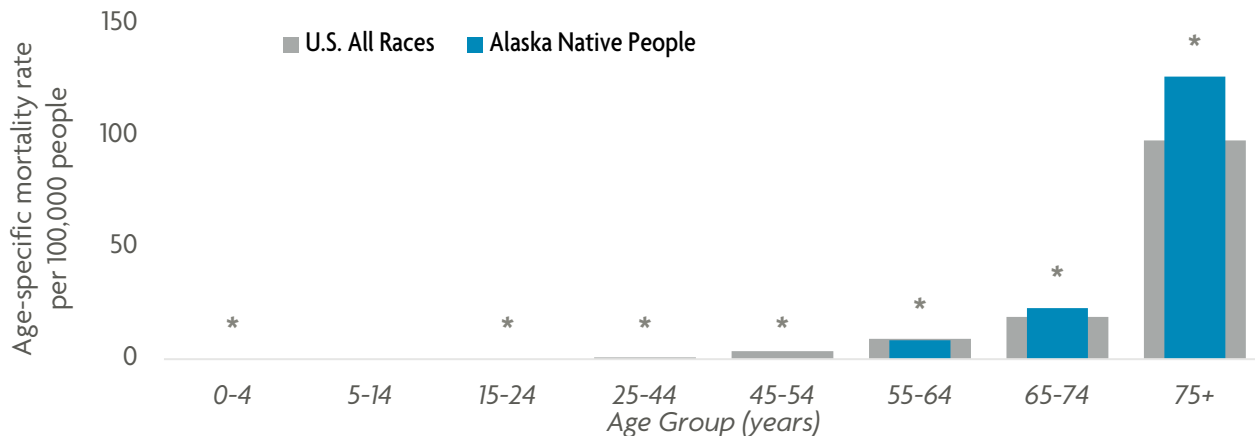


Figure 17b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

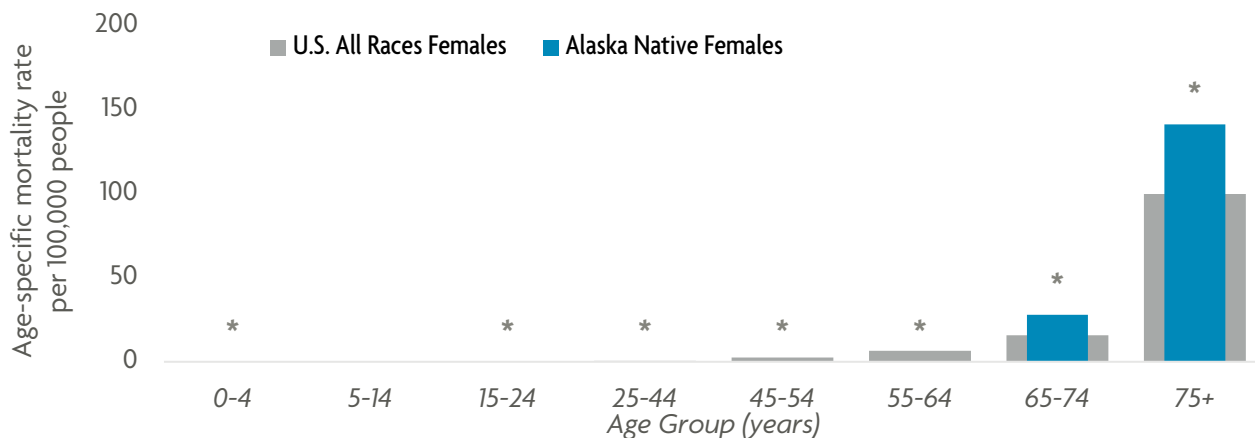
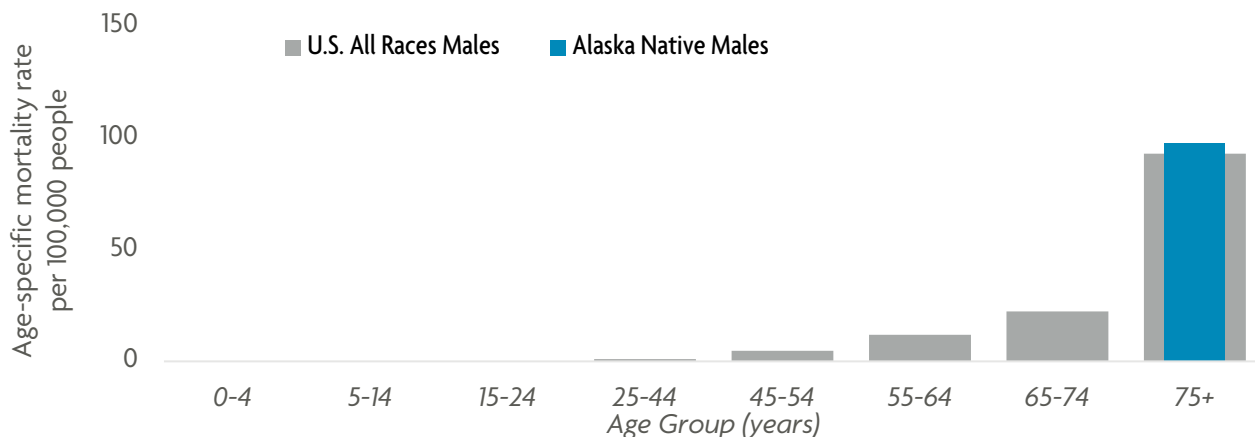


Figure 17c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Congenital Malformation Age-Specific Mortality Rates

Figure 18a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

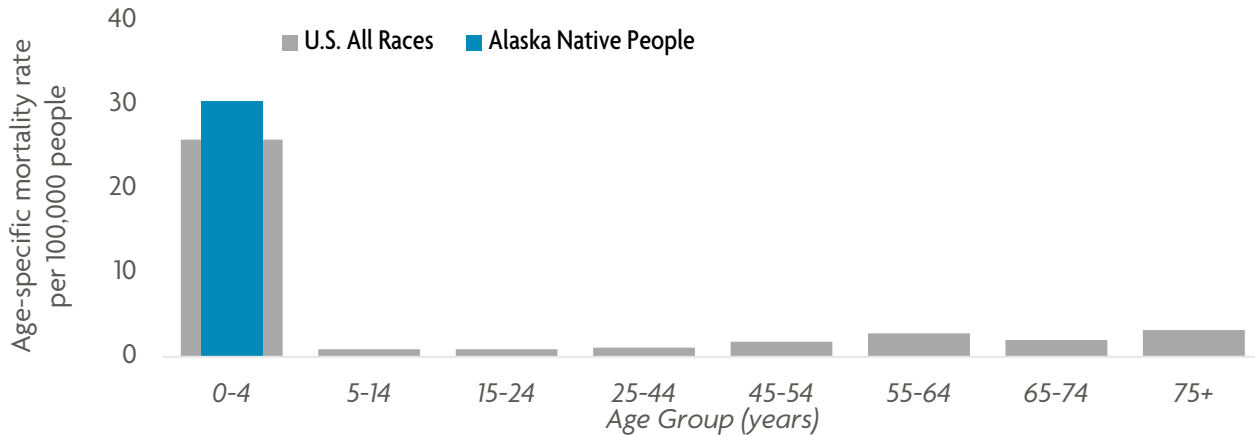


Figure 18b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

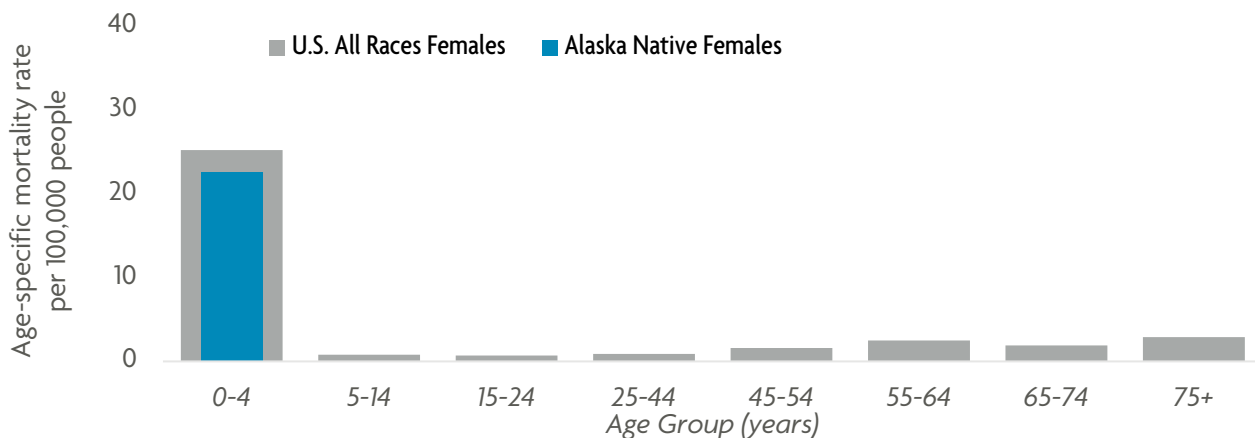
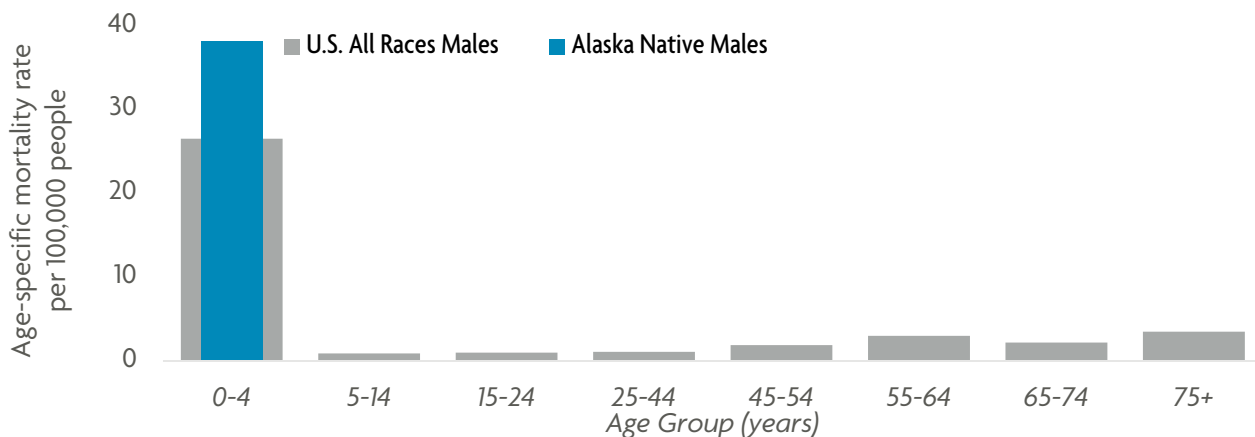


Figure 18c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Parkinson’s Disease Age-Specific Mortality Rates

Figure 19a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



Figure 19b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

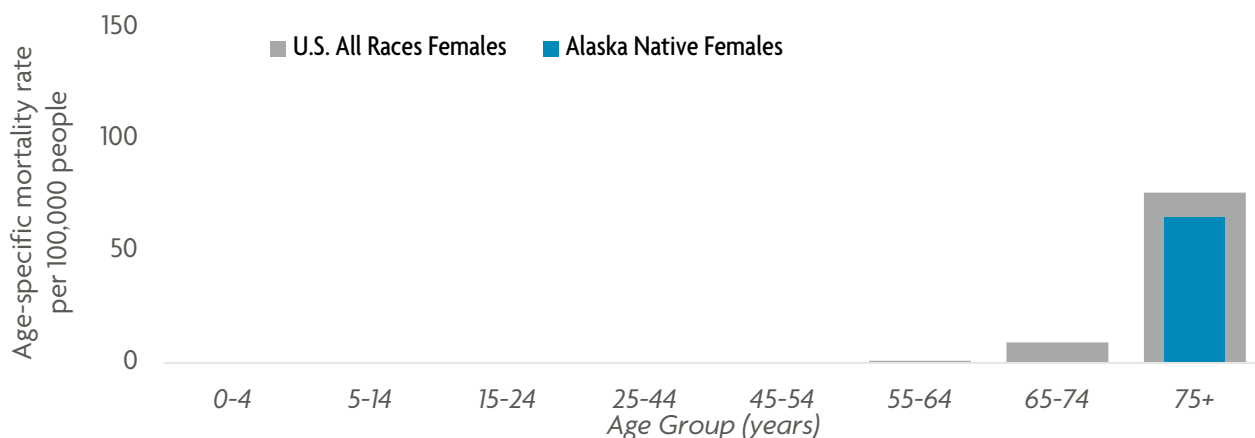
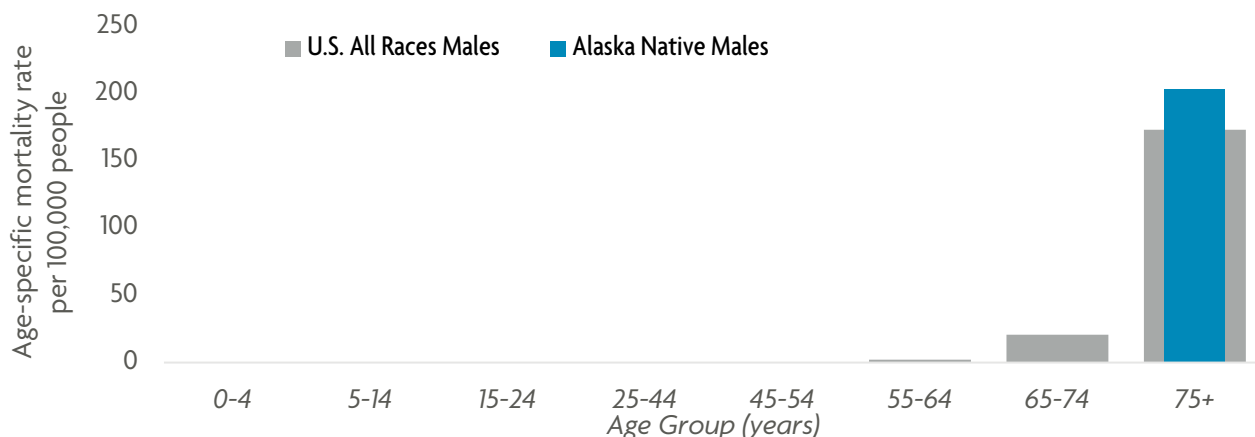


Figure 19c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Perinatal Conditions Age-Specific Mortality Rates

Figure 20a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



Figure 20b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

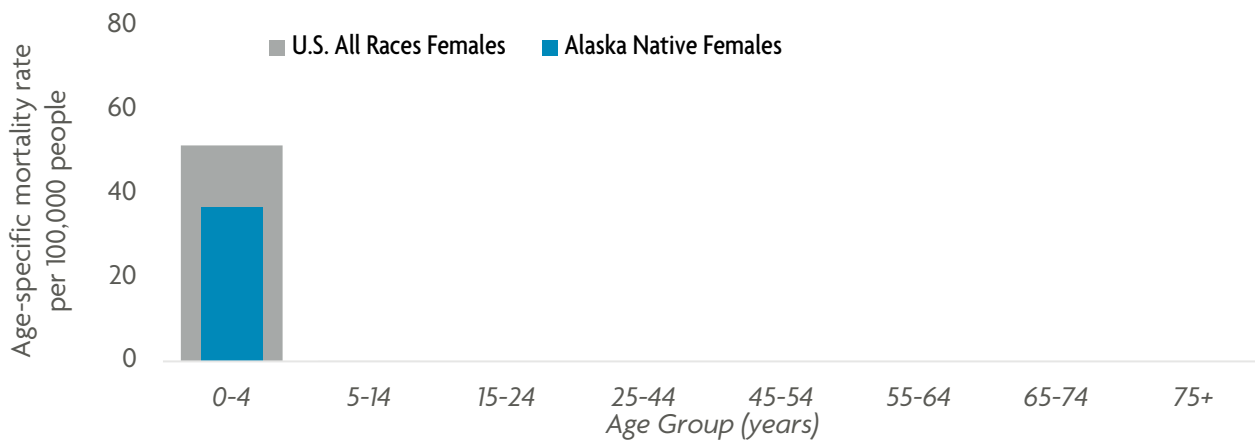
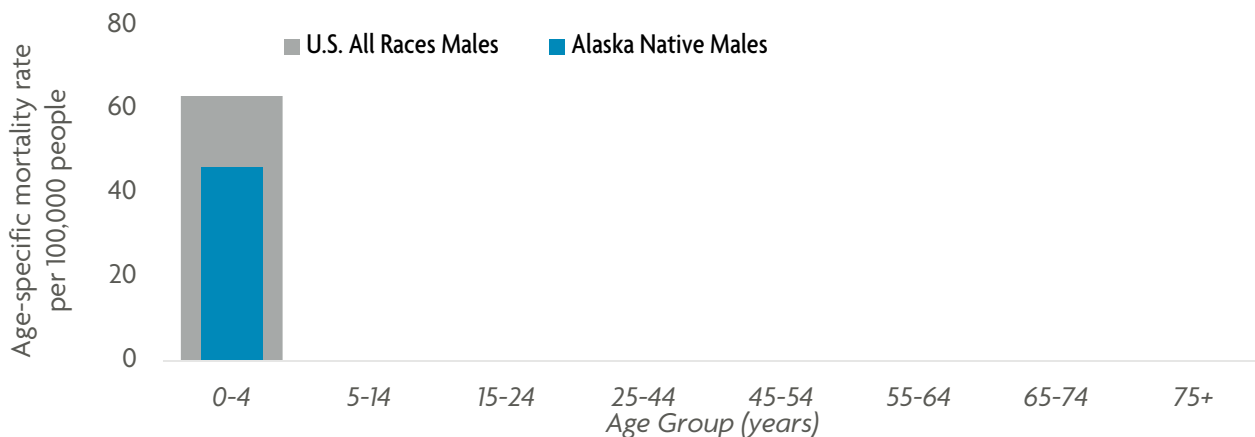


Figure 20c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Years of Potential Life Lost (YPLL)

Main Findings

- Alaska Native people, both sexes combined, had an average of 26.8 years of potential life lost from all-causes during the 2014-2018 time period.
- Unintentional injury (YPLL=23,323) caused the greatest number of years of potential life lost among Alaska Native people, both sexes combined, and among females (YPLL=8,243) and males (YPLL=15,080), separately.
- Suicide (YPLL=13,591) was the second leading cause of years of potential life lost among Alaska Native people, both sexes combined, and among males (YPLL=10,182).
- Among Alaska Native females, cancer (YPLL=4,904) was the second leading cause of years of potential life lost. Among Alaska Native males, cancer (YPLL=5,264) ranked fourth in years of potential life lost.

Overview

Years of potential life lost (YPLL) is the number of years more a person would have lived if s/he lived to age 75. For example, an individual who dies at age 55 has 20 years of potential life lost by this calculation. It is a measure of premature mortality.

This chapter reports YPLL for the five-year period, 2014-2018. The top 15 causes of YPLL for both sexes combined and each sex individually are included. Table 2a reports YPLL for Alaska Native people, both sexes combined, Table 2b reports this for females, and Table 2c for males. Figures 21a-c display the average YPLL by cause of death. Data for these figures are available in Tables 2a-c. Tables in this chapter are ranked by total YPLL and figures are ranked by mean YPLL.

YEARS OF POTENTIAL LIFE LOST (YPLL)

Table 2a. Leading Causes of YPLL before Age 75 among Alaska Native People, 2014-2018

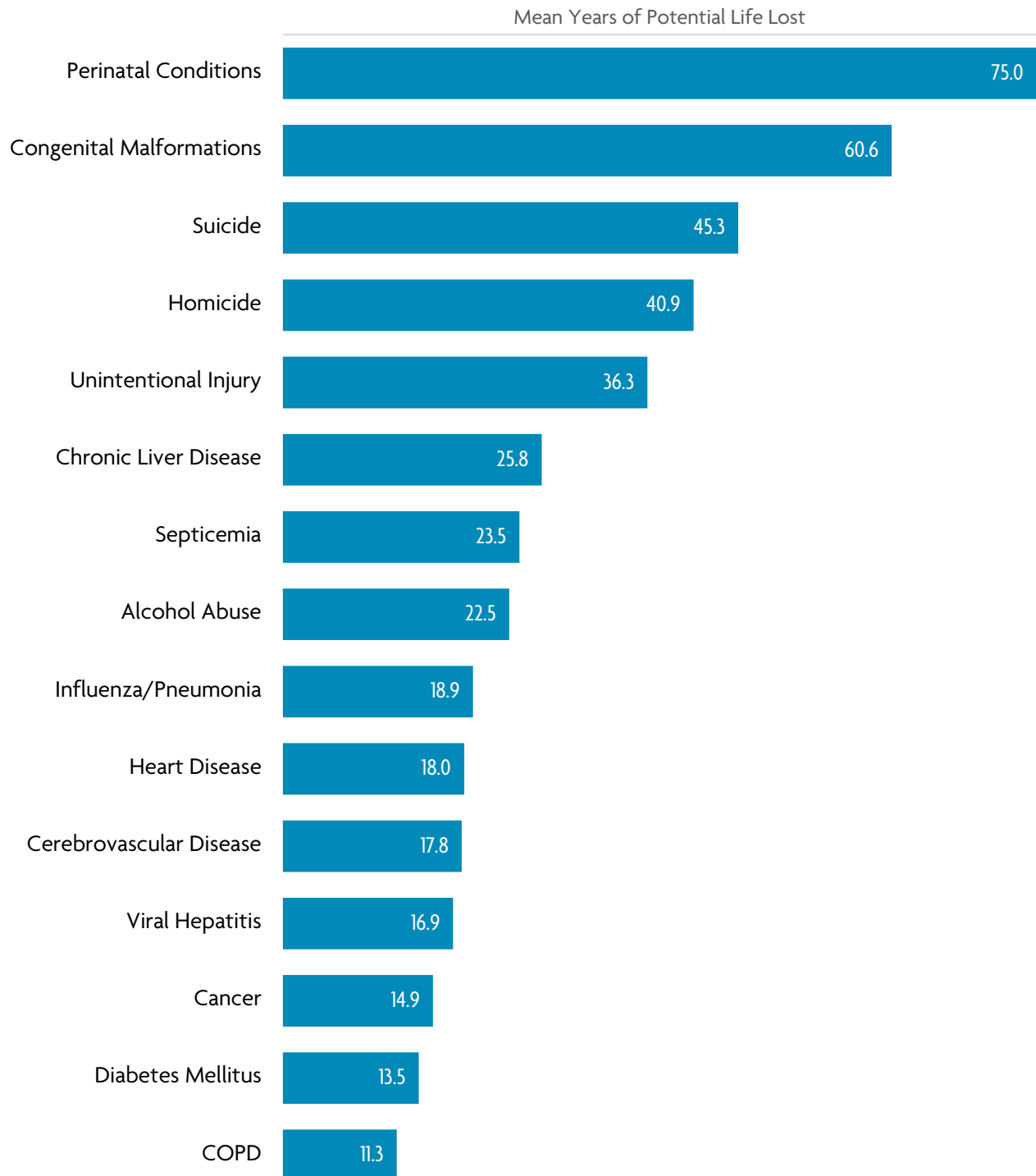
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Total YPLL	% Total YPLL	Count	Mean YPLL
Unintentional Injury	23,323	23.0%	643	36.3
Suicide	13,591	13.4%	300	45.3
Cancer	10,168	10.0%	681	14.9
Heart Disease	9,612	9.5%	533	18.0
Chronic Liver Disease	5,048	5.0%	196	25.8
Homicide	4,658	4.6%	114	40.9
Alcohol Abuse	2,635	2.6%	117	22.5
Perinatal Conditions	2,250	2.2%	30	75.0
Congenital Malformations	1,999	2.0%	33	60.6
COPD	1,598	1.6%	141	11.3
Cerebrovascular Disease	1,584	1.6%	89	17.8
Septicemia	1,012	1.0%	43	23.5
Diabetes Mellitus	933	0.9%	69	13.5
Influenza/Pneumonia	870	0.9%	46	18.9
Viral Hepatitis	254	0.3%	15	16.9
All-Cause	101,217	100.0%	3,777	26.8

YEARS OF POTENTIAL LIFE LOST (YPLL)

Figure 21a. Leading Causes of YPLL before Age 75 among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



YEARS OF POTENTIAL LIFE LOST (YPLL)

Table 2b. Leading Causes of YPLL before Age 75 among Alaska Native Females, 2014-2018

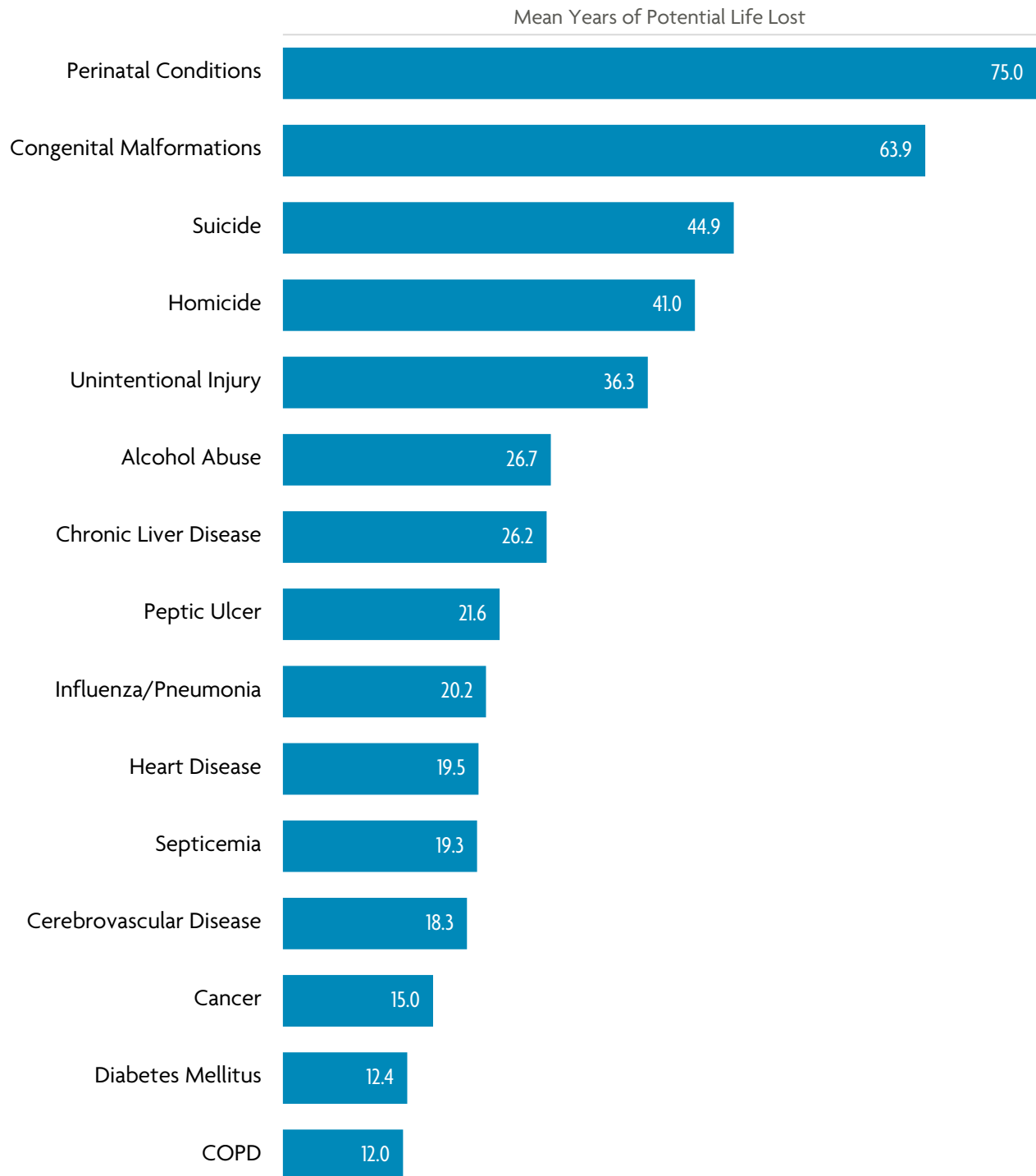
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Total YPLL	% Total YPLL	Count	Mean YPLL
Unintentional Injury	8,243	20.3%	227	36.3
Cancer	4,904	12.0%	328	15.0
Heart Disease	3,582	8.8%	184	19.5
Chronic Liver Disease	3,568	8.8%	136	26.2
Suicide	3,409	8.4%	76	44.9
Homicide	1,558	3.8%	38	41.0
Alcohol Abuse	1,173	2.9%	44	26.7
Perinatal Conditions	975	2.4%	13	75.0
COPD	789	1.9%	66	12.0
Cerebrovascular Disease	751	1.8%	41	18.3
Congenital Malformations	703	1.7%	11	63.9
Septicemia	541	1.3%	28	19.3
Influenza/Pneumonia	384	0.9%	19	20.2
Diabetes Mellitus	371	0.9%	30	12.4
Peptic Ulcer	151	0.4%	7	21.6
All-Cause	40,701	100.0%	1,592	25.6

YEARS OF POTENTIAL LIFE LOST (YPLL)

Figure 21b. Leading Causes of YPLL before Age 75 among Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



YEARS OF POTENTIAL LIFE LOST (YPLL)

Table 2c. Leading Causes of YPLL before Age 75 among Alaska Native Males, 2014-2018

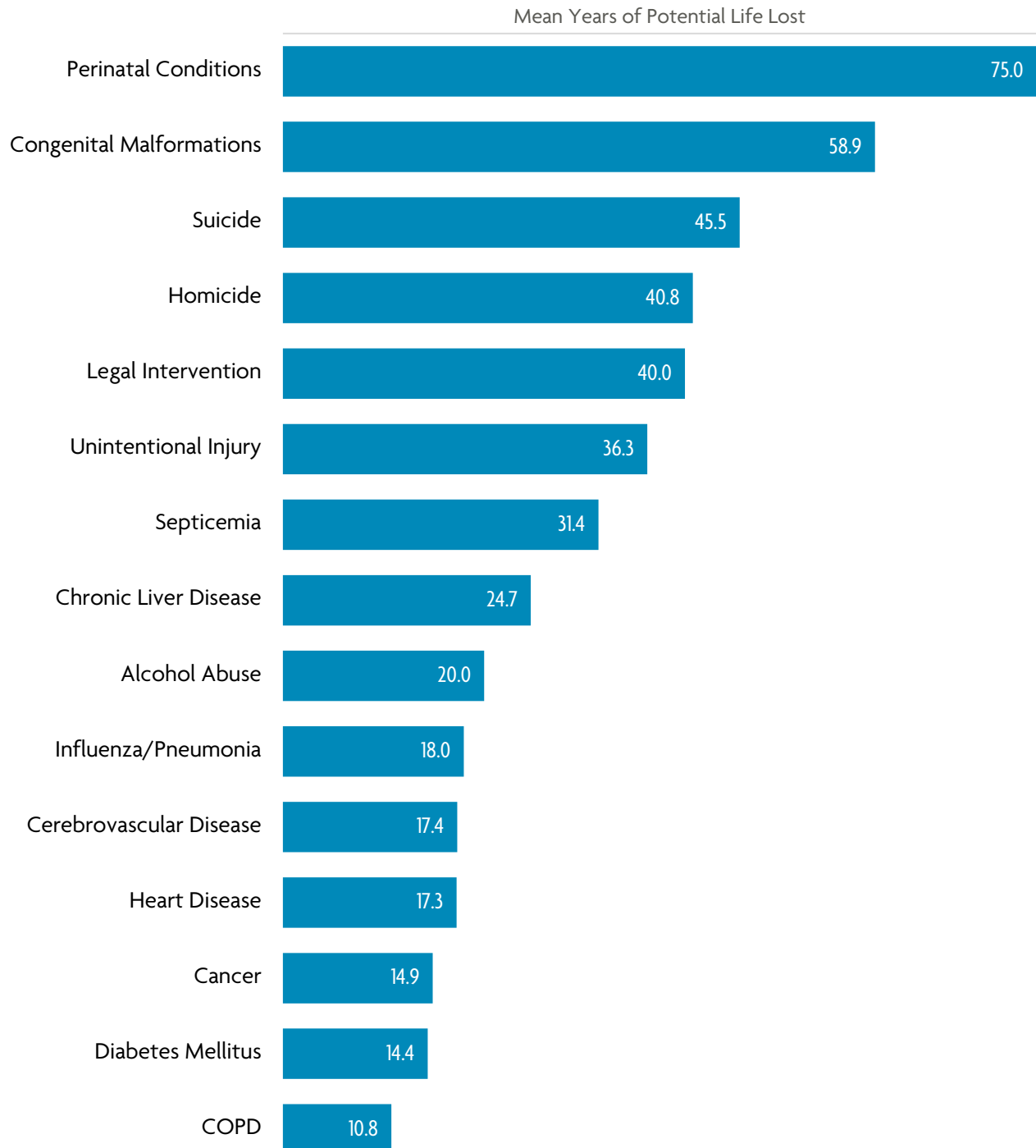
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Total YPLL	% Total YPLL	Count	Mean YPLL
Unintentional Injury	15,080	24.9%	416	36.3
Suicide	10,182	16.8%	224	45.5
Heart Disease	6,030	10.0%	349	17.3
Cancer	5,264	8.7%	353	14.9
Homicide	3,100	5.1%	76	40.8
Chronic Liver Disease	1,480	2.4%	60	24.7
Alcohol Abuse	1,462	2.4%	73	20.0
Congenital Malformations	1,296	2.1%	22	58.9
Perinatal Conditions	1,275	2.1%	17	75.0
Cerebrovascular Disease	833	1.4%	48	17.4
COPD	809	1.3%	75	10.8
Diabetes Mellitus	562	0.9%	39	14.4
Influenza/Pneumonia	486	0.8%	27	18.0
Septicemia	471	0.8%	15	31.4
Legal Intervention	240	0.4%	6	40.0
All-Cause	60,516	100.0%	2,185	27.7

YEARS OF POTENTIAL LIFE LOST (YPLL)

Figure 21c. Leading Causes of YPLL before Age 75 among Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records





Mortality Rate Trends

Caution should be used when interpreting trends among small and variable populations. In addition, death certificate categorizations including racial classification methodology have changed over time. Prior to the 2014-2018 time period, Alaska Native people with multiple races were not necessarily classified as Alaska Native people in census or other uses (the bridging methodology assigned a single race to multi-race individuals). The racial classification methodology used on Alaska death certificates since 2014 enables us to classify any individual with any mention of Alaska Native status as an Alaska Native person. Previous definitions of Alaska Native people were limited to bridge race estimates (1999-2013) and single race responses (1980-1998), shown in the continuous line in the figures in this chapter. These trends provide context to the rates of the most recent time period (2014-2018), and are represented by a single point in the figures. This new classification is not completely comparable to the old methodology, thus caution should be used when interpreting any trend.

Trend lines presented below assume that multi-race Alaska Native people prior to 1999, not categorized as Alaska Native using the single race categorization method (and not included in the statistics), are not substantially different from the Alaska Native people that were classified Alaska Native under the single race categorization. While the first time period presented here, 1980-1983, is only a four-year aggregate (compared to five-years for all other time periods), there is no reason to believe the inclusion of an additional year in the first time period would substantially change the overall trend calculation. We assume the risk of mortality in 1979 is not significantly different than the 1980-1983 time period.

In addition, the CDC's ICD coding guidance changes over time resulting in the frequency of codes becoming more or less likely to be used by medical examiners or other physicians. For more information, see details about death categorization in Methods, Appendix A.

All trends noted in the highlights are statistically significant, unless otherwise noted. All mortality rates are age-adjusted, standardized to U.S. 2000 population.

Statewide Trends

Main Findings

- Alaska Native all-cause mortality rates declined 9% between the 1980-1983 time period and the most recent five-year period, 2014-2018. A decline in all-cause mortality has occurred in every five-year period, except for the two most recent periods, 2009-2013 and 2014-2018. The greatest decline (7%) occurred during 1999-2003 and 2004-2008. U.S. all races all-cause mortality declined 26% during 1980-1983 and 2014-2018.
- Alaska Native cancer mortality rates decreased 8% between 1980-1983 and 2014-2018. U.S. all races rates declined 24% between 1980-1983 and 2014-2018.
- Alaska Native heart disease mortality rates declined 24% between 1980-1983 and 2014-2018. U.S. all races rates declined 58% between 1980-1983 and 2014-2018.

MORTALITY RATE TRENDS

- Alaska Native unintentional injury mortality rates declined 38% between 1980-1983 and 2014-2018. U.S. all races rates declined 4%, though this change was not statistically significant.
- Alaska Native suicide rates have decreased by 3% between 1980-1983 and 2014-2018. U.S. all races rates increased 4% between 1980-1983 and 2014-2018.
- Alaska Native chronic obstructive pulmonary disease (COPD) mortality rates increased 164% between 1980-1983 and 2014-2018. U.S. all races rates increased 33% between 1980-1983 and 2014-2018.
- Alaska Native cerebrovascular disease mortality rates decreased 20% between 1980-1983 and 2014-2018. U.S. all races rates declined 56% between 1980-1983 and 2014-2018.
- Alaska Native chronic liver disease mortality rates increased 19% between 1980-1983 and 2014-2018. U.S. all races rates declined 16% between 1980-1983 and 2014-2018.
- Alaska Native pneumonia and influenza mortality rates declined 47% between 1980-1983 and 2014-2018. U.S. all races rates declined 50% between 1980-1983 and 2014-2018.
- Alaska Native homicide mortality rates decreased 56% between 1980-1983 and 2014-2018. U.S. all races rates decreased 19% between 1980-1983 and 2008-2013.
- Alaska Native alcohol abuse mortality rates decreased 30% between 1980-1983 and 2014-2018. U.S. all races rates increased 25% between 1980-1983 and 2014-2018.

Overview

This chapter lists changes in mortality rates over the thirty-nine year period, 1980-2018. Table 3 displays these changes among Alaska Native people, both sexes combined. Percent change refers to the 1980-1983 time period compared to the most recent time period, 2014-2018. Figures 22-32 compare rates of Alaska Native people and U.S. all races for specific causes over the period. Data for these figures are available in Table 3.

MORTALITY RATE TRENDS

Table 3. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People Statewide, 1980-2018

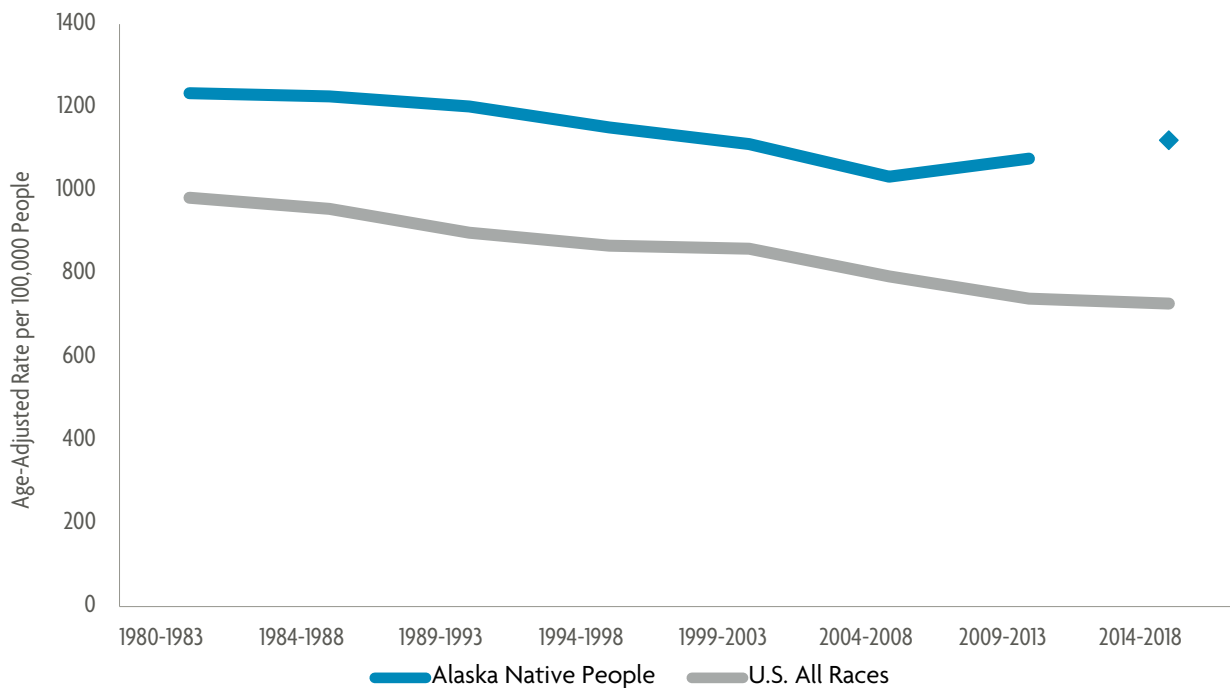
Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	224.3	243.3	245.4	248.9	239.5	226.3	234.6	205.9	-8.2%
Heart Disease	270.9	288.1	271.9	252	211.6	169	190.3	207.3	-23.5% *
Unintentional Injury	184.1	174	133	111	107.4	97.7	104.8	114.7	-37.7% *
Suicide	41.8	49.5	46.8	42.8	34.7	42.3	40.6	40.4	-3.3%
COPD	26.2	44.5	58.4	68.3	63	57.3	65.7	69.1	163.8% *
Chronic Liver Disease	28.1	20.4	26.8	18.3	19.4	18	24	33.5	19.3% *
Cerebrovascular Disease	64.5	65.1	67.5	84.1	66.5	56.7	54.7	51.9	-19.5% *
Alcohol Abuse	28.8	23.2	20.6	31.7	40.9	38.7	14.2	20.1	-30.3% *
Homicide	36.8	22.6	18.7	16.1	16.8	11.2	11.2	16.3	-55.7% *
Influenza/Pneumonia	52.2	60.5	56.2	39.6	35.8	25.5	26	27.7	-46.9% *
All-Cause	1234.0	1226.5	1202.1	1151.6	1111.6	1033.3	1076.7	1120.7	-9.2% *

*significant difference, $p < 0.05$

Figure 22. Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 23. Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

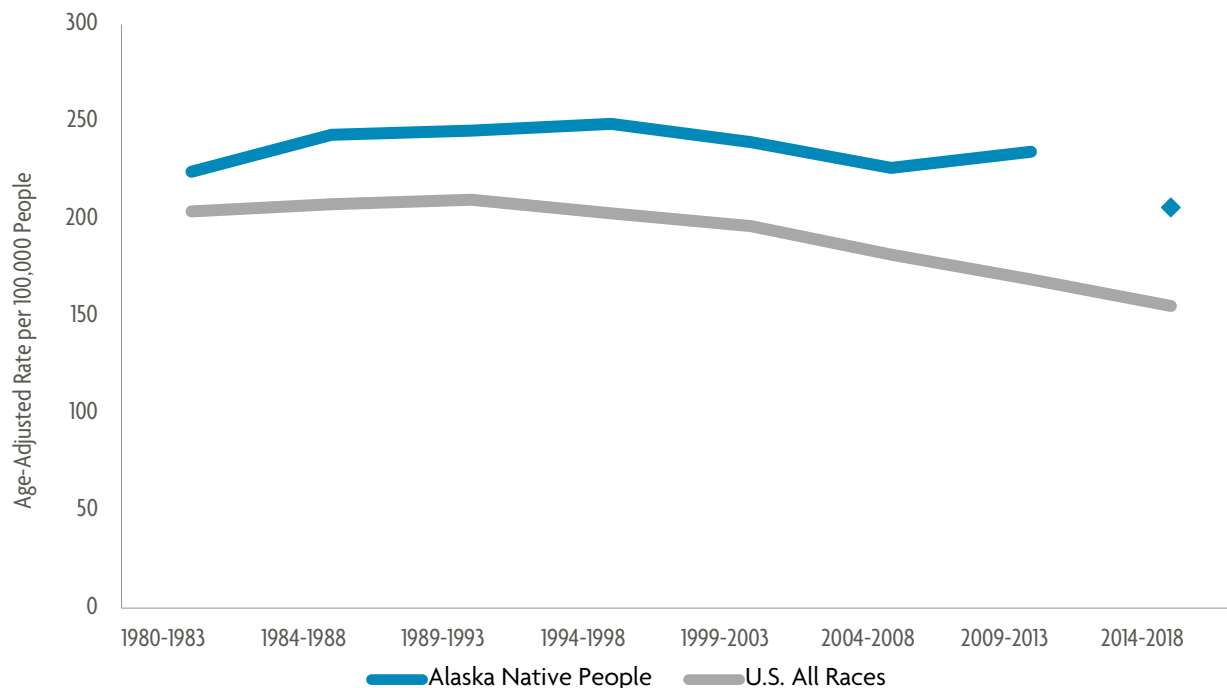
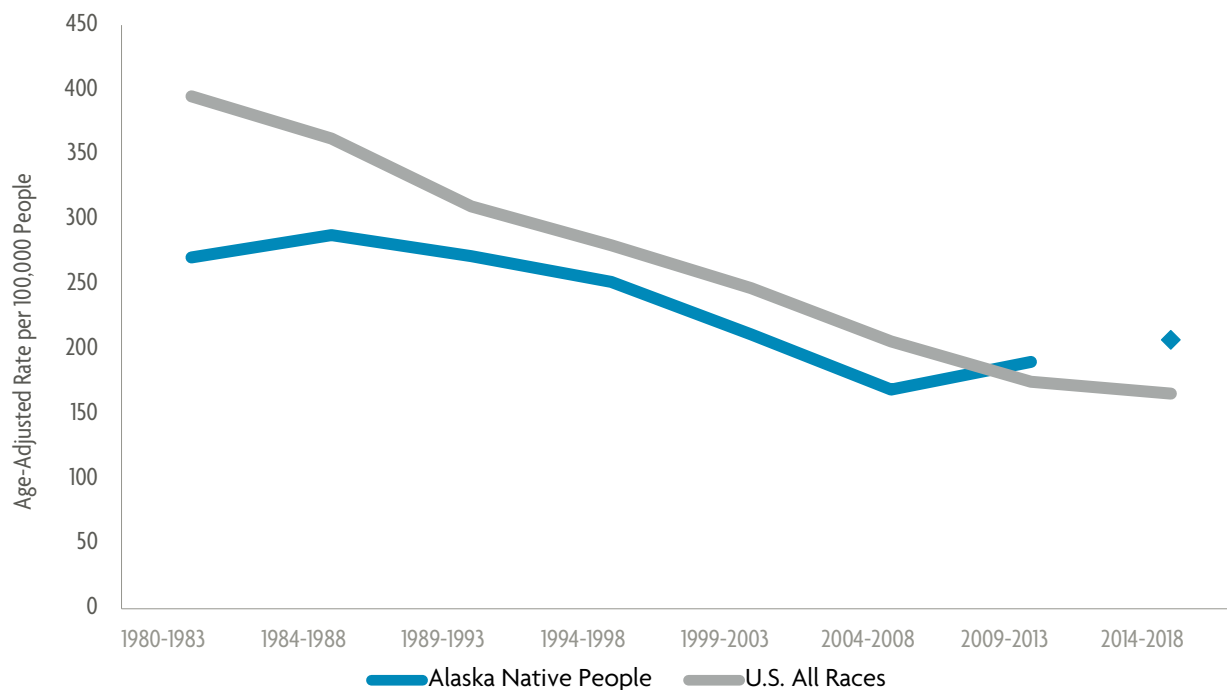


Figure 24. Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 25. Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

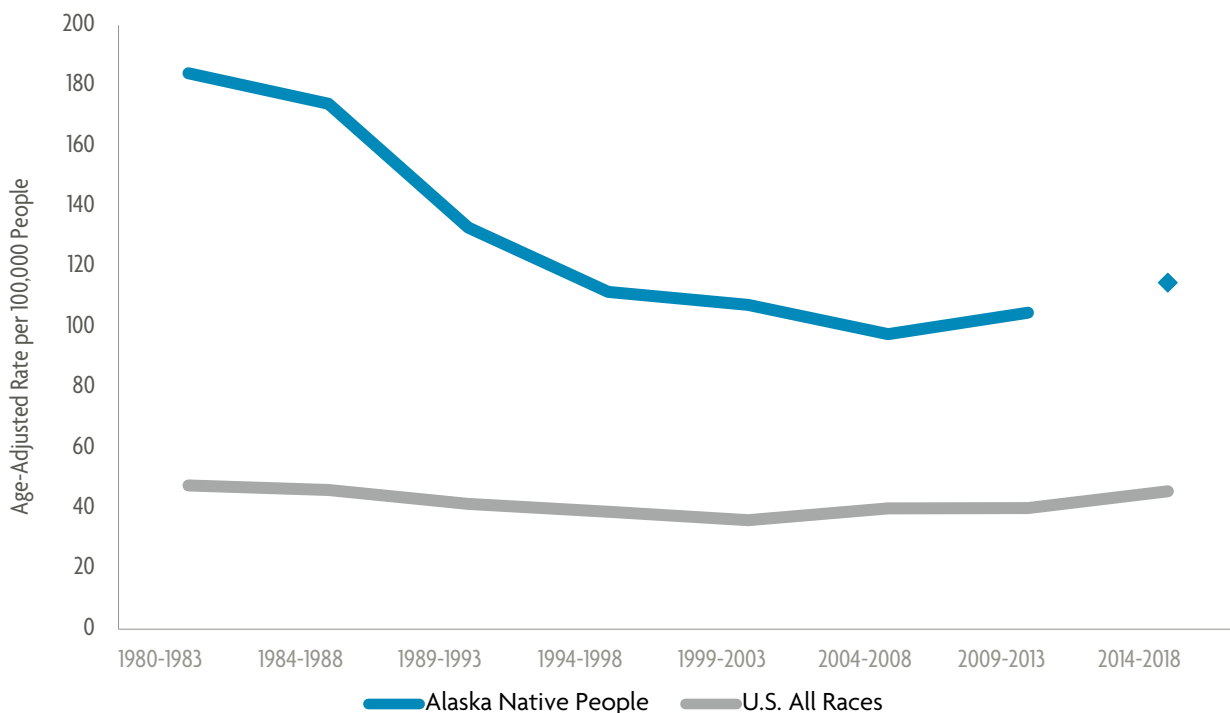
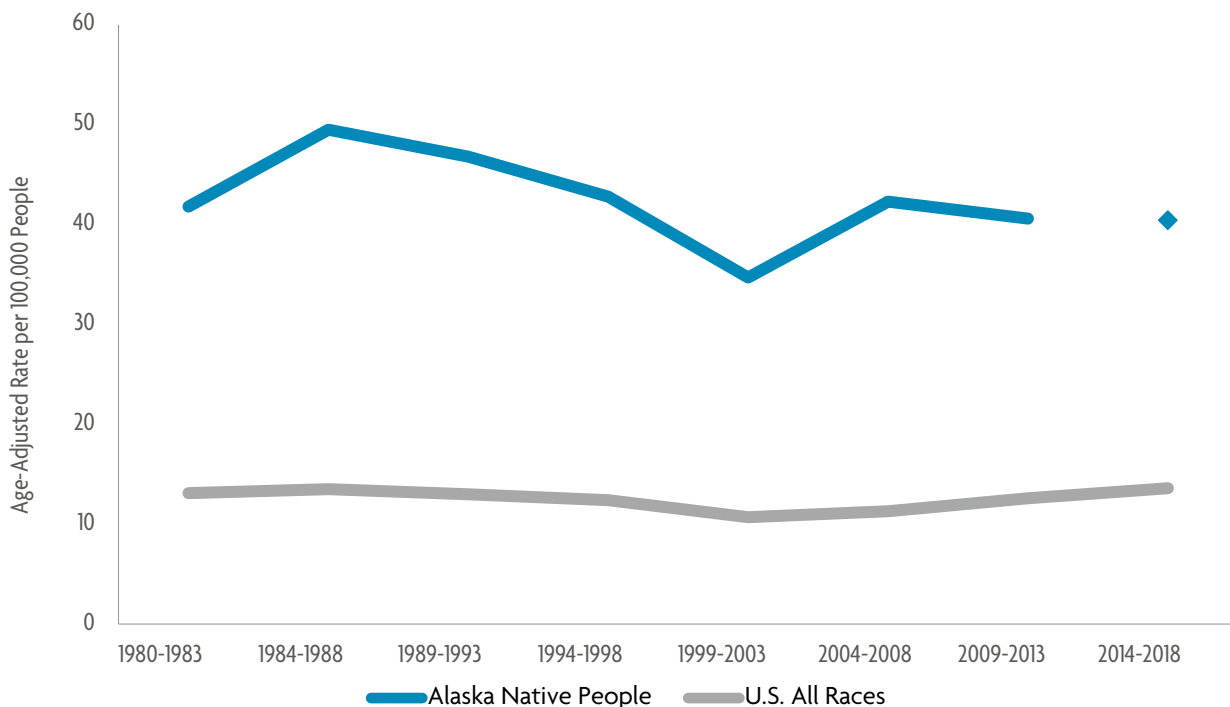


Figure 26. Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 27. Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

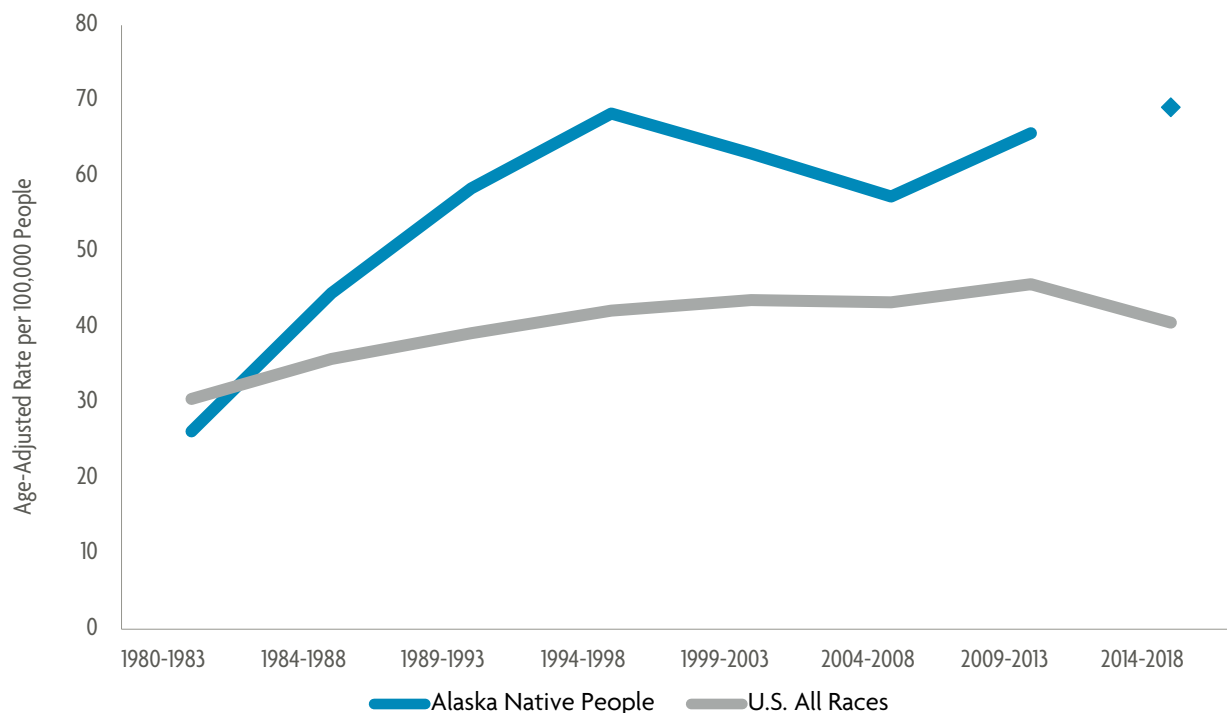
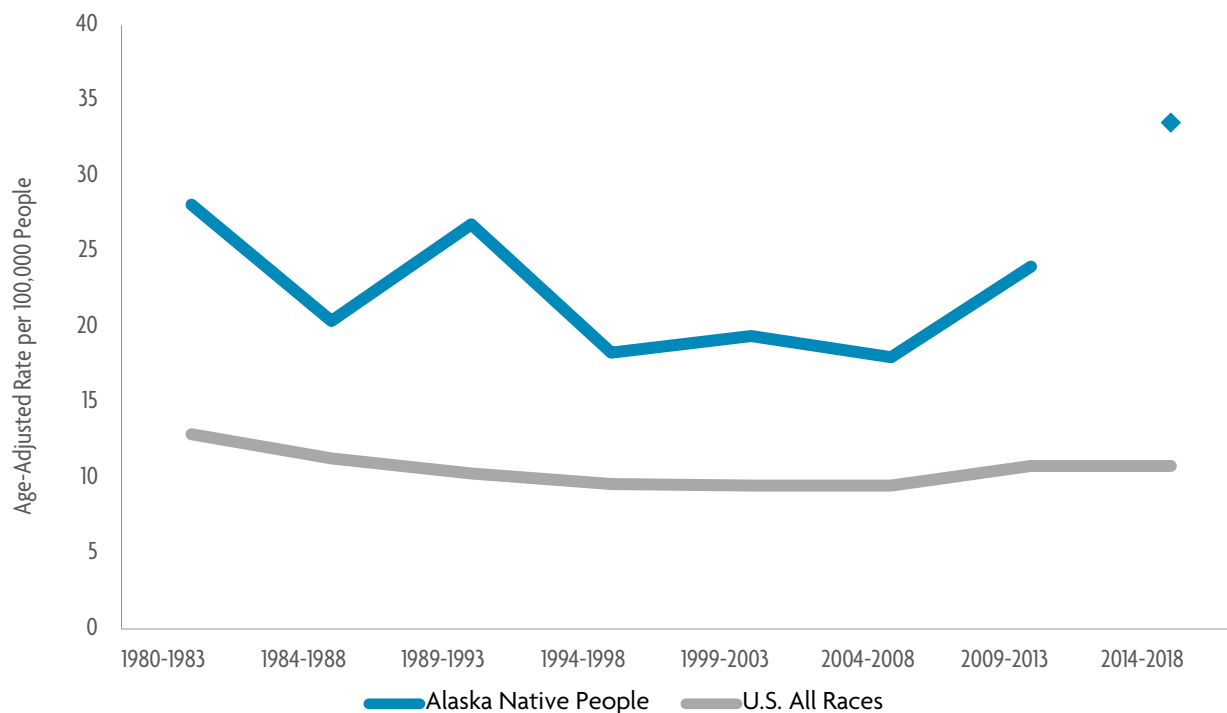


Figure 28. Trend in Chronic Liver Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 29. Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

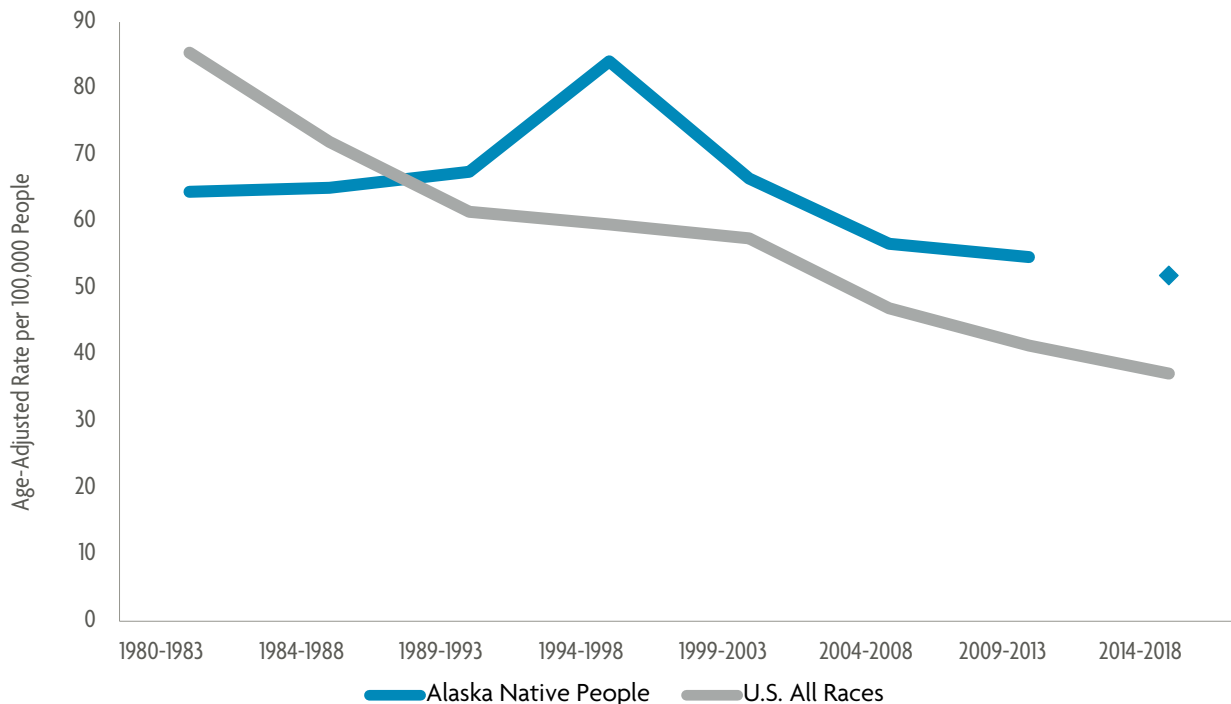
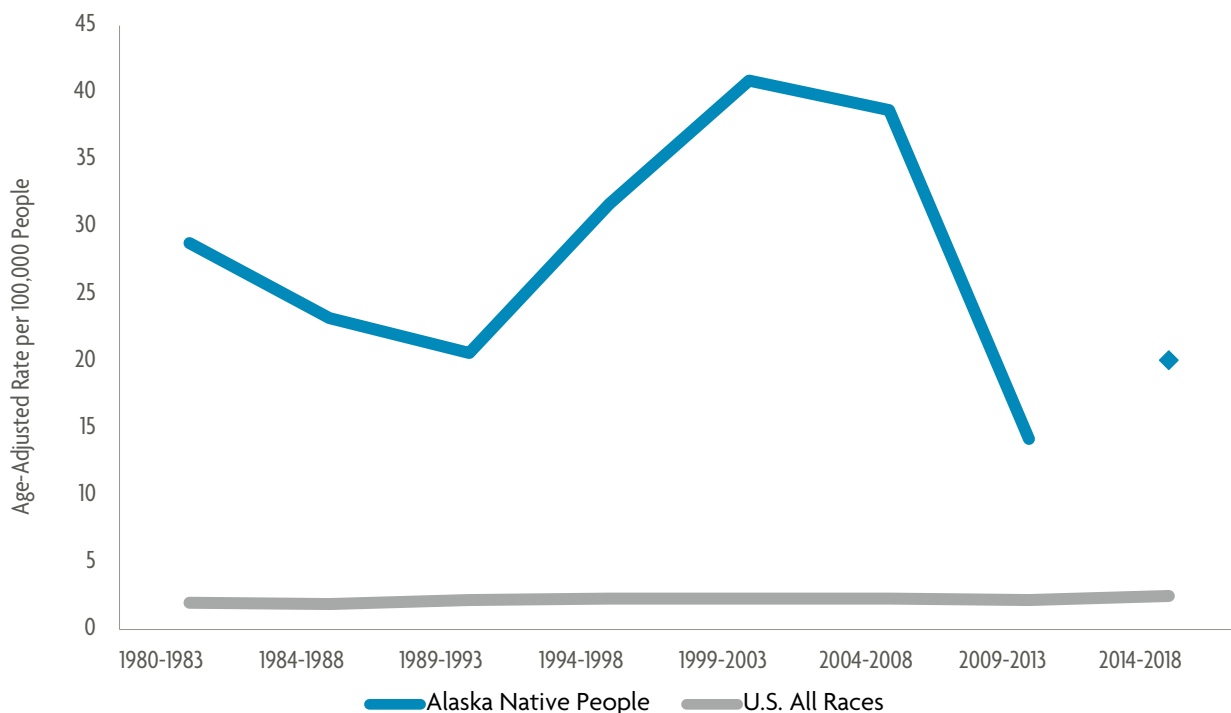


Figure 30. Trend in Alcohol Abuse Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 31. Trend in Homicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

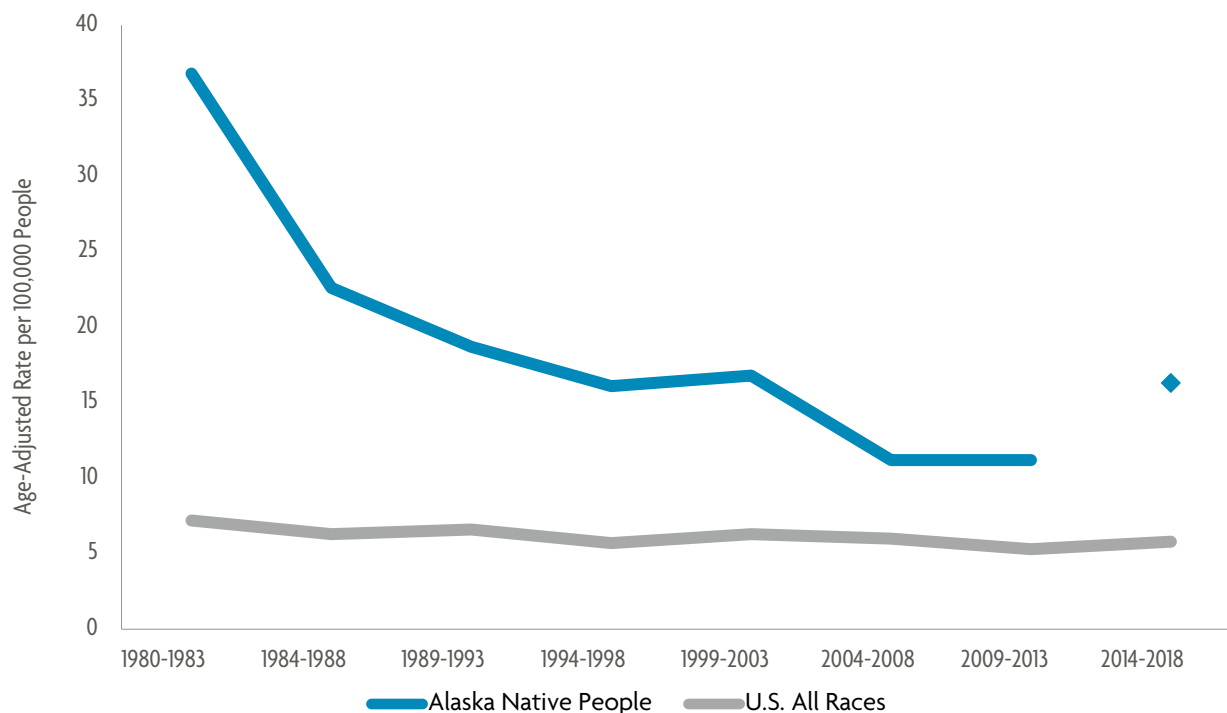
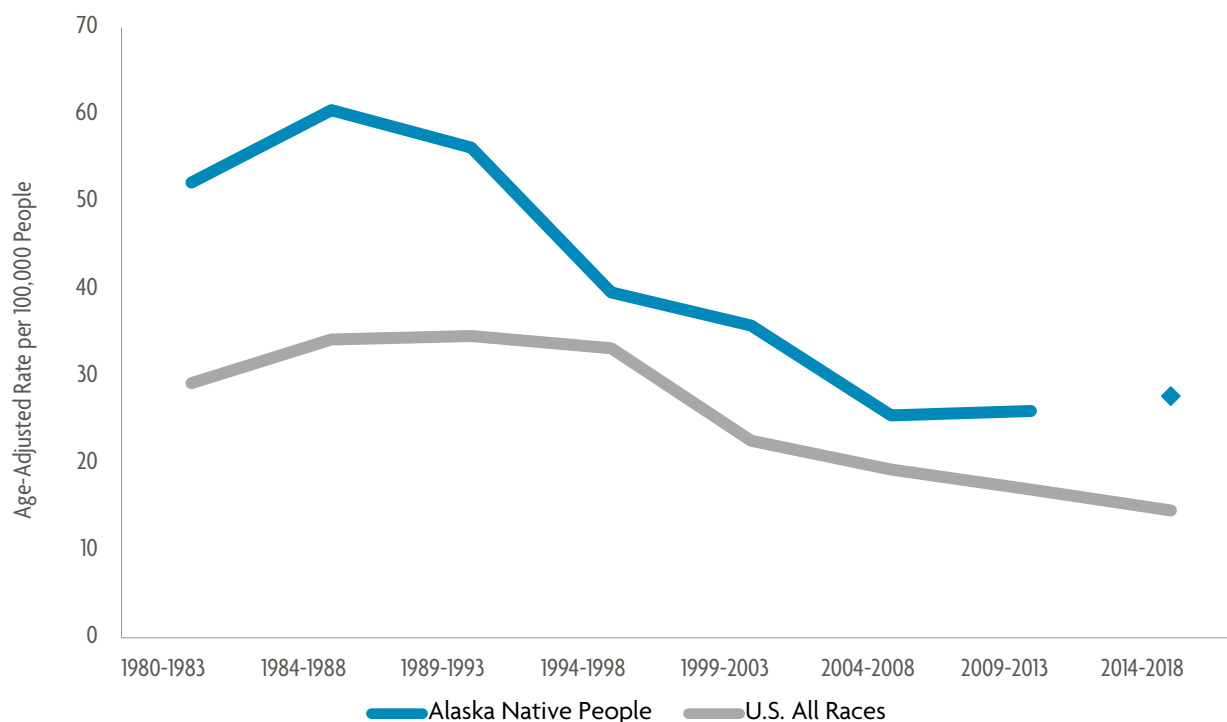


Figure 32. Trend in Influenza/Pneumonia Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



Regional Trends

Main Findings

- Alaska Native people in the Aleutians & Pribilofs service region experienced a decline in unintentional injury (82%), heart disease (79%), and all-cause (53%) mortality rates between 1980-1983 and 2014-2018.
- Alaska Native people in the Anchorage-MatSu service region had a consistently lower rate of suicide mortality than the rate for the rest of the state over the period, 1980-1983 to 2014-2018. In addition, mortality rates declined due to pneumonia & influenza (83%), homicide (50%), and heart disease (29%) between 1980-1983 and 2014-2018.
- Alaska Native people in the Arctic Slope service region had a higher rate of cancer mortality than the rate for the rest of the state over the period, 1980-1983 to 2014-2018.
- Alaska Native people in the Bristol Bay service region historically has had a higher rate of unintentional injury mortality than the rate for the rest of the state, however this is no longer true for the 2014-2018 time period.
- Alaska Native people in the Copper River/Prince William Sound service region had a 75% decline in the unintentional injury mortality rate between 1980-1983 and 2014-2018.
- Alaska Native people in the Interior service region had a decline in mortality rates due to alcohol abuse (49%) and unintentional injury (49%) between 1980-1983 and 2014-2018.
- Alaska Native people in the Kenai Peninsula service region experienced a decline in the heart disease mortality rate (51%) between 1980-1983 and 2014-2018.
- Alaska Native people in the Kodiak Area service region had a decline in mortality rates due to heart disease (60%) and unintentional injury (51%). They had an increase in the mortality rate due to cancer (112%) between 1980-1983 and 2014-2018.
- Alaska Native people in the Northwest Arctic service region had a higher rate of suicide than the rate for the rest of the state but had a decline in suicide mortality rates (24%) between the 1980-1983 and 2014-2018 periods.
- Alaska Native people in the Norton Sound service region had a higher rate of suicide than the rates for the rest of the state but experienced a decline in suicide mortality rates (46%) between the 1980-1983 and 2014-2018 period. The mortality rate for cerebrovascular disease decreased (36%) between 1980-1983 and 2014-2018.
- Alaska Native people in the Southeast service region had lower mortality rates than the rest of the state from cancer, unintentional injuries, suicide, and COPD over the period, 1980-1983 to 2014-2018. Mortality rates declined for heart disease (55%), suicide (60%), and cerebrovascular disease (67%) between 1980-1983 and 2014-2018.
- Alaska Native people in the Yukon-Kuskokwim service region had a decline in the mortality rate for unintentional injury (39%) and an increase in the suicide rate (143%) between 1980-1983 and 2014-2018.

Overview

This section reports mortality rate trends by service region. Definitions for service regions are available in Appendix D. Tables 4-15 display this information for each region, both sexes combined, for the eight time periods between 1980 and 2018. The causes of death are listed in order based on the count ranking of leading cause statewide for the most recent time period, 2014-2018. Figures 33-113 compare rates in each service region to Alaska Native people statewide and to U.S. all races. Figures were only presented when it was possible to calculate rates for at least three consecutive time periods. Data for these figures are available in Tables 4-15. Counts for these rates are available in Appendix B – Tables 59-70.

MORTALITY RATE TRENDS

Table 4. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Aleutians & Pribilofs Region, 1980-2014

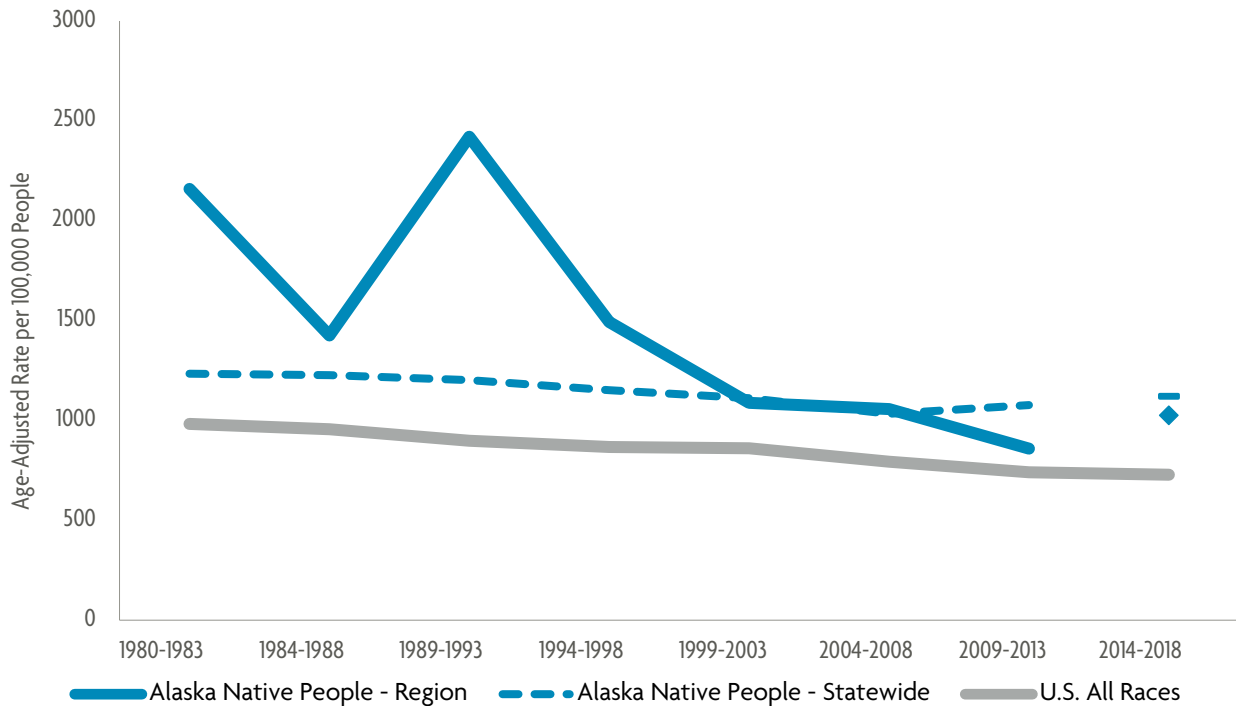
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	310.2	197.3	189.6	530.3	396.0	230.7	262.1	240.1	-22.6%
Heart Disease	751.9	581.2	707.4	203.8	144.1	231.0	128.8	157.8	-79.0% *
Unintentional Injury	387.5	227.9	64.0	301.3	84.9	102.2	66.8	71.7	-81.5% *
All-Cause	2159.0	1425.7	2420.5	1492.5	1088.3	1057.3	859.7	1025.5	-52.5% *

*significant difference, $p < 0.05$

Figure 33. Aleutian & Pribilofs Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

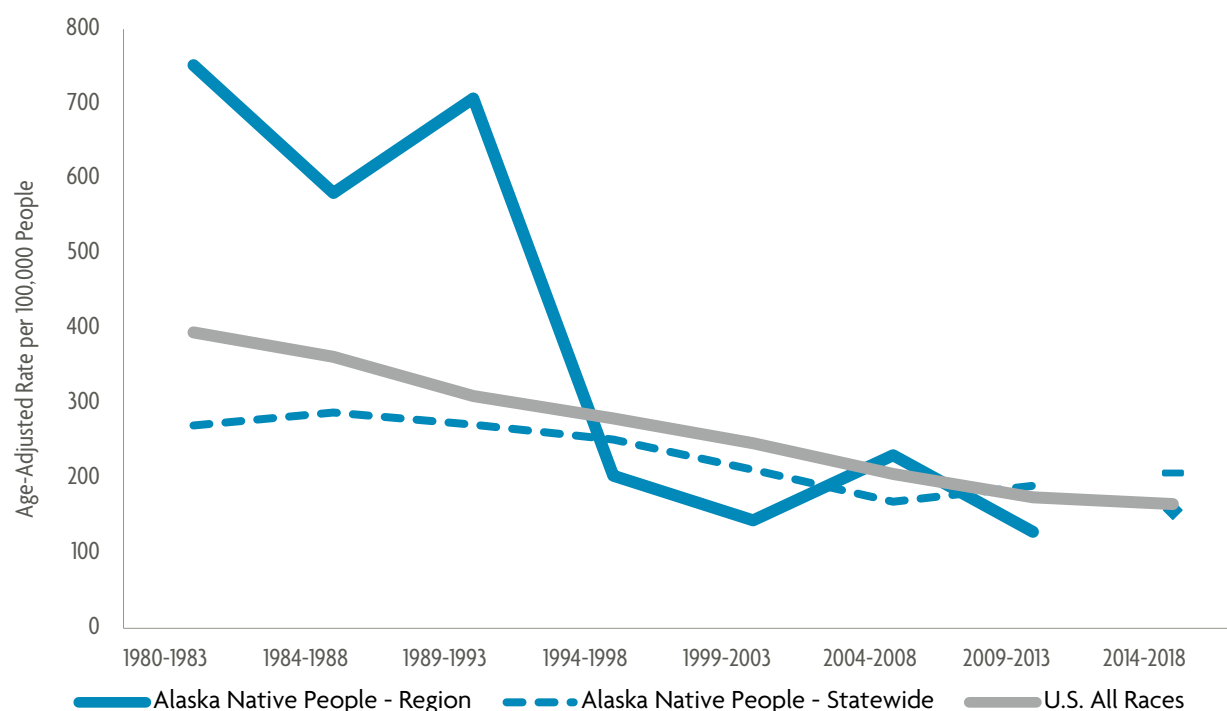
Figure 34. Aleutian & Pribilofs Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



Figure 35. Aleutian & Pribilofs Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

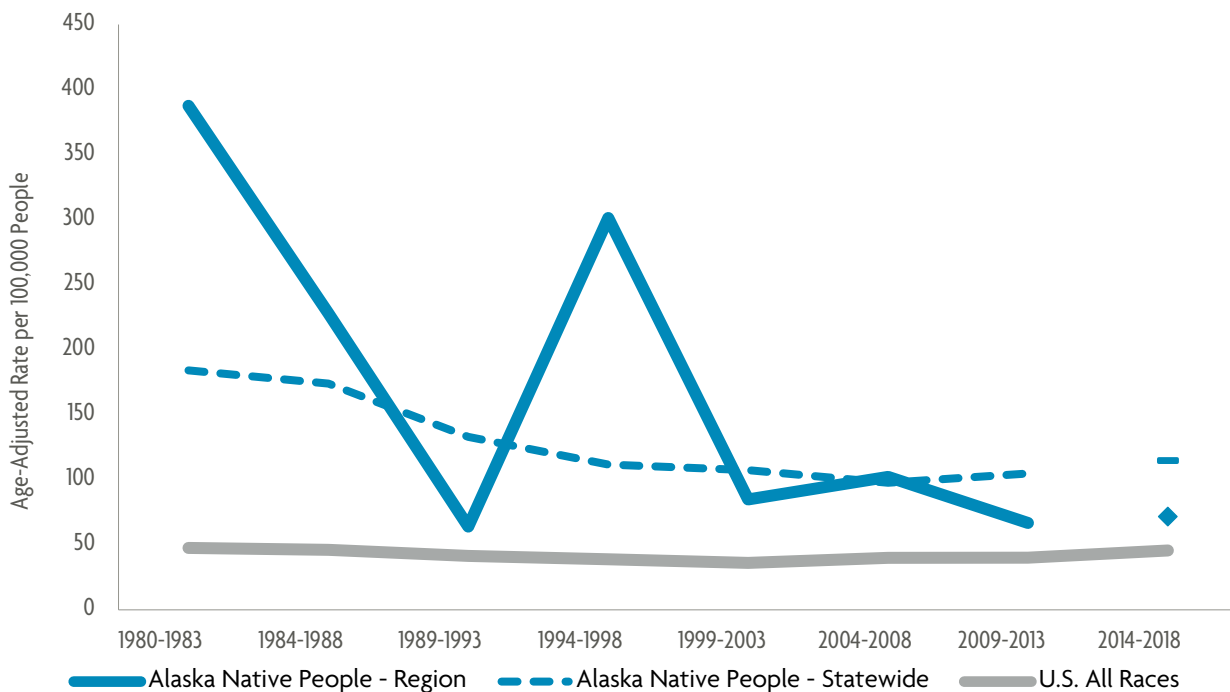
Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 36. Aleutian & Pribilofs Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Table 5. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Anchorage-MatSu Region, 1980-2014

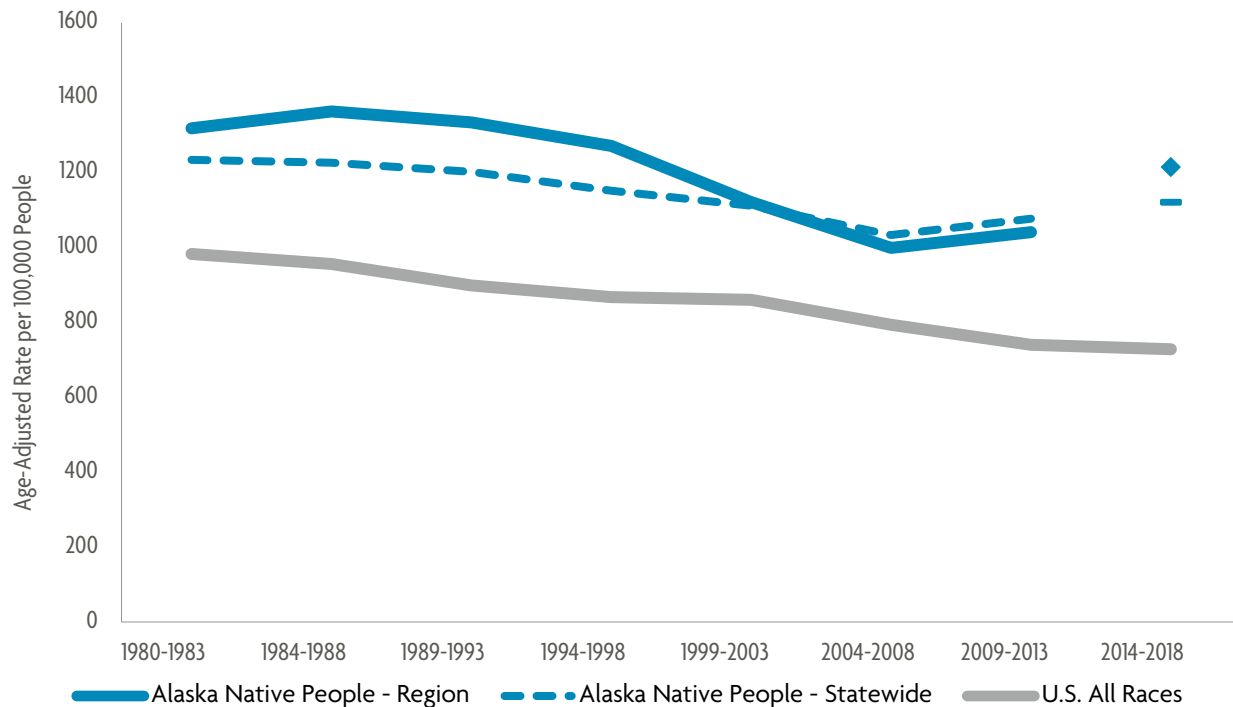
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	231.7	237.3	240.1	247.8	231.3	176.2	233.5	212.1	-8.5%
Heart Disease	278.4	322.5	301.5	206.9	226.2	169.9	203.2	196.6	-29.4% *
Unintentional Injury	99.7	114.4	100.8	87.7	96.3	82.3	104.7	117.6	18.0%
Suicide	20.5	26.4	33.2	20.1	17.3	27.7	29.3	34.9	70.3% *
COPD	73.1	85.9	73.8	78.1	66.3	48.2	63	68	-7.0%
Chronic Liver Disease	48.3	36.9	51.7	22.7	27.9	33.1	46.4	68	40.7% *
Cerebrovascular Disease	48.3	36.9	51.7	22.7	27.9	33.1	46.4	62.8	30.1% *
Alcohol Abuse	37.1	25.7	25.9	26	45.3	44.7	20.8	25.4	-31.6%
Homicide	35.3	18.7	18.5	25.9	16.7	9	17.8	17.8	-49.7% *
Influenza/Pneumonia	181.5	116.8	39.2	20	20.1	18.3	29	31.6	-82.6% *
All-Cause	1318.1	1363.3	1334.2	1271.3	1121.3	998.9	1189.8	1214.6	-7.9%

*significant difference, $p < 0.05$

Figure 37. Anchorage-MatSu Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 38. Anchorage-MatSu Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

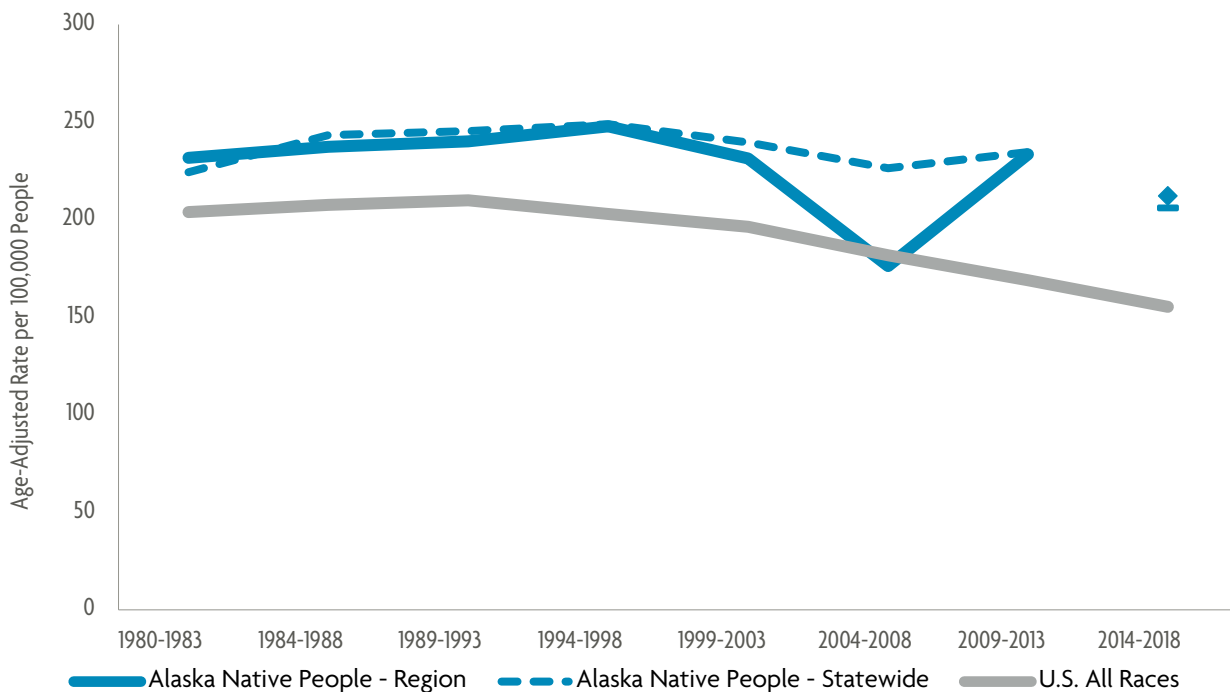
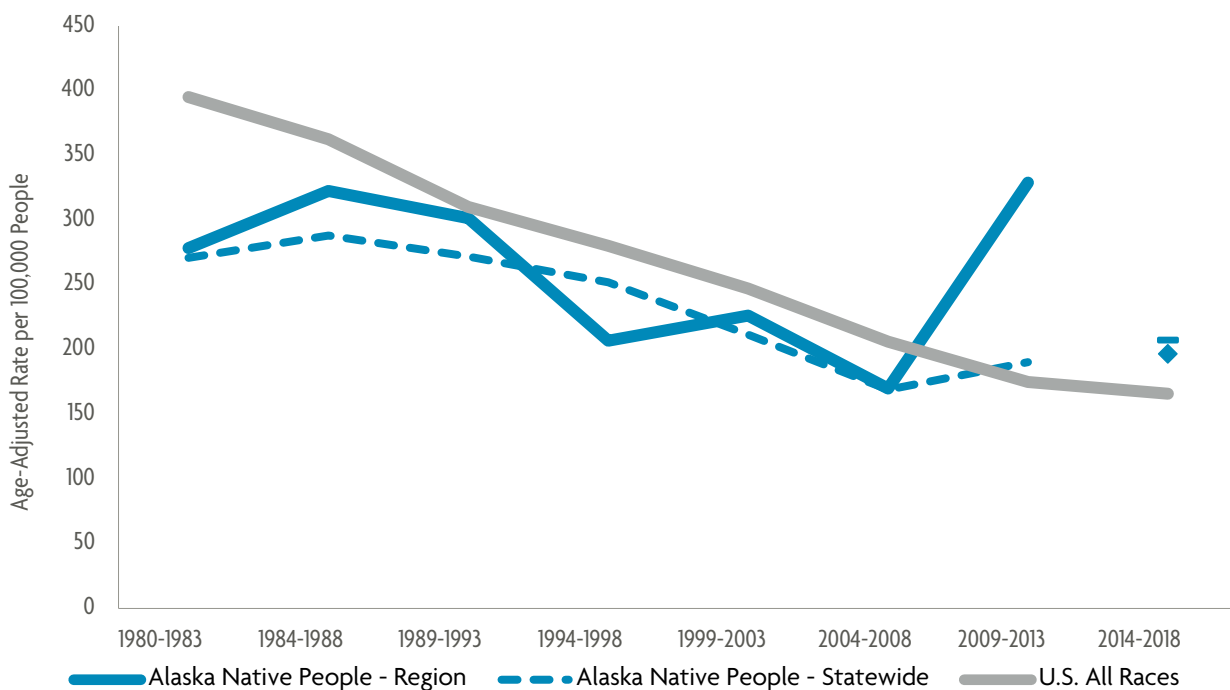


Figure 39. Anchorage-MatSu Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 40. Anchorage-MatSu Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

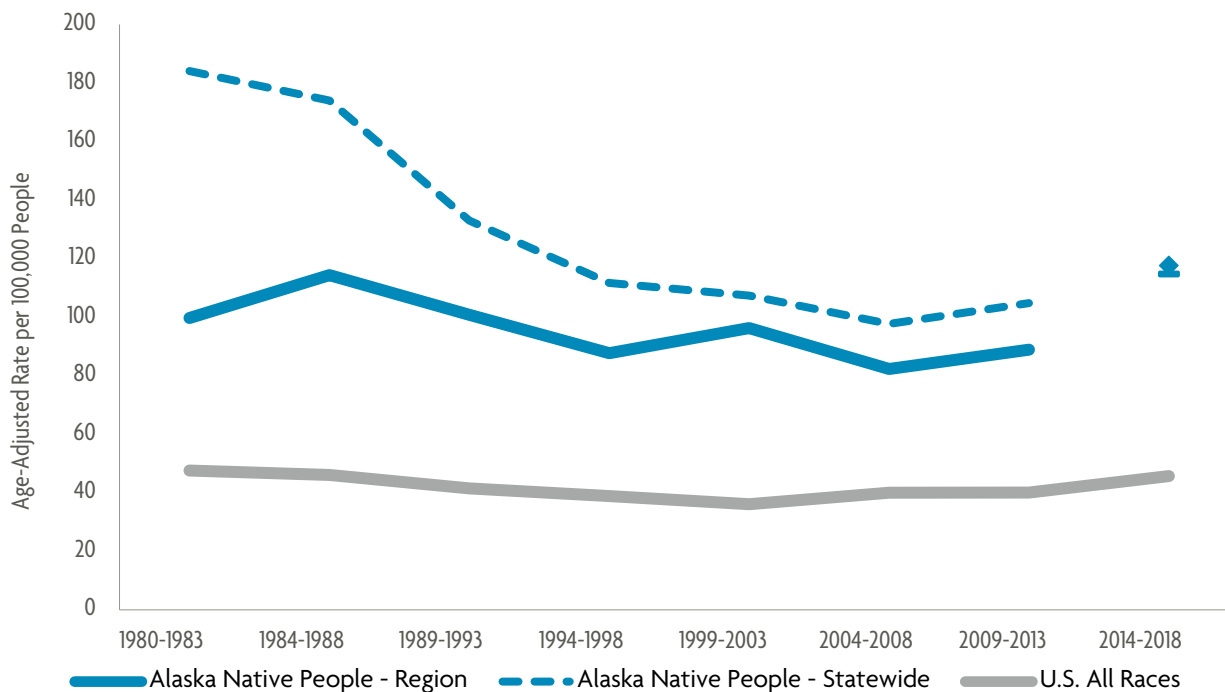
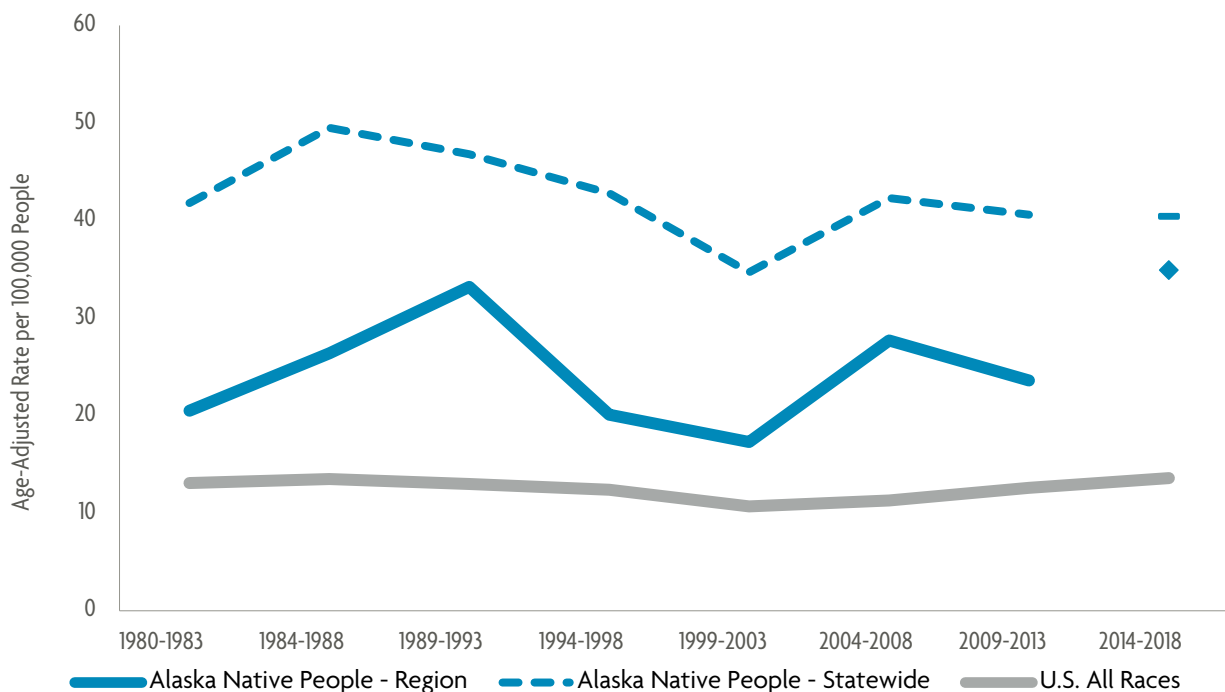


Figure 41. Anchorage-MatSu Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 42. Anchorage-MatSu Trend in Chronic Liver Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

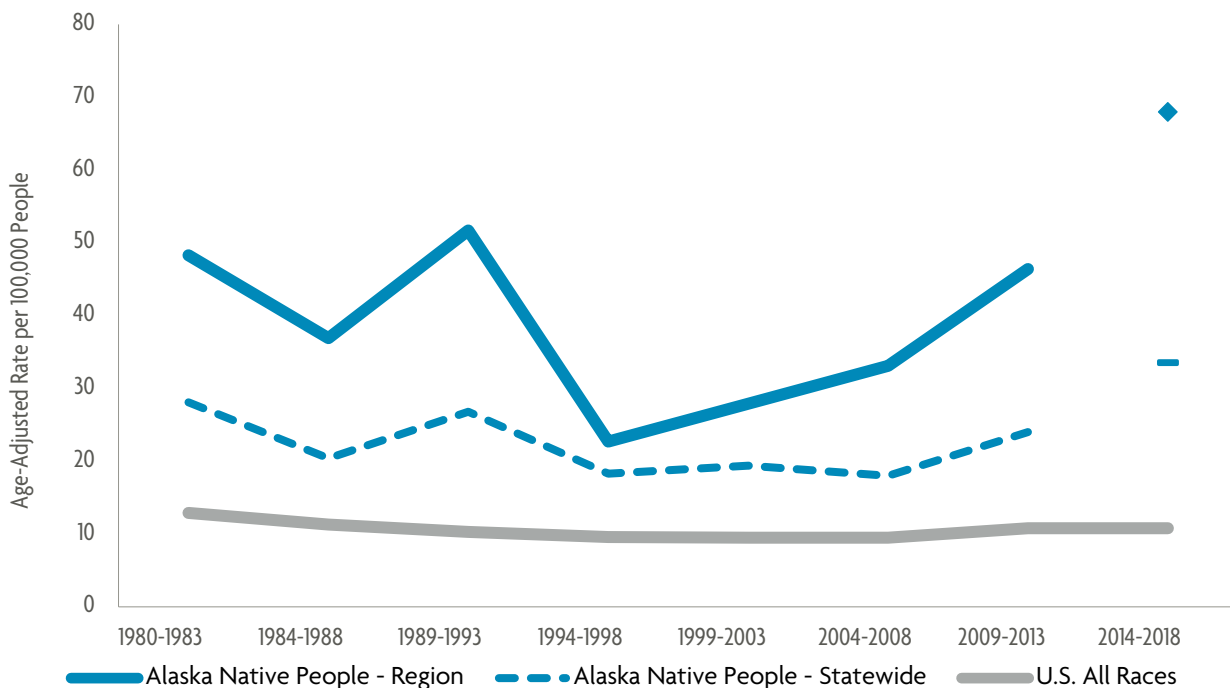
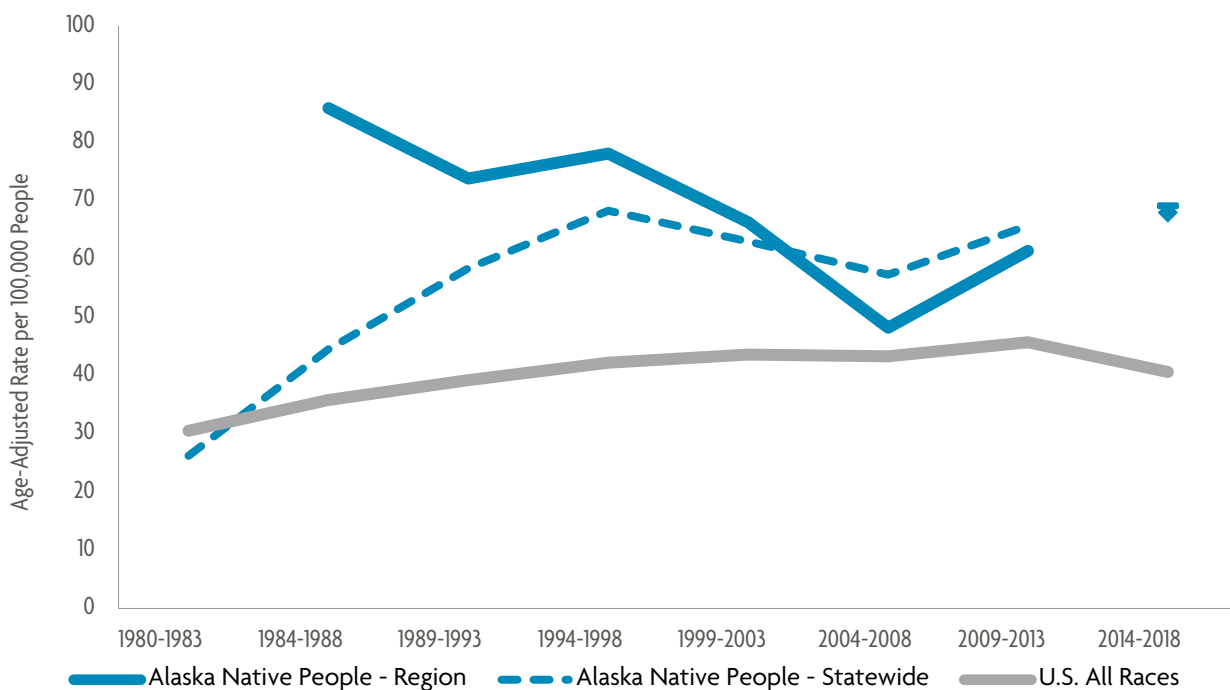


Figure 43. Anchorage-MatSu Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 44. Anchorage-MatSu Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

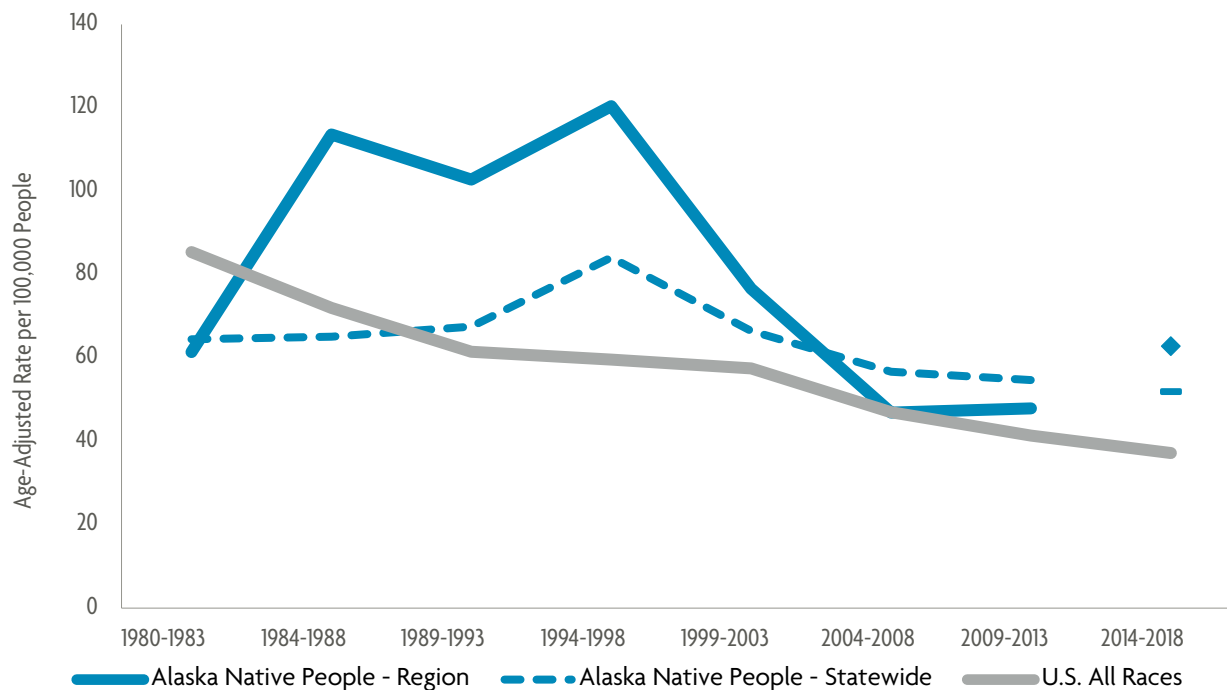
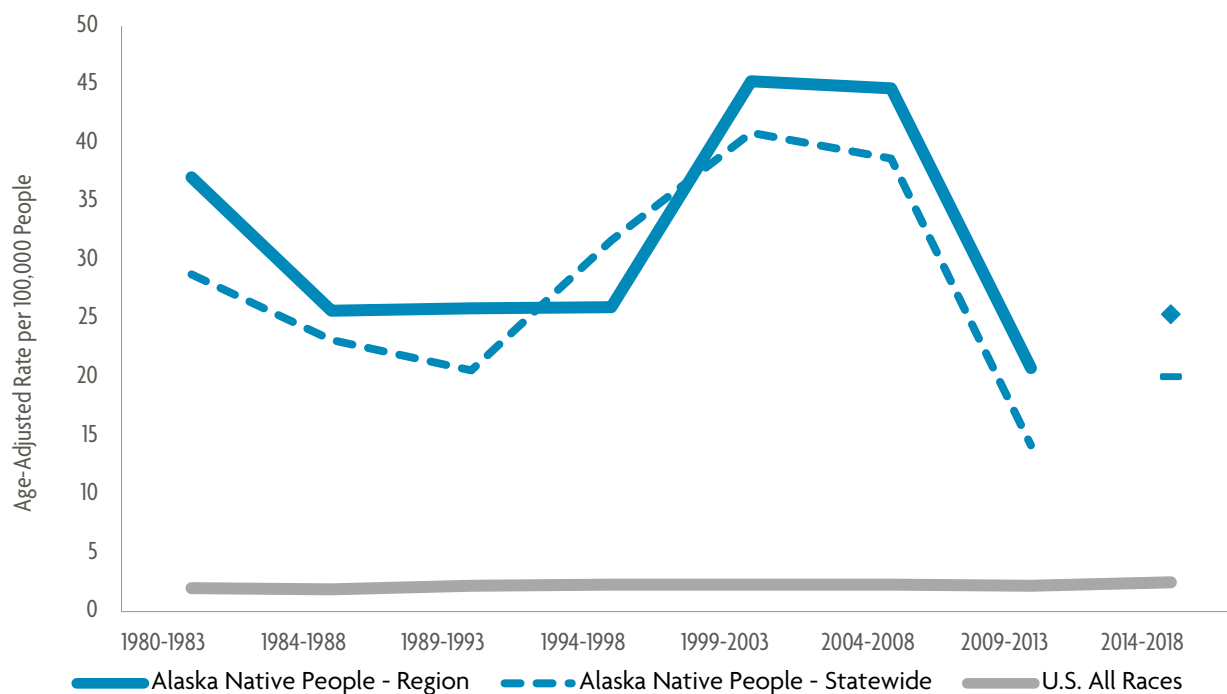


Figure 45. Anchorage-MatSu Trend in Alcohol Abuse Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 46. Anchorage-MatSu Trend in Homicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

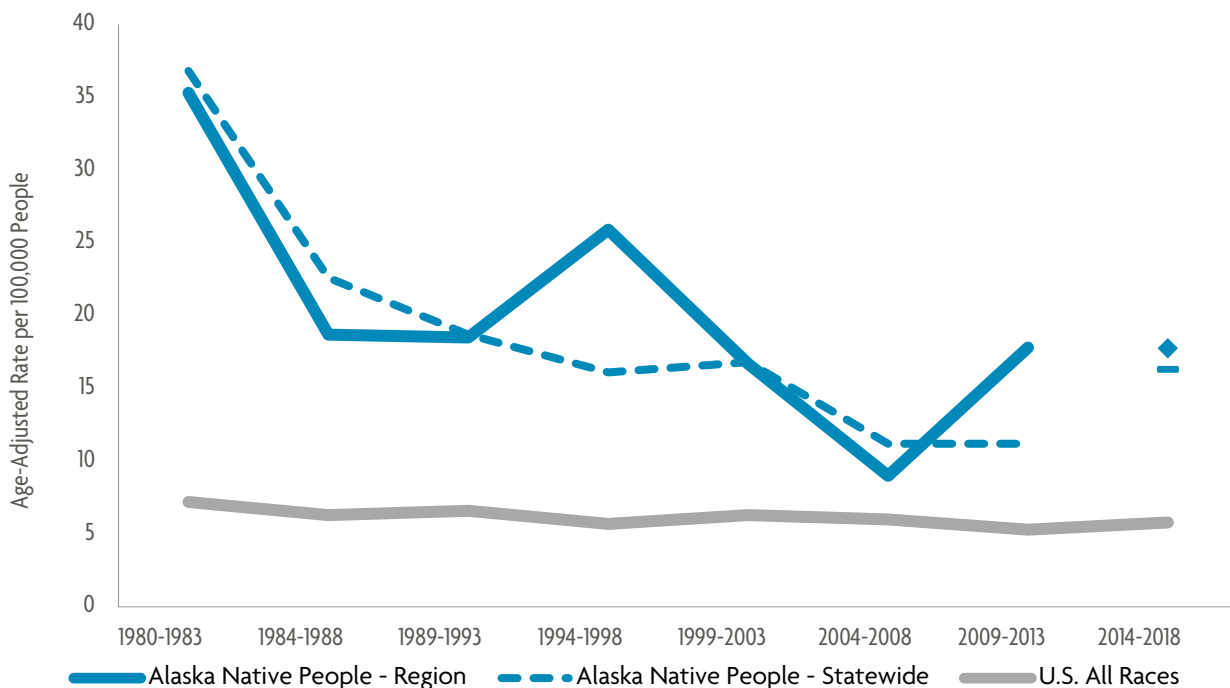
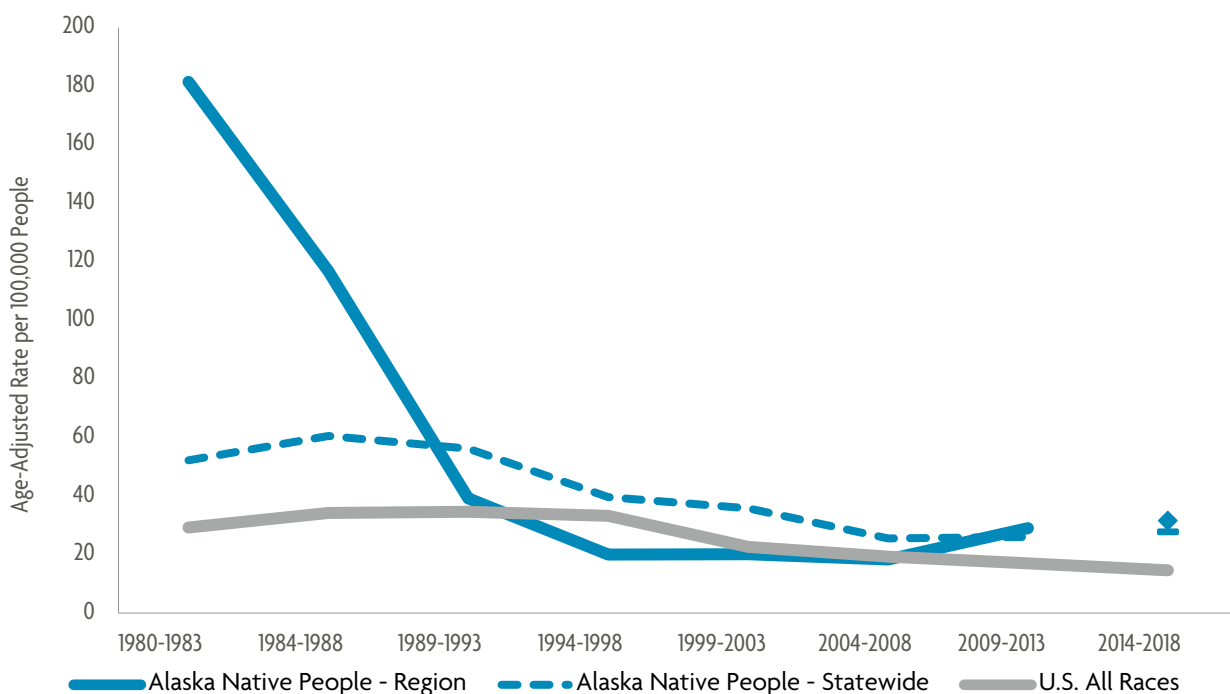


Figure 47. Anchorage-MatSu Trend in Influenza/Pneumonia Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Table 6. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Arctic Slope Region, 1980-2014

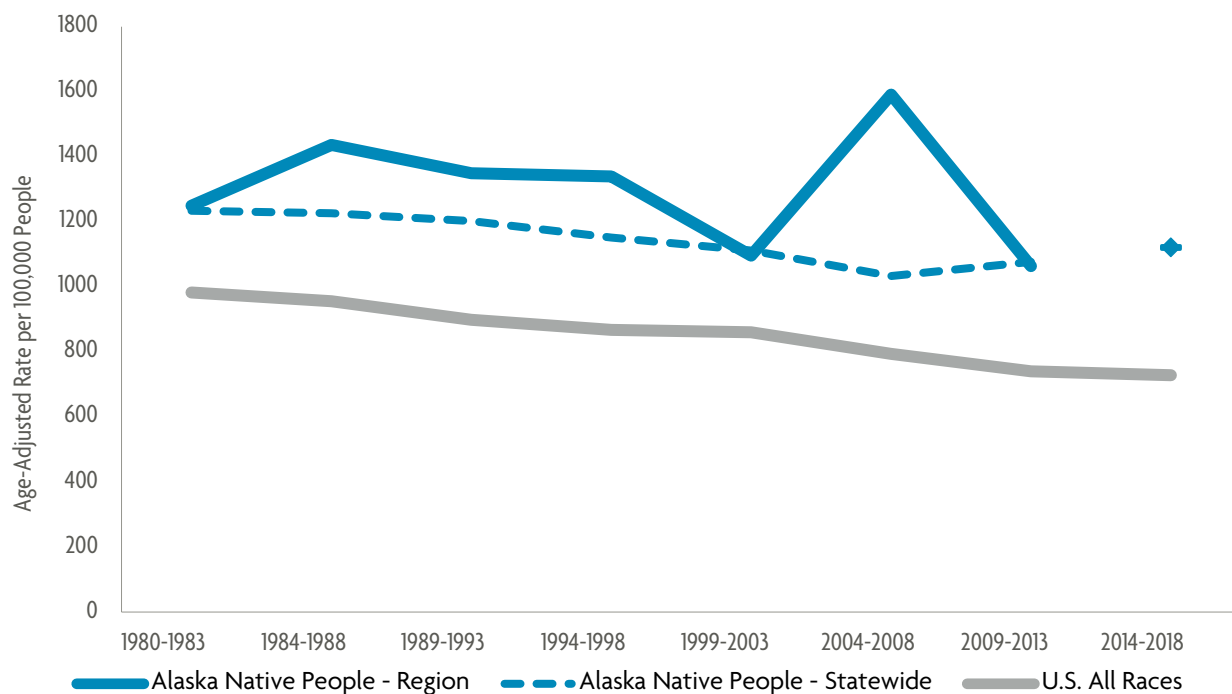
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	230.3	418.8	250.2	334	261	422.3	305.4	310.1	34.6%
Heart Disease	519.1	198.1	493.8	284.9	218.4	321.1	131.3	206.4	-60.2% *
Unintentional Injury	147.8	188.2	116.8	113.7	99.1	109.1	116.8	68	-54.0% *
Suicide	43	32.5	50.4	52.5	30.4	69.1	29	33.4	-22.4%
COPD	112.5	135.9	131.7	127.2	111.1	163.3	99.4	105.3	-6.4%
Homicide	36.8	22.6	18.7	16.1	16.8	11.2	11.2	16.3	-55.7%
All-Cause	1249.7	1436.5	1349.5	1339.8	1096.1	1591.2	1063.8	1121.2	-10.3%

*significant difference, $p < 0.05$

Figure 48. Arctic Slope Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 49. Arctic Slope Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

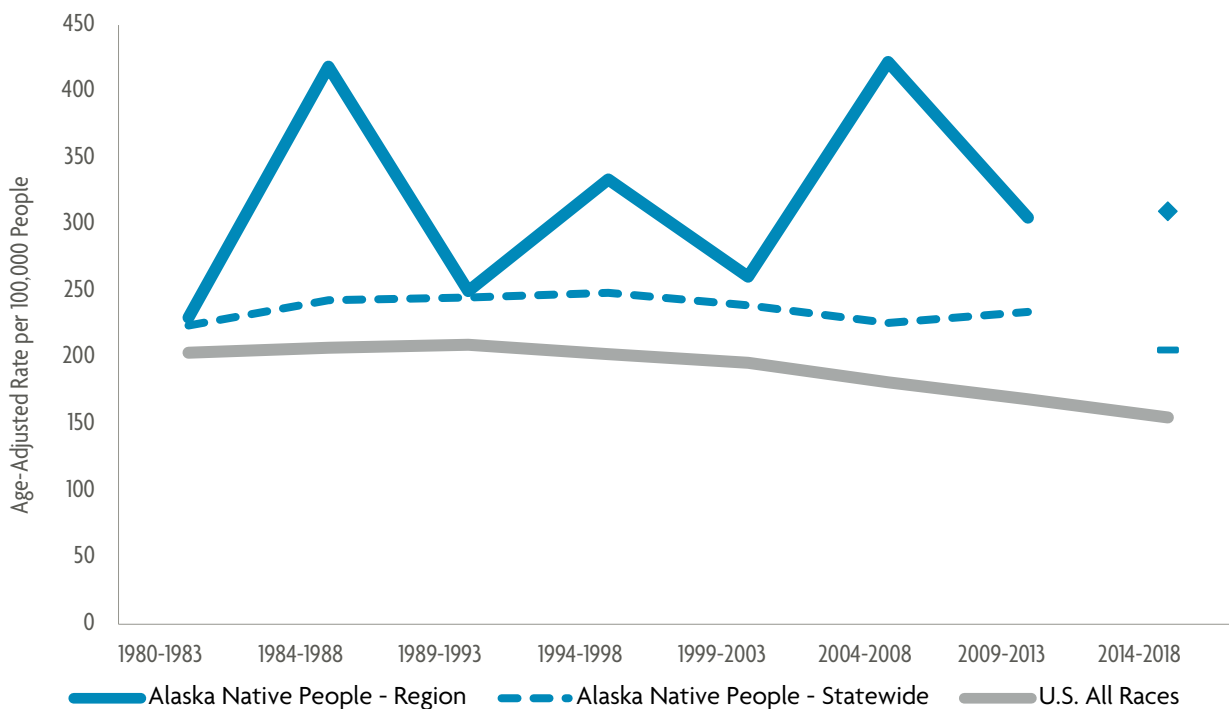
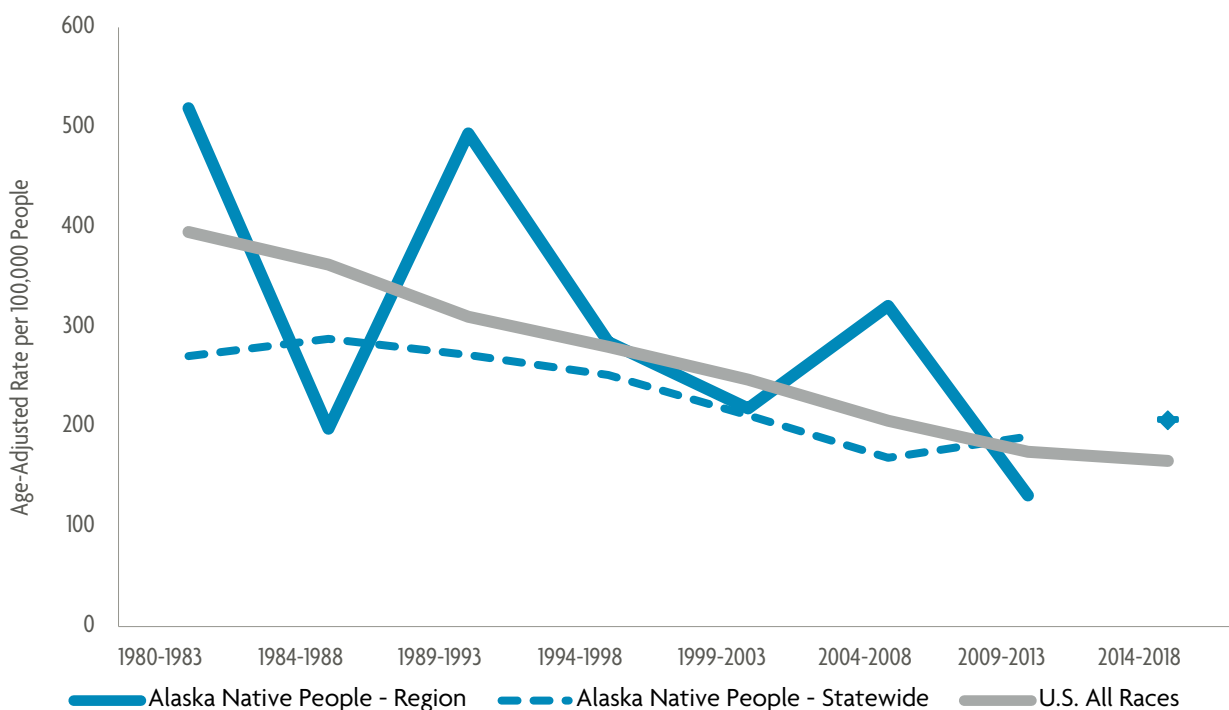


Figure 50. Arctic Slope Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 51. Arctic Slope Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

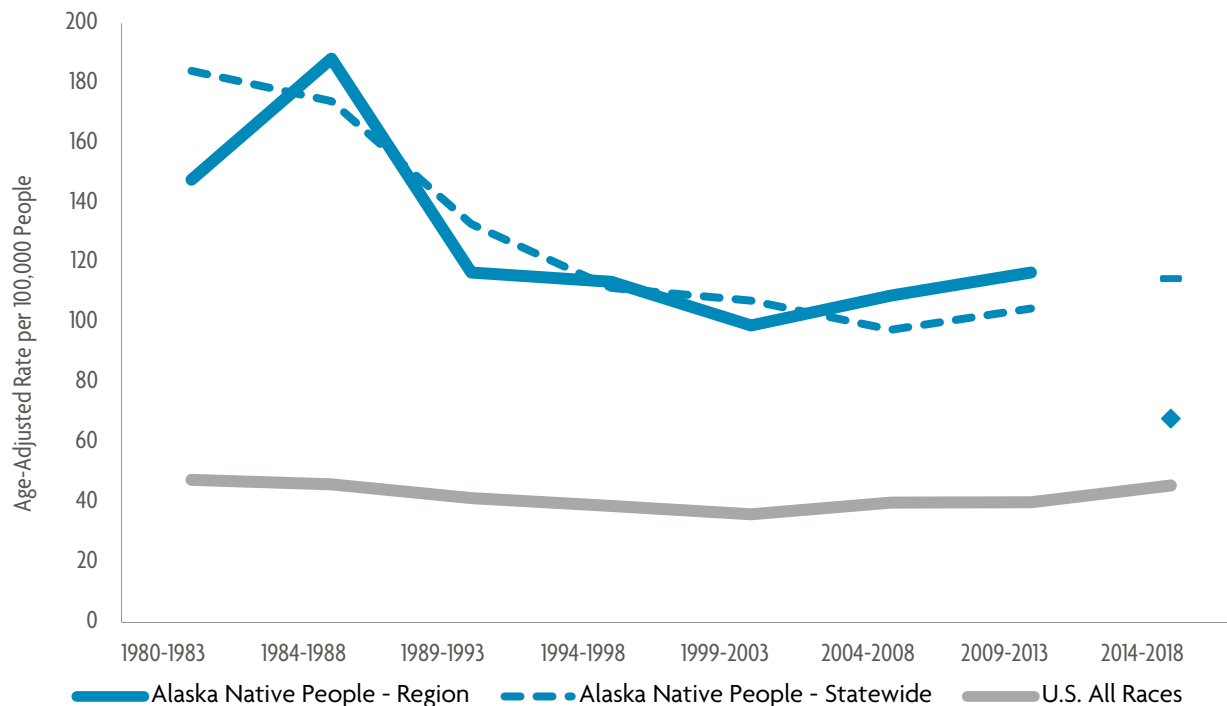


Figure 52. Arctic Slope Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

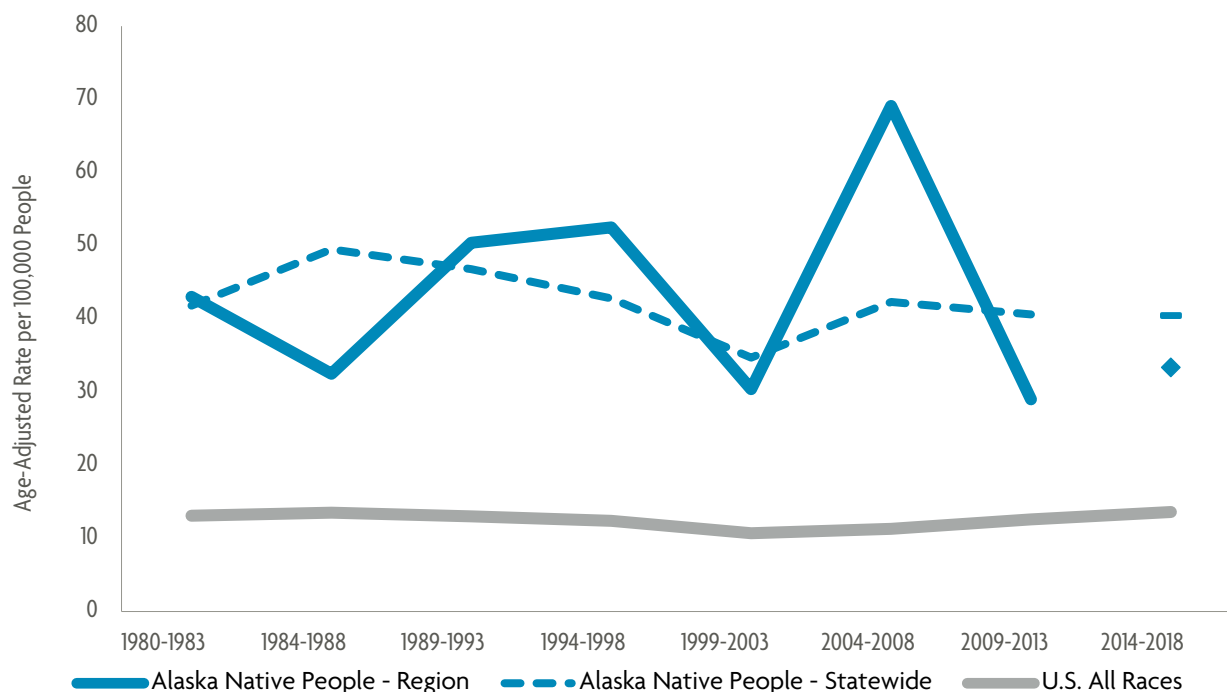
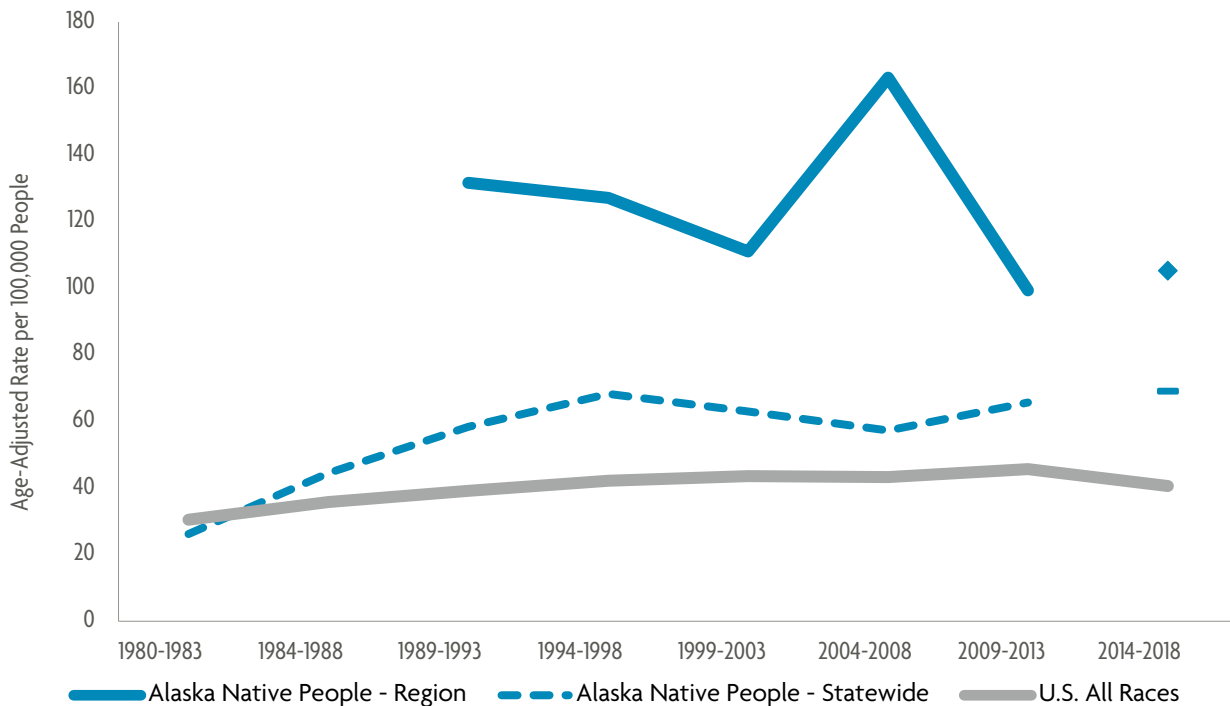


Figure 53. Arctic Slope Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Table 7. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Bristol Bay Region, 1980-2014

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

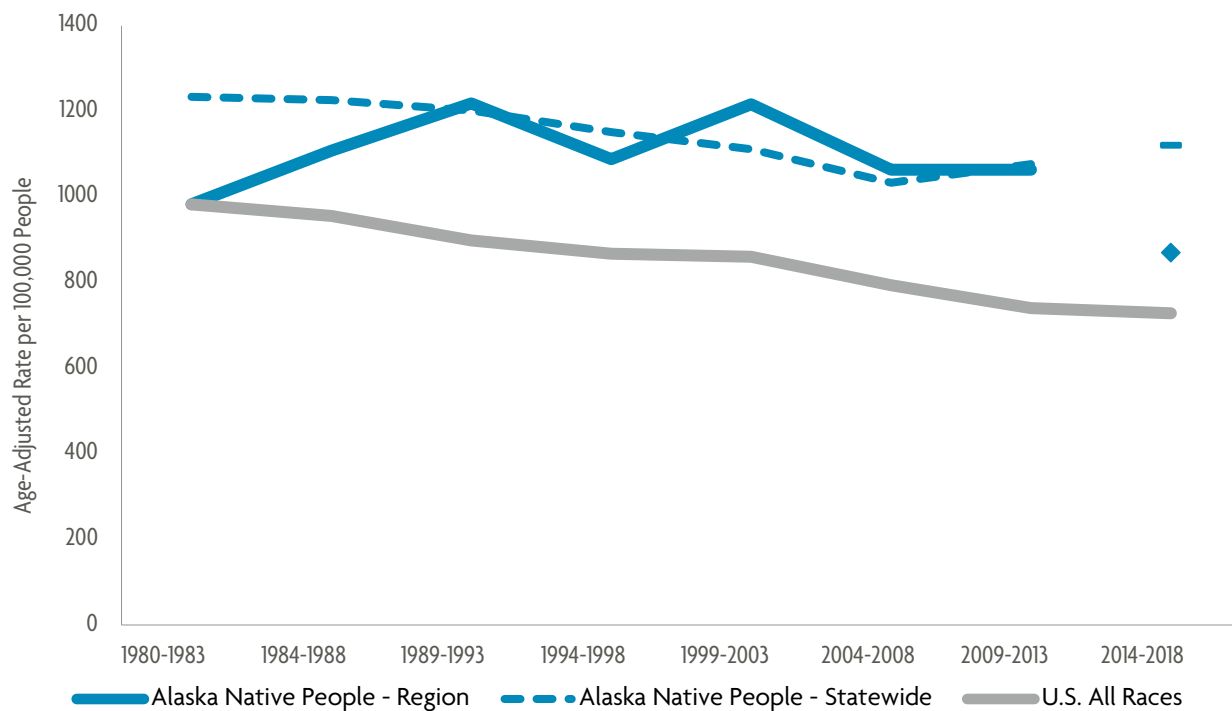
Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	177.3	233.5	263.2	205.8	251.6	241.1	240.9	171.8	-3.1%
Heart Disease	118.1	335.3	271.1	172.1	207	173.9	218.5	177.3	50.2%
Unintentional Injury	318.2	278.4	168.6	132.6	179.9	171.6	193.4	104.4	-67.2% *
Suicide	51.9	29.4	46.5	37.6	24.2	22.3	52.8	20.8	-60.0% *
COPD	-	-	117.4	93.7	74.8	65.6	52.4	64.9	-44.7% *
All-Cause	983.1	1108.1	1218.6	1088.5	1216.6	1063.9	1166.7	869.9	-11.5% *

*significant difference, $p < 0.05$

- Rate not reportable

Figure 54. Bristol Bay Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 55. Bristol Bay Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

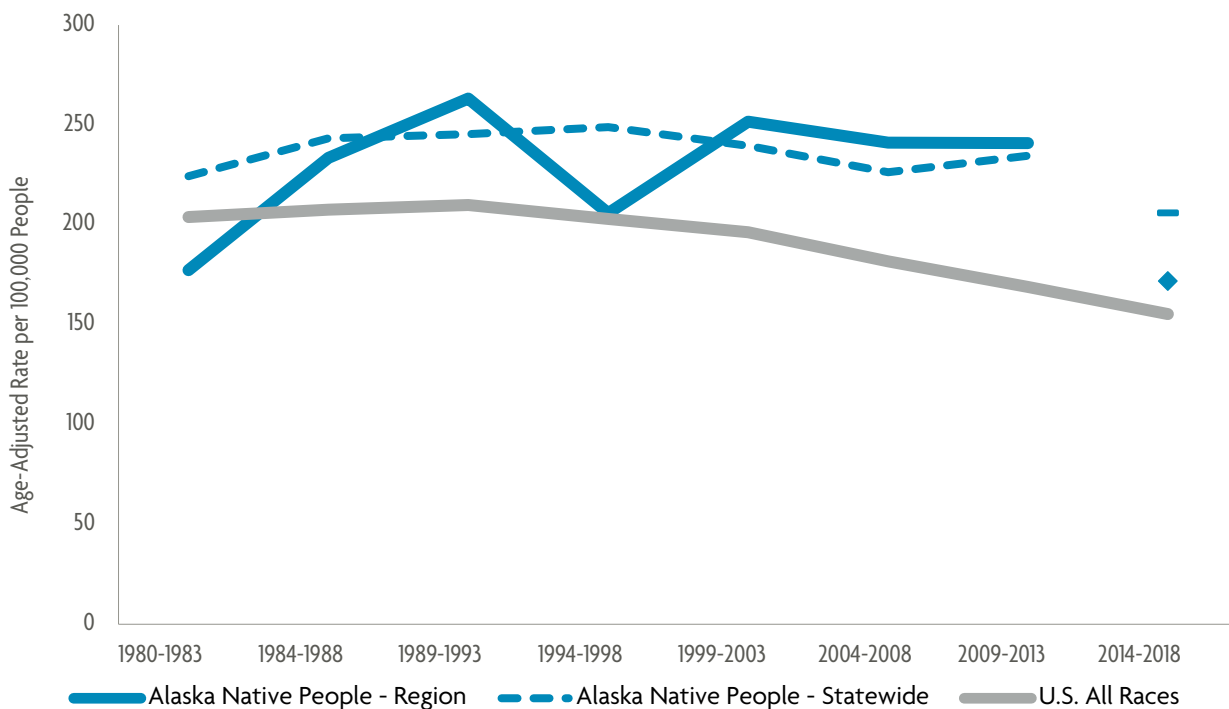
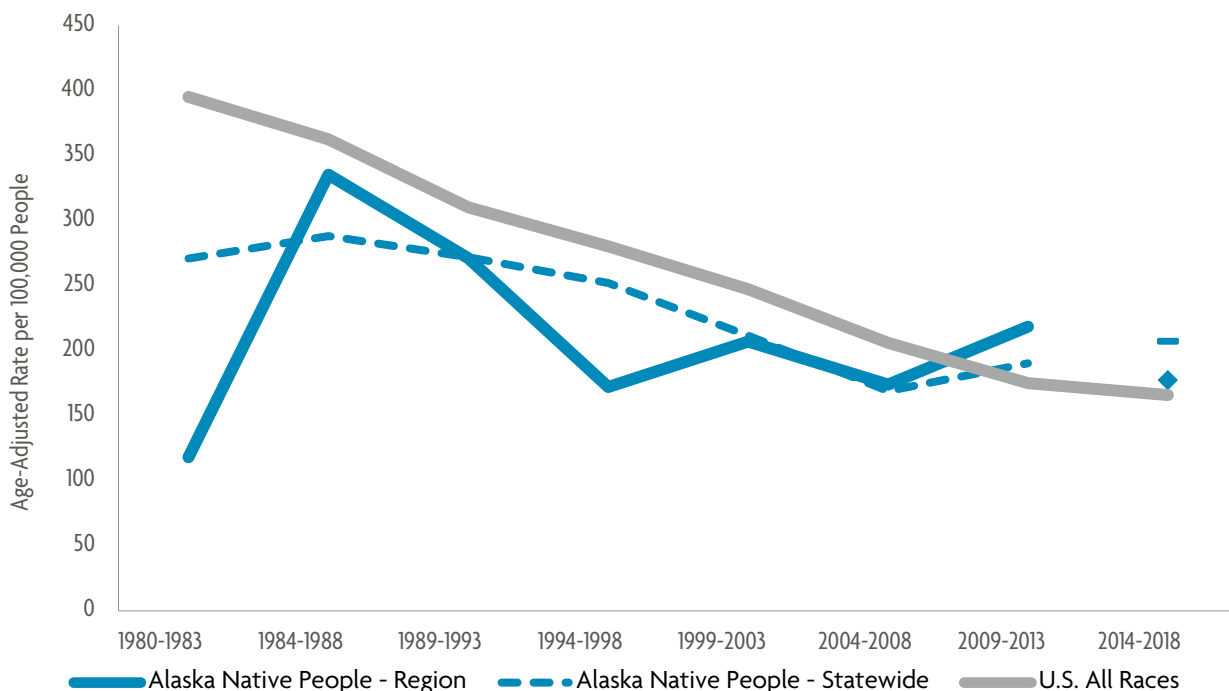


Figure 56. Bristol Bay Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 57. Bristol Bay Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

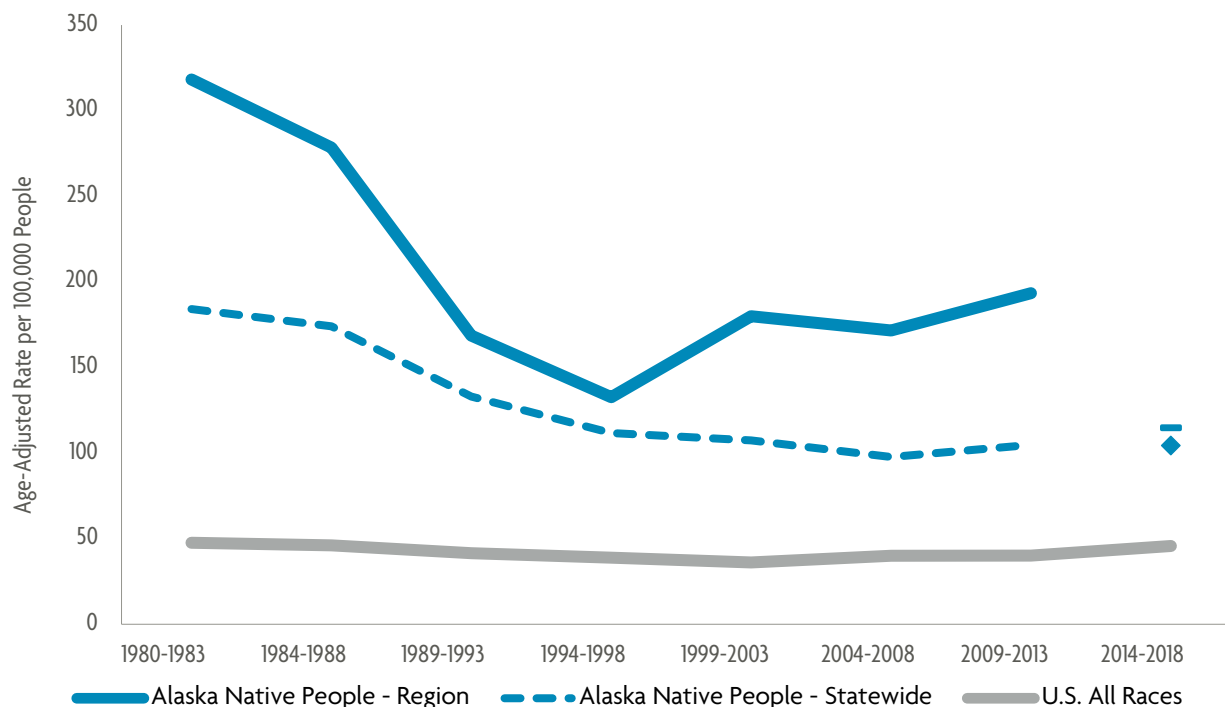
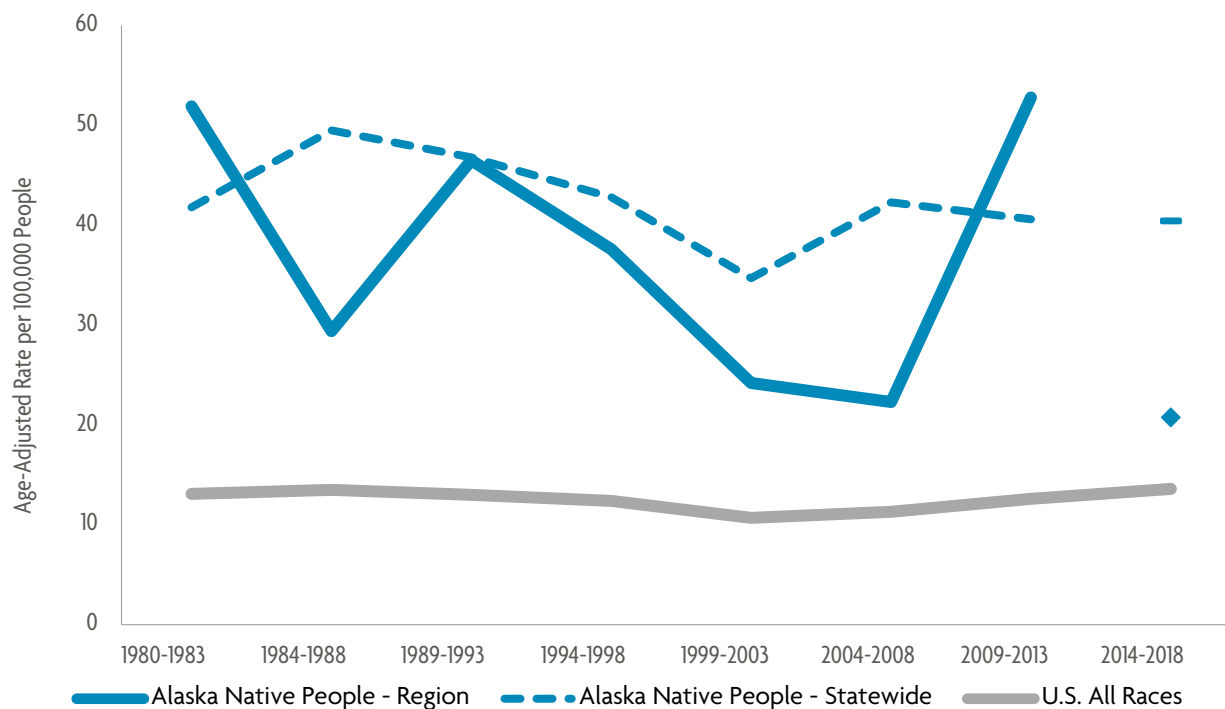


Figure 58. Bristol Bay Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

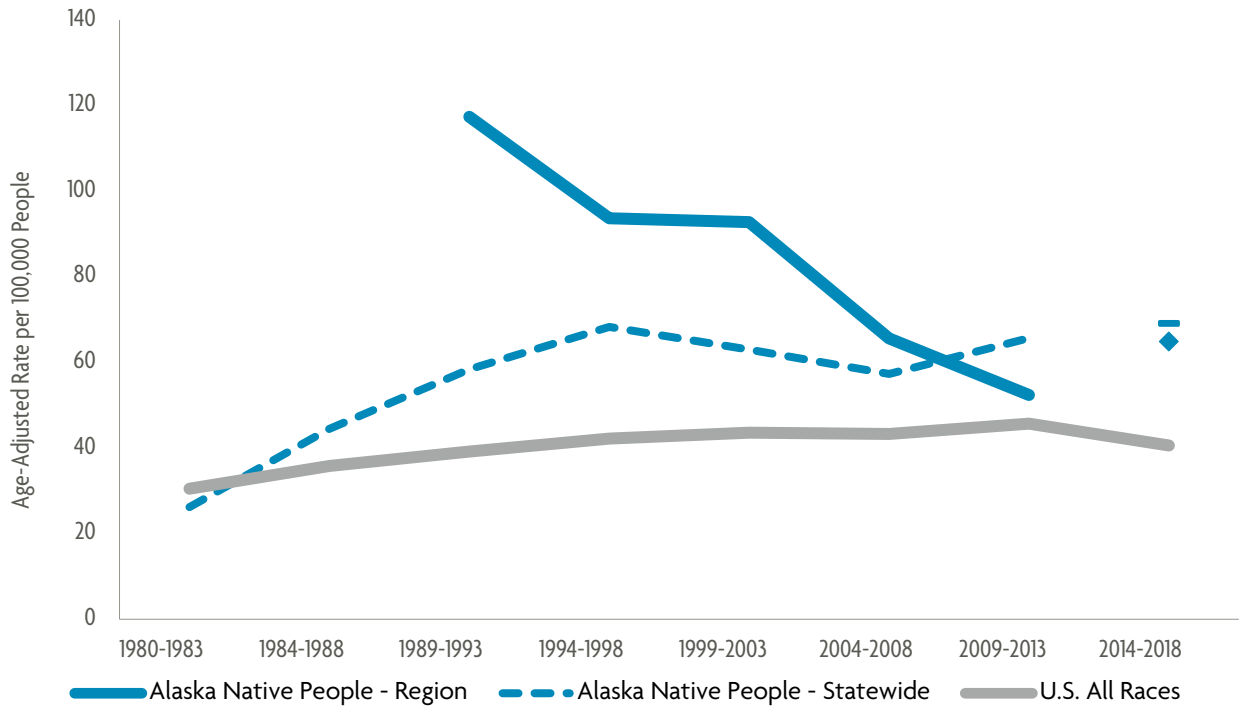
Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 59. Bristol Bay Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018 (Rate not reportable prior to 1989)

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Table 8. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Copper River-PWS Region, 1980-2014

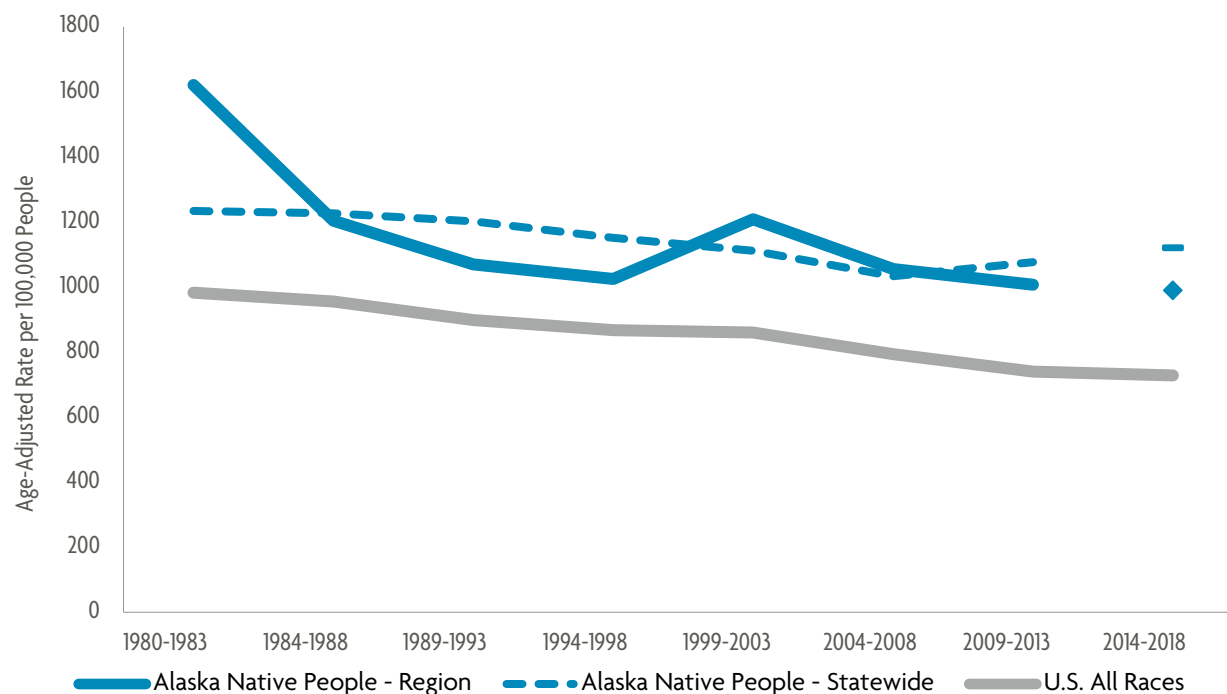
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	171.6	296.0	268.7	122.1	337.1	251.2	335.5	140.2	-18.3%
Heart Disease	287.0	257.4	225.5	180.5	170.3	160.9	174.5	202.2	-29.6%
Unintentional Injury	427.1	183.7	145.9	222.3	119.7	89.5	164.0	103.7	-75.7% *
All-Cause	1621.4	1203.9	1069.5	1024.9	1208.6	1055.5	1007.9	989.6	-39.0% *

*significant difference, $p < 0.05$

Figure 60. Copper River-PWS Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 61. Copper River-PWS Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

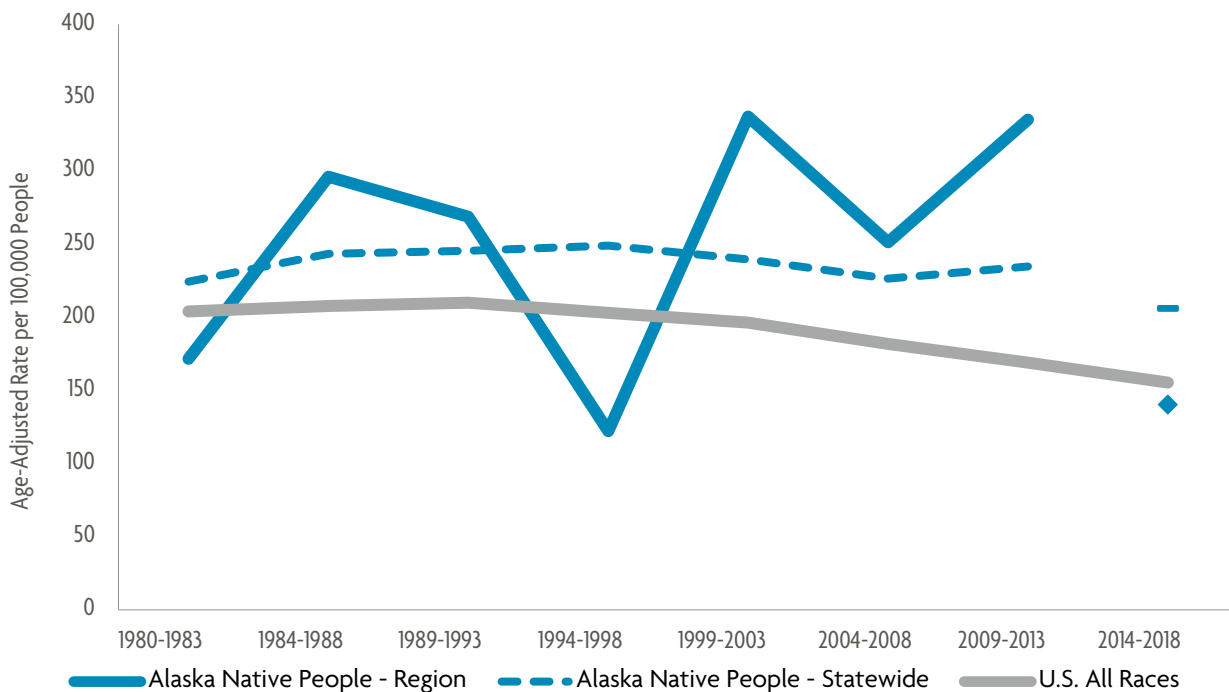
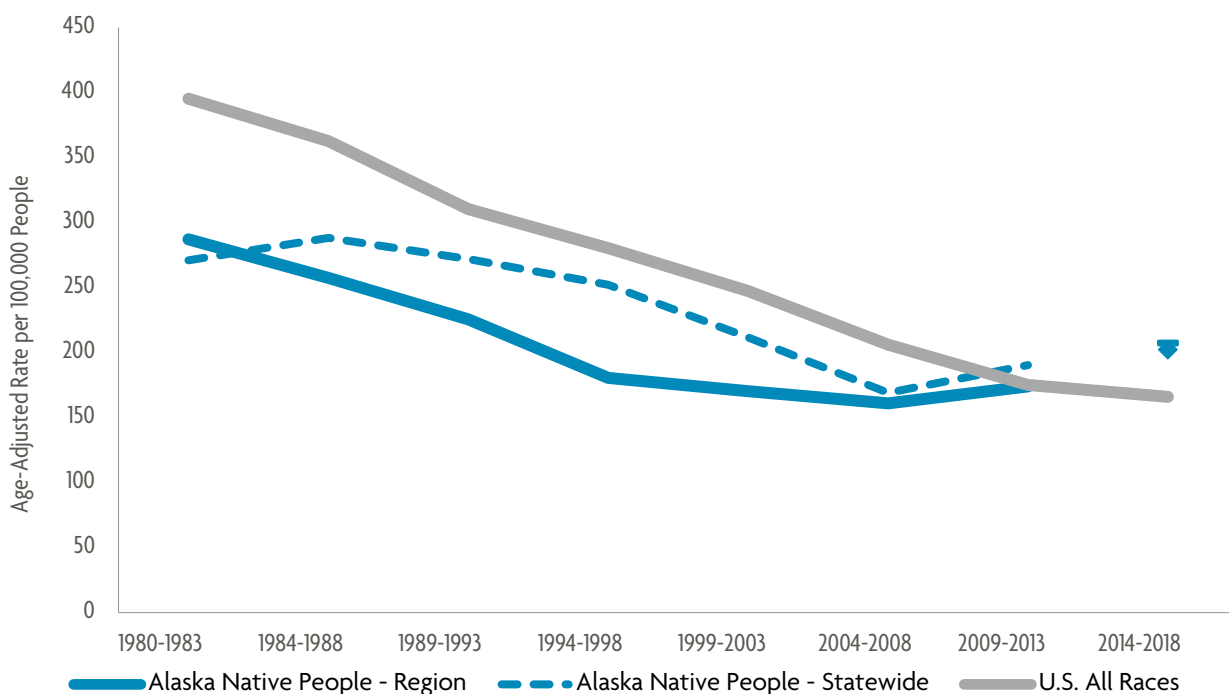


Figure 62. Copper River-PWS Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

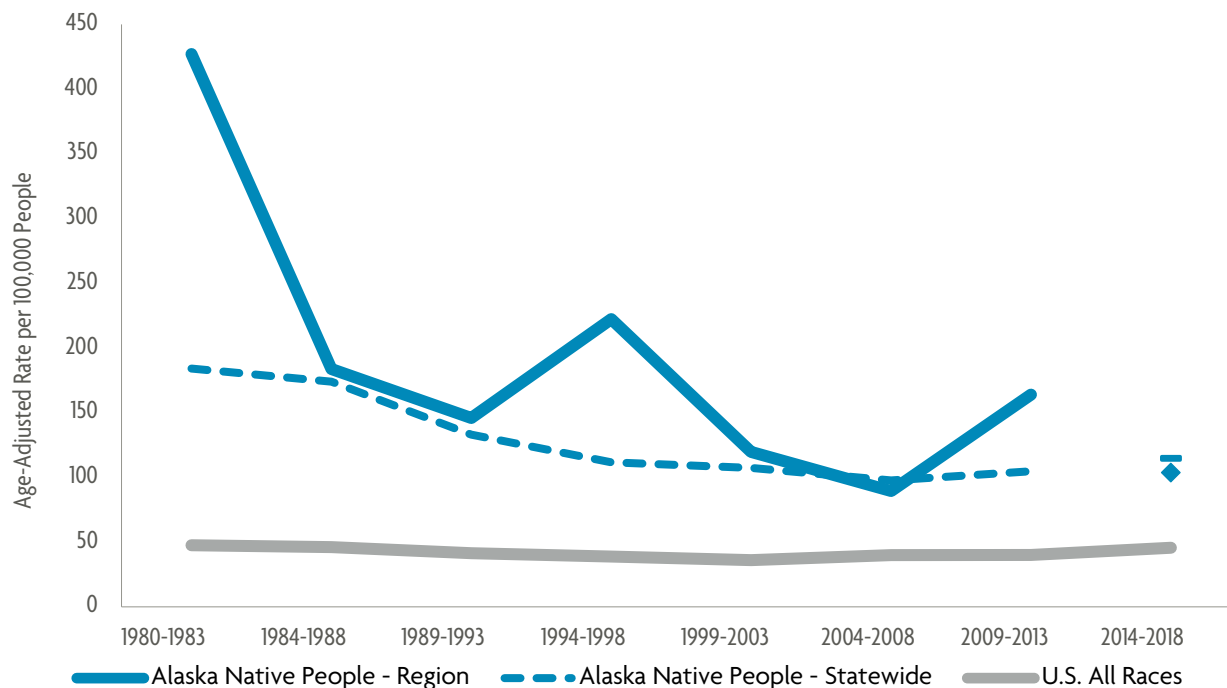
Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 63. Copper River-PWS Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Table 9. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Interior Region, 1980-2014

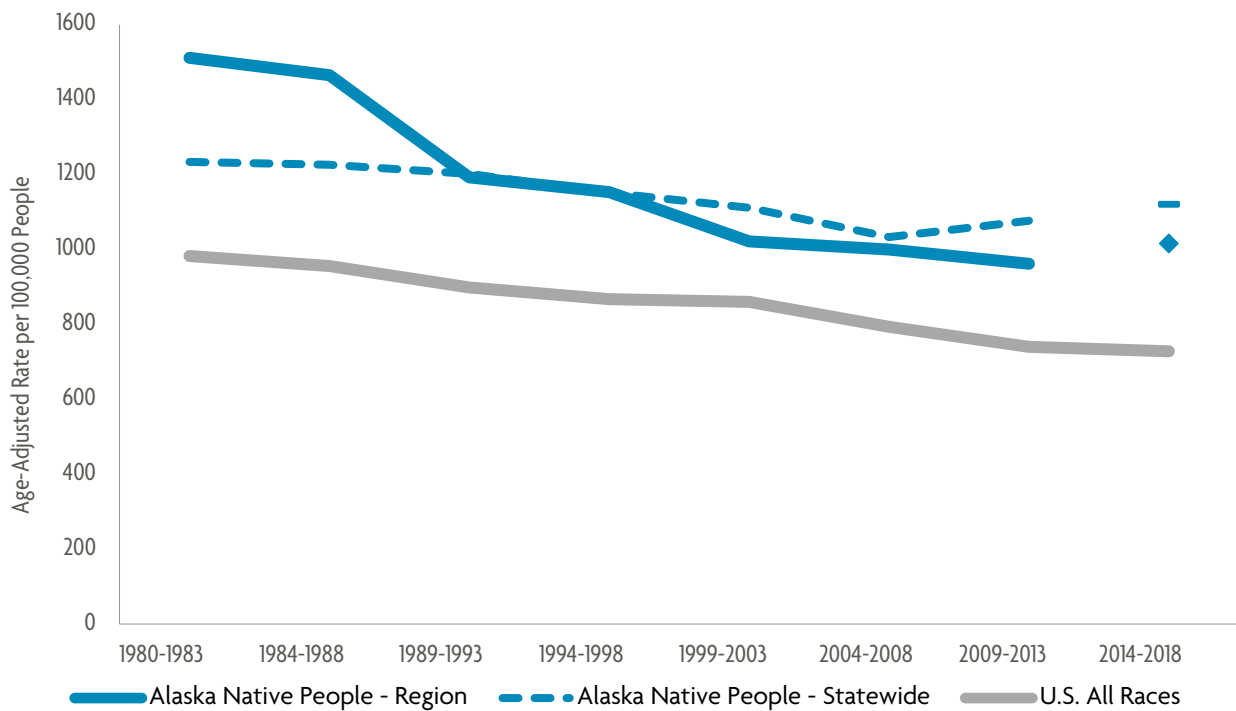
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	237.4	225.1	250.1	233.6	205.2	228.7	212.1	215.2	-9.3%
Heart Disease	264.1	351.1	272.0	258.8	170.4	124.8	182.6	185.1	-29.9% *
Unintentional Injury	242.9	248.2	132.7	127.4	118.9	110.7	114.3	124.2	-48.9% *
Suicide	59.8	51.2	73.4	55.3	49.5	41.1	39.1	40.0	-33.1% *
COPD	69.8	56.8	20.6	48.8	65.4	44.3	62.9	58.1	-16.8%
Chronic Liver Disease	24.5	27.8	22.4	24.8	25.0	16.8	27.7	45.7	86.4% *
Cerebrovascular Disease	68.5	96.3	48.2	78.3	55.9	48.1	39.1	31.4	-54.1% *
Alcohol Abuse	48.7	33.6	23.4	42.7	72.8	74.0	15.8	24.9	-48.8%
Influenza/Pneumonia	72.2	94.2	52.7	34.3	22.2	30.9	39.1	15.2	-79.0% *
All-Cause	1511.9	1465.7	1192.7	1153.5	1021.8	1000.1	962.3	1016.1	-32.8% *

*significant difference, $p < 0.05$

Figure 64. Interior Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 65. Interior Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

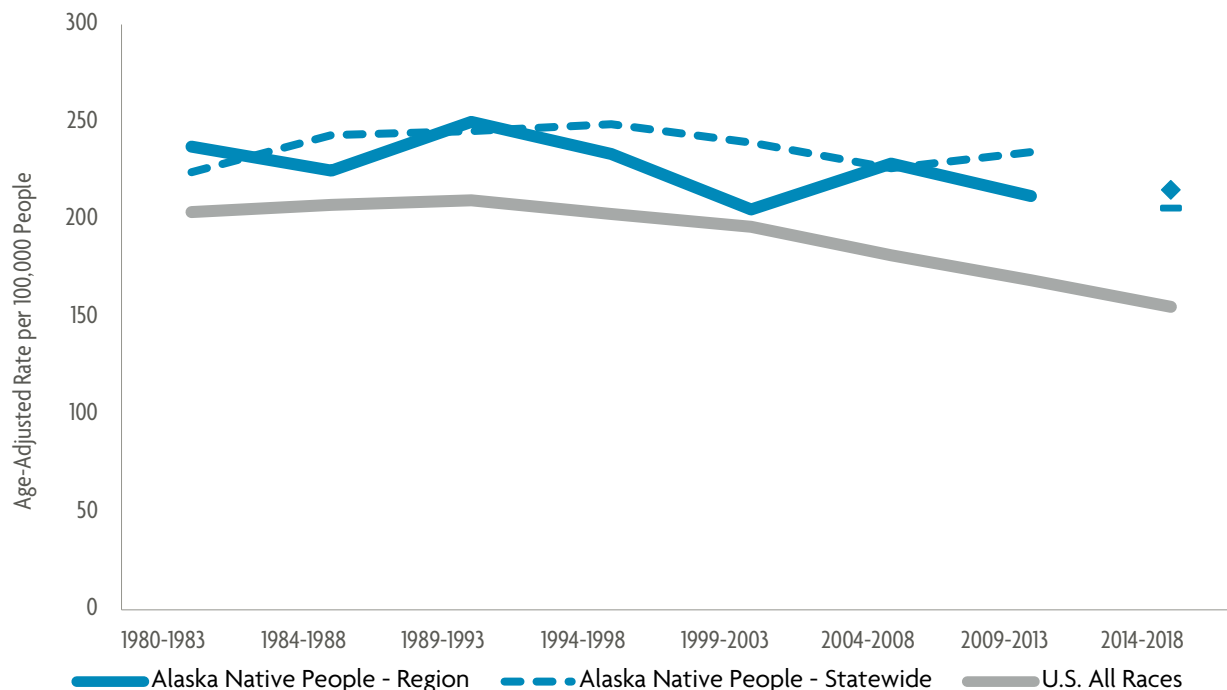
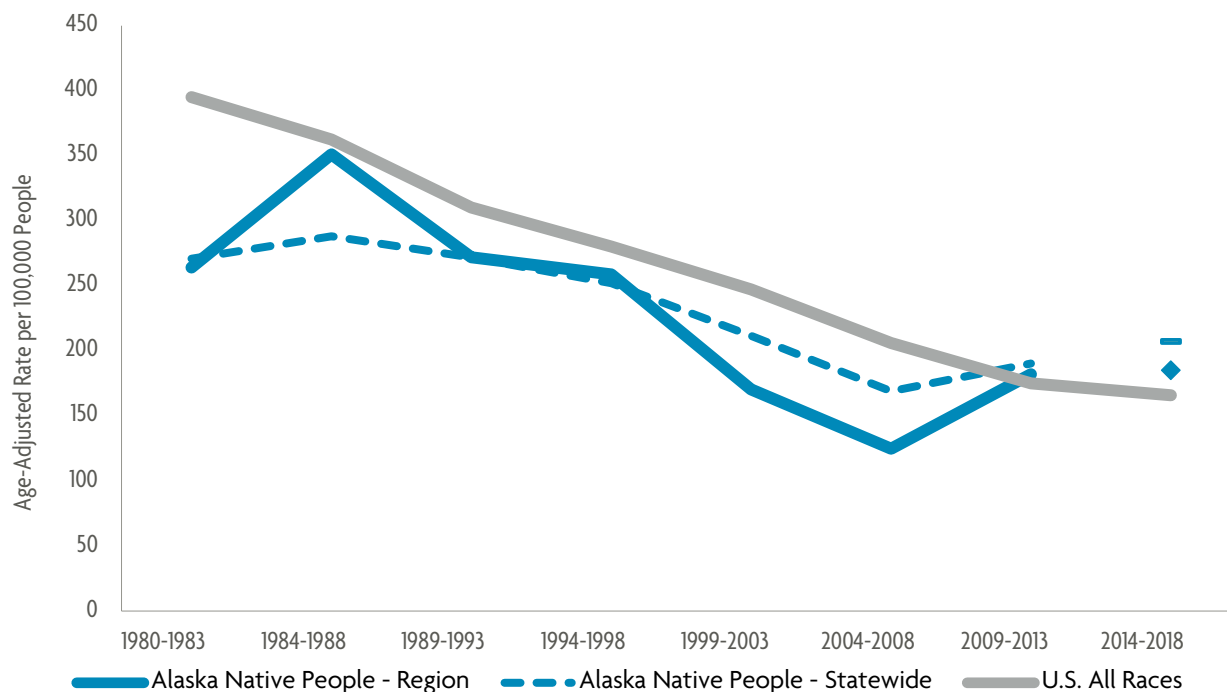


Figure 66. Interior Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 67. Interior Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

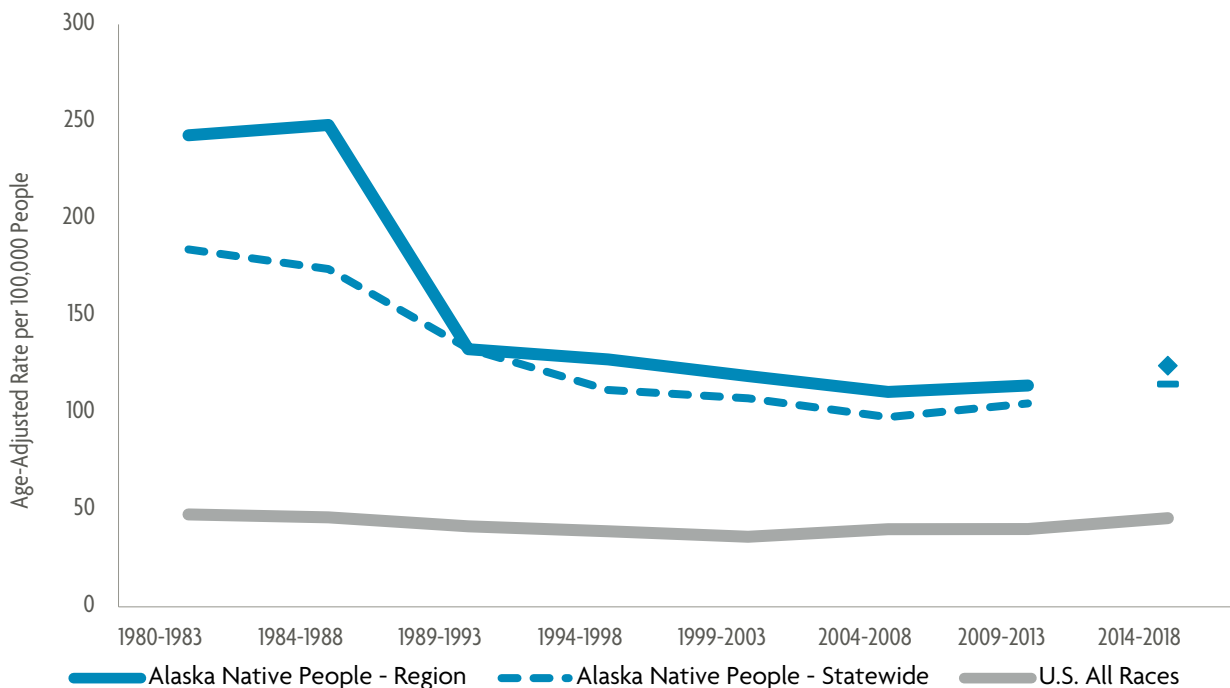
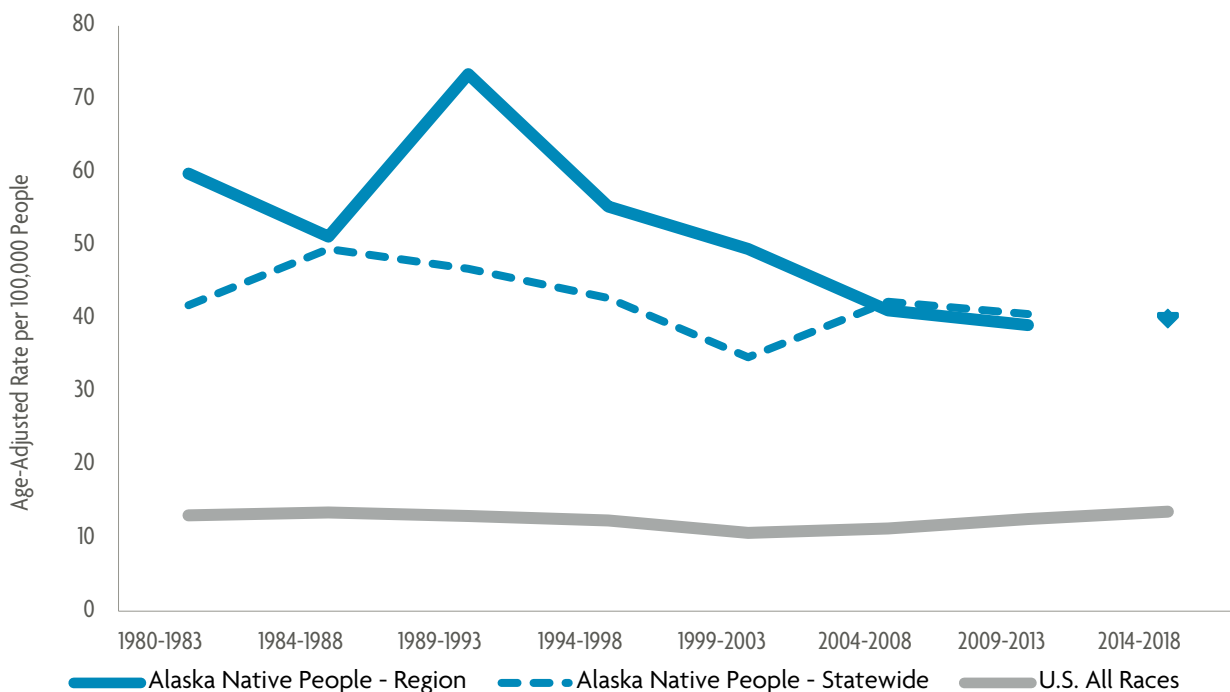


Figure 68. Interior Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 69. Interior Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

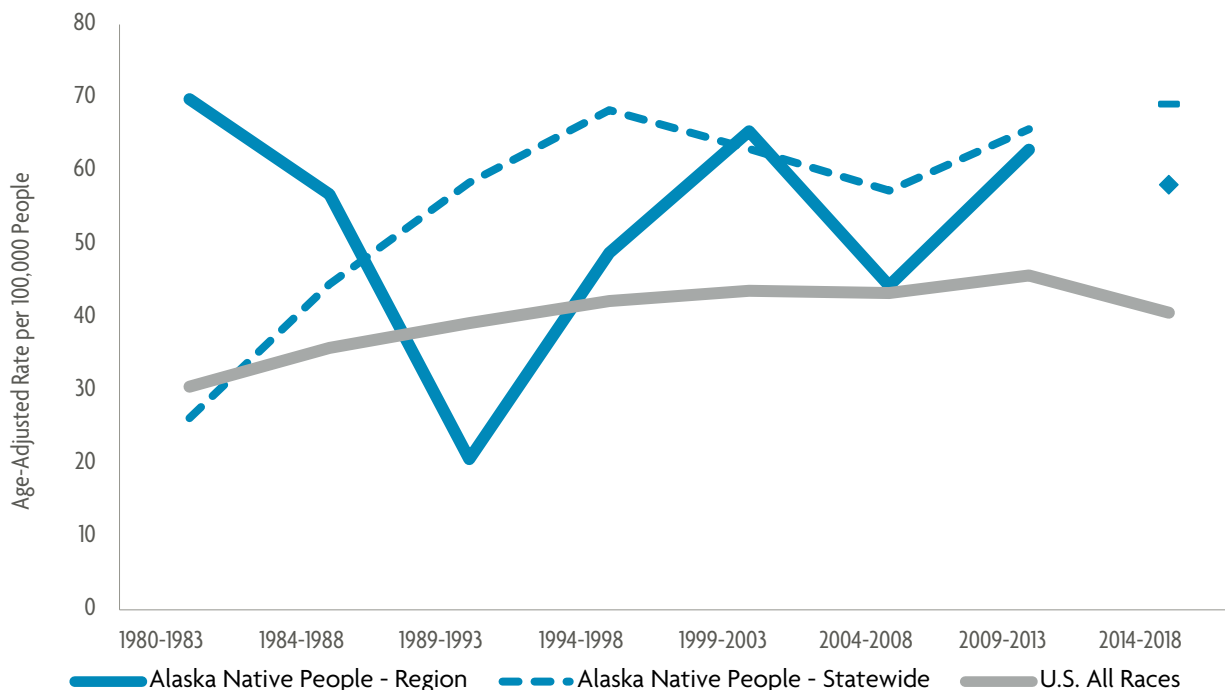
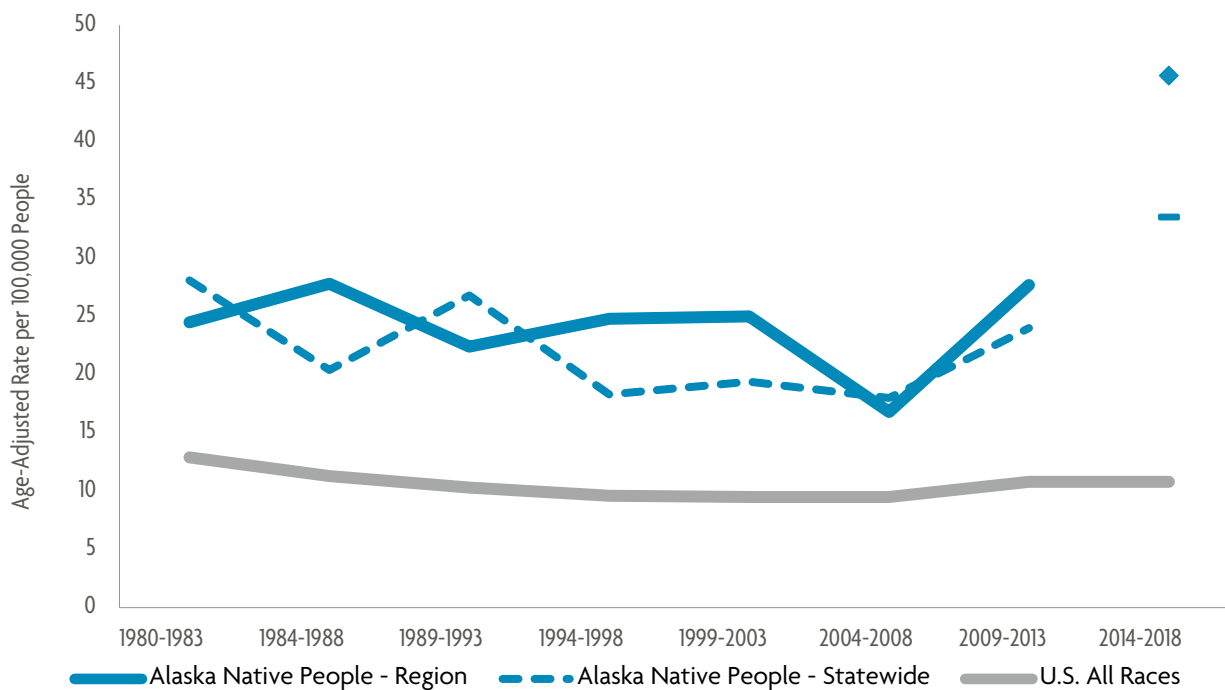


Figure 70. Interior Trend in Chronic Liver Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 71. Interior Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

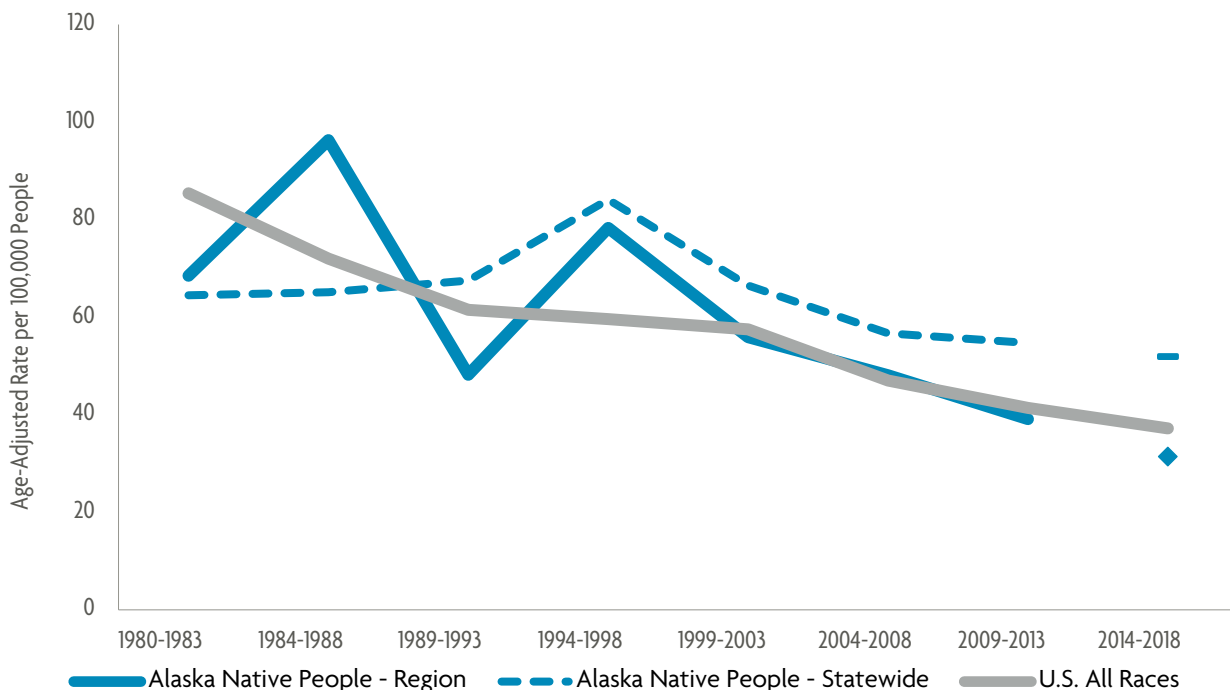
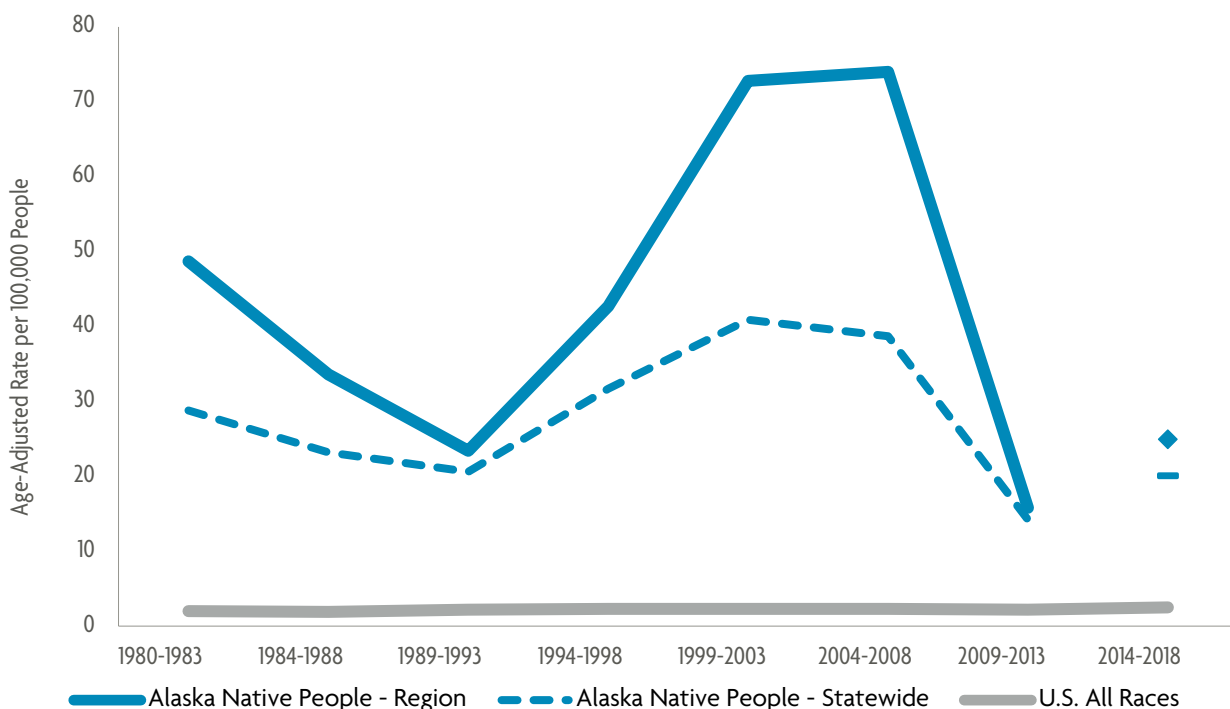


Figure 72. Interior Trend in Alcohol Abuse Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

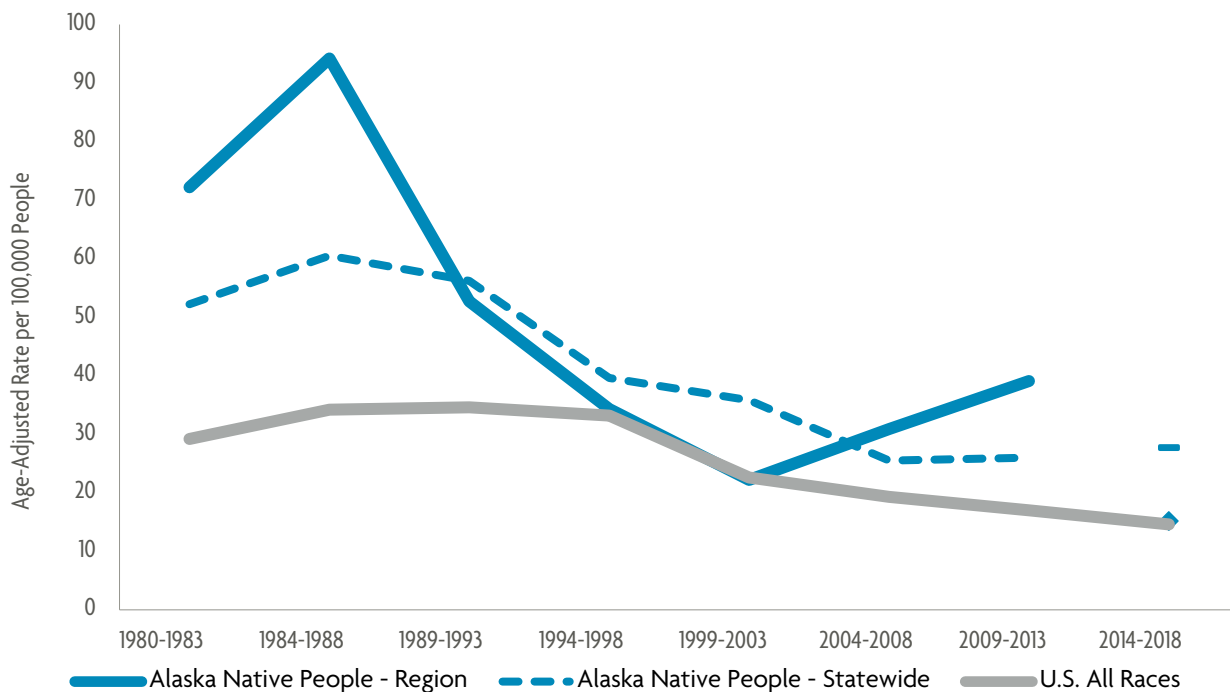
Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 73. Interior Trend in Influenza/Pneumonia Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Table 10. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Kenai Peninsula Region, 1980-2014

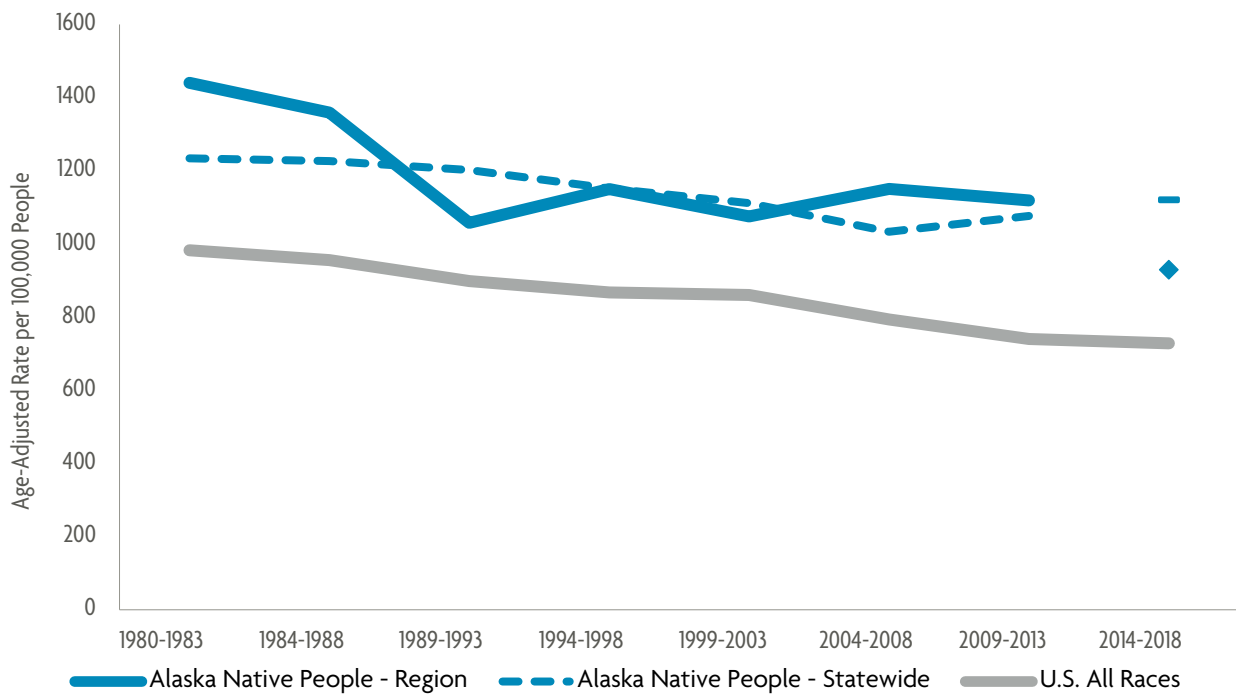
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	340.8	459.9	287.9	372.1	171.7	260.4	256.6	155.8	-54.3% *
Heart Disease	475.5	340.9	198.4	292.1	245.2	262.8	192.6	231.9	-51.2% *
Unintentional Injury	73.8	112.4	122.6	68.2	70.9	83.5	85.4	41.9	-43.2%
All-Cause	1440.4	1359.0	1057.8	1149.9	1075.3	1150.4	1119.0	929.5	-35.5% *

*significant difference, $p < 0.05$

Figure 74. Kenai Peninsula Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 75. Kenai Peninsula Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

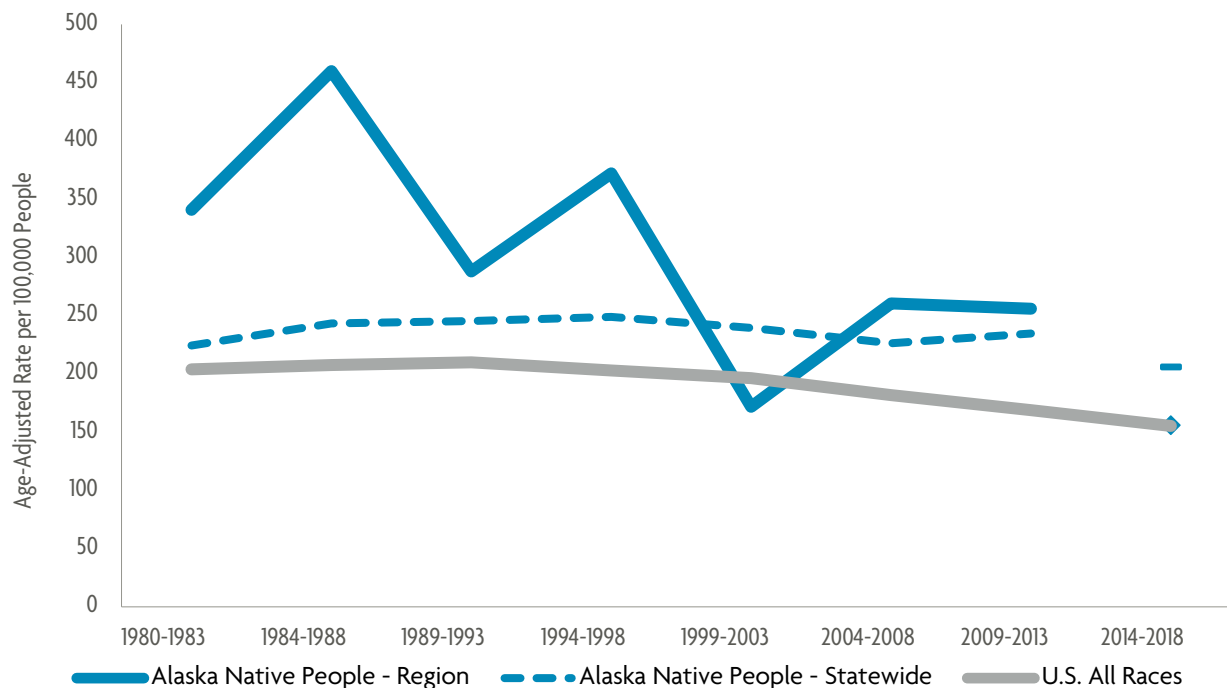
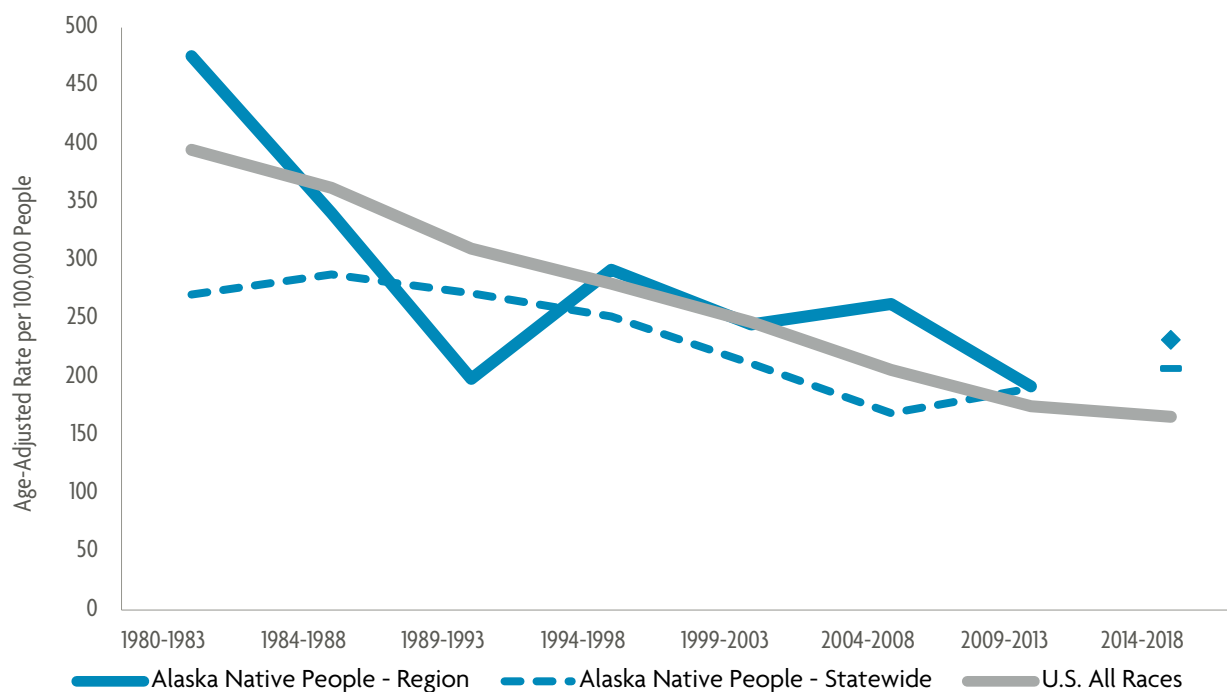


Figure 76. Kenai Peninsula Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

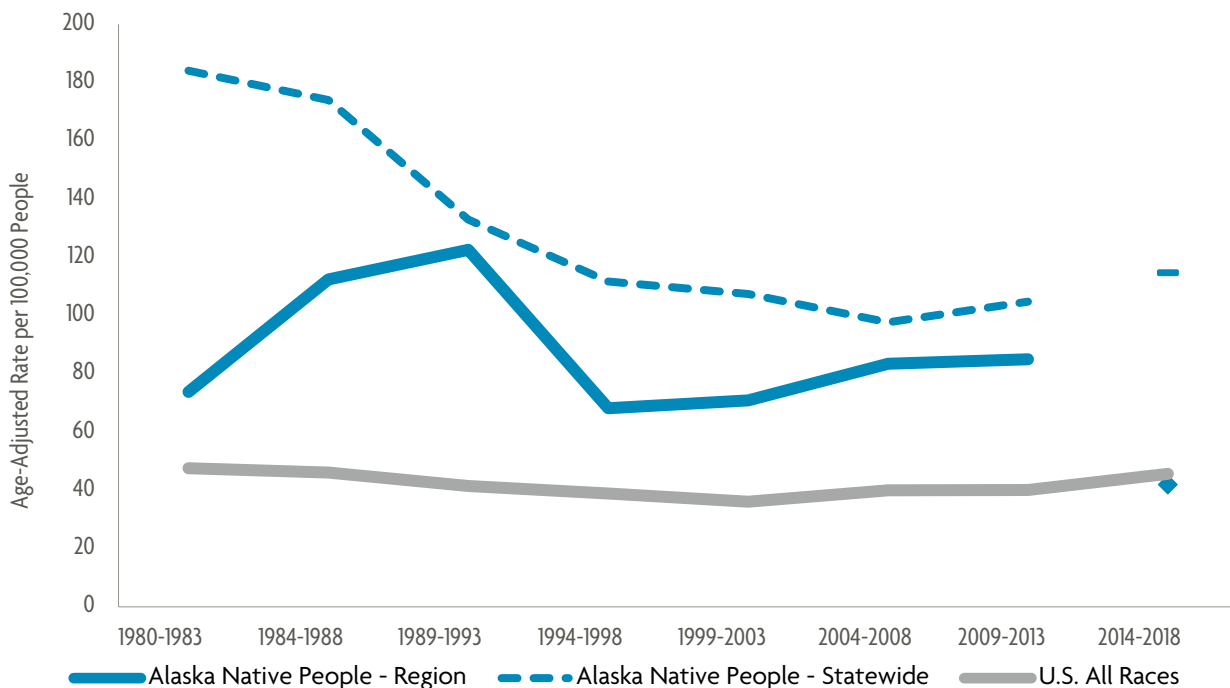
Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 77. Kenai Peninsula Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Table 11. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Kodiak Region, 1980-2014

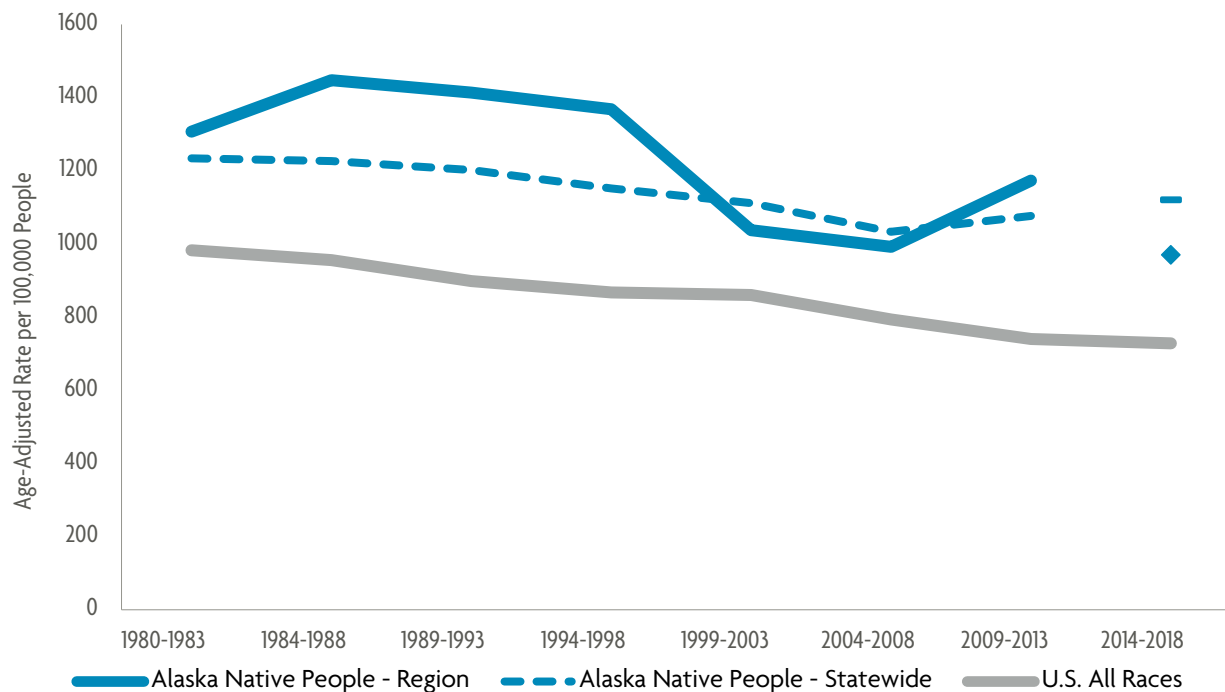
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	92.6	382.7	331.9	323.6	240.8	251.2	247.8	196.5	112.2%
Heart Disease	444.0	407.9	395.4	423.1	295.4	112.8	263.2	177.6	-60.0% *
Unintentional Injury	208.8	182.1	94.4	87.9	97.1	54.0	106.1	101.6	-51.4% *
All-Cause	1307.0	1447.6	1413.8	1368.1	1037.8	991.9	1173.3	969.9	-25.8% *

*significant difference, $p < 0.05$

Figure 78. Kodiak Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 79. Kodiak Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

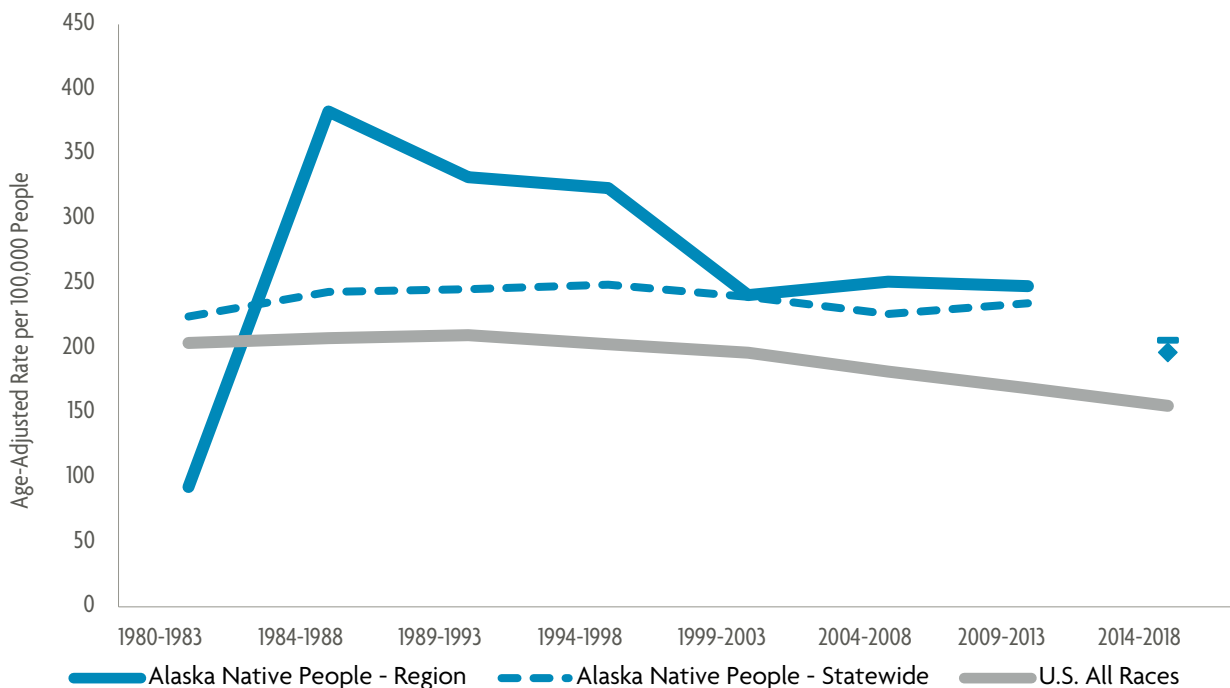
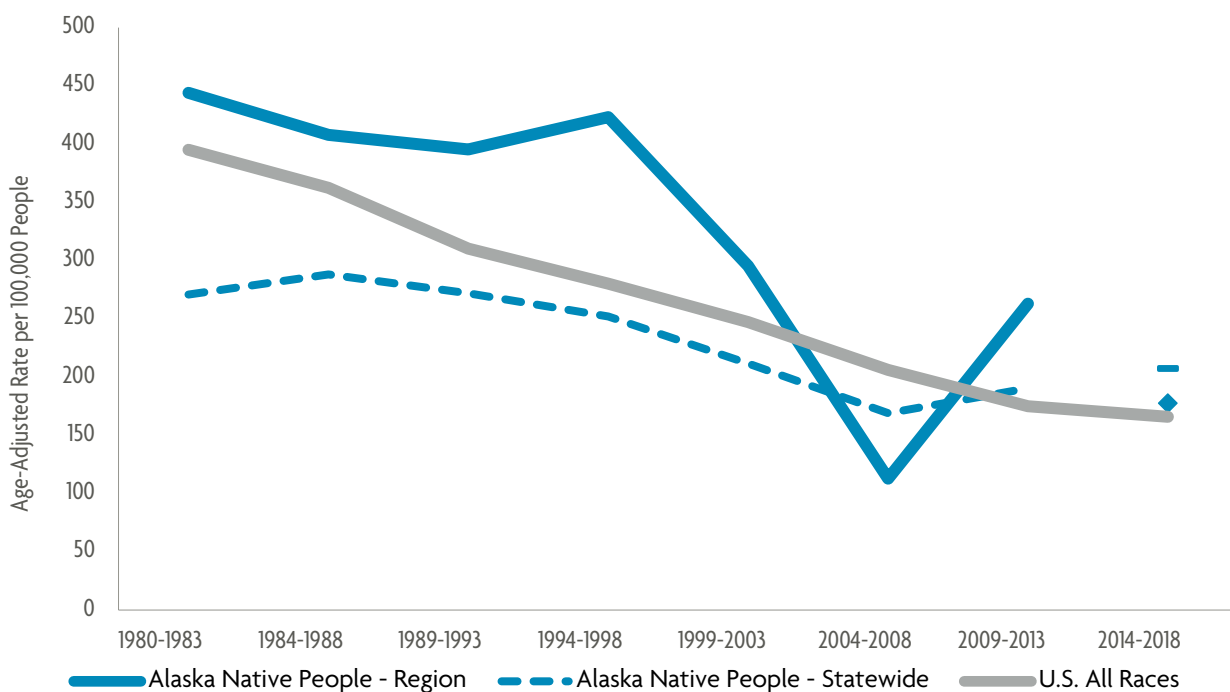


Figure 80. Kodiak Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

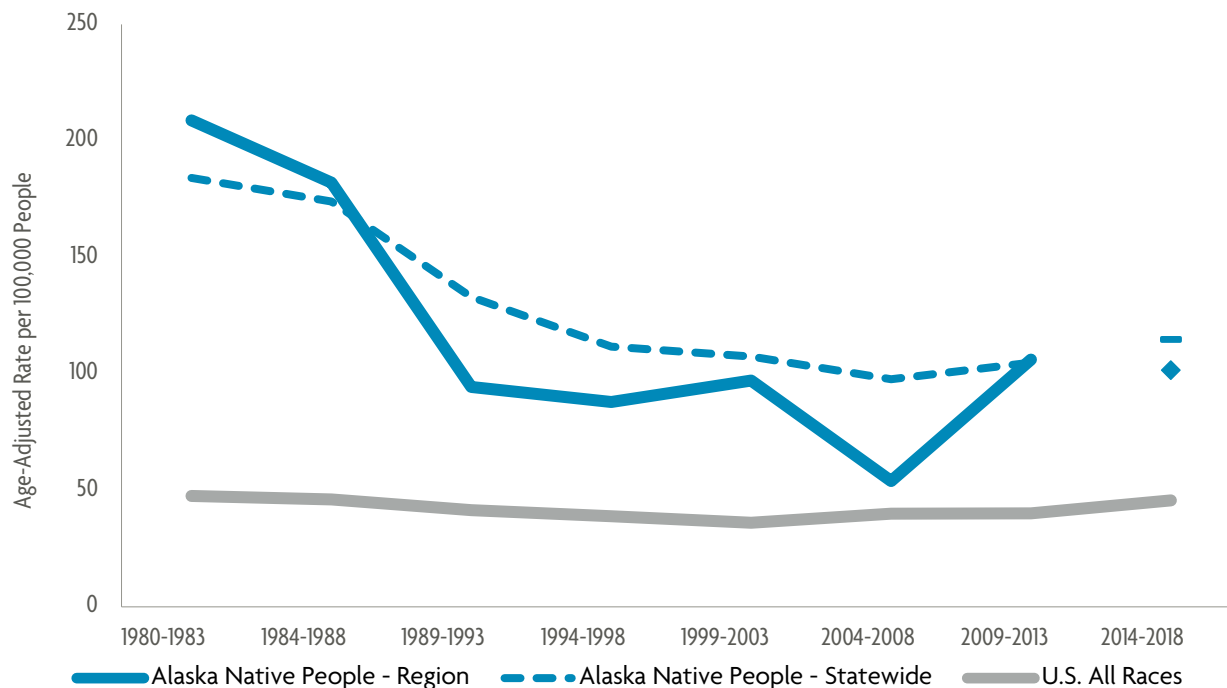
Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 81. Kodiak Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Table 12. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Northwest Arctic Region, 1980-2014

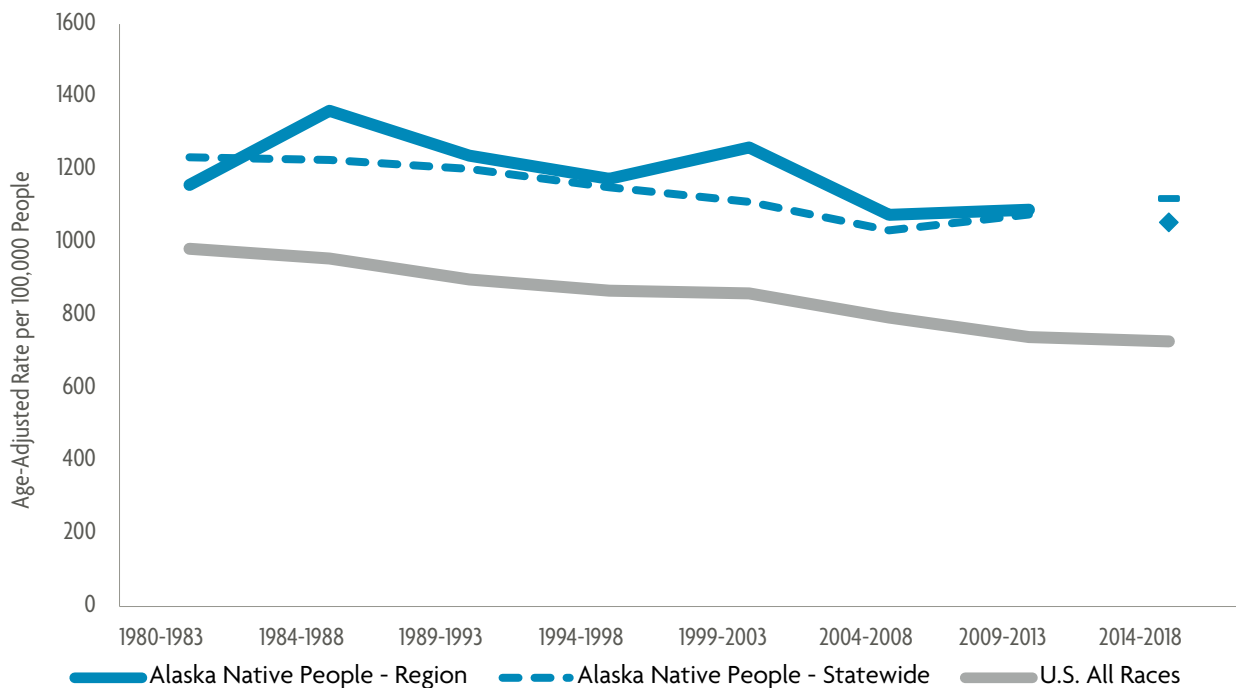
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	181.9	307	214.5	262.8	260.9	282	246.7	187.1	2.9%
Heart Disease	243.8	250.3	265.5	273.5	219.7	207.5	204.7	218	-10.6%
Unintentional Injury	197.3	174.1	227.6	87.8	132	151.3	117.2	113.2	-42.6% *
Suicide	92	78.3	70.7	75.8	83.8	79.6	57.4	69.3	-24.7% *
COPD	68	65.3	63.2	61.9	55.6	70	71	52.5	-22.8% *
Cerebrovascular Disease	68.7	72.2	74.6	77.5	101.2	39.6	39.2	71.8	4.6%
All-Cause	1158.3	1361.8	1238.5	1174.8	1260.8	1076.8	1090.1	1055.1	-8.9%

*significant difference, $p < 0.05$

Figure 82. Northwest Arctic Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 83. Northwest Arctic Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

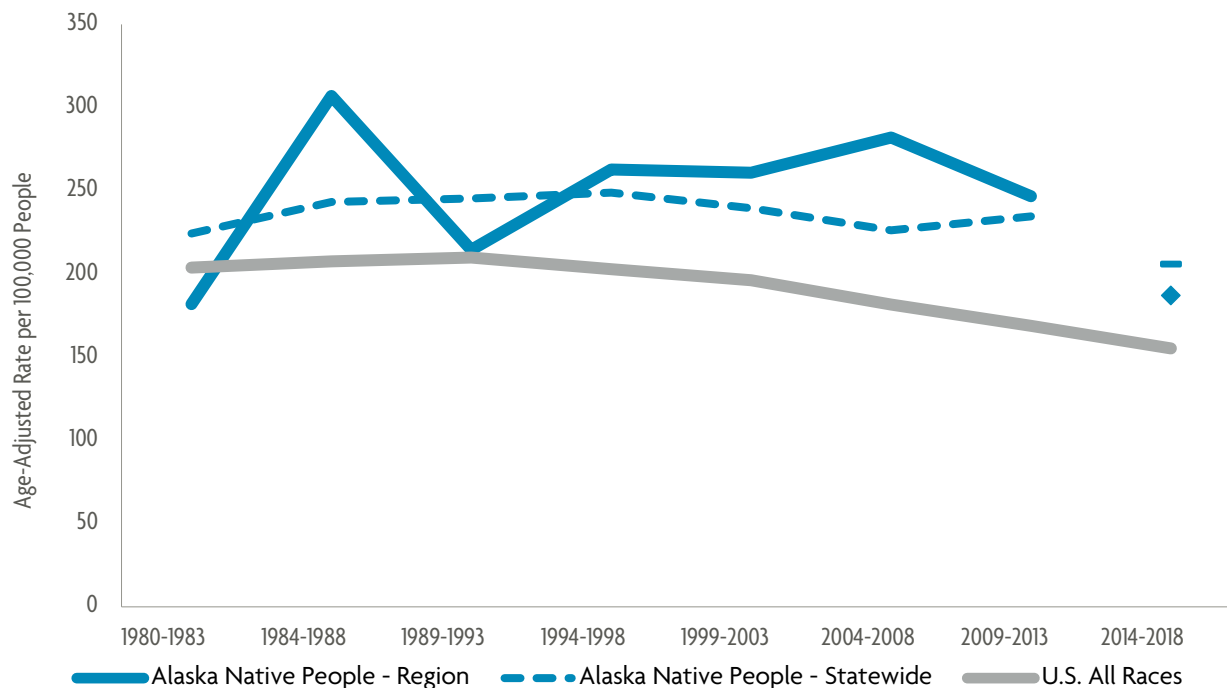
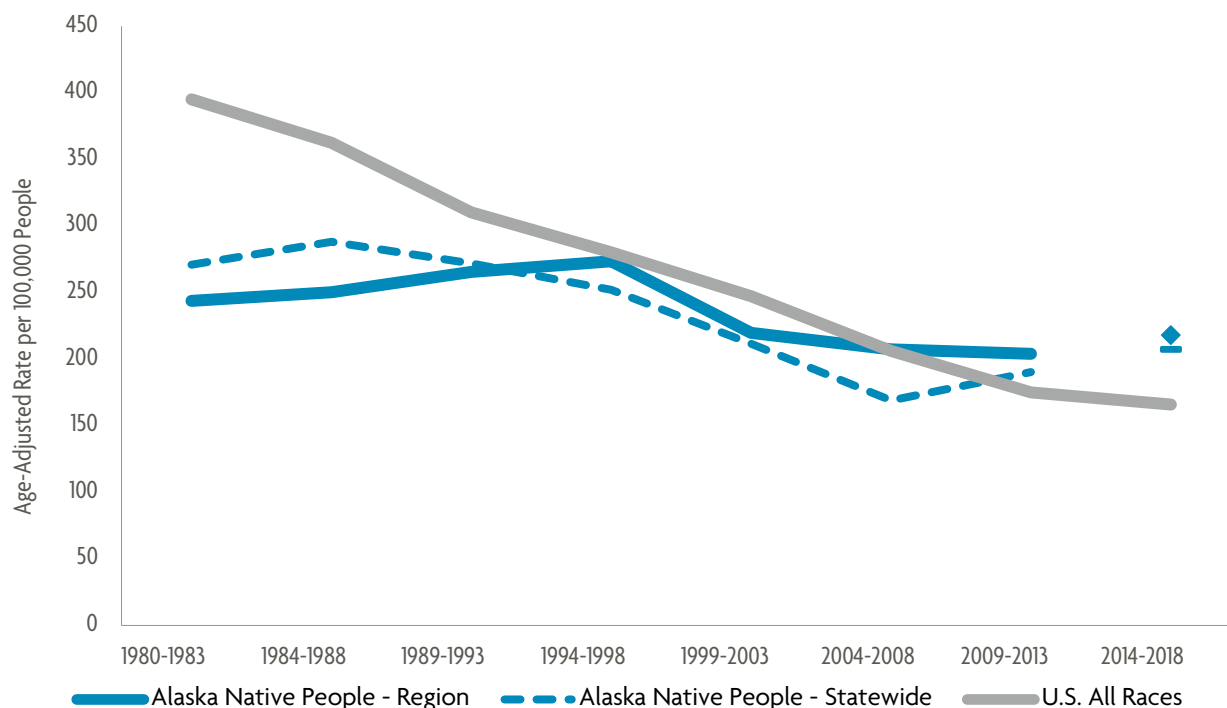


Figure 84. Northwest Arctic Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

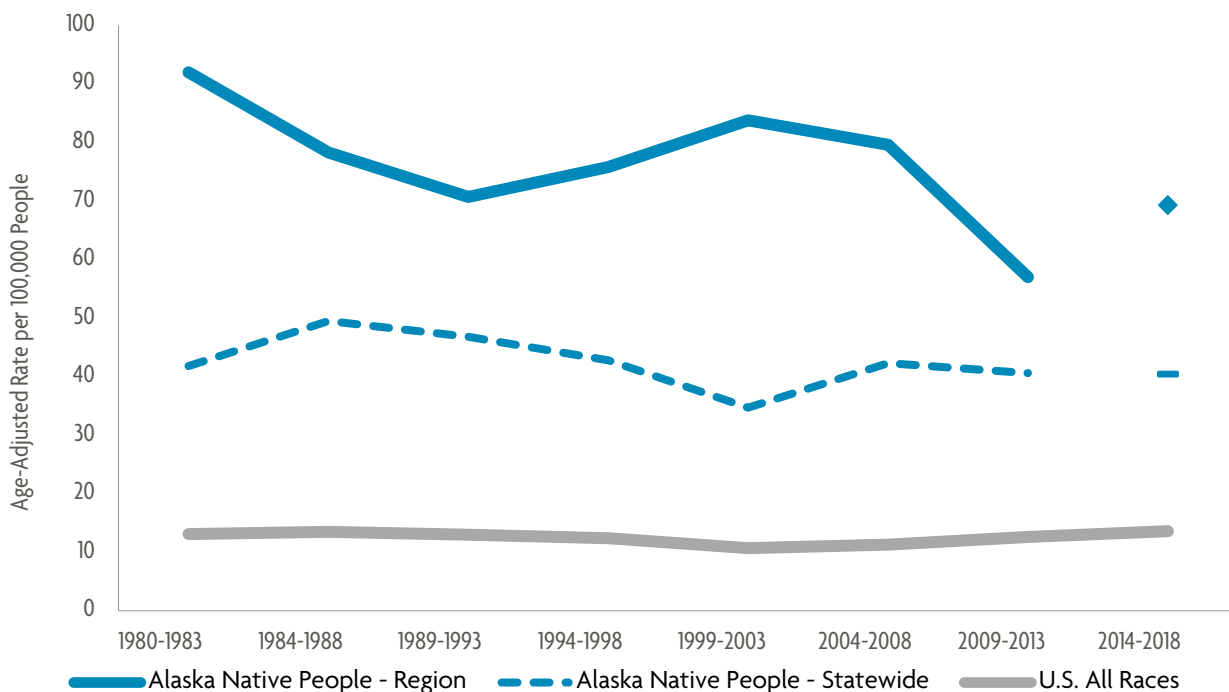
Figure 85. Northwest Arctic Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



Figure 86. Northwest Arctic Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 87. Northwest Arctic Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

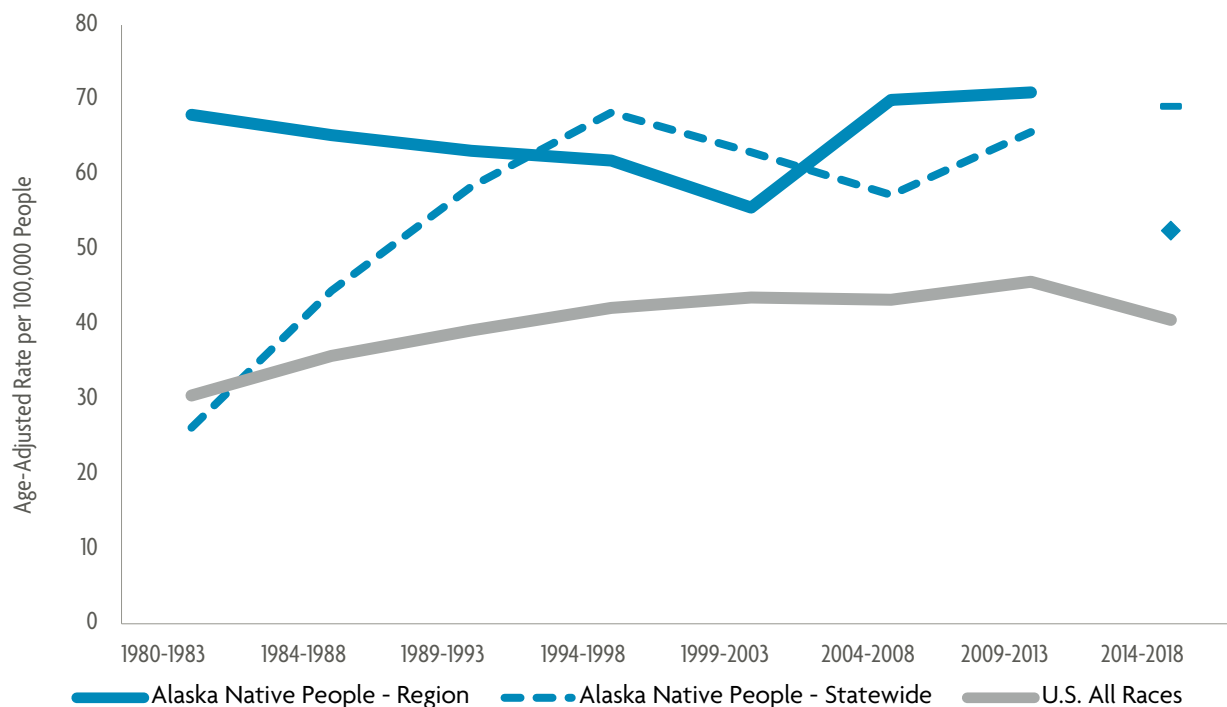
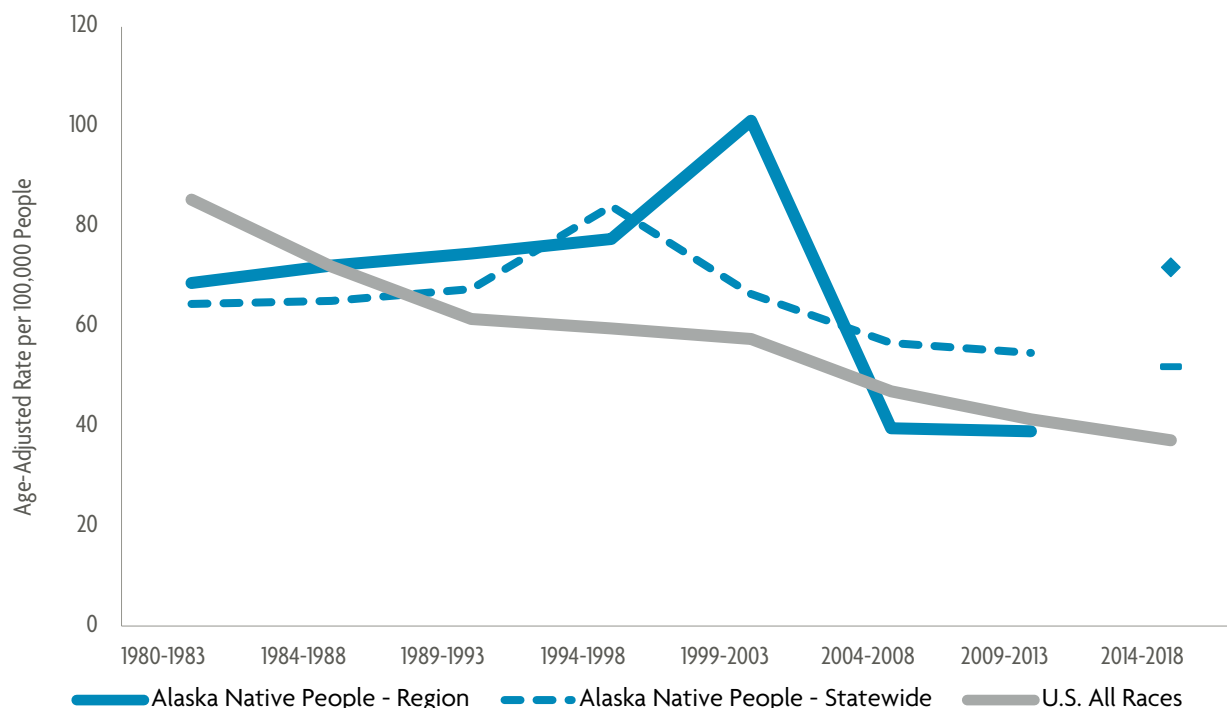


Figure 88. Northwest Arctic Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Table 13. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Norton Sound Region, 1980-2014

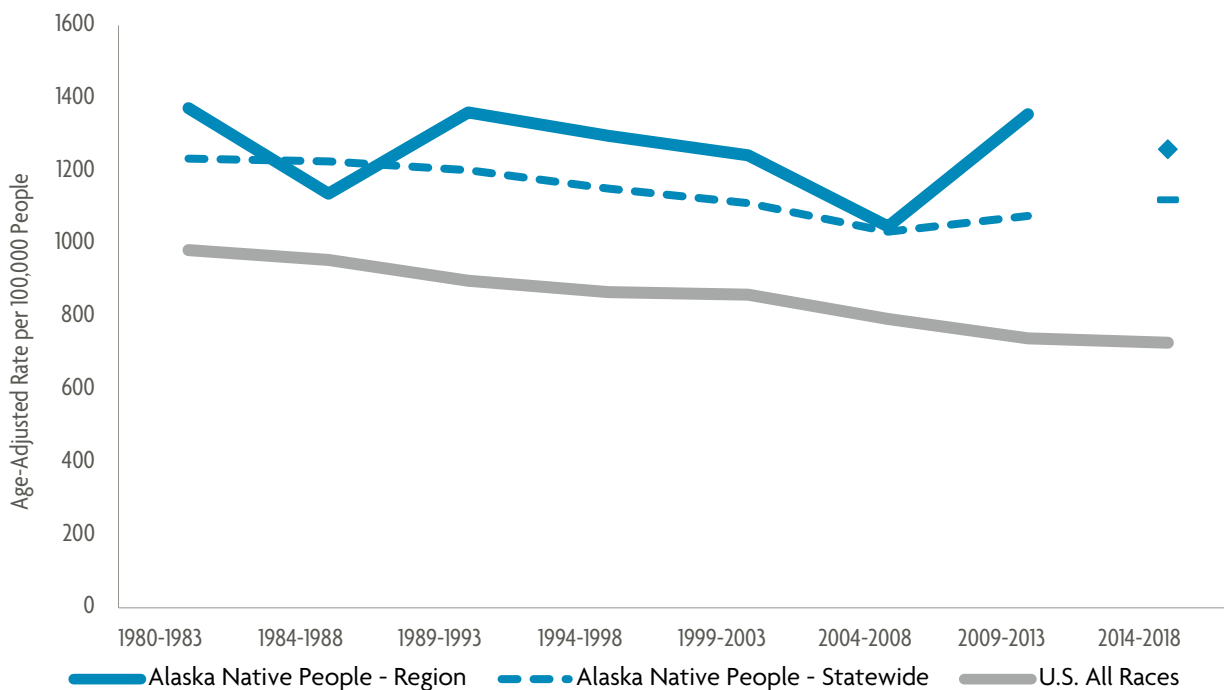
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	315.2	259.8	257.1	278	282.7	234.6	316.8	233	-26.1% *
Heart Disease	301.6	324	303.1	252.1	179	149.9	290.4	247.3	-18.0%
Unintentional Injury	141.4	156	122.6	175.8	143	136.1	115.2	112.6	-20.4%
Suicide	90.3	93.5	79.5	72.9	87.8	75.8	96.7	48.6	-46.2% *
COPD	35.9	46.1	62.1	107.7	71.4	58.3	100.9	117.5	227.4% *
Cerebrovascular Disease	62.1	46.6	78.9	79.9	60	47.3	109.2	40	-35.6% *
All-Cause	1372.7	1137.6	1360.7	1296.6	1243.0	1047.5	1356.1	1259.5	-8.2%

*significant difference, $p < 0.05$

Figure 89. Norton Sound Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 90. Norton Sound Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

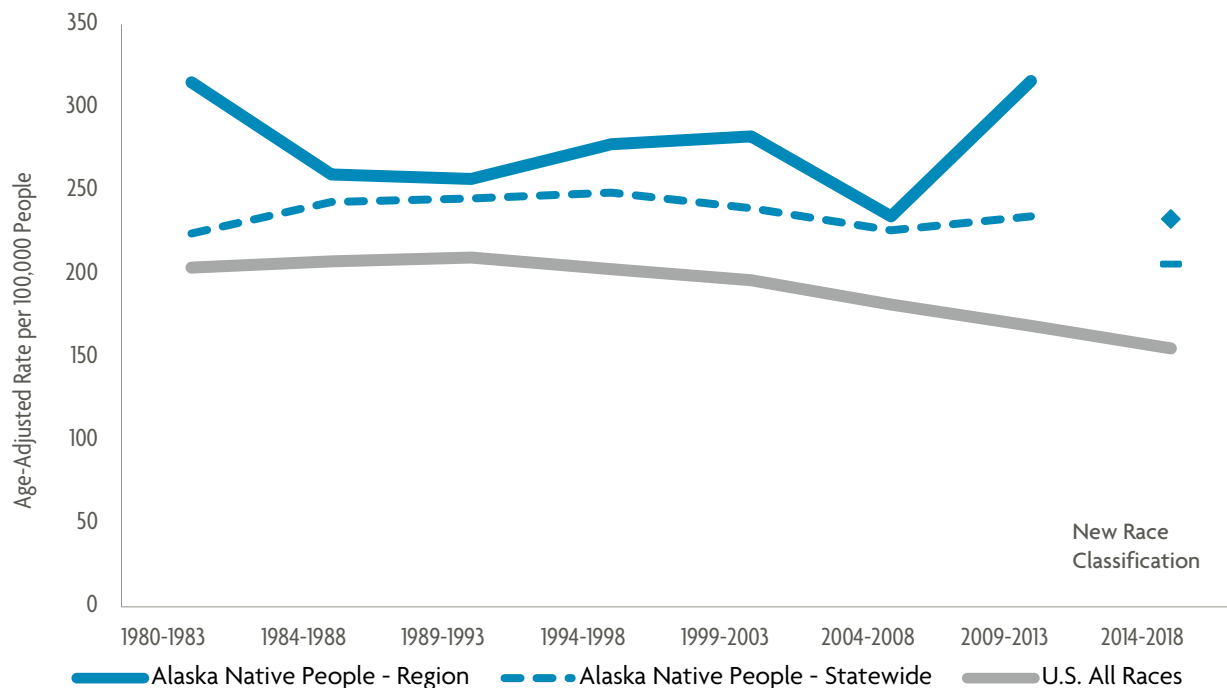
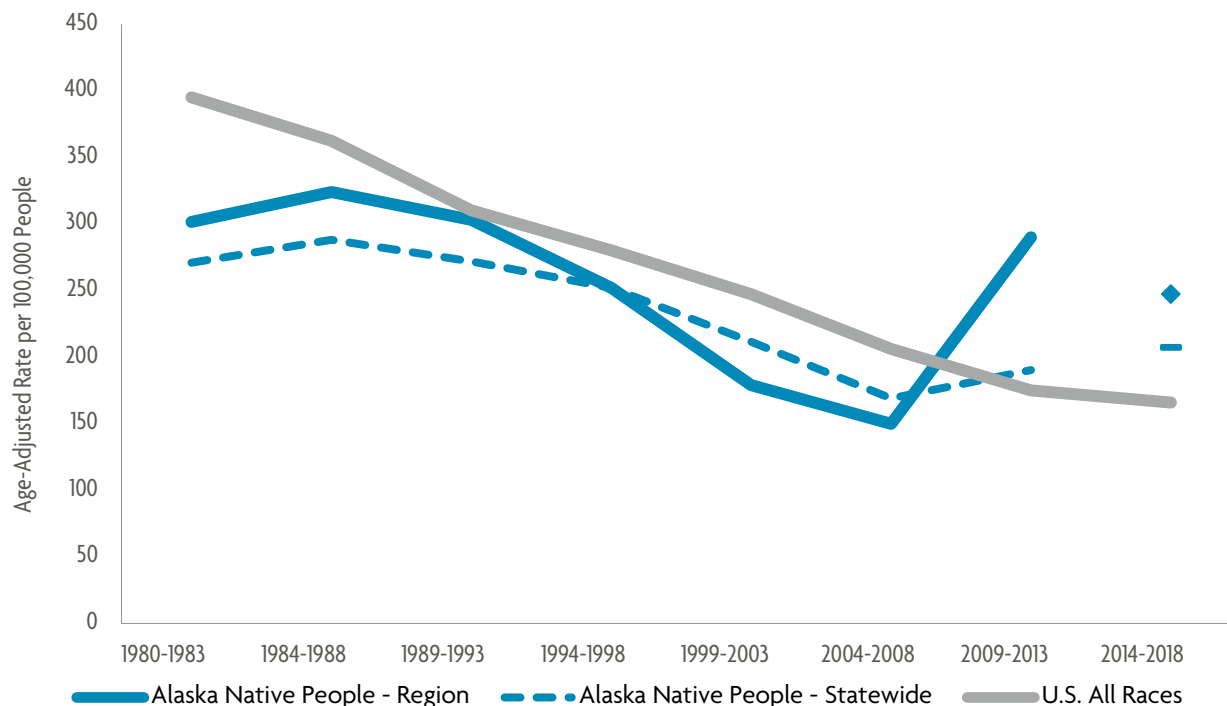


Figure 91. Norton Sound Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 92. Norton Sound Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

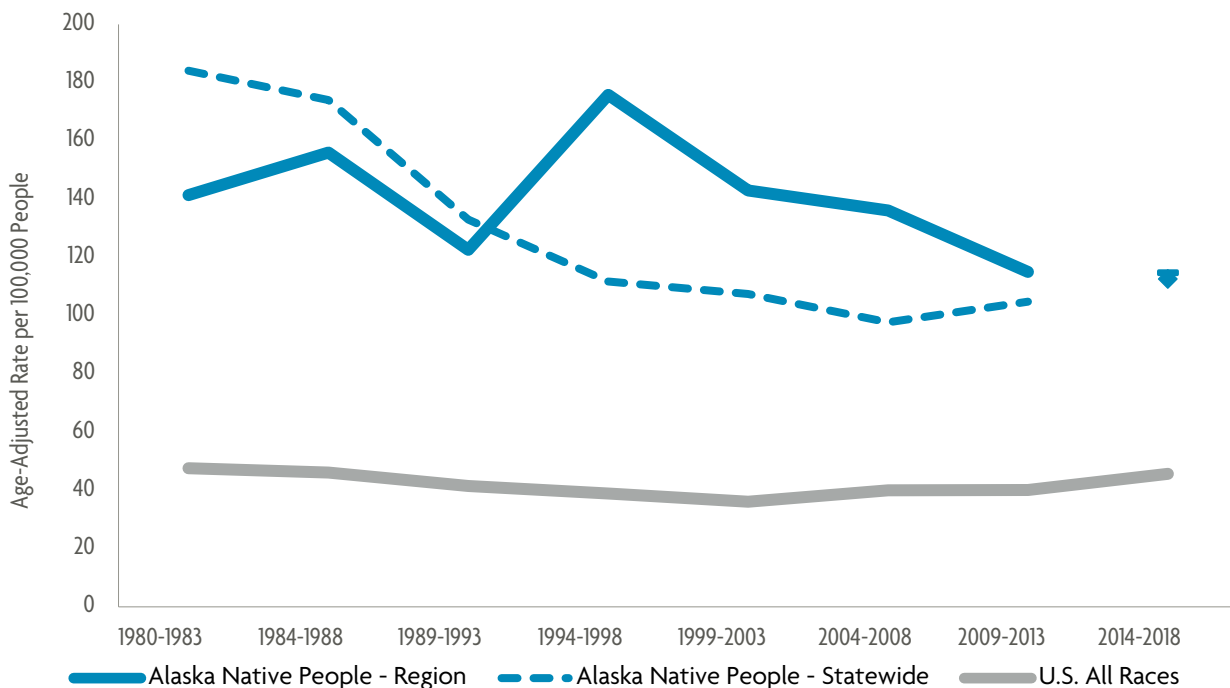
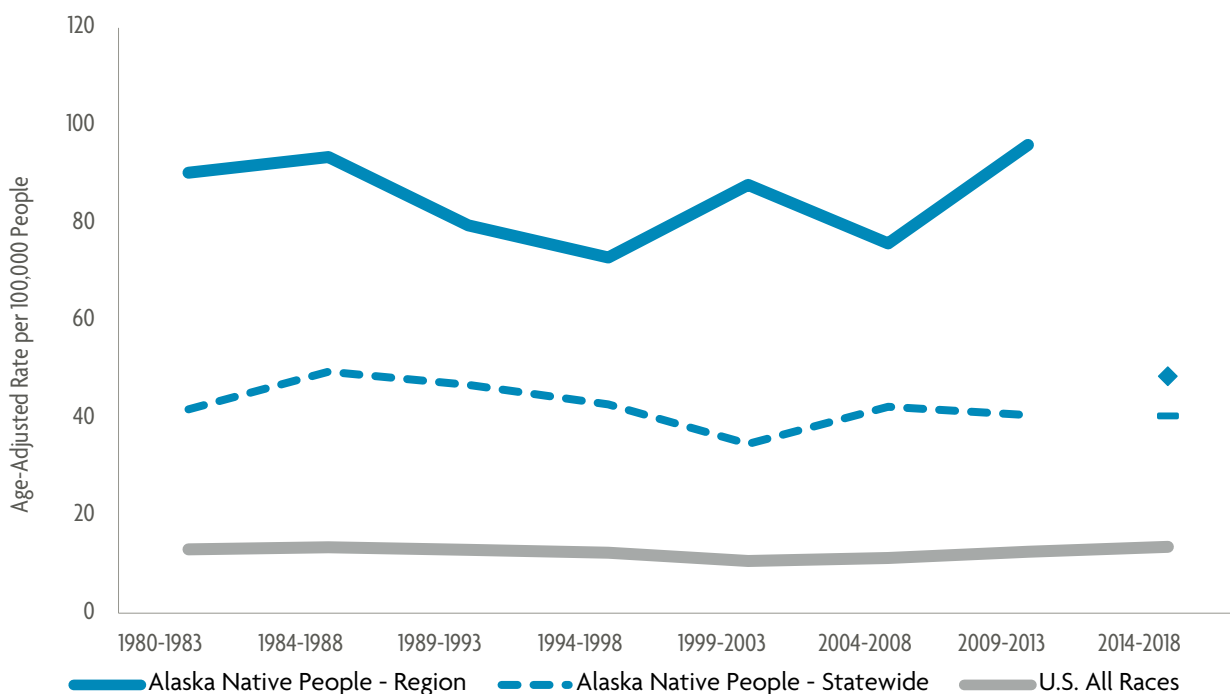


Figure 93. Norton Sound Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 94. Norton Sound Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

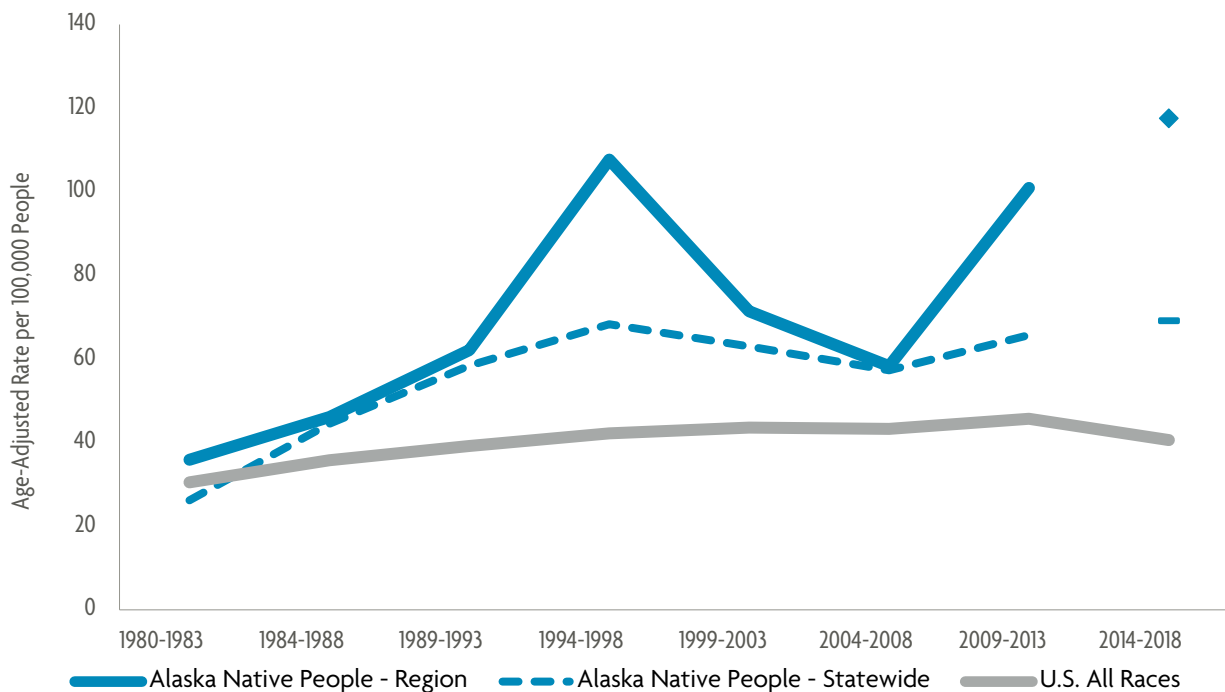
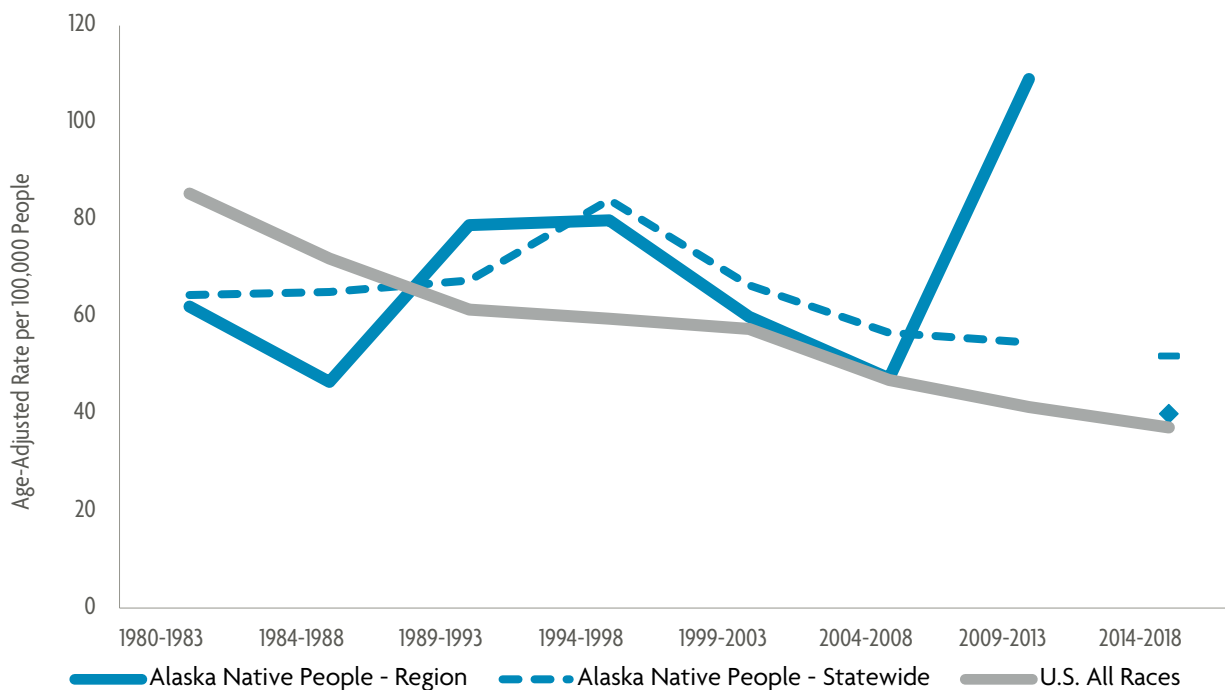


Figure 95. Norton Sound Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Table 14. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Southeast Region, 1980-2014

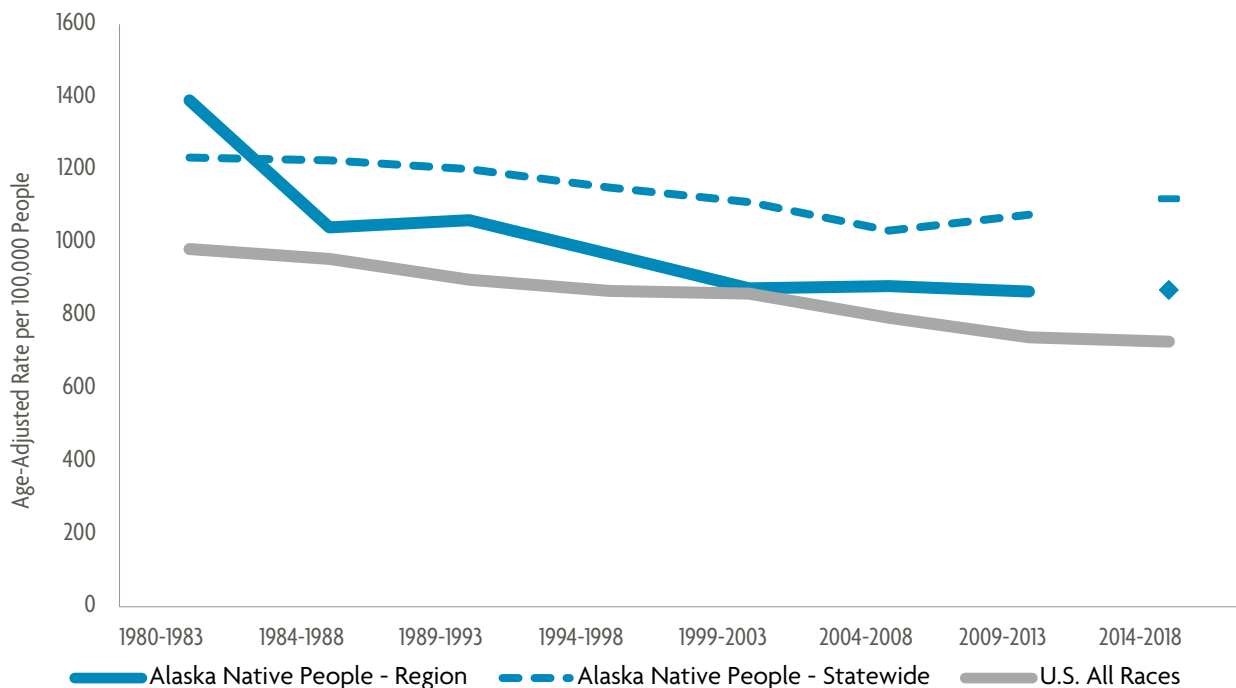
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	195.5	135.2	203.8	177.4	189.9	191.1	184.3	159.5	-18.4%
Heart Disease	404.9	280	270.8	296.4	210.6	147.1	162.3	182.3	-55.0% *
Unintentional Injury	125	110.1	100.1	81.2	51.2	74	71.2	79.6	-36.3% *
Suicide	37.8	32.1	28.8	26.5	9.2	17.9	19.4	15.1	-60.0% *
COPD	22.4	25	45.7	40.9	33.7	47.4	42	51.8	131.4% *
Chronic Liver Disease	17.7	14.8	28.8	19.8	17.7	15.3	23.4	28	58.4% *
Cerebrovascular Disease	104.2	73.7	65.8	51.4	55.5	51.1	29	34.1	-67.3% *
All-Cause	1391.1	1042.3	1062.0	968.9	874.8	881.0	866.6	869.9	-37.5% *

*significant difference, $p < 0.05$

Figure 96. Southeast Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 97. Southeast Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

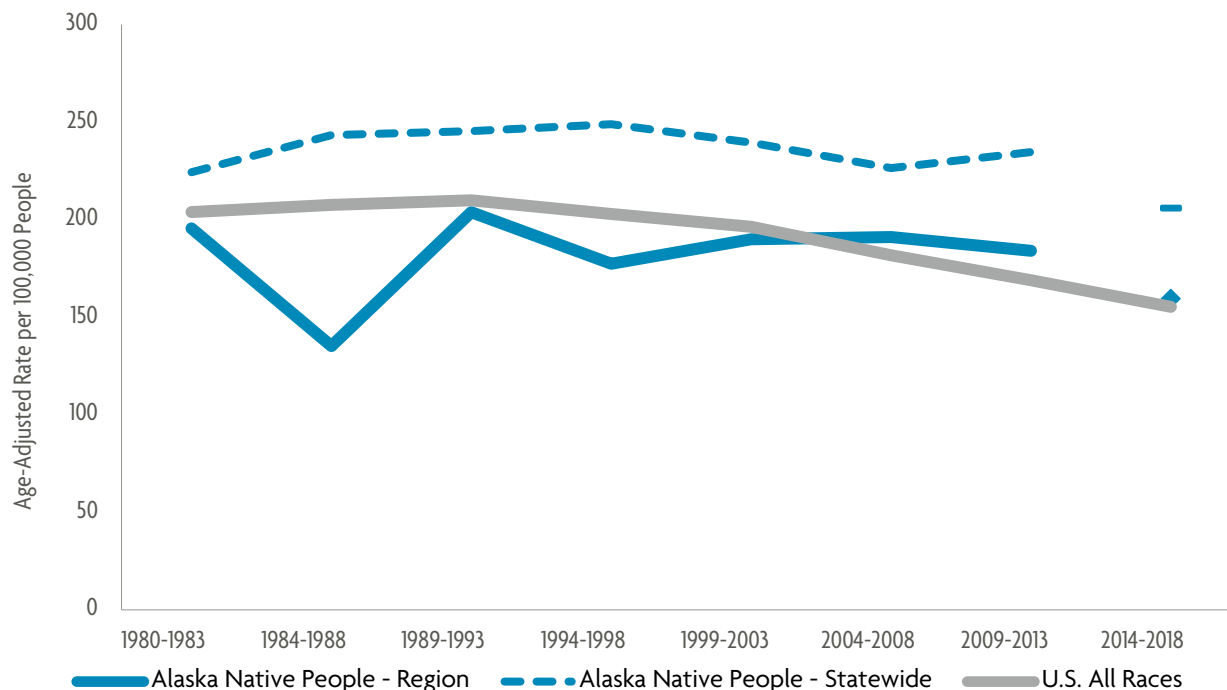
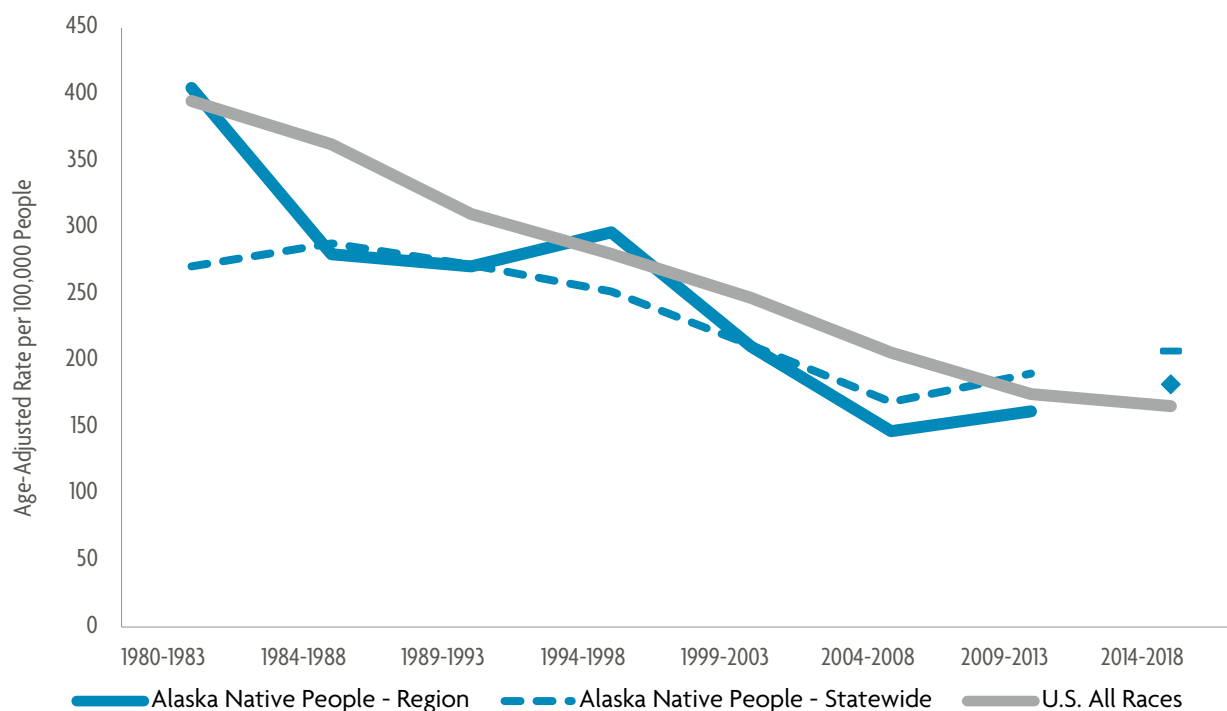


Figure 98. Southeast Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 99. Southeast Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

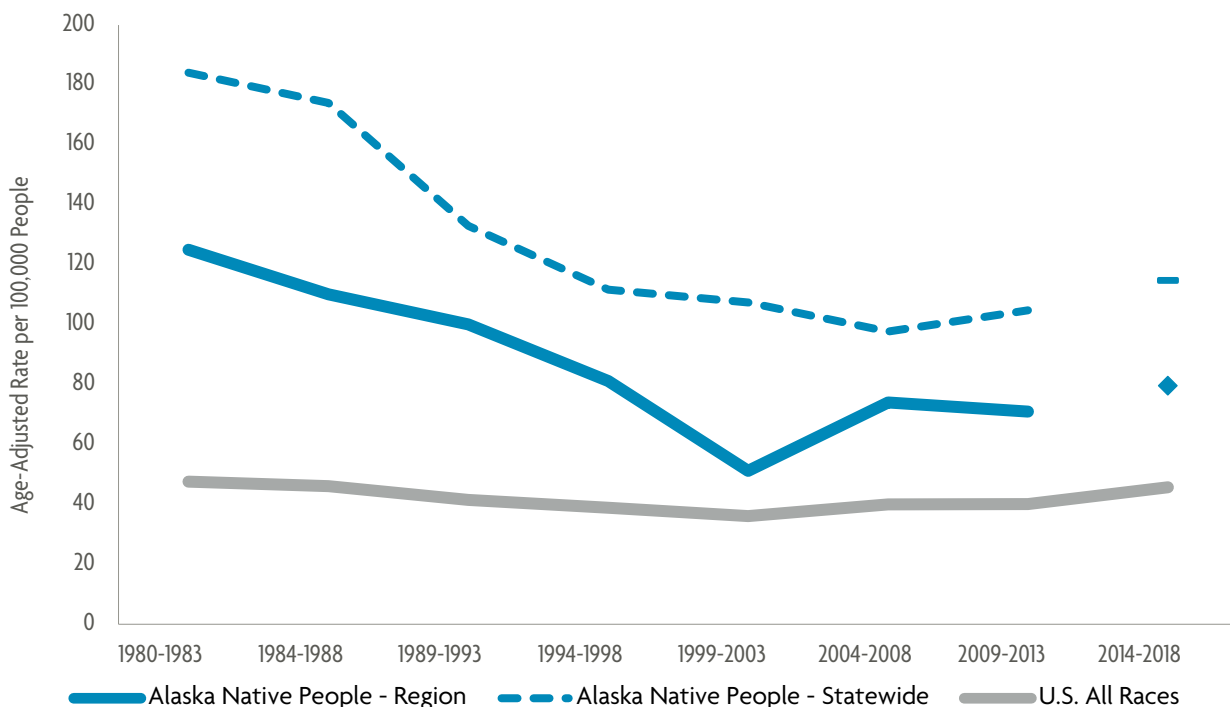
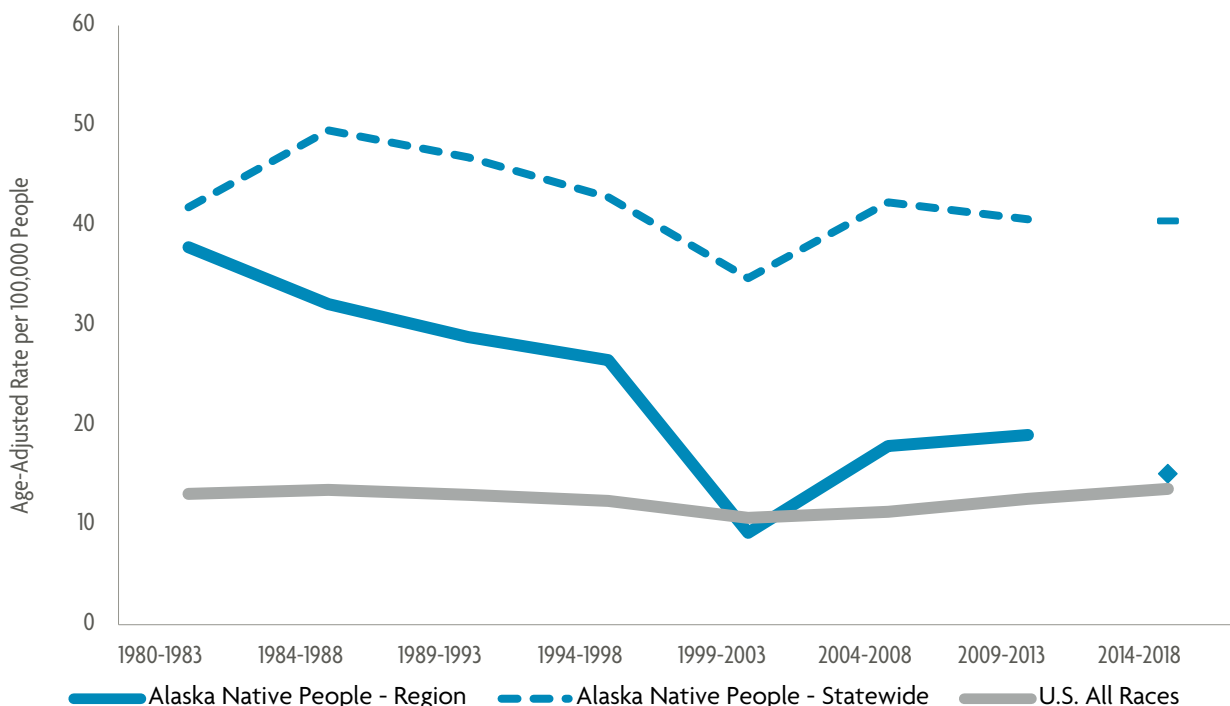


Figure 100. Southeast Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 101. Southeast Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

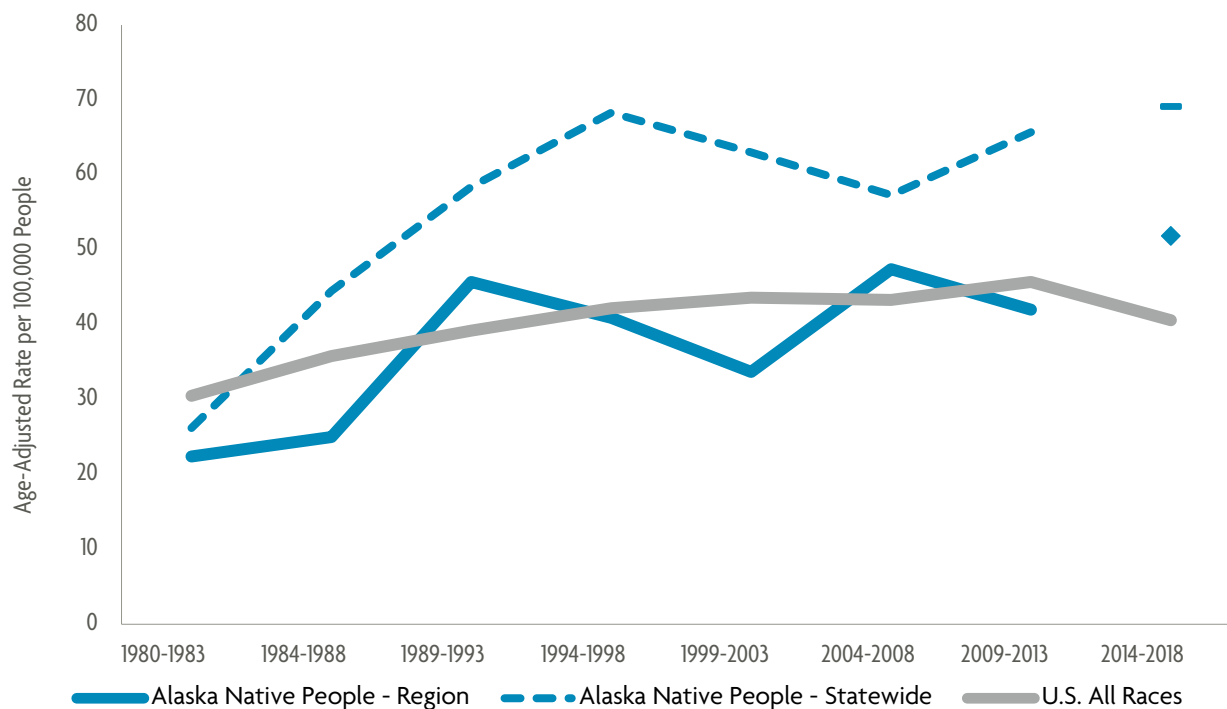


Figure 102. Southeast Trend in Chronic Liver Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

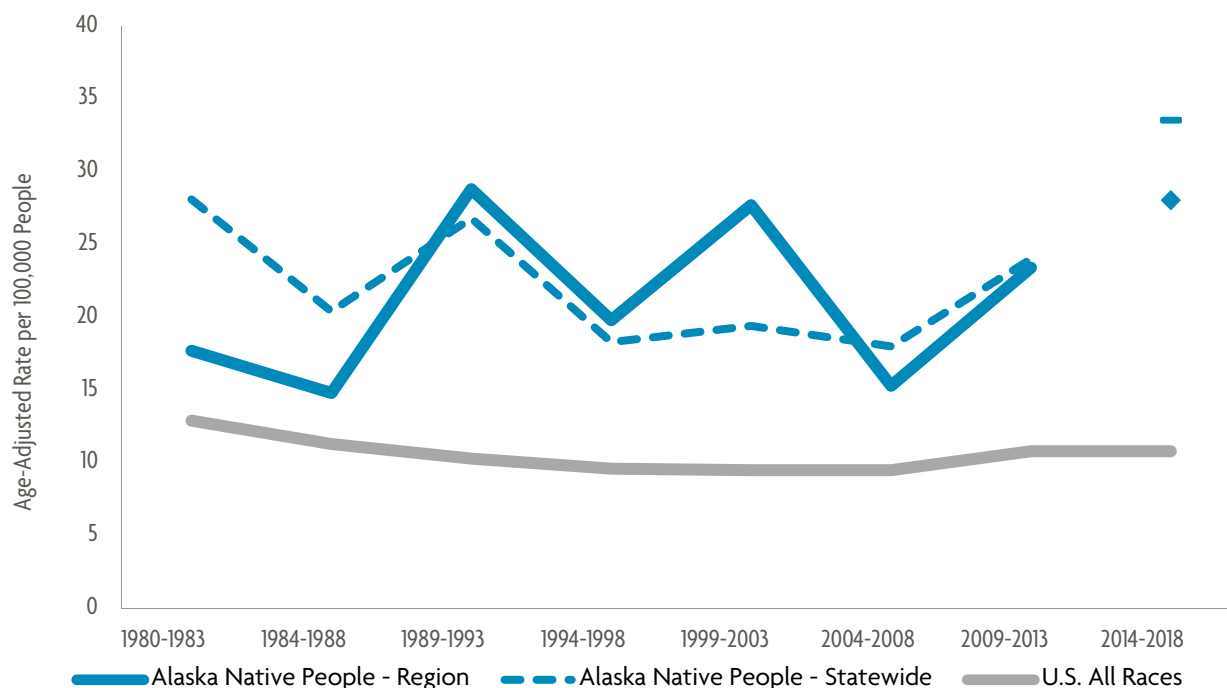
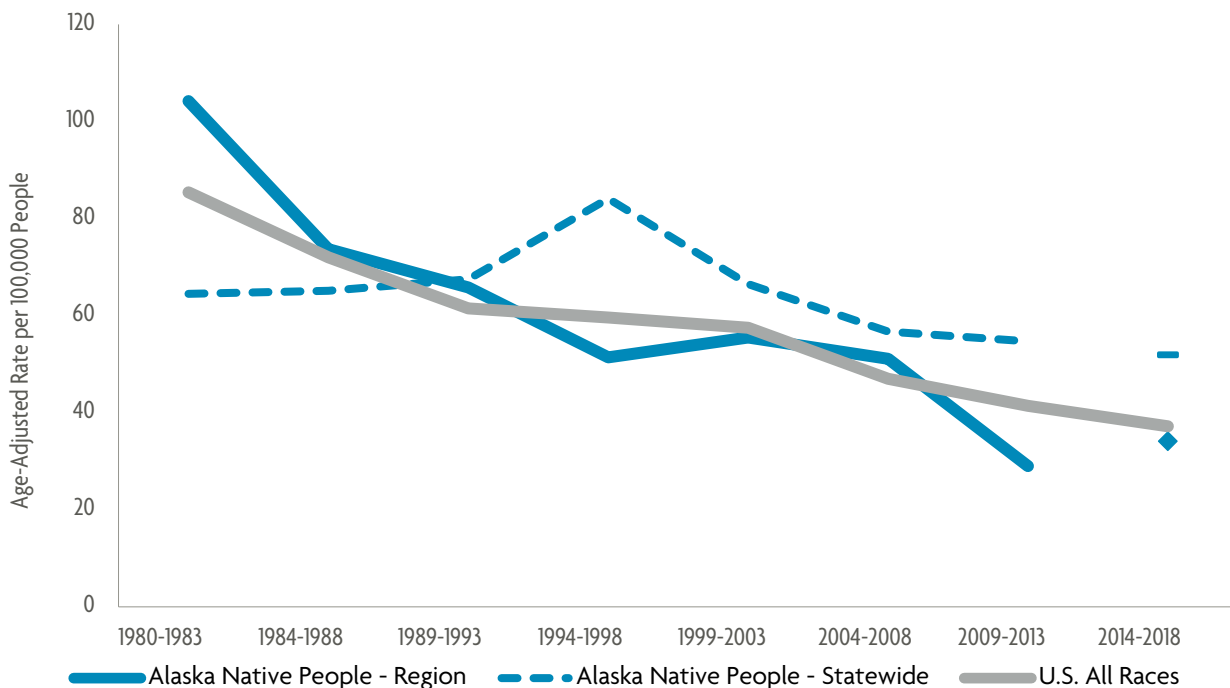


Figure 103. Southeast Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Table 15. Trends in Age-Adjusted Mortality Rates per 100,000 People among Alaska Native People in the Yukon-Kuskokwim Region, 1980-2014

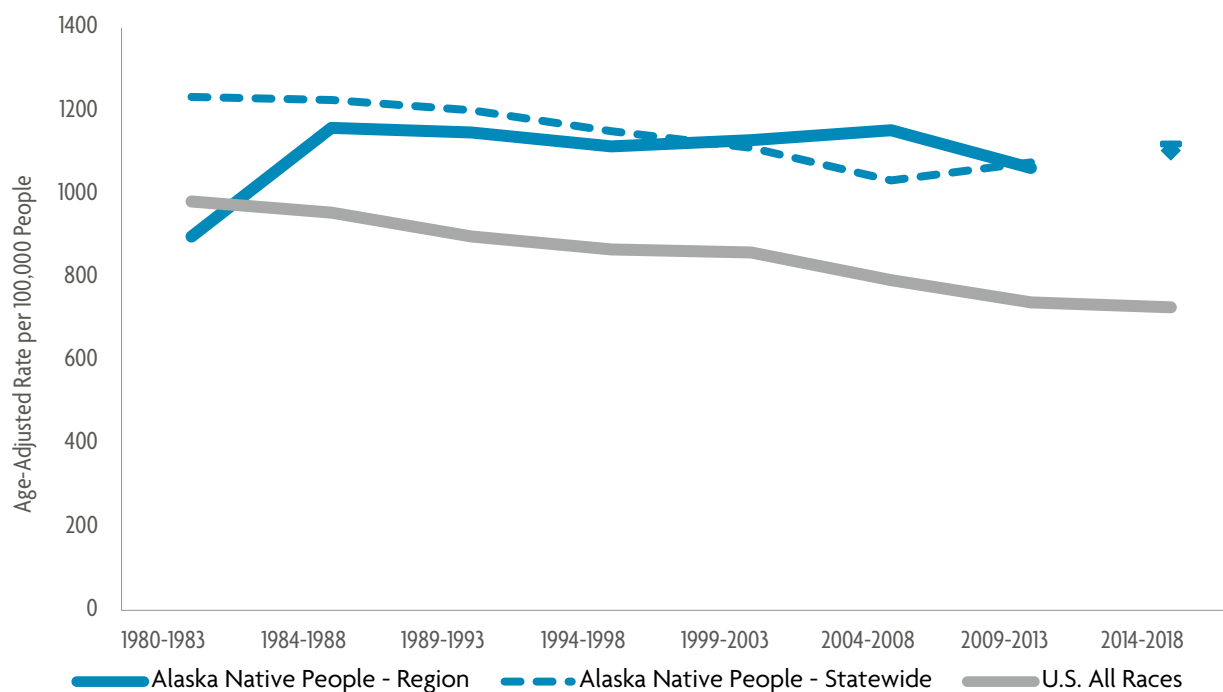
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018	% Change
Cancer	217.4	256.6	250.5	260.6	249	273.1	234.8	179	-17.7%
Heart Disease	111.3	212.8	187.6	226.7	209.2	175.4	166.2	188.8	69.6% *
Unintentional Injury	218.4	203.9	166.2	125	130.7	96	107.8	133.1	-39.1% *
Suicide	22.8	55.6	47.6	64.4	43.7	64.3	58.3	55.5	143.4% *
COPD	34.1	37.3	66.8	70.3	63.1	63.5	81.6	69.5	103.9% *
Cerebrovascular Disease	39.3	46.1	69.3	62.7	56.6	77.7	86.2	73	85.6% *
Alcohol Abuse	18.8	24.4	22.1	24.6	25.6	25.7	14.2	14.6	-22.3%
Homicide	28.2	22.6	24.3	6.6	20.7	18.8	18.4	17.8	-37.0% *
Influenza/Pneumonia	33.8	41.8	85.2	40.4	59.9	47	24.7	55.3	63.7% *
All-Cause	898.3	1159.6	1148.6	1115.3	1130.0	1153.8	1063.8	1104.8	23.0% *

*significant difference, $p < 0.05$

Figure 104. Yukon-Kuskokwim Trend in All-Cause Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 105. Yukon-Kuskokwim Trend in Cancer Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

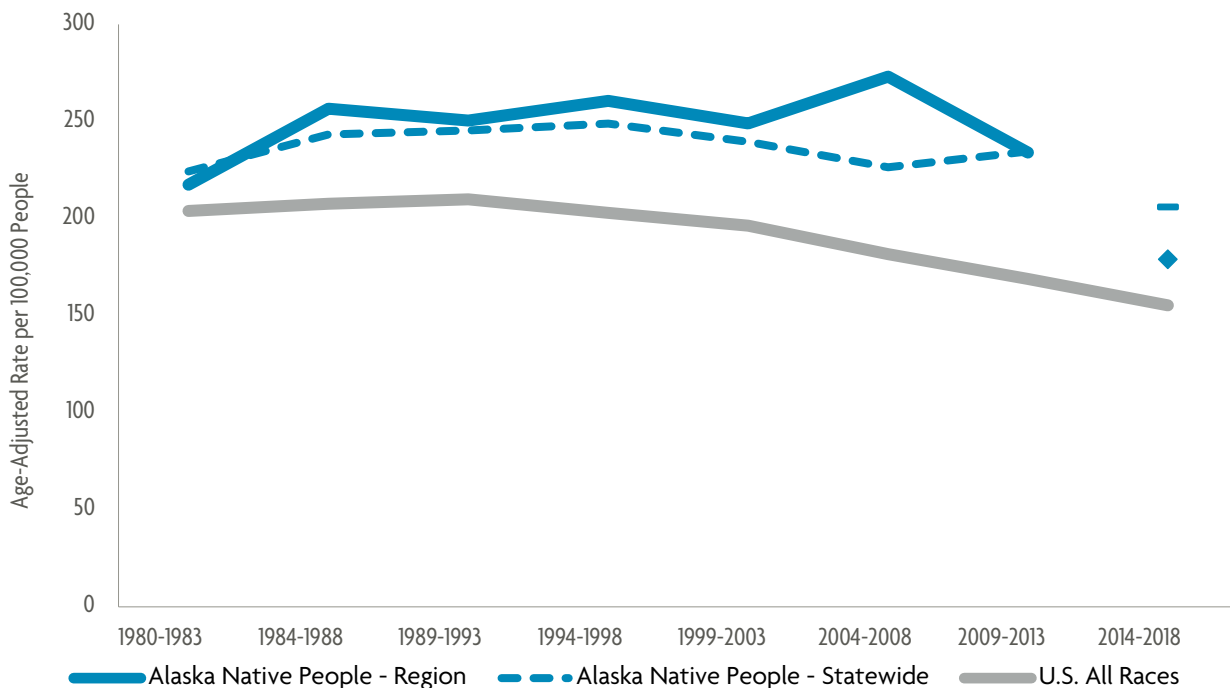
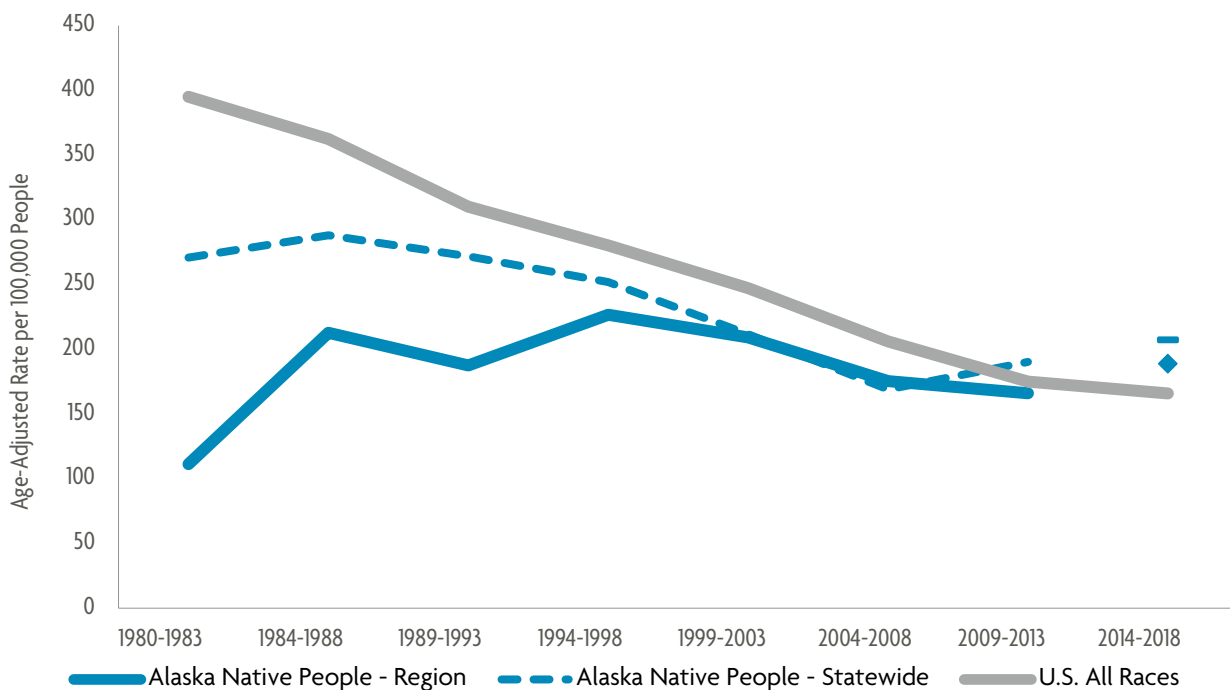


Figure 106. Yukon-Kuskokwim Trend in Heart Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 107. Yukon-Kuskokwim Trend in Unintentional Injury Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

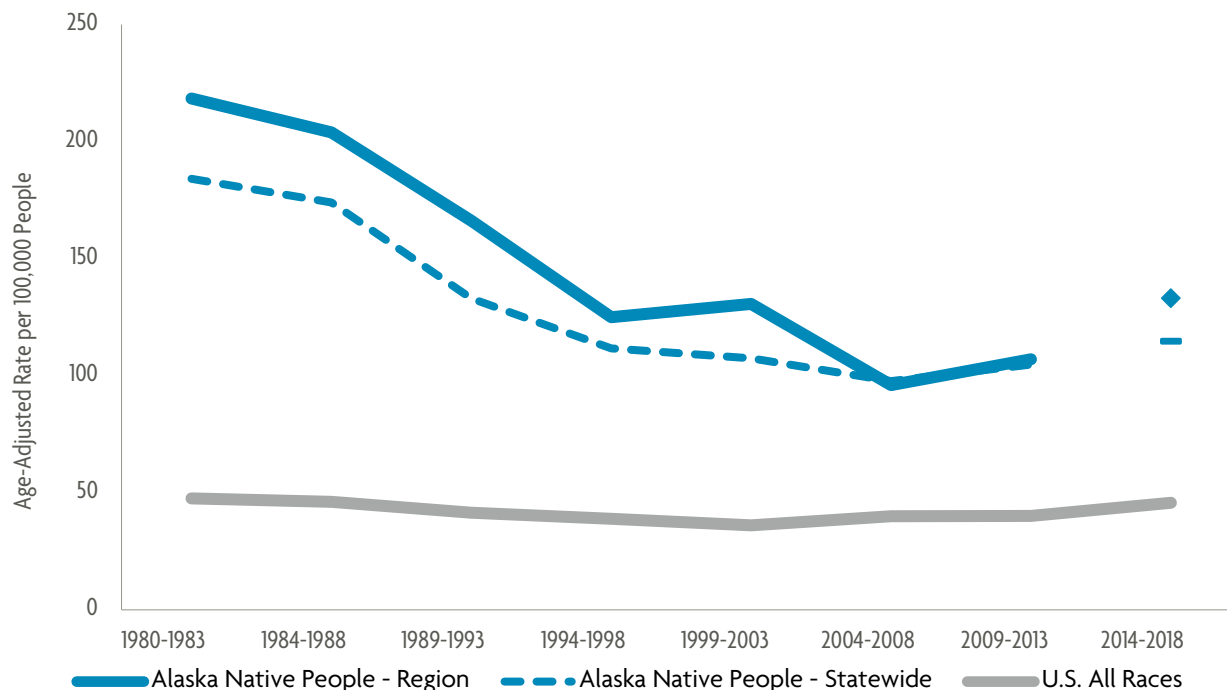
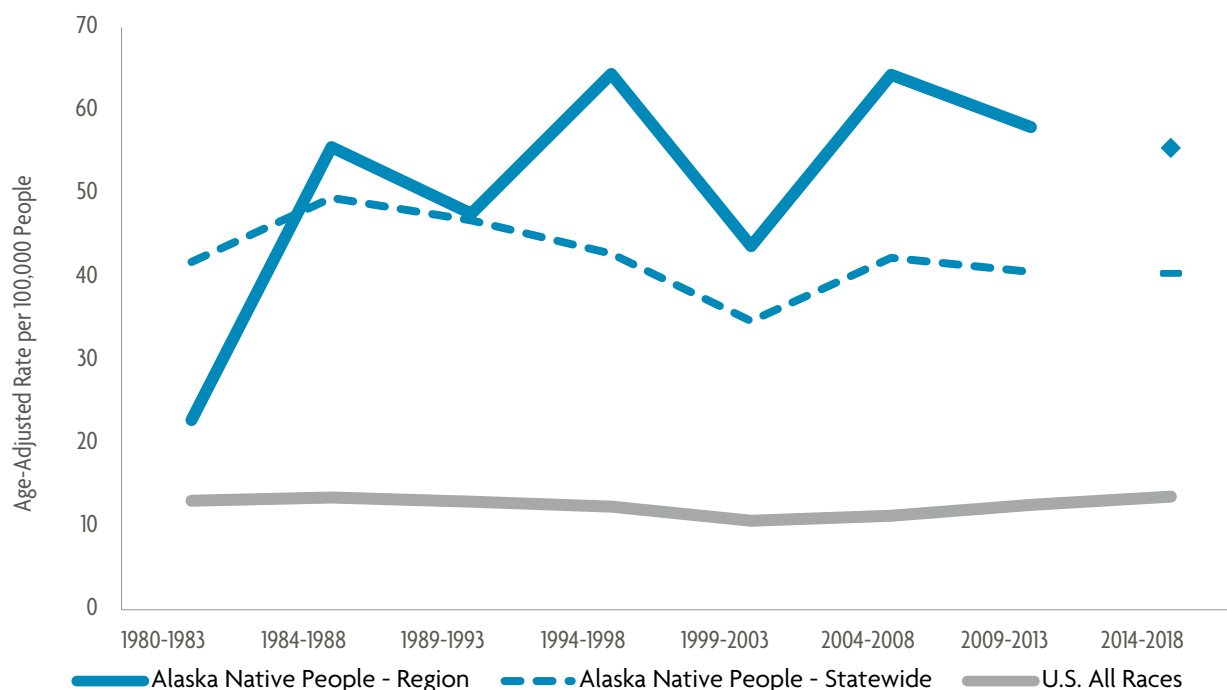


Figure 108. Yukon-Kuskokwim Trend in Suicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 109. Yukon-Kuskokwim Trend in COPD Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records

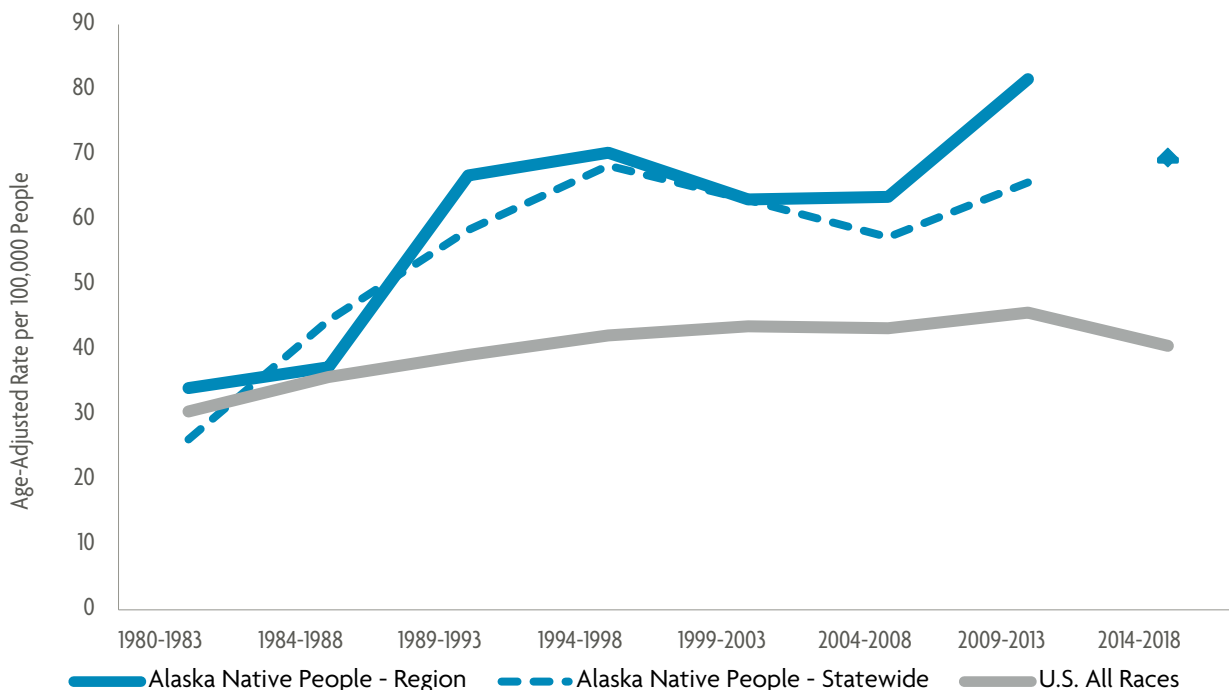
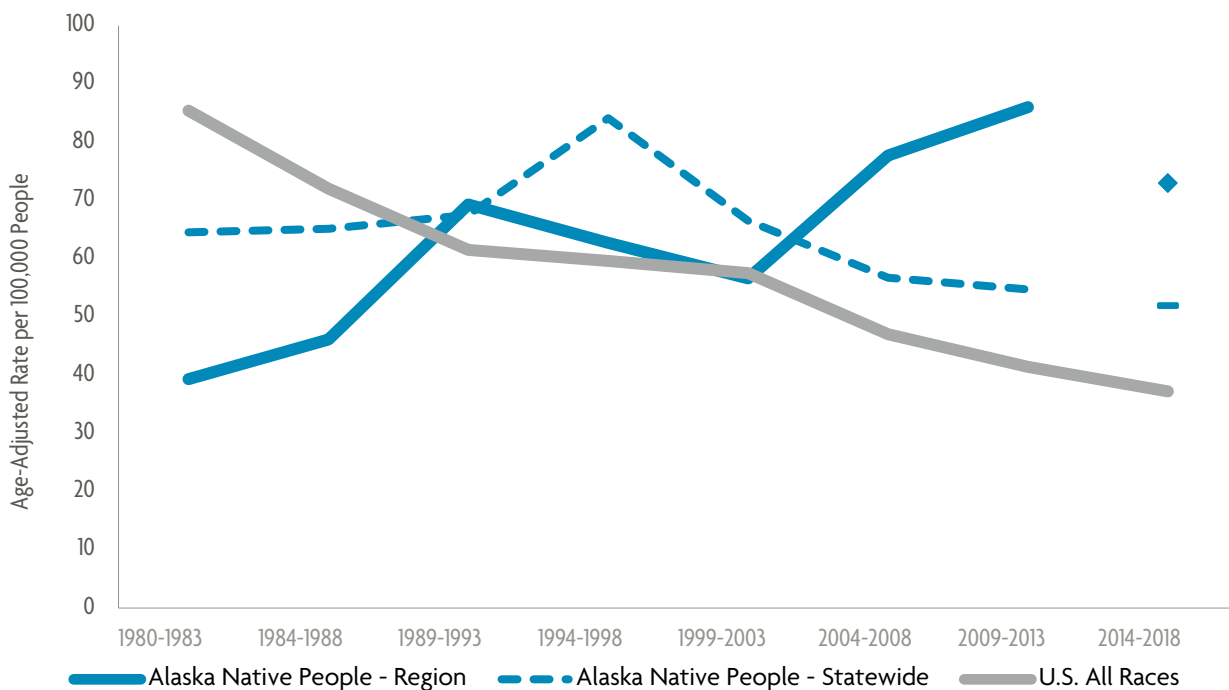


Figure 110. Yukon-Kuskokwim Trend in Cerebrovascular Disease Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

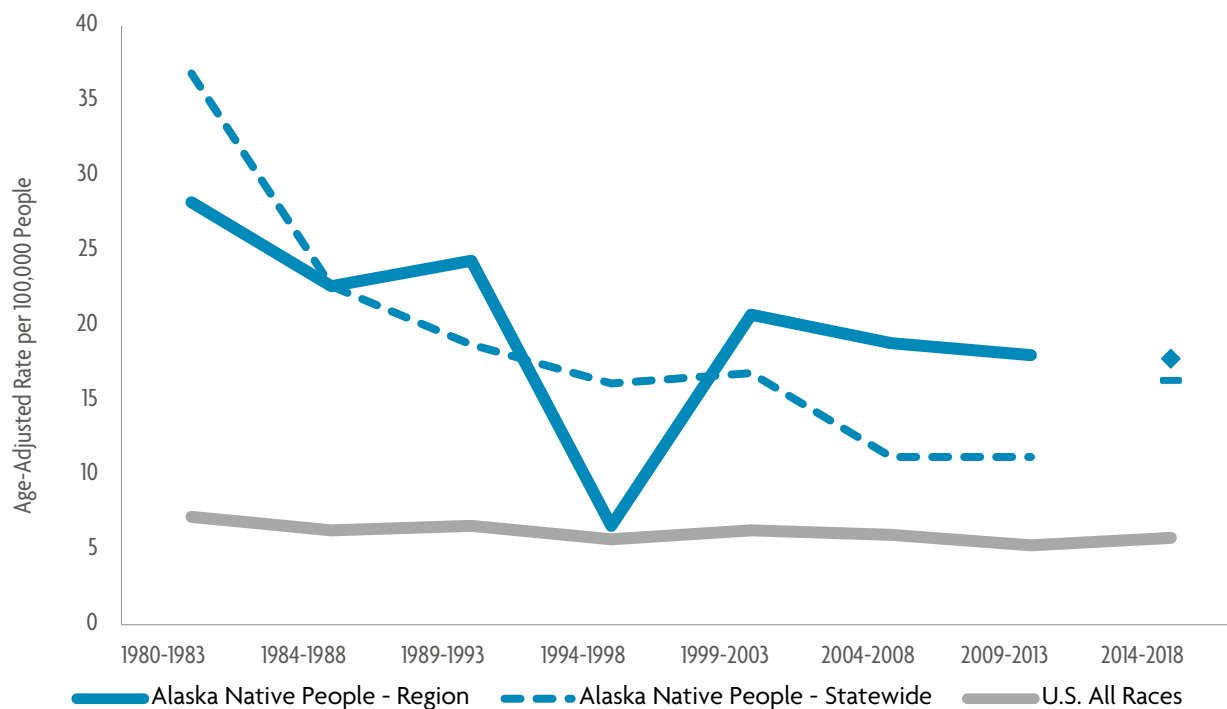
Figure 111. Yukon-Kuskokwim Trend in Alcohol Abuse Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



Figure 112. Yukon-Kuskokwim Trend in Homicide Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

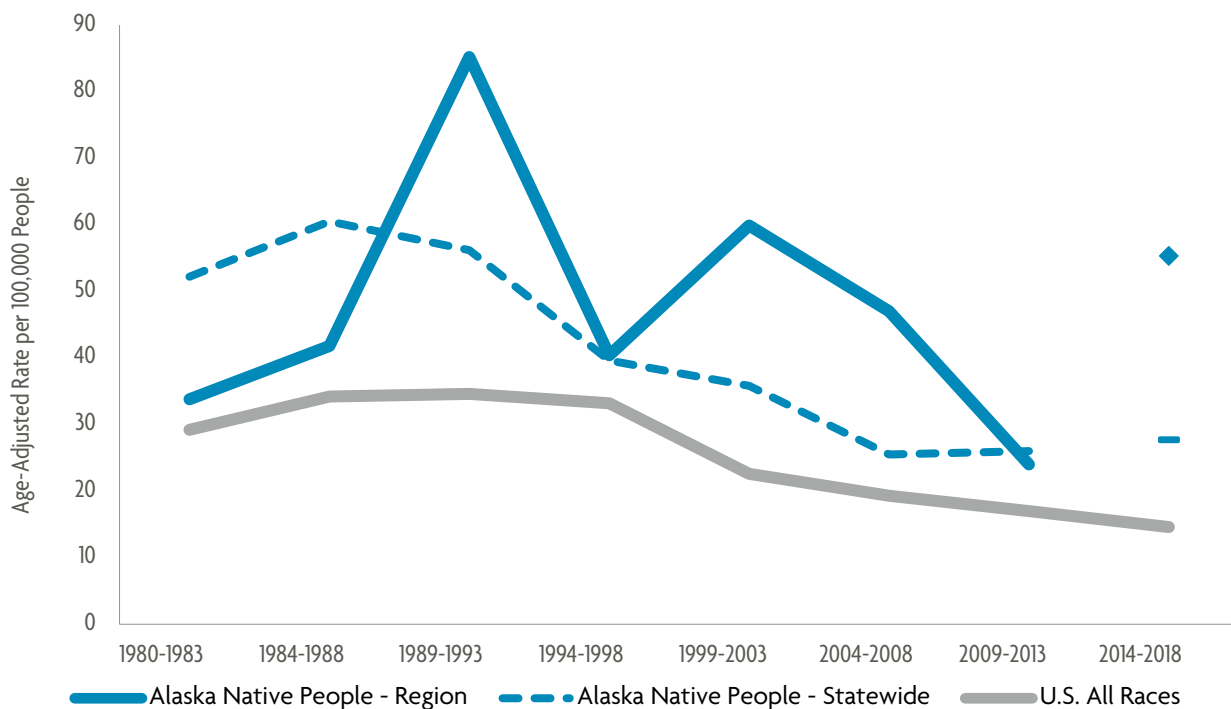
Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records



MORTALITY RATE TRENDS

Figure 113. Yukon-Kuskokwim Trend in Influenza/Pneumonia Age-Adjusted Mortality Rate per 100,000 People, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services Health Analytics and Vital Records





Mortality Rates by Region

Main Findings

- The Aleutian & Pribilof service region had no significant differences in mortality rates as compared to the rest of the state.
- The Anchorage-MatSu service region had significantly higher mortality rates for all-causes, alcohol abuse, Alzheimer's disease, and chronic liver disease as compared to the rest of the state.
- The Arctic Slope service region had significantly higher mortality rates for cancer than the rest of the state, and significantly lower unintentional injury mortality rates as compared to the rest of the state.
- The Bristol Bay service region had significantly lower all-cause and suicide mortality rates as compared to the rest of the state.
- The Copper River/Prince William Sound service region had no significant differences in mortality rates as compared to the rest of the state.
- The Interior service region had significantly higher mortality rates for homicide than the rest of the state, and significantly lower all-cause, cerebrovascular disease, influenza and pneumonia mortality rates as compared to the rest of the state.
- The Kenai Peninsula service region had significantly lower all-cause and unintentional injury mortality rates as compared to the rest of the state.
- The Kodiak service region had significantly higher mortality rates for diabetes mellitus as compared to the rest of the state.
- The Northwest Arctic service region had significantly higher mortality rates for perinatal conditions and suicide as compared to the rest of the state.
- The Norton Sound service region had significantly higher mortality rates for Alzheimer's disease and COPD as compared to the rest of the state.
- The Southeast service region had significantly lower all-cause, Alzheimer's disease, cancer, cerebrovascular disease, COPD, homicide, influenza and pneumonia, suicide, and unintentional injury mortality rates as compared to the rest of the state.
- The Yukon-Kuskokwim service region had significantly higher mortality rates for cerebrovascular disease, influenza and pneumonia, and suicide than the rest of the state, and significantly lower mortality rates for chronic liver disease, diabetes mellitus, and septicemia as compared to the rest of the state.

Overview

Alaska has been divided into twelve service regions for the purpose of reporting health data. In general, these regions match the larger Tribal Health Organization (THO) service areas. Smaller service areas required aggregation. The twelve service regions reported were:

- 1) Aleutians and Pribilofs
- 2) Anchorage-MatSu
- 3) Arctic Slope
- 4) Bristol Bay
- 5) Copper River/Prince William Sound (PWS)
- 6) Interior
- 7) Kenai Peninsula
- 8) Kodiak Area
- 9) Northwest Arctic
- 10) Norton Sound
- 11) Southeast
- 12) Yukon-Kuskokwim

Appendix D contains a full list of census areas and tribal health organizations in each region.

This chapter compares age-adjusted mortality rates of each service region for the five-year period, 2014-2018. Individual service regions are compared to other regions and the state overall. For the purpose of determining significant differences between the regions, individual service regions are compared to the remainder of the state combined. Significant differences are indicated by an asterisk.

The all-cause and specific leading causes of death are reported and compared if the count of deaths is greater than or equal to five. Not all cause-region combinations are reportable.

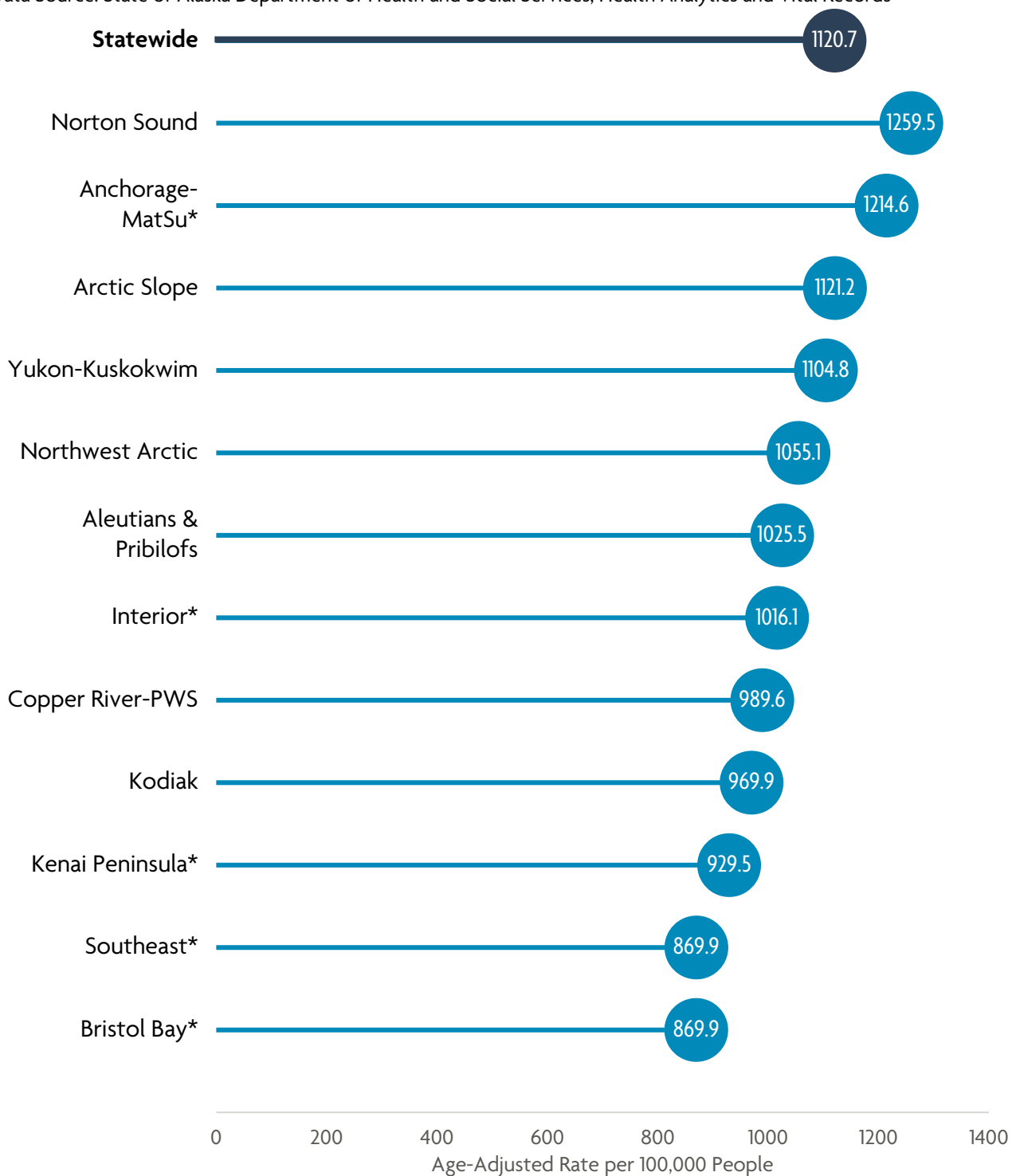
Figures 114a-132a compare each service region, both sexes combined, to other service regions and the state overall. Figures 114b-132b display this information for females, and Figures 114c-132c for males. Data for these figures are available in Tables 71a-82c located in Appendix B.

Tables 71a-82c in Appendix B also list the ten leading causes of death for each region in rank order and by gender. These tables also report the percentage of total deaths from each cause for each region.

MORTALITY RATES BY REGION

Figure 114a. All-Cause Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

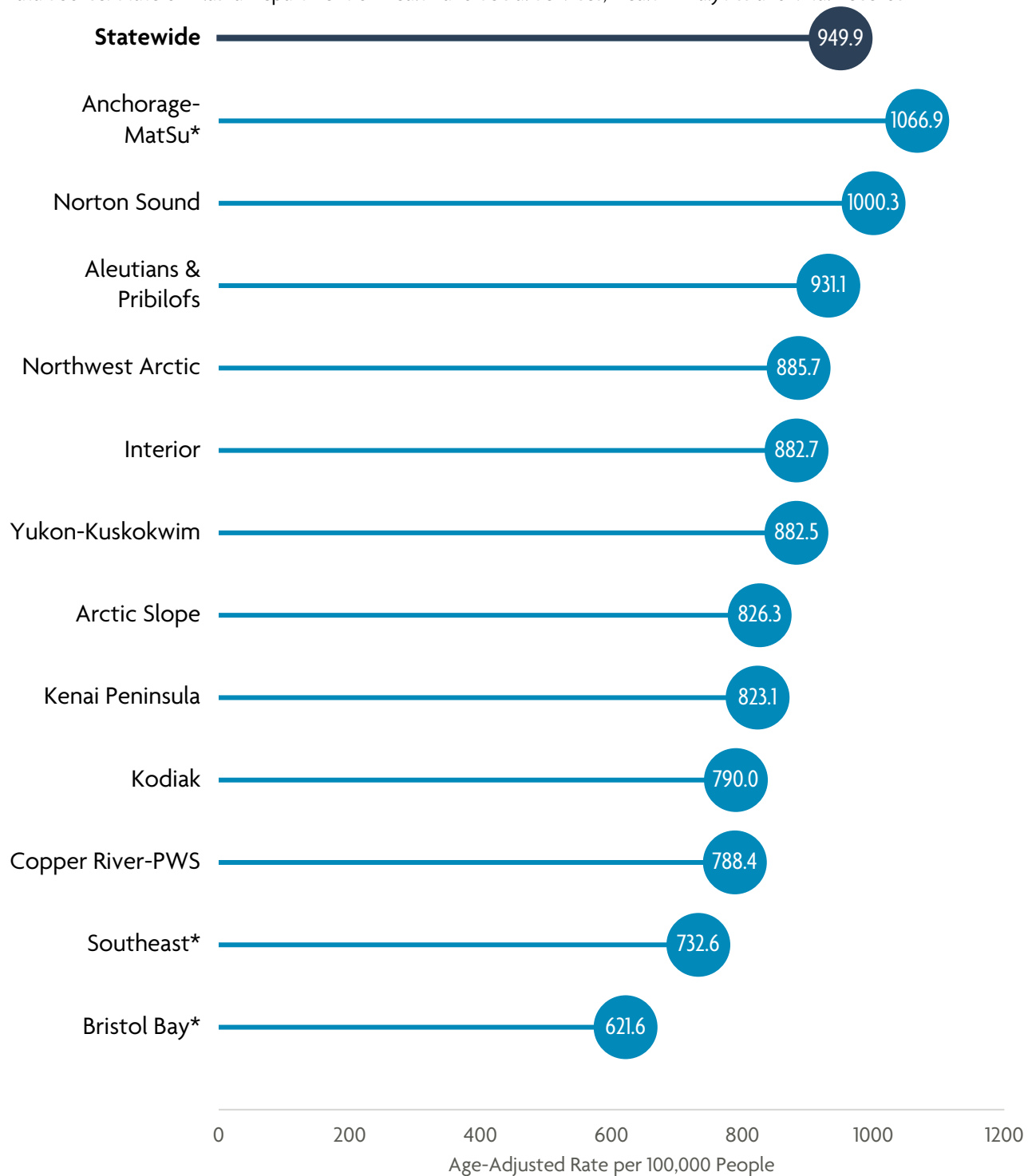


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 114b. All-Cause Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

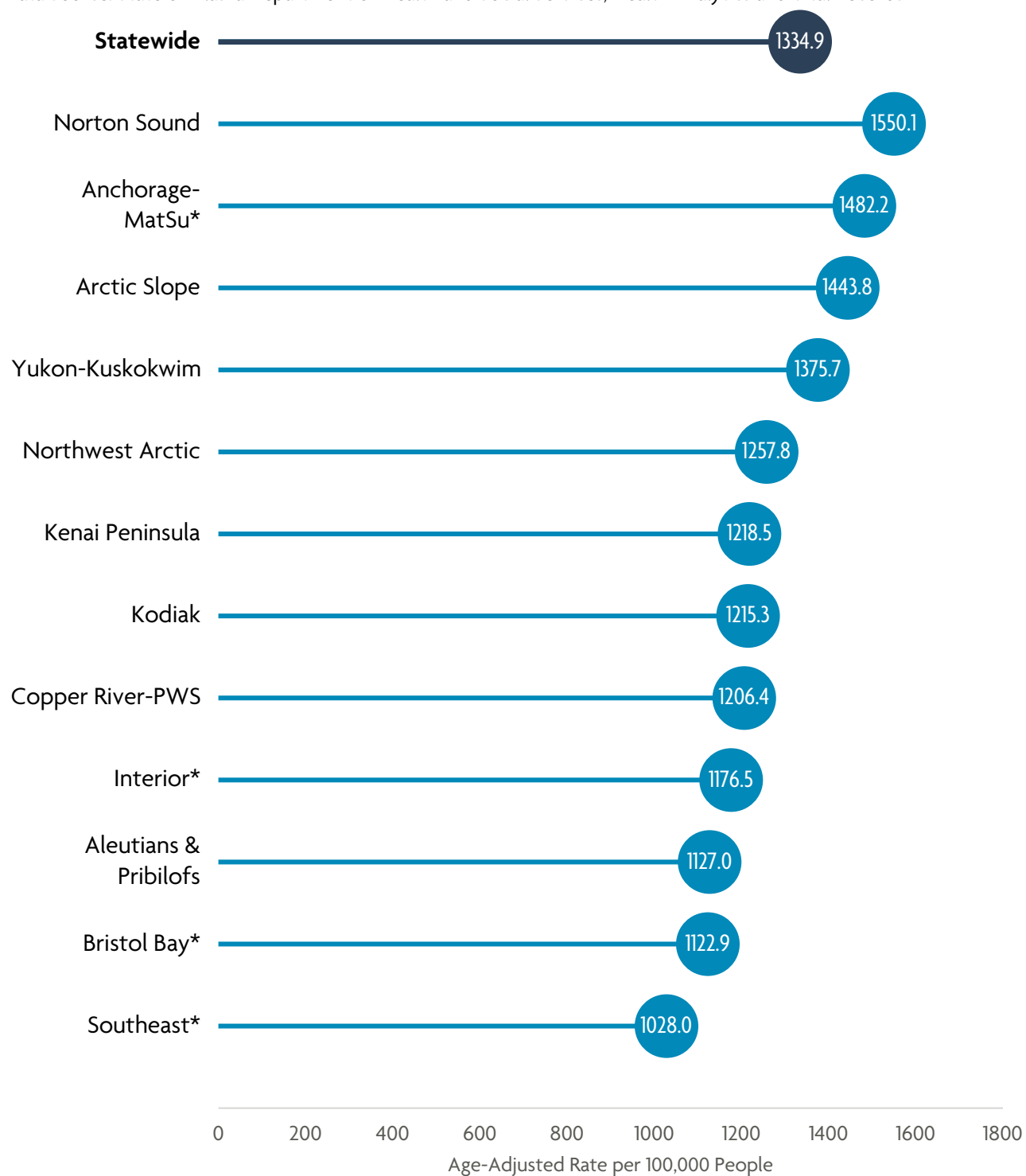


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 114c. All-Cause Mortality Rates by Region, Alaska Native Males, 2014-2018

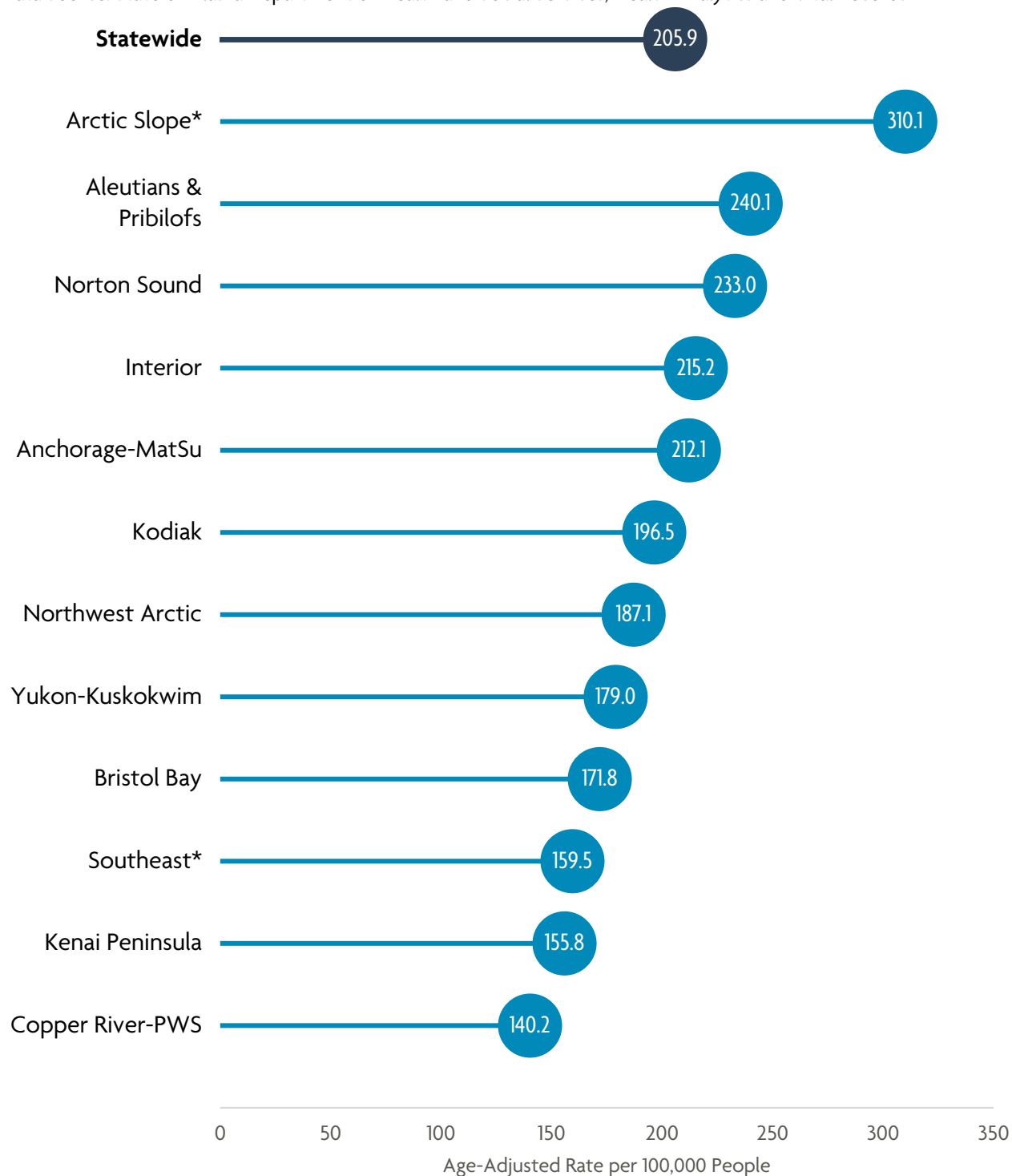
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



MORTALITY RATES BY REGION

Figure 115a. Cancer Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

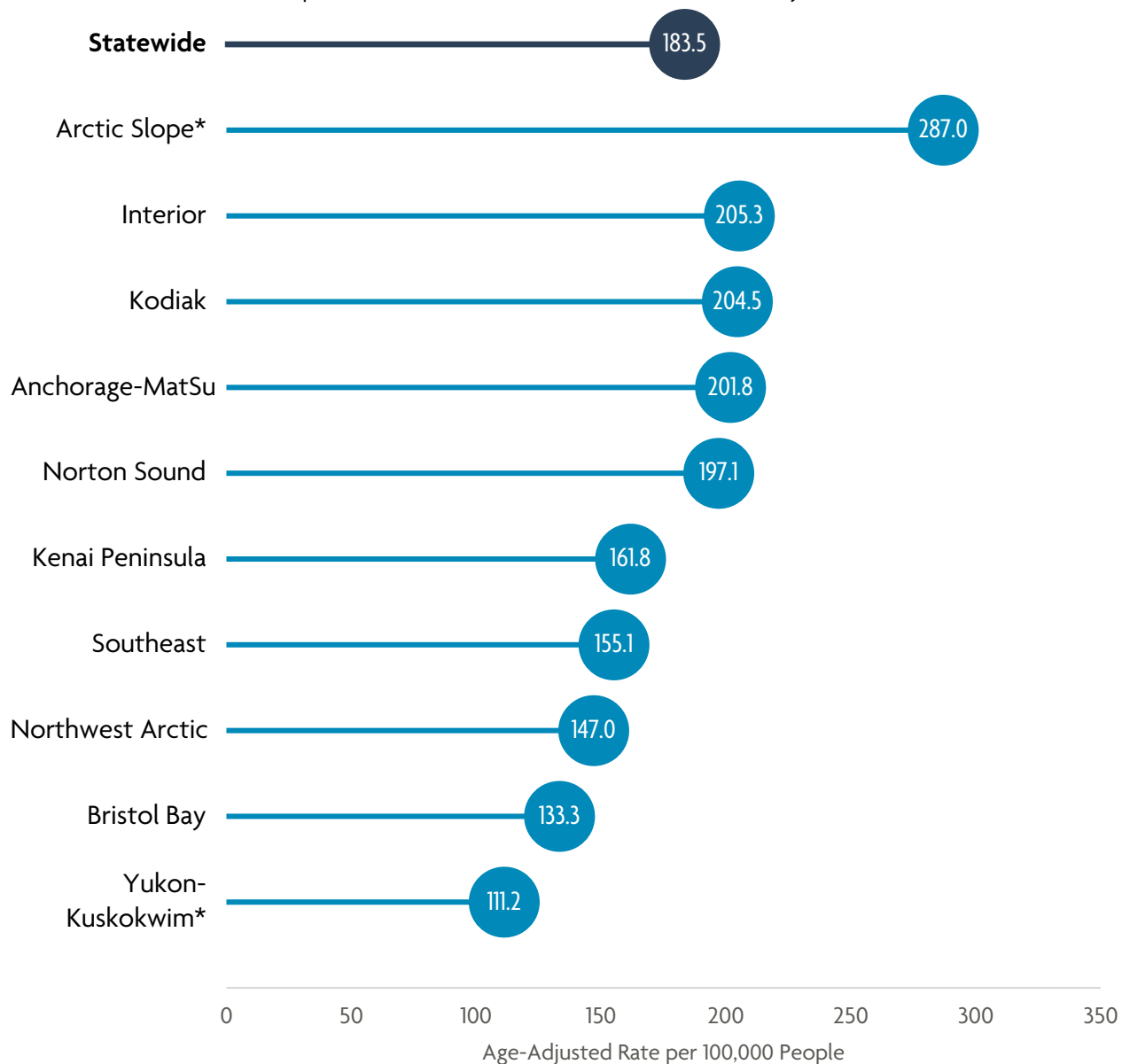


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 115b. Cancer Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

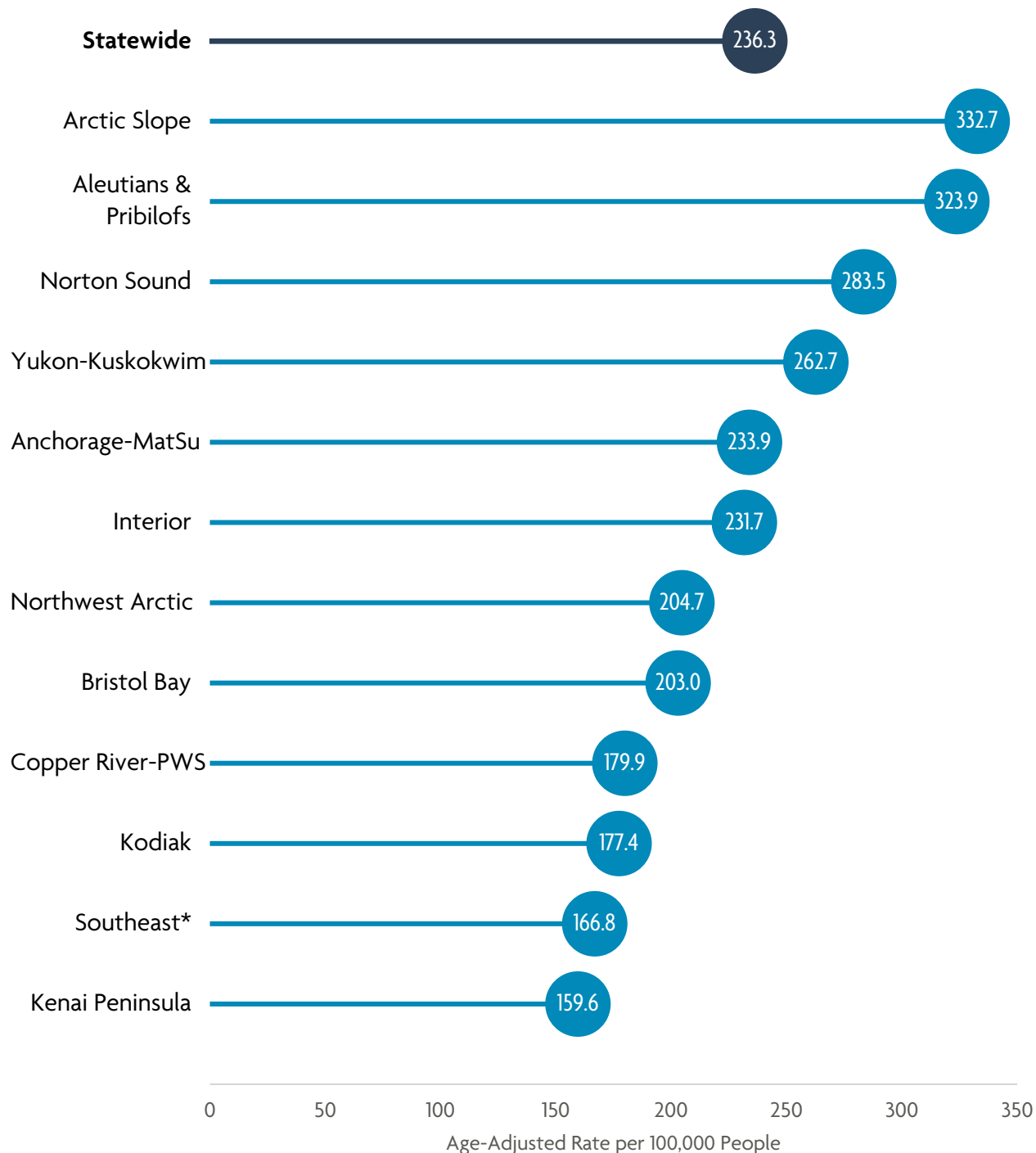


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 115c. Cancer Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

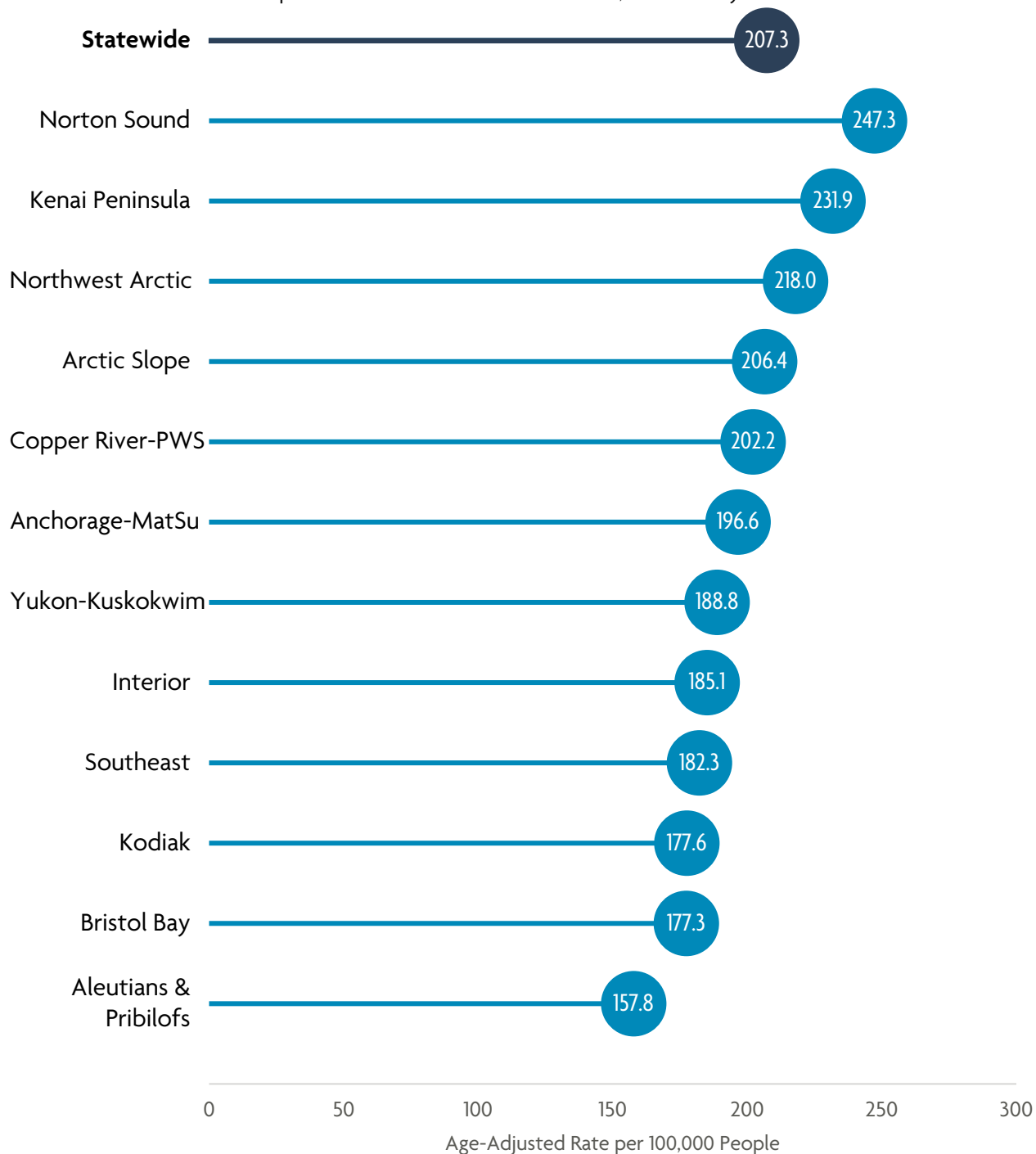


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 116a. Heart Disease Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

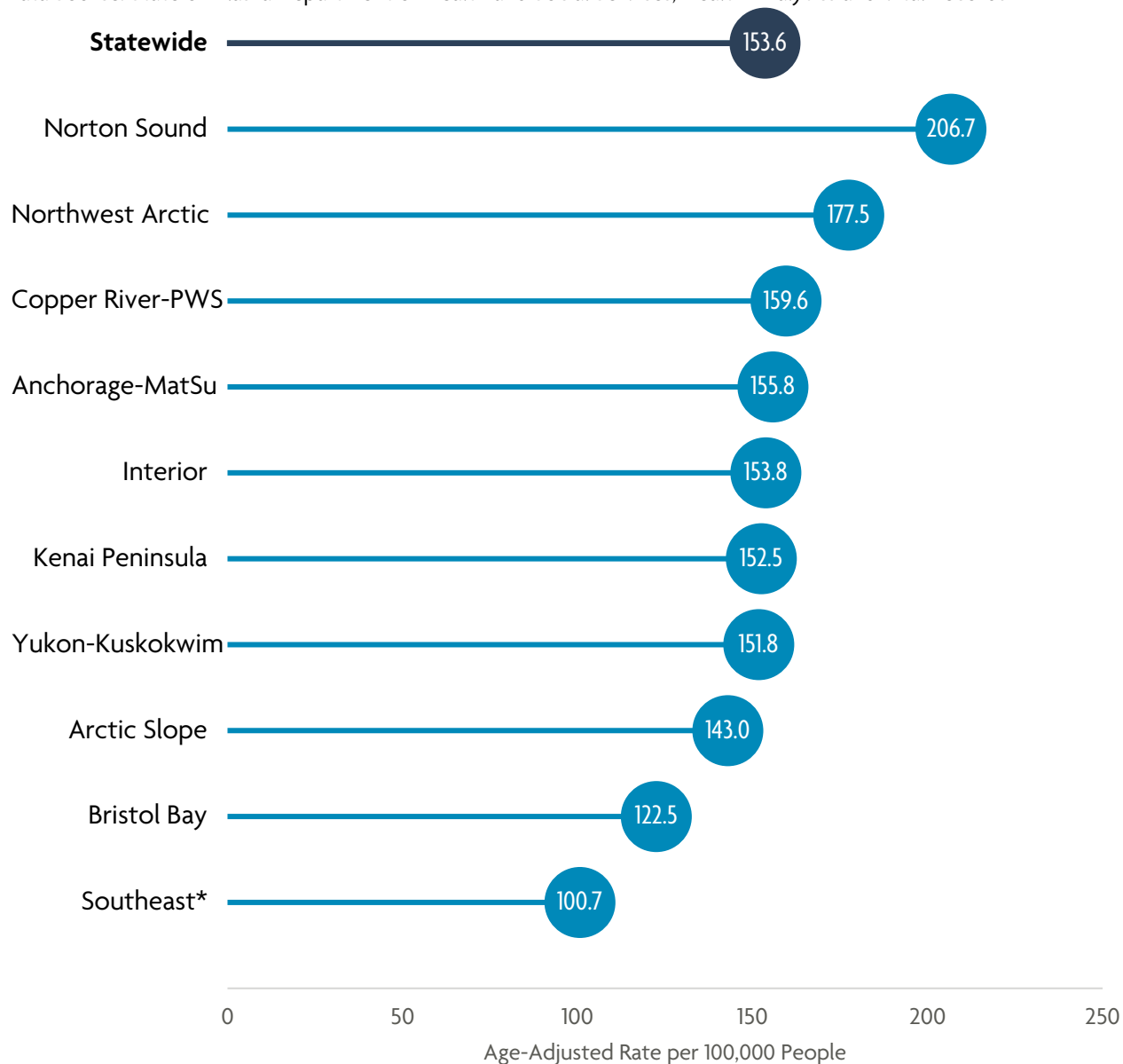


**significant difference, $p < 0.05$*

MORTALITY RATES BY REGION

Figure 116b. Heart Disease Mortality by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

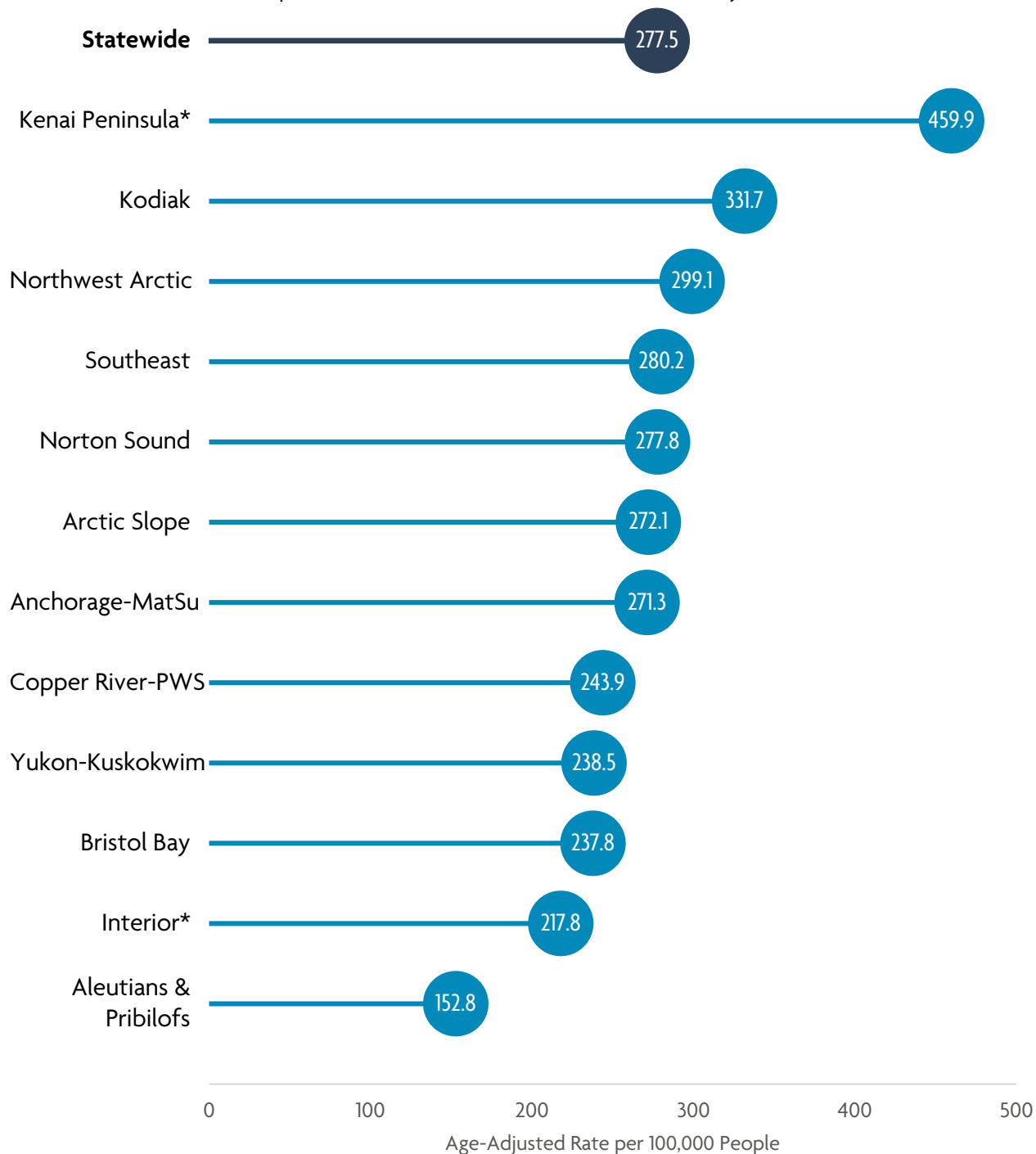


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 116c. Heart Disease Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

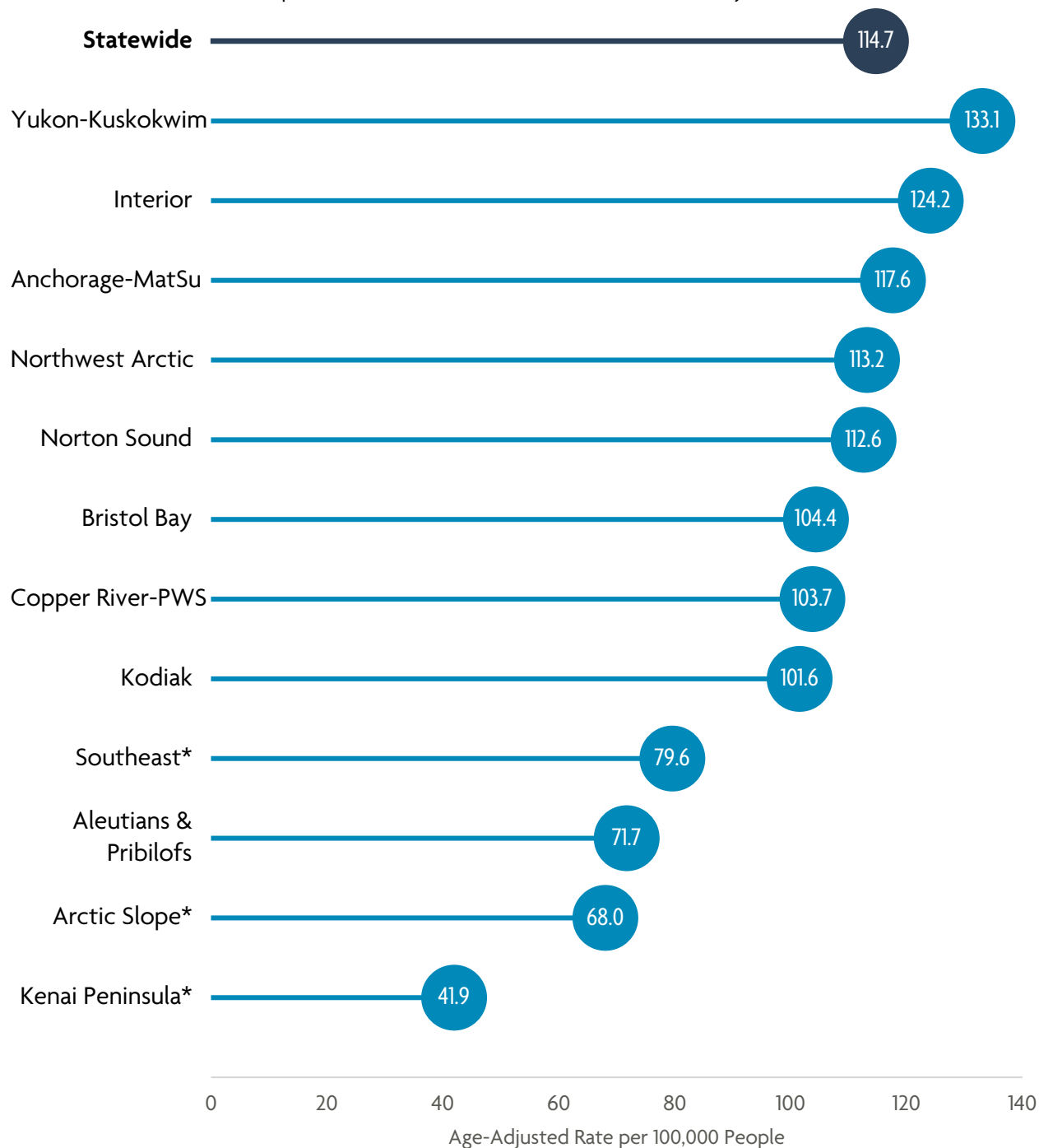


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 117a. Unintentional Injury Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

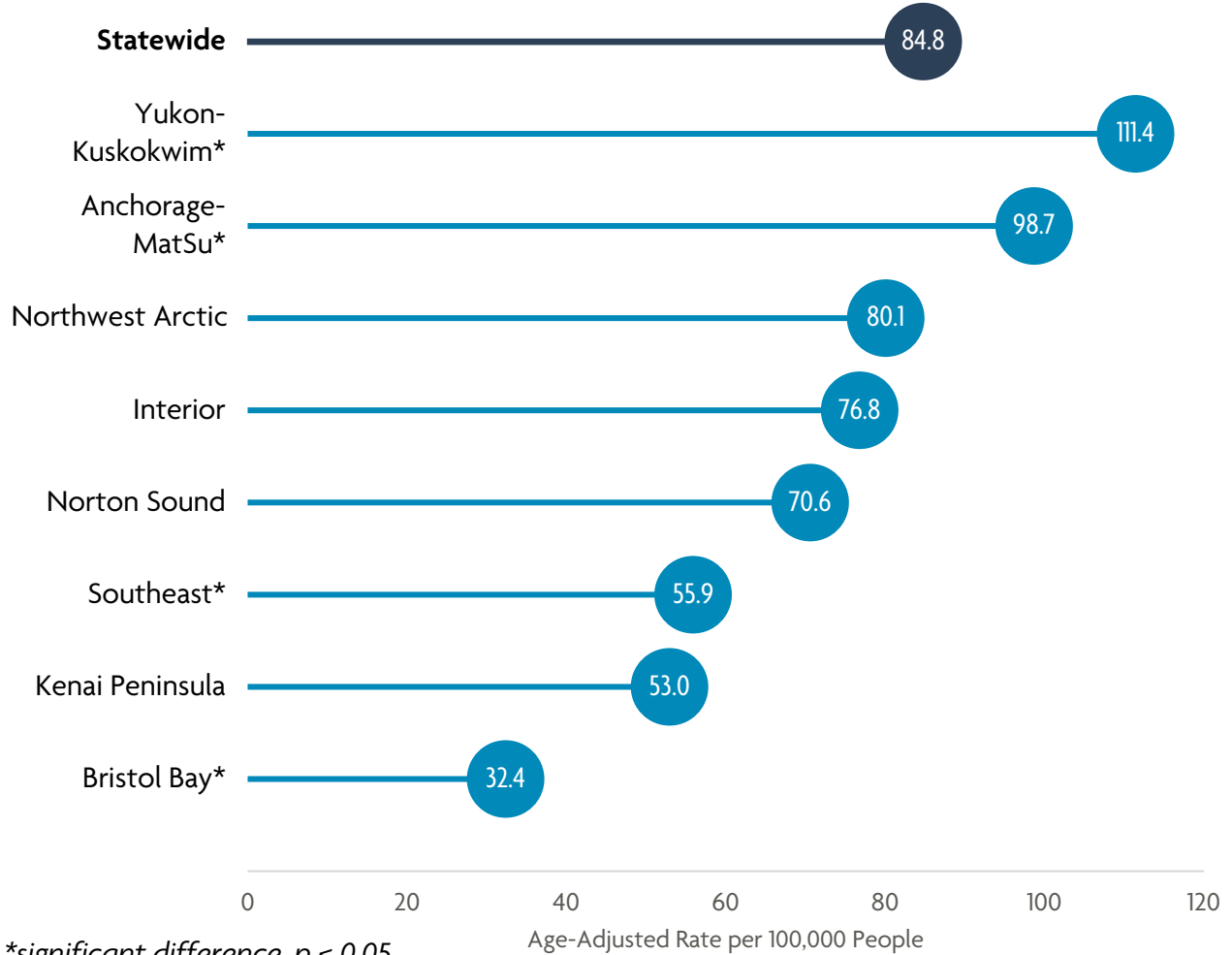


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 117b. Unintentional Injury Mortality Rates by Region, Alaska Native Females, 2014-2018

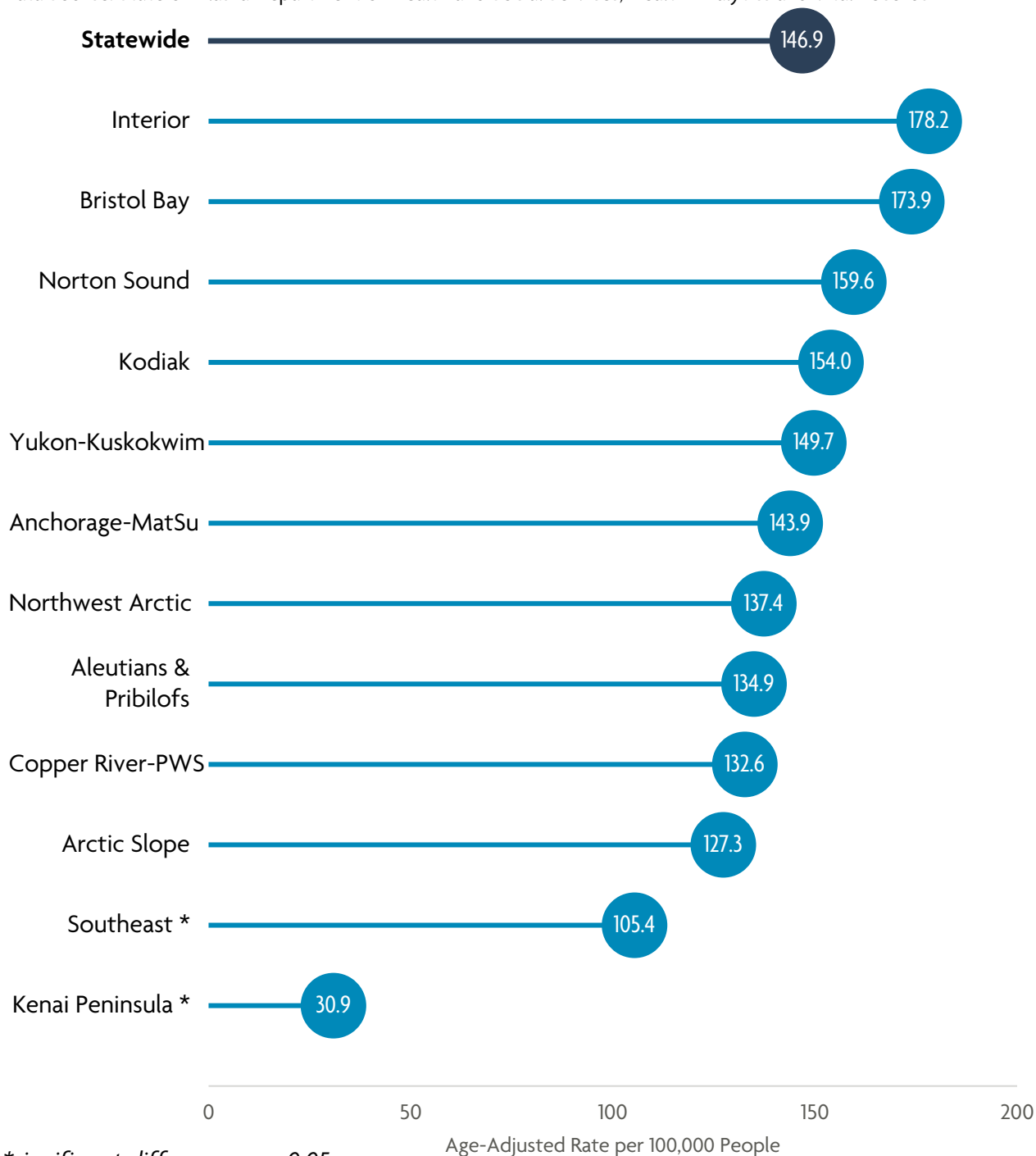
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



MORTALITY RATES BY REGION

Figure 117c. Unintentional Injury Mortality Rates by Region, Alaska Native Males, 2014-2018

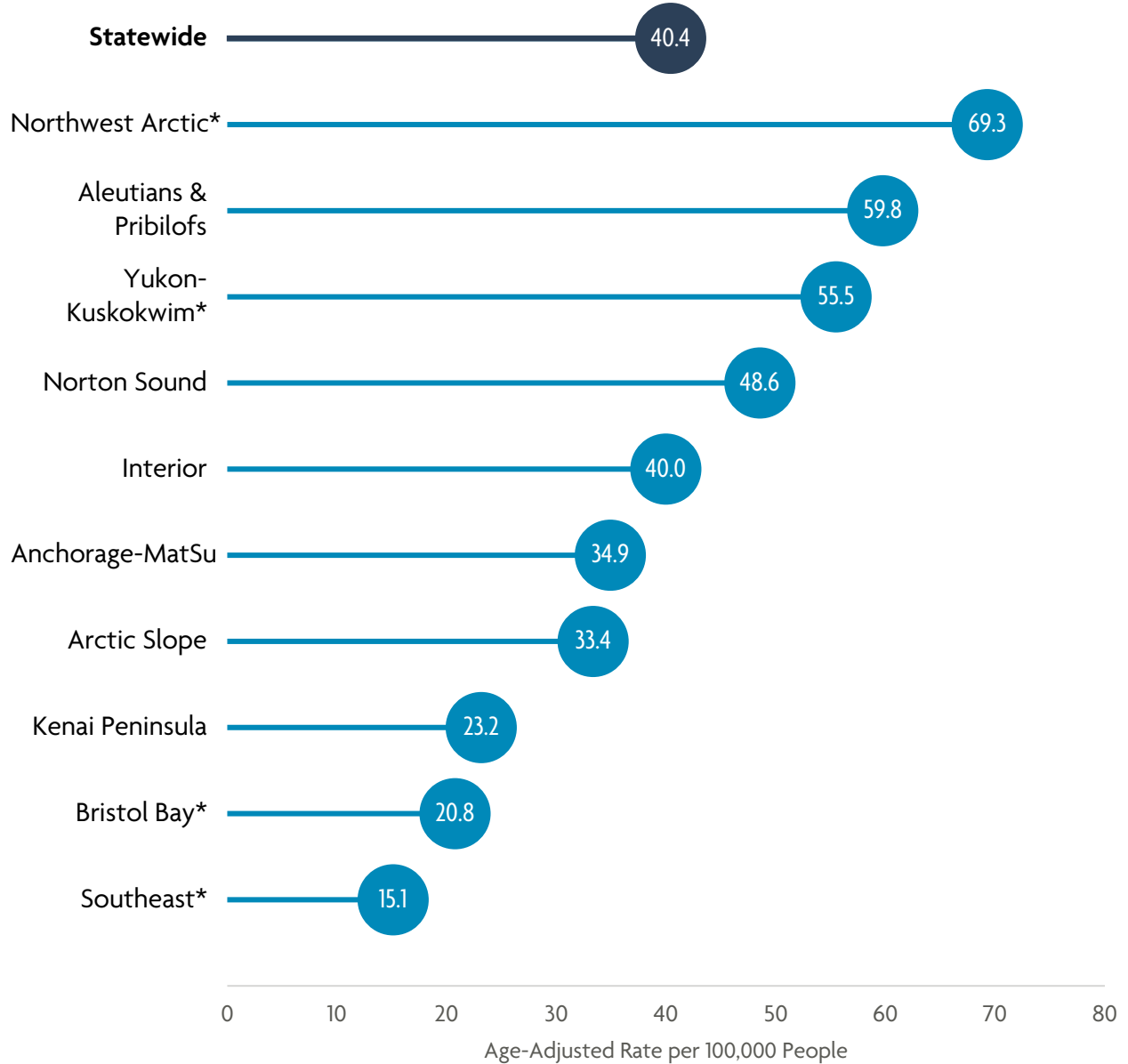
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



MORTALITY RATES BY REGION

Figure 118a. Suicide Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

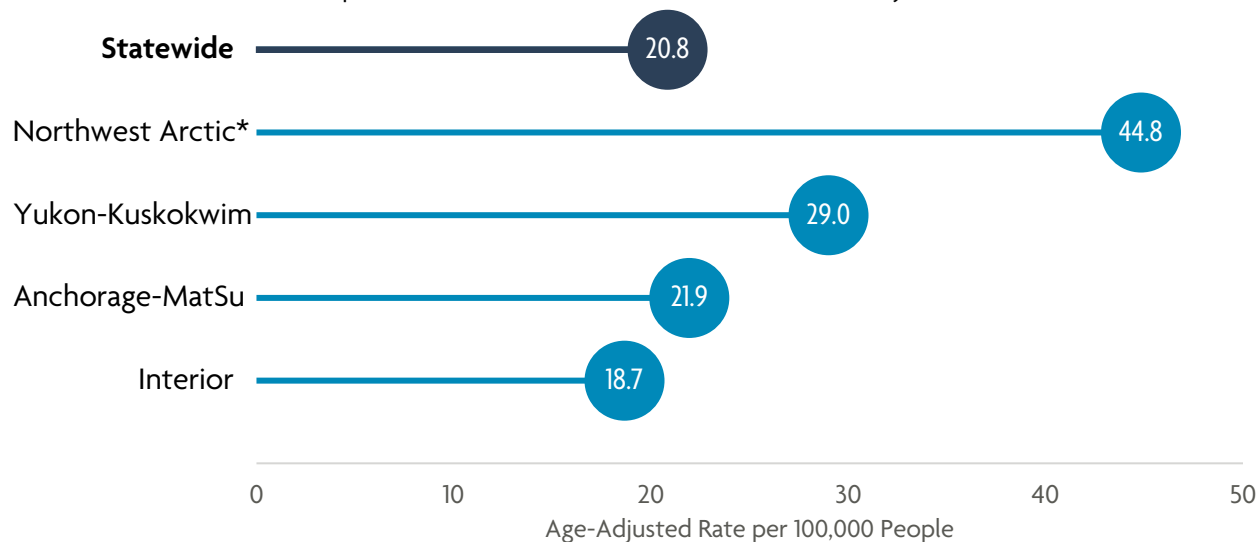


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 118b. Suicide Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

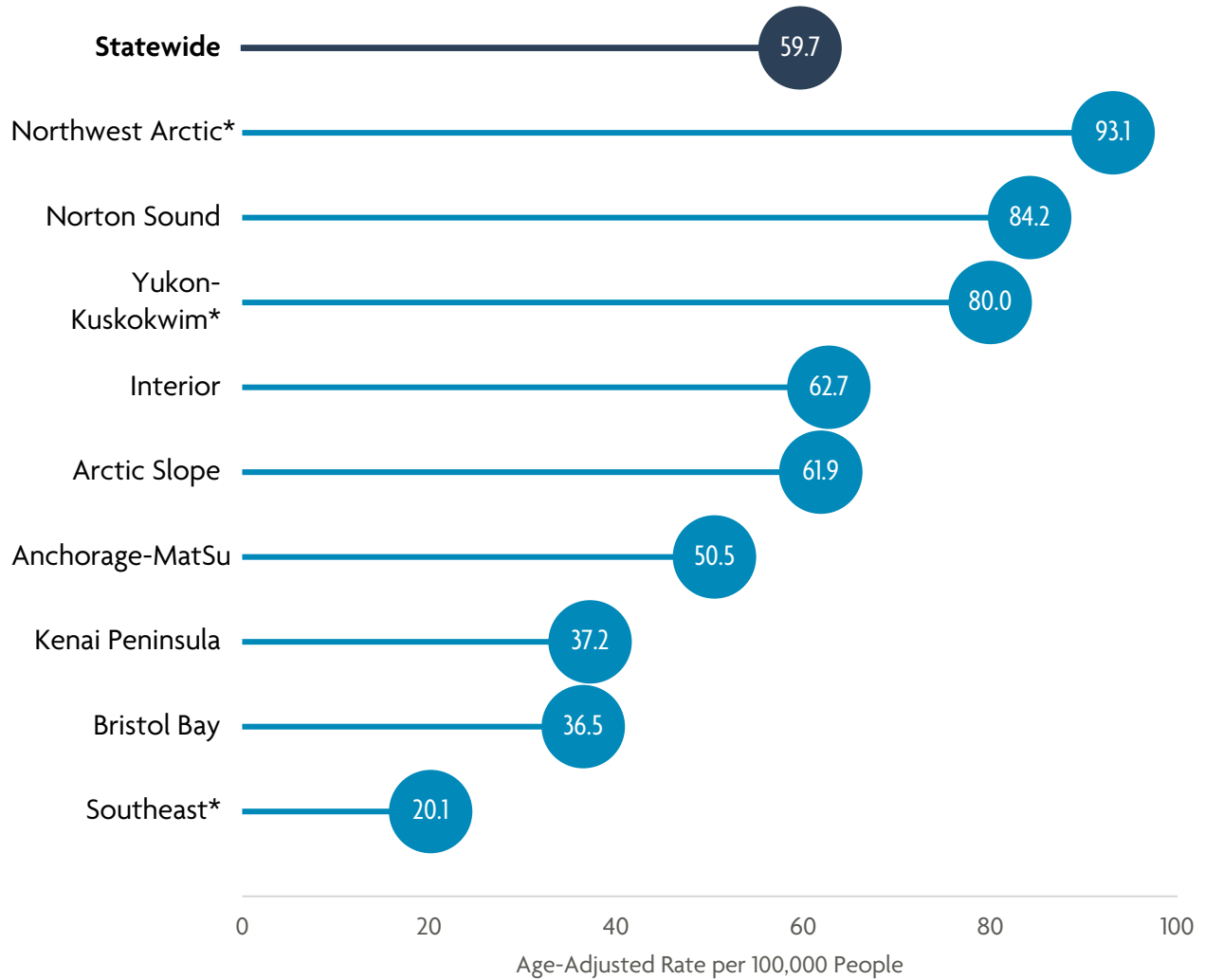


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 118c. Suicide Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

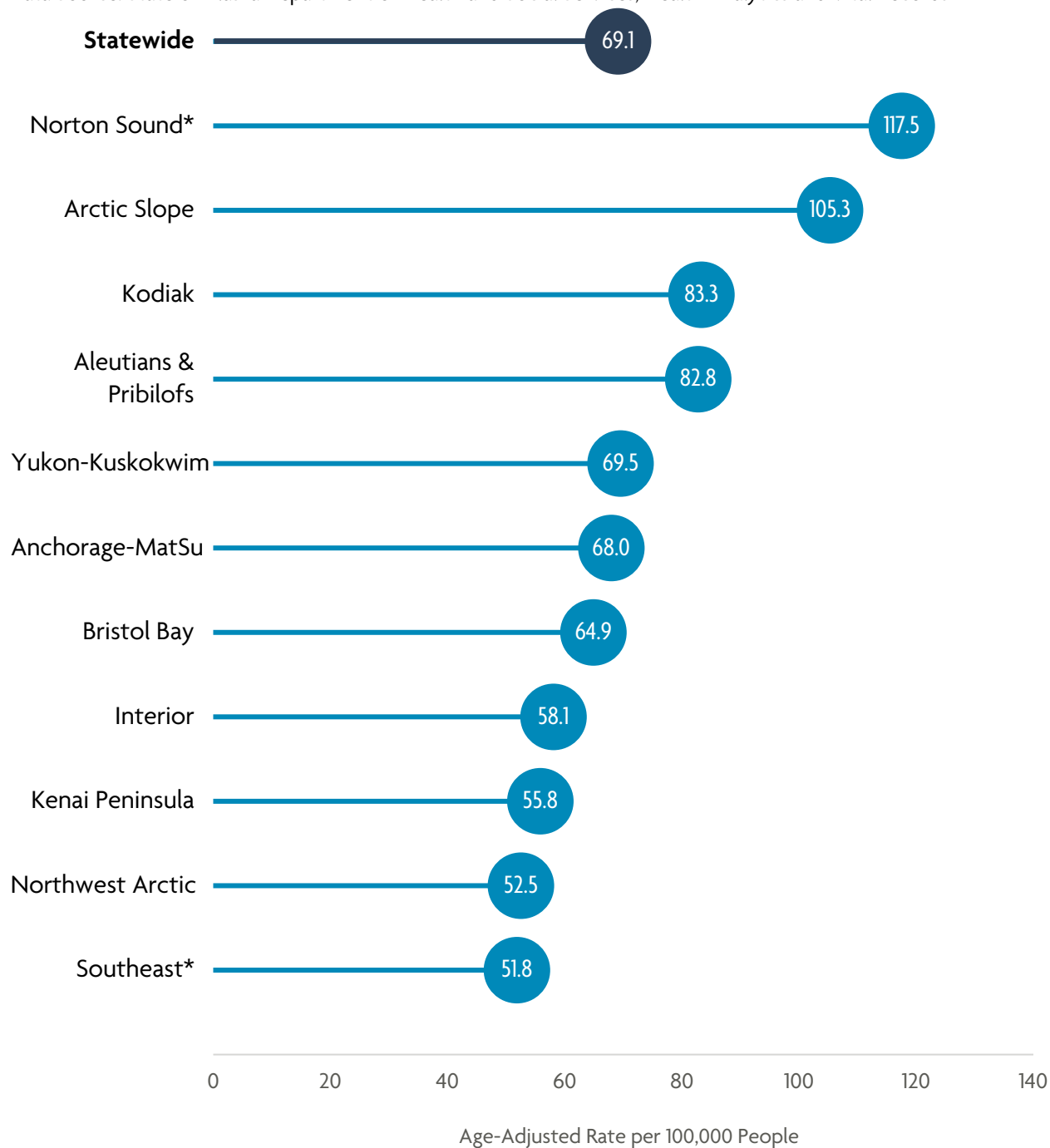


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 119a. COPD Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

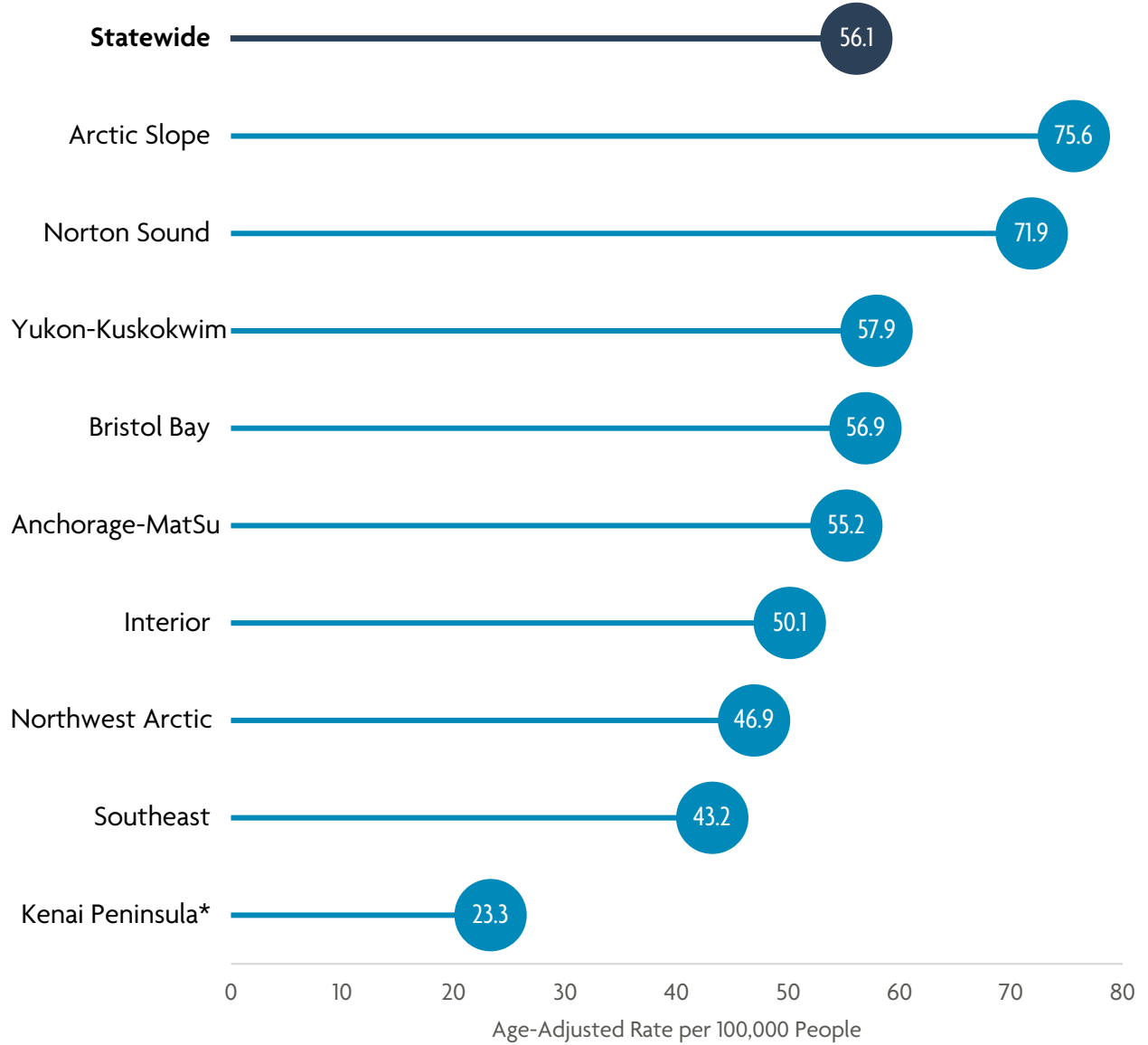


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 119b. COPD Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

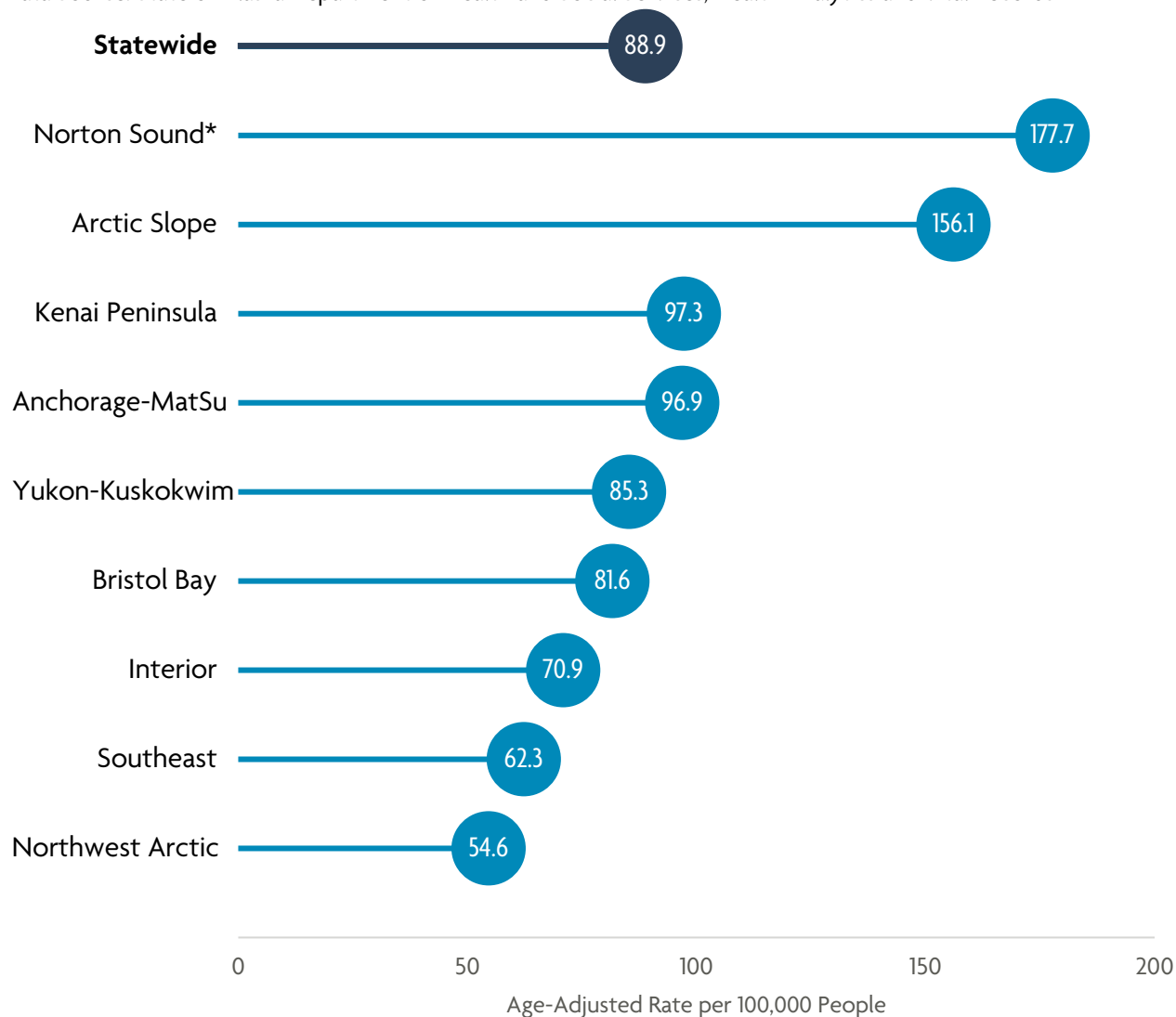


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 119c. COPD Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

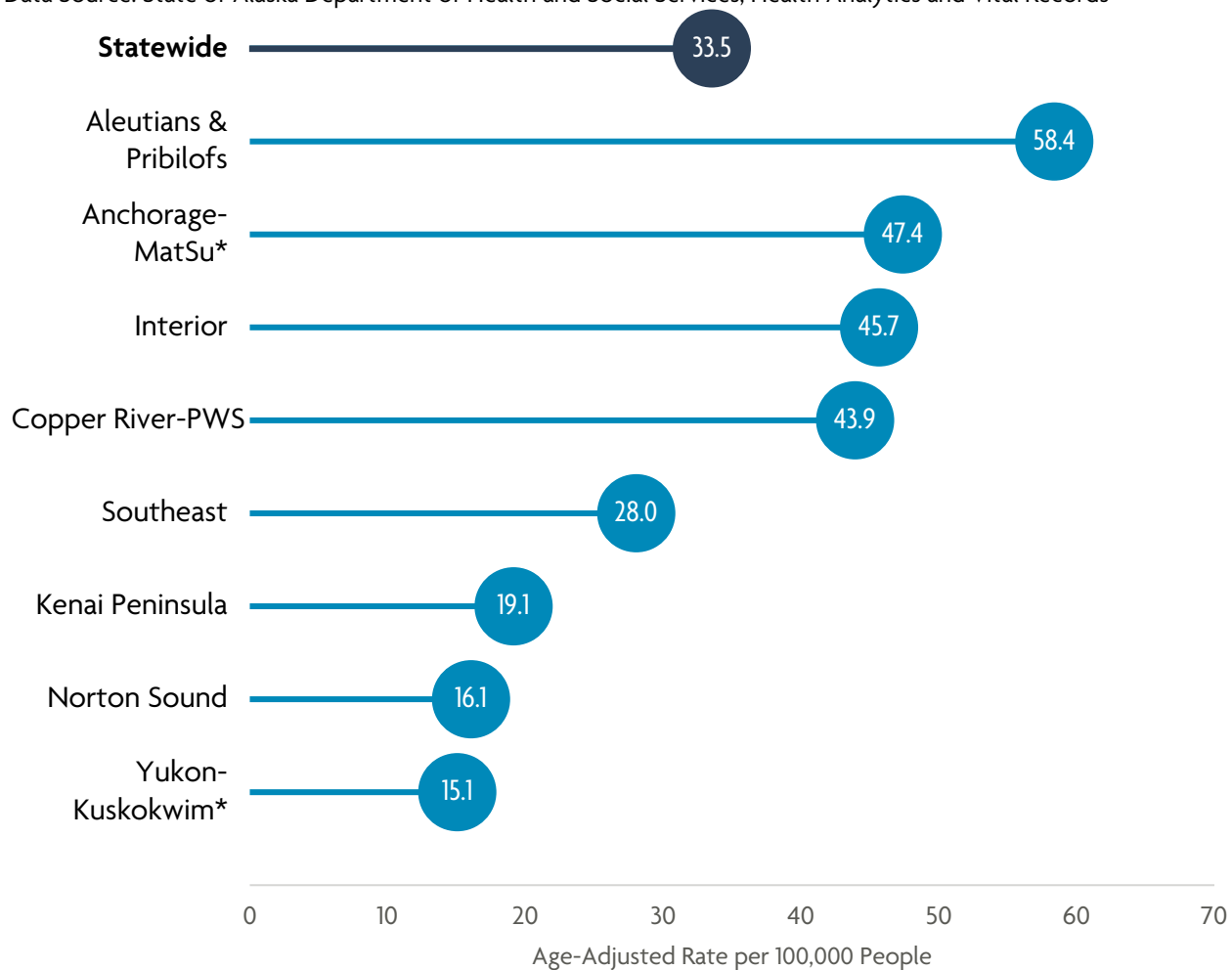


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 120a. Chronic Liver Disease Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 120b. Chronic Liver Disease Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

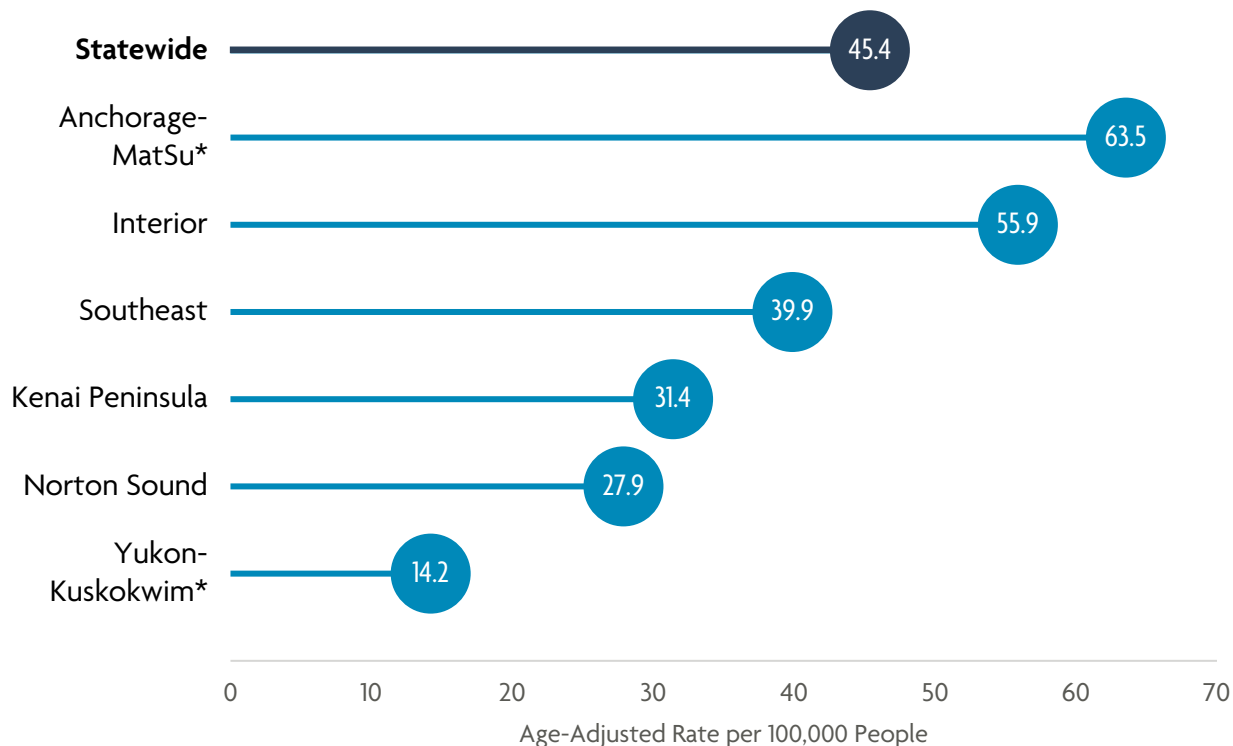
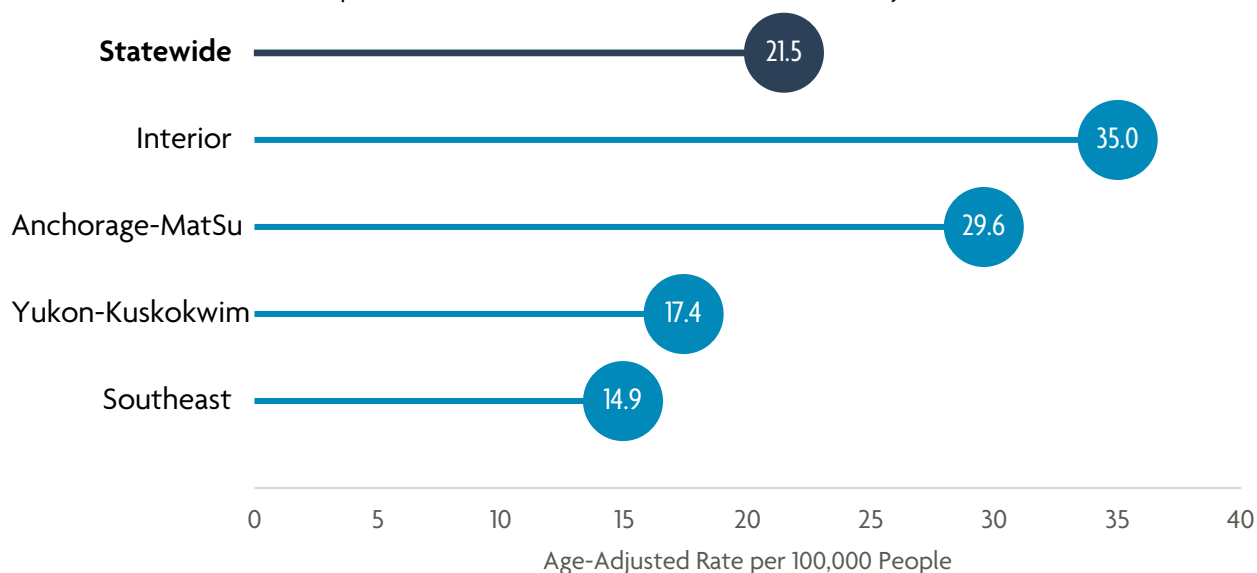


Figure 120c. Chronic Liver Disease Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

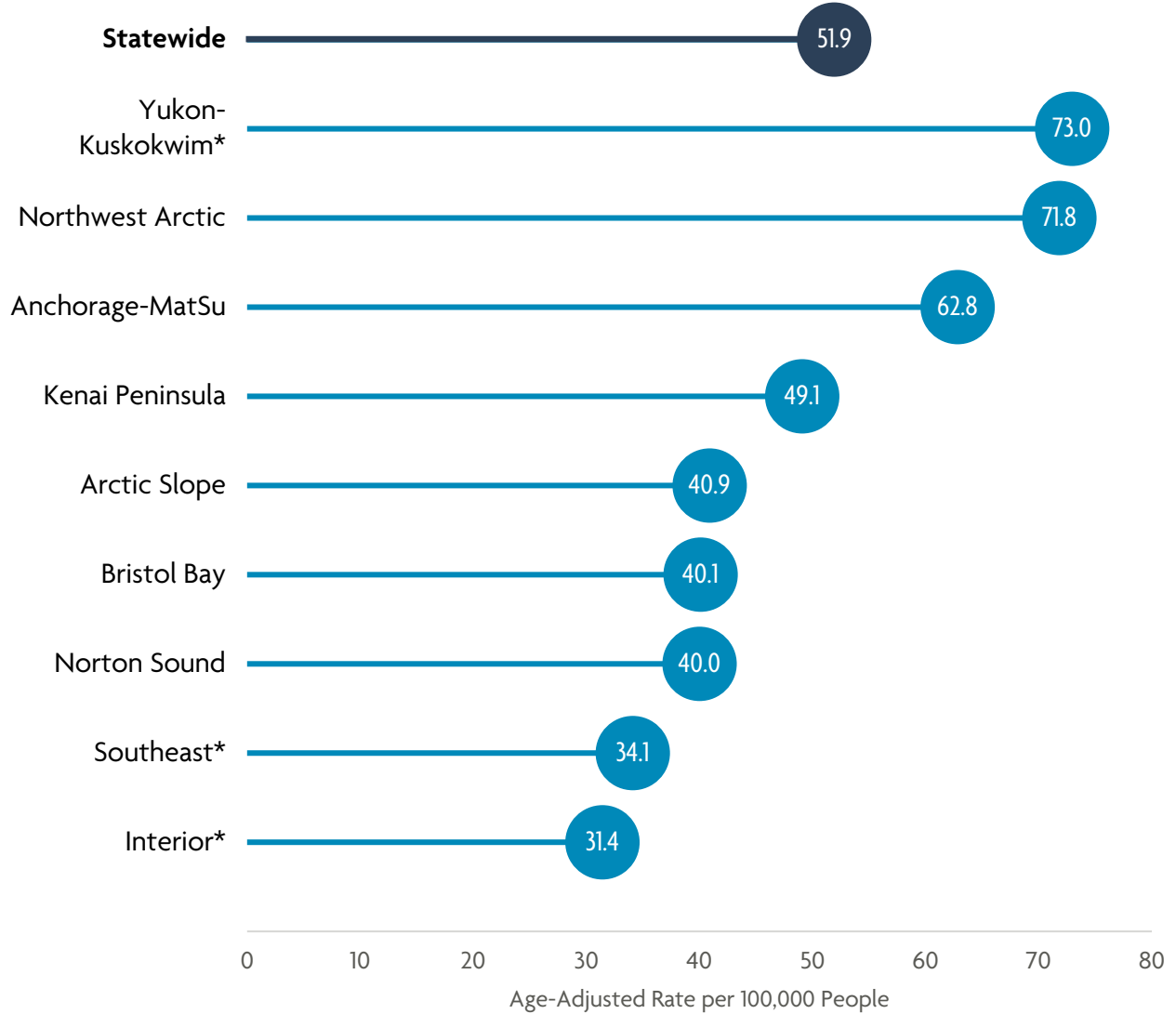


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 121a. Cerebrovascular Disease Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 121b. Cerebrovascular Disease Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

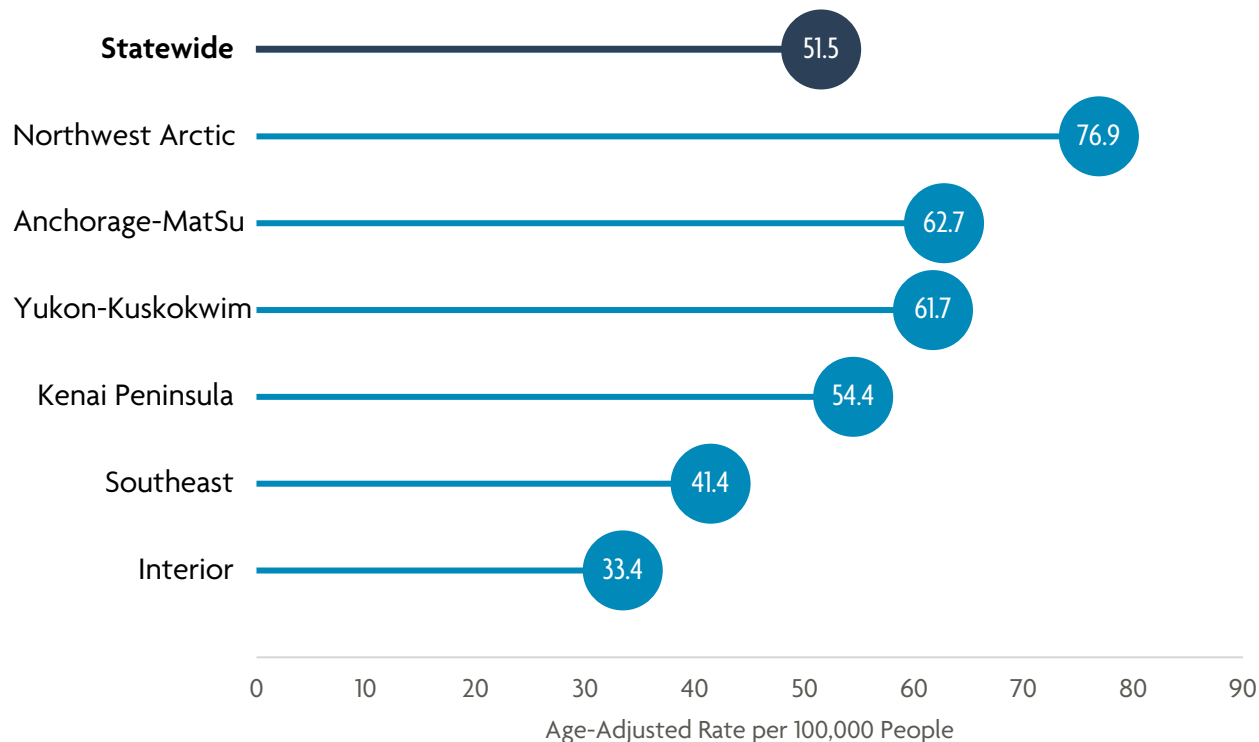
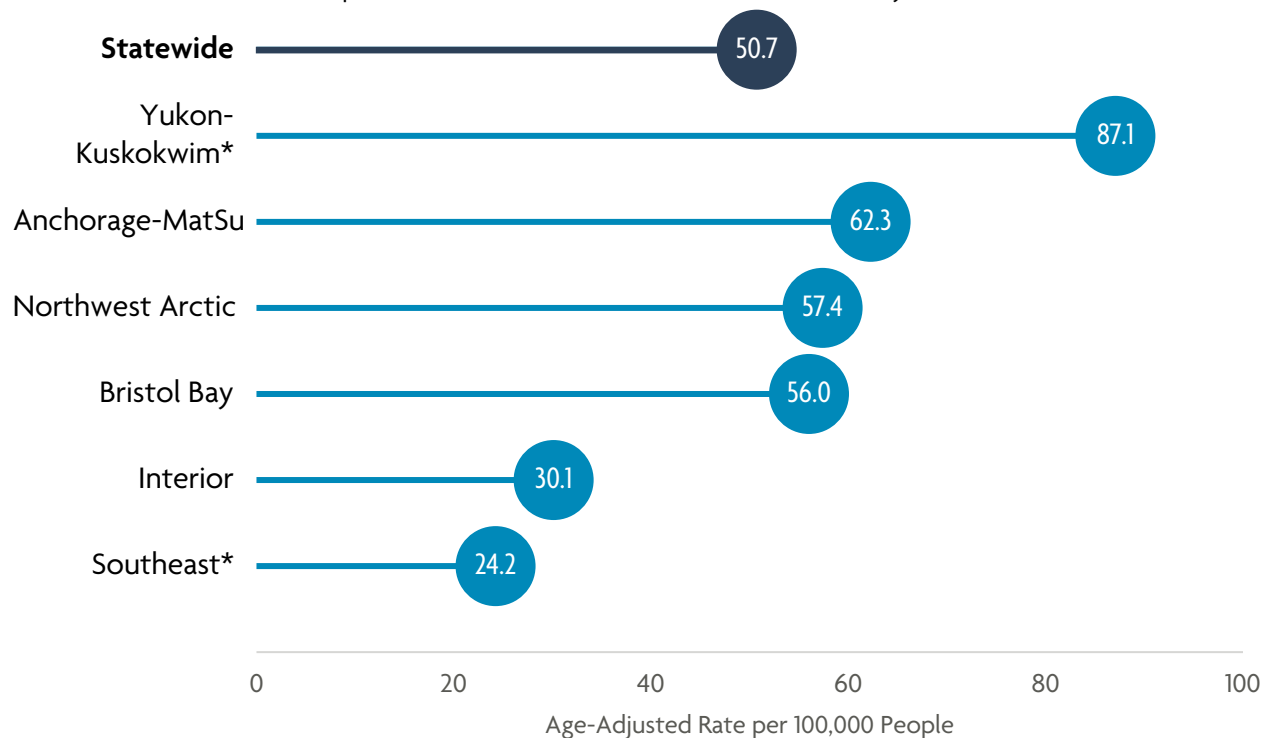


Figure 121c. Cerebrovascular Disease Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

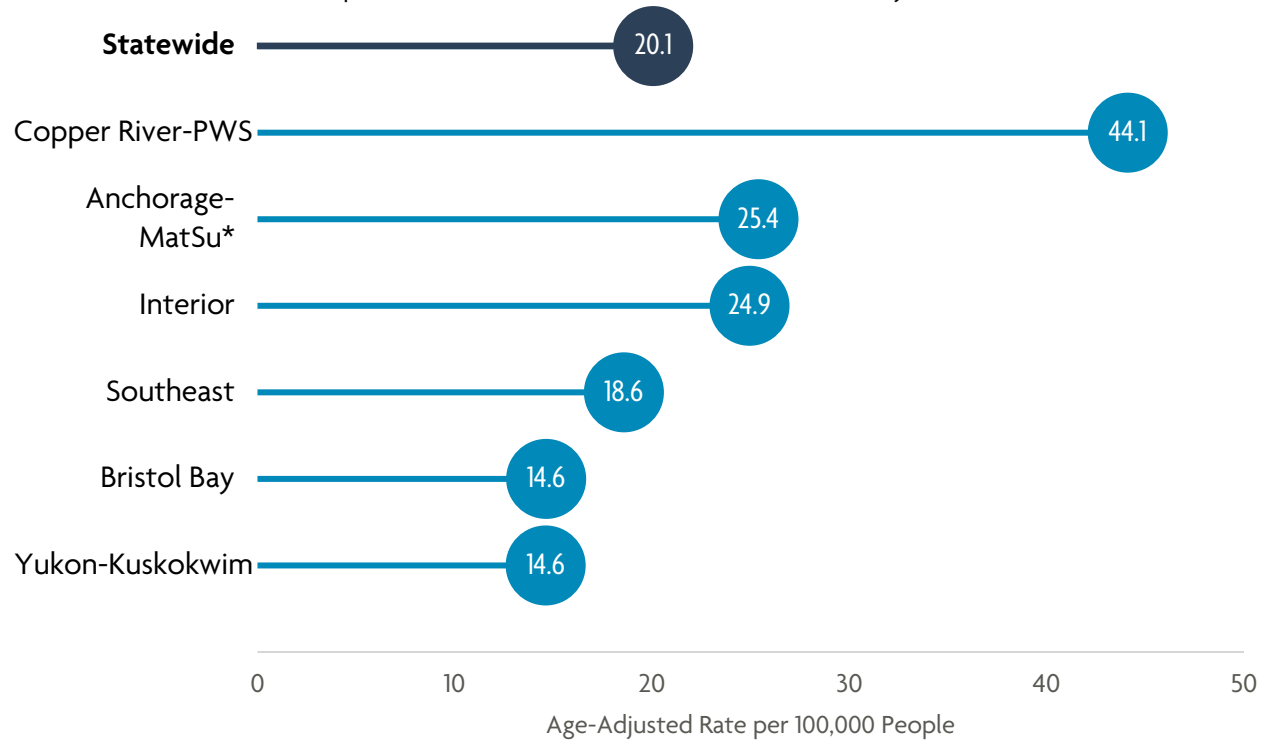


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 122a. Alcohol Abuse Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



MORTALITY RATES BY REGION

Figure 122b. Alcohol Abuse Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

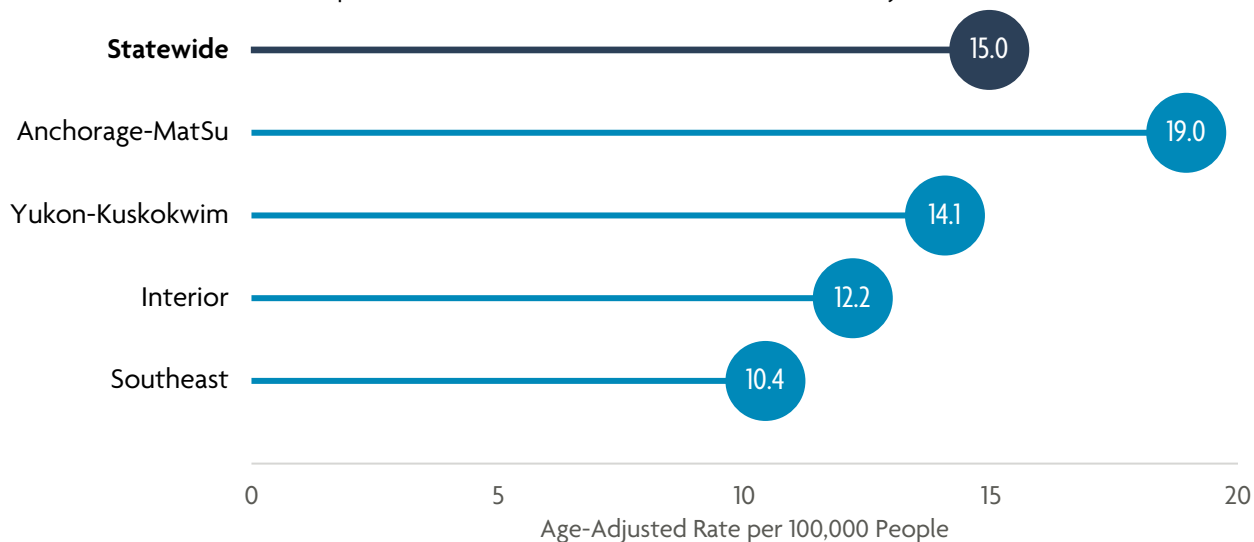
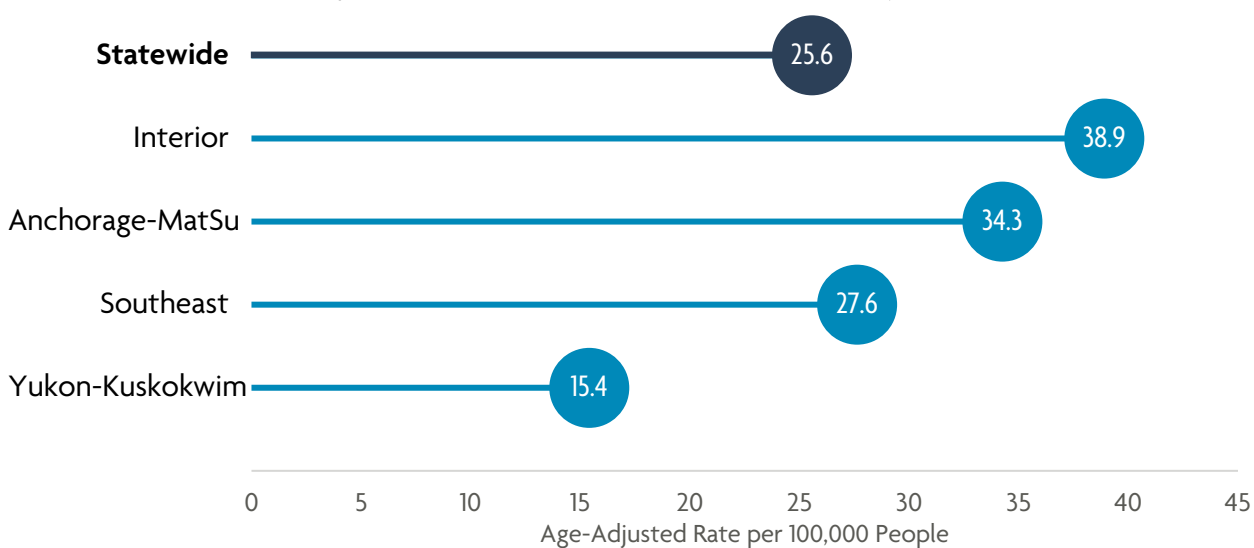


Figure 122c. Alcohol Abuse Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 123a. Homicide Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

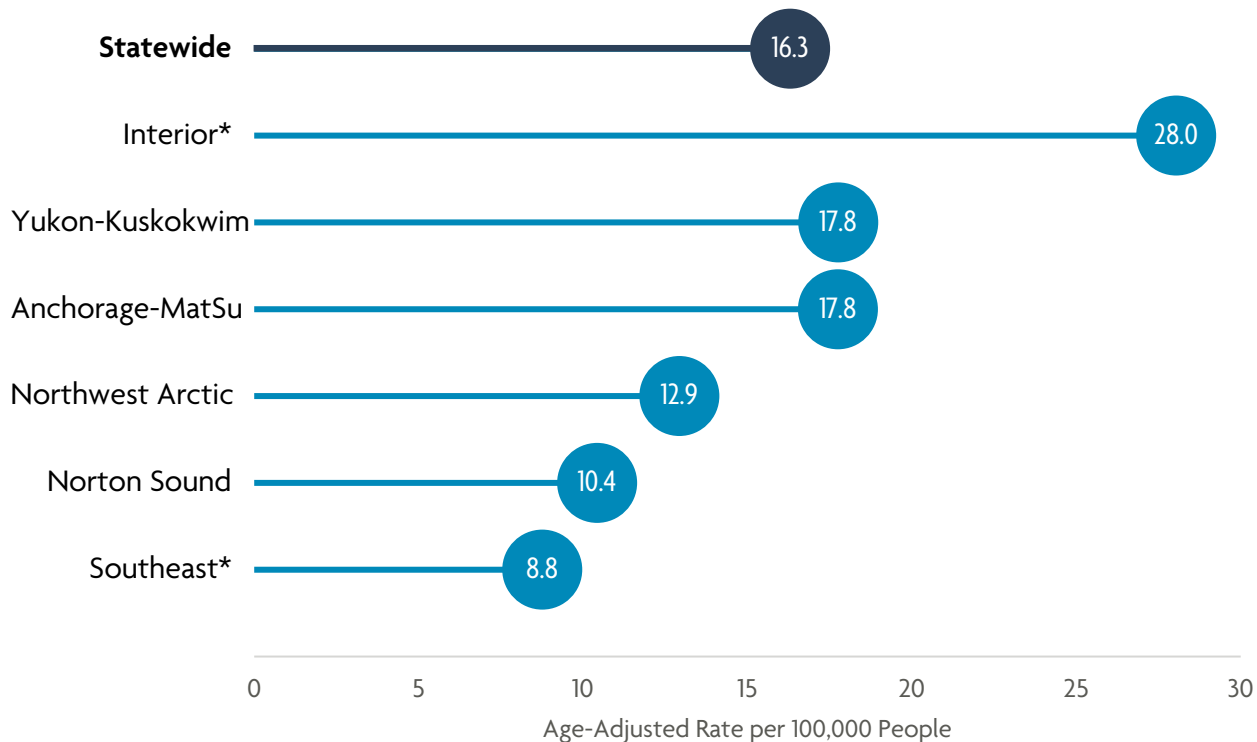
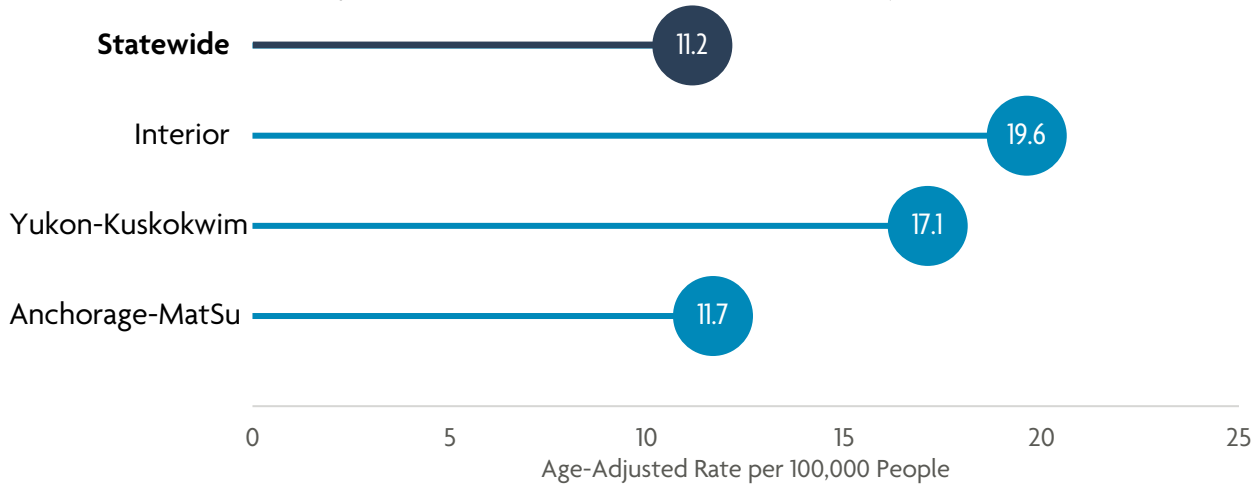


Figure 123b. Homicide Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

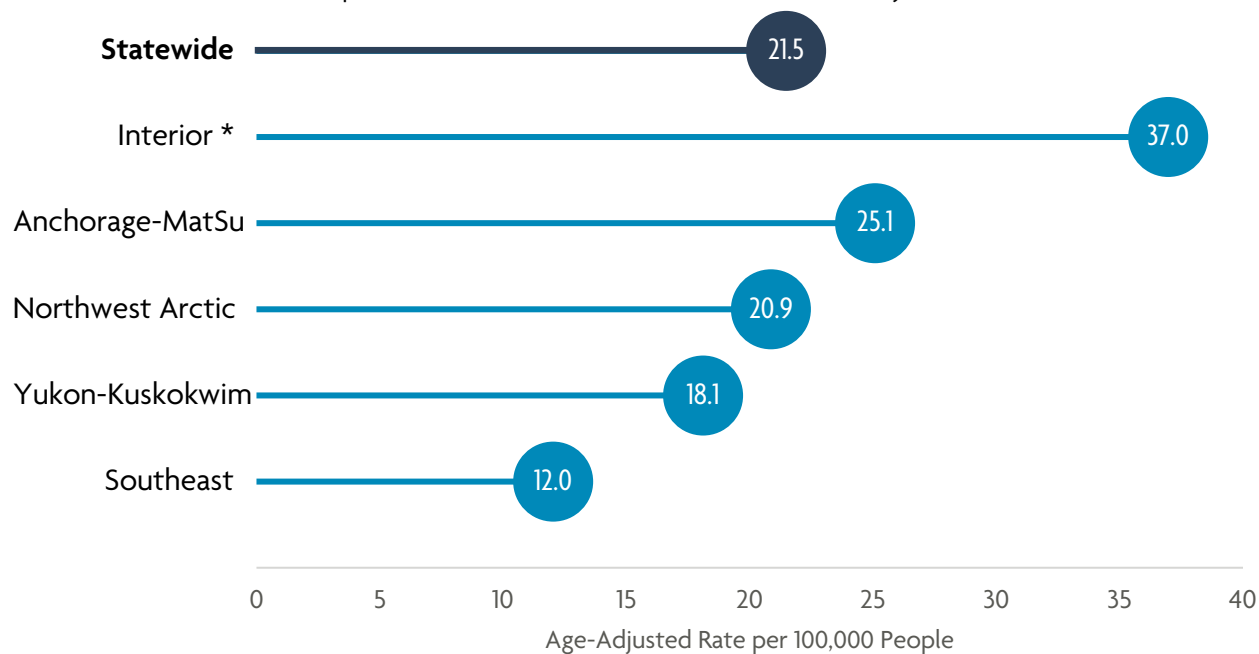


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 123c. Homicide Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

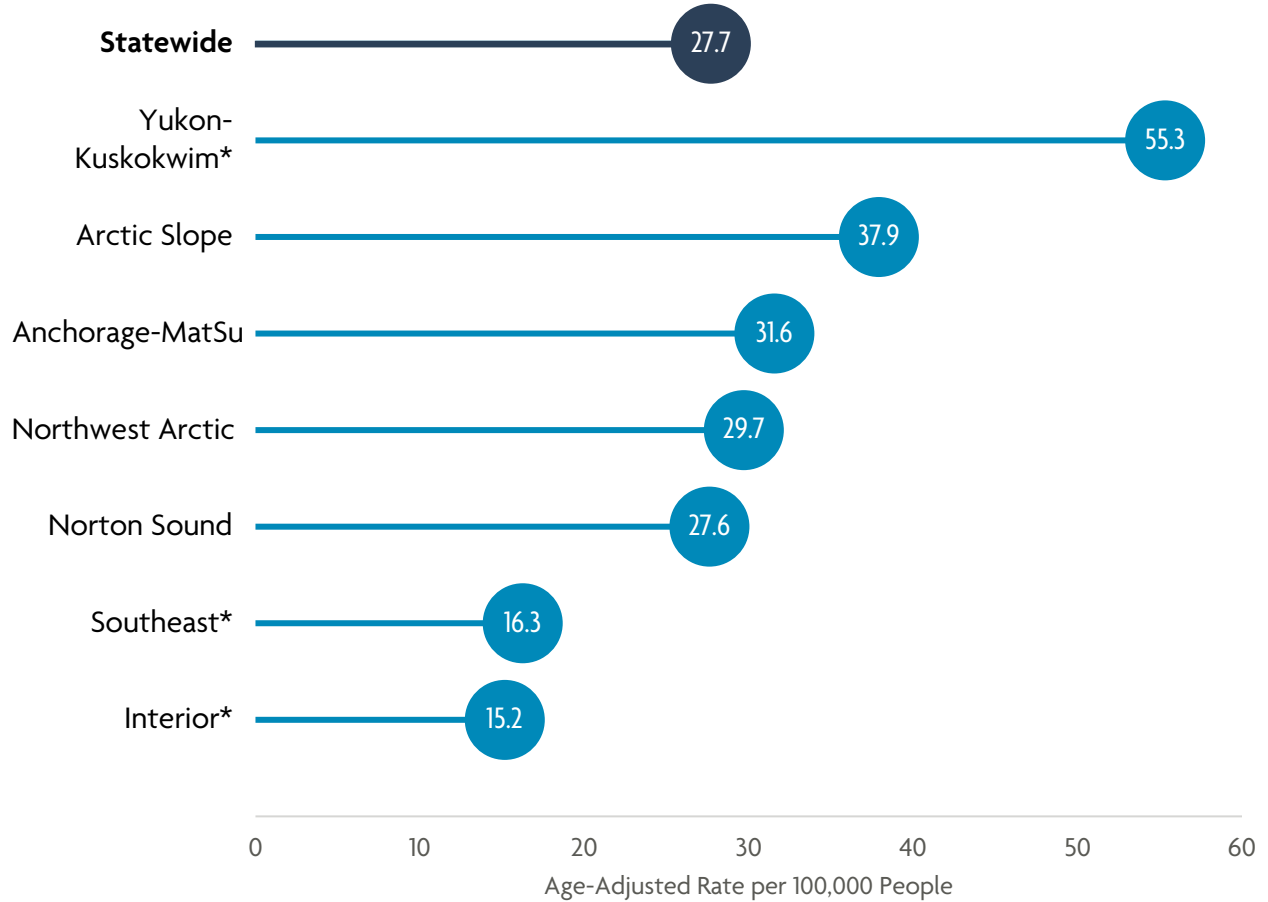


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 124a. Influenza/Pneumonia Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 124b. Influenza/Pneumonia Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

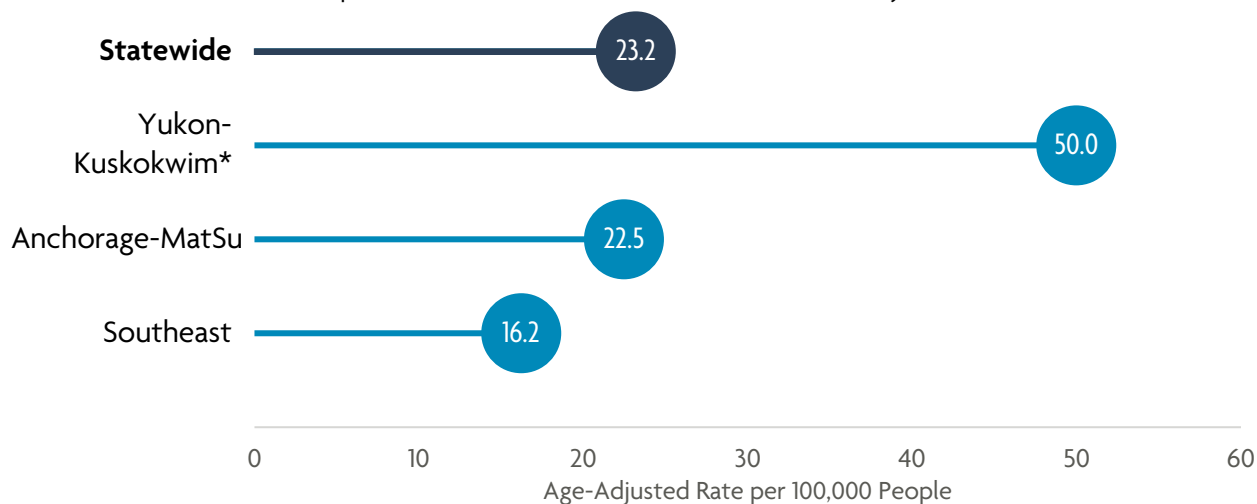
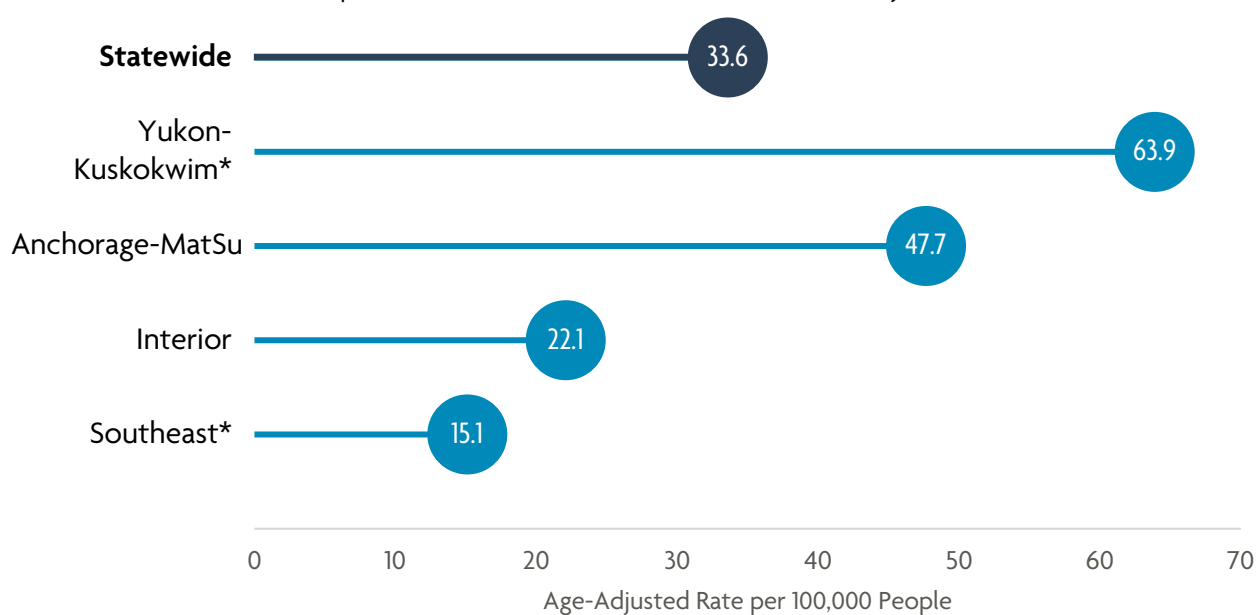


Figure 124c. Influenza/Pneumonia Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

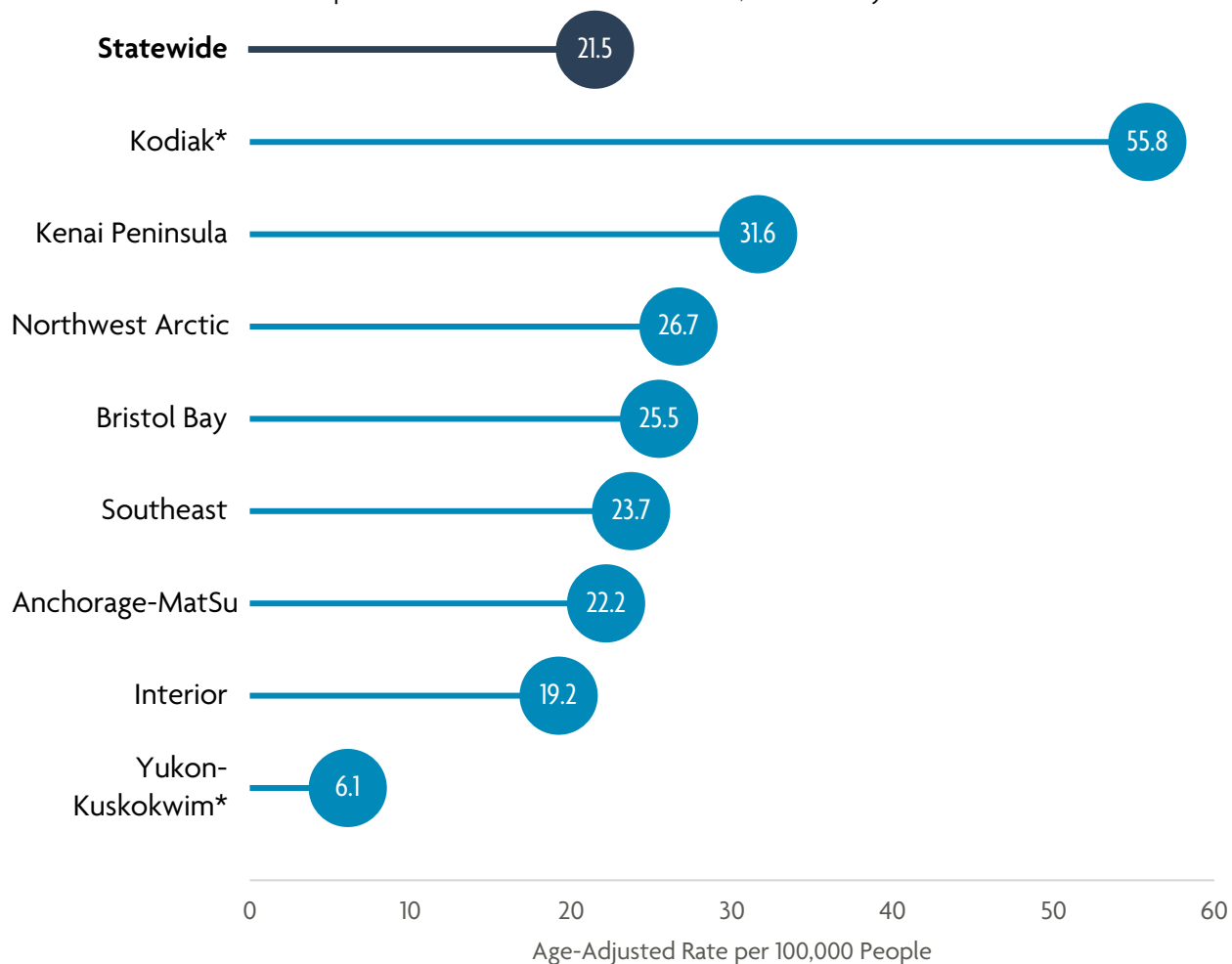


*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 125a. Diabetes Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 125b. Diabetes Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

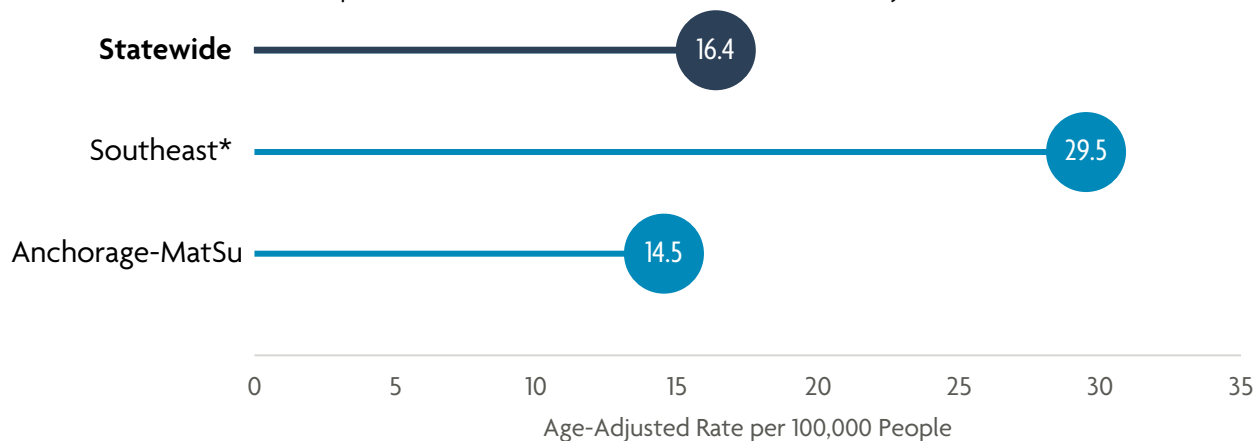
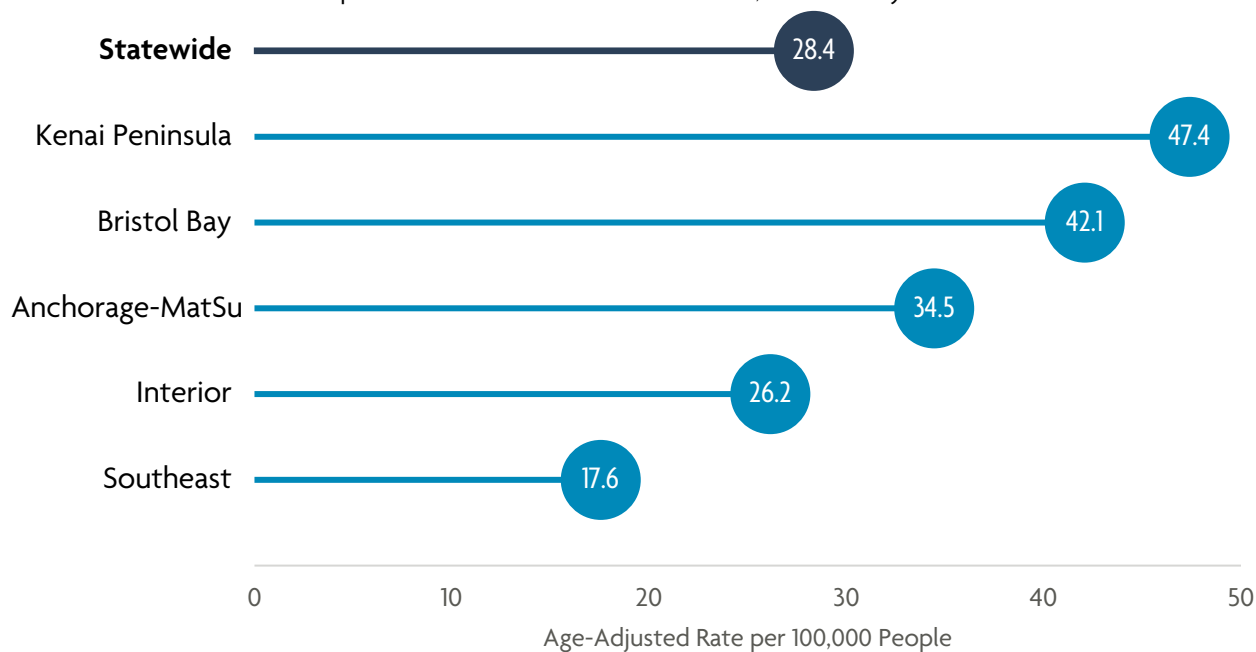


Figure 125c. Diabetes Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 126a. Alzheimer's Disease Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

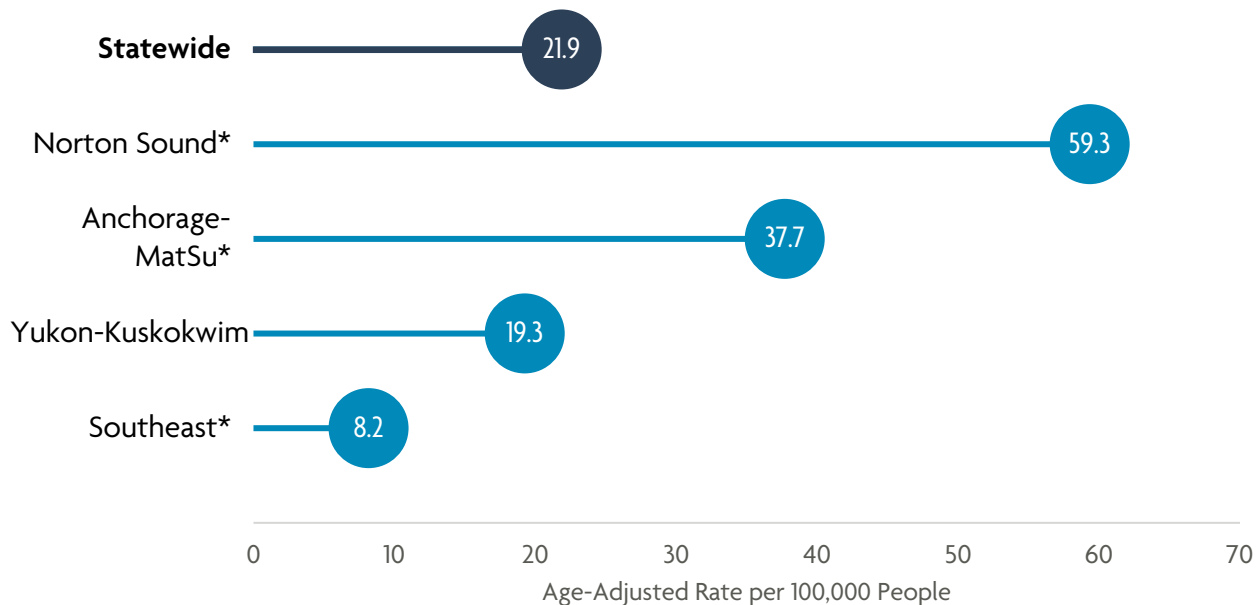
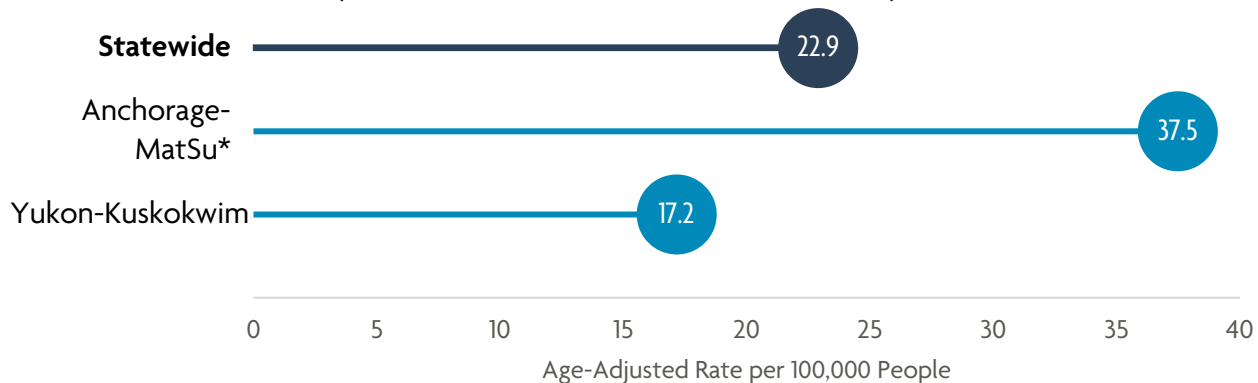


Figure 126b. Alzheimer's Disease Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 126c. Alzheimer's Disease Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

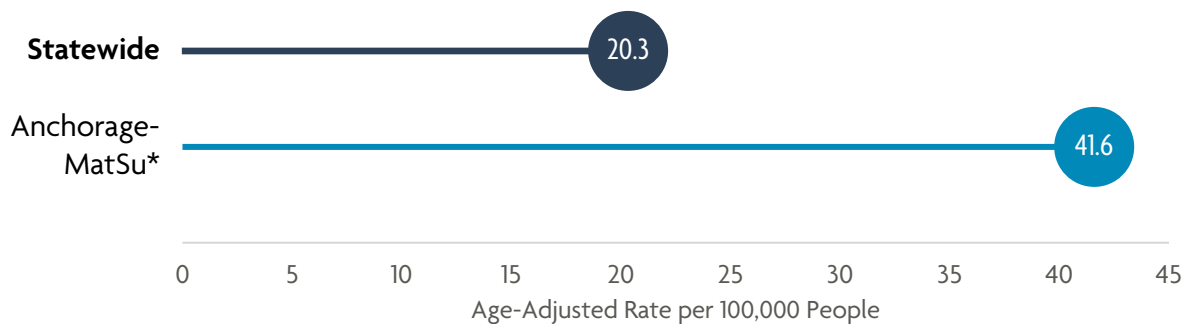
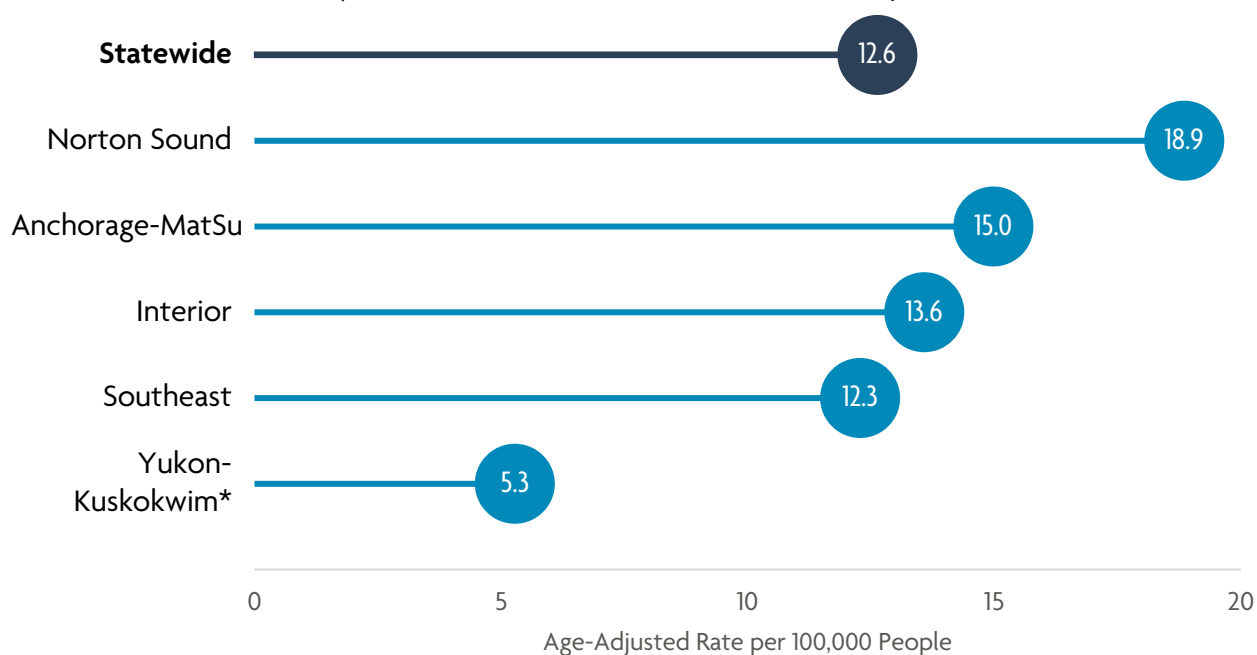


Figure 127a. Septicemia Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 127b. Septicemia Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

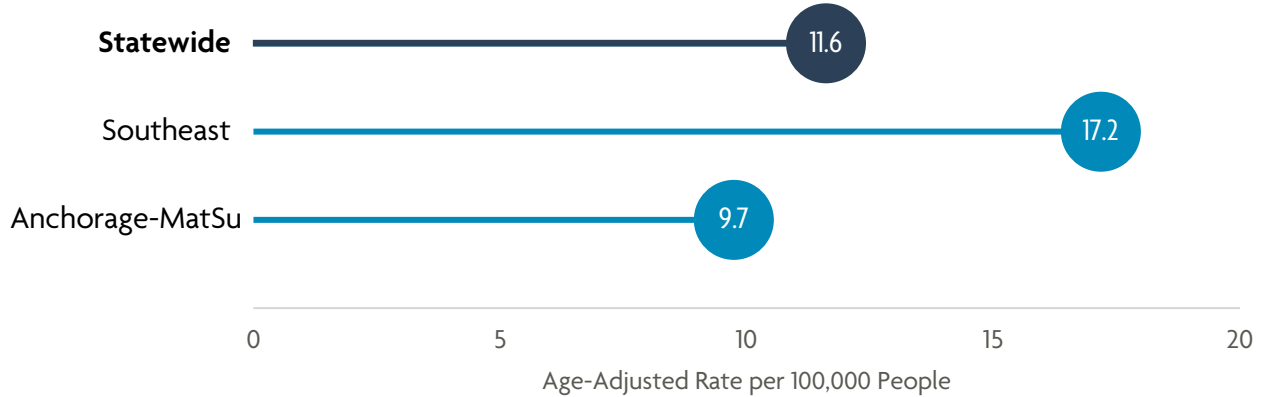
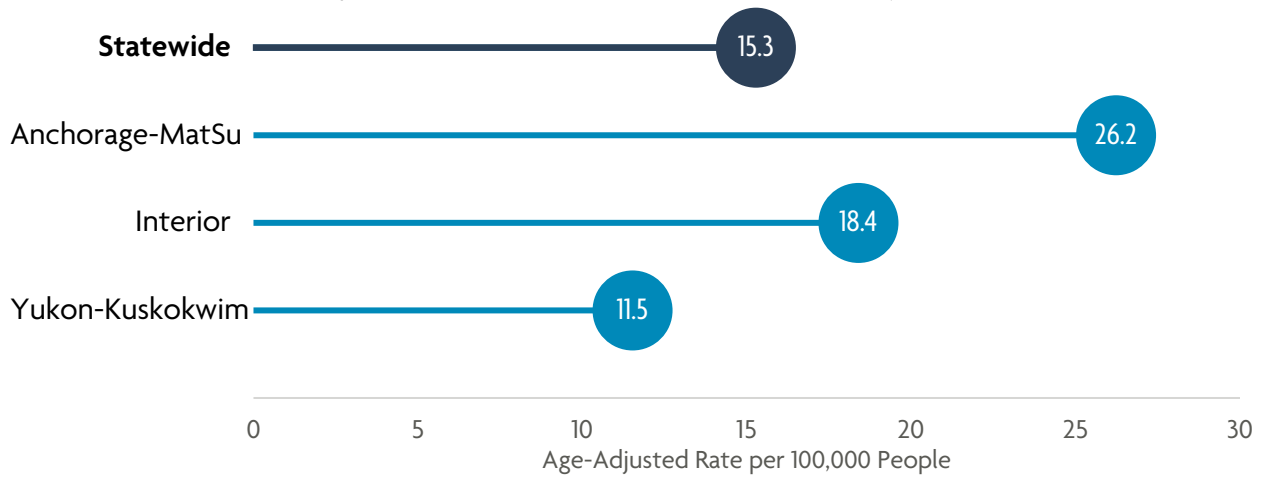


Figure 127c. Septicemia Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



**significant difference, $p < 0.05$*

MORTALITY RATES BY REGION

Figure 128a. Nephritis Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

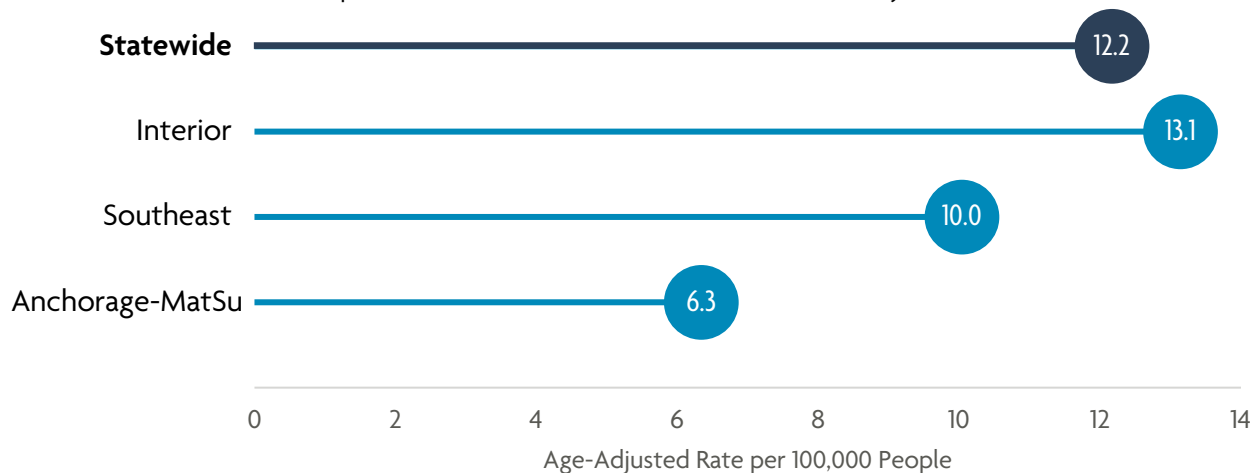


Figure 128b. Nephritis Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

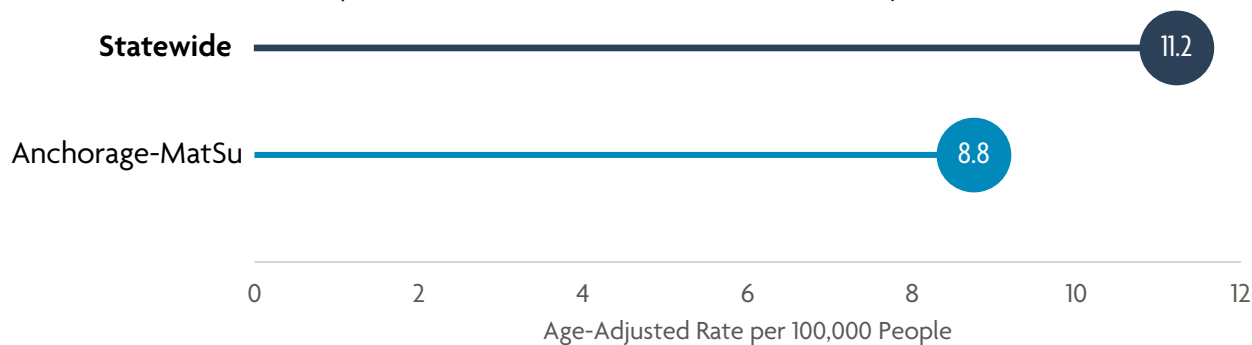
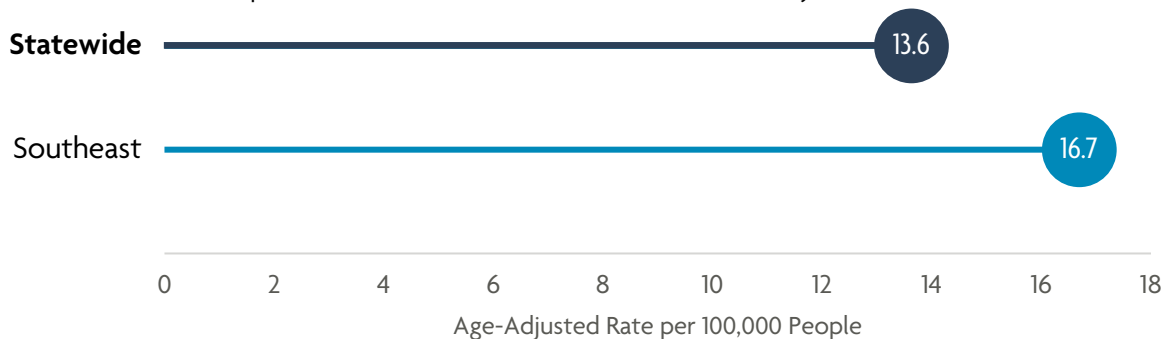


Figure 128c. Nephritis Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 129a. Hypertension Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

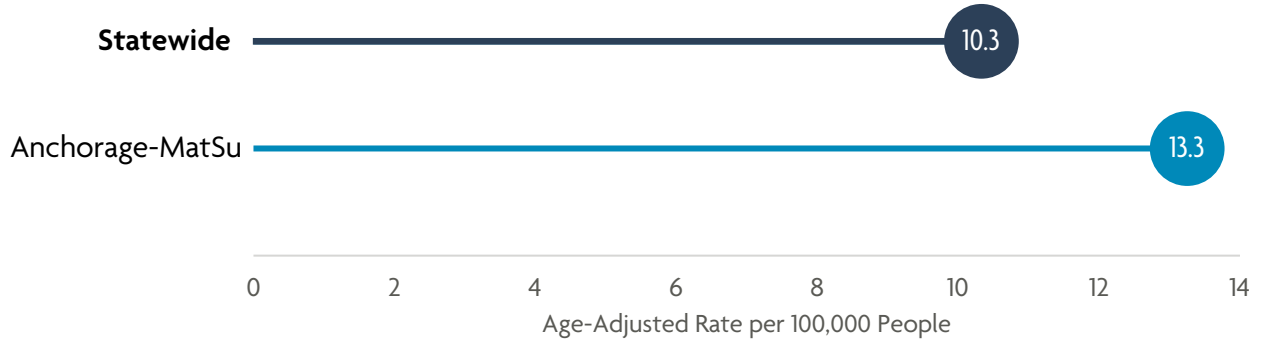


Figure 129b. Hypertension Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

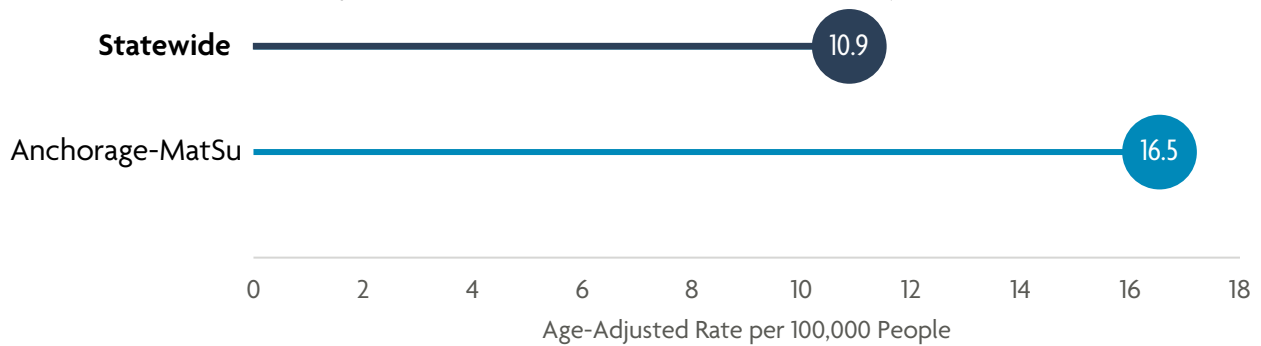
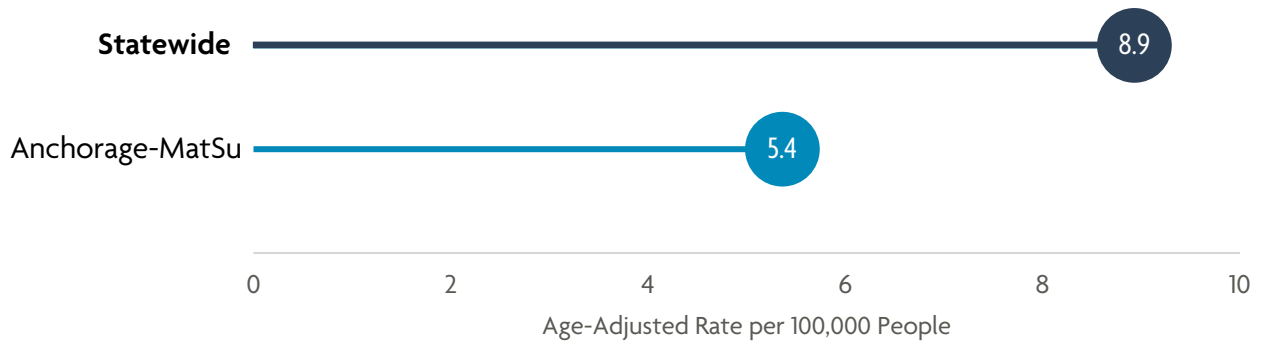


Figure 129c. Hypertension Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 130a. Congenital Malformation Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

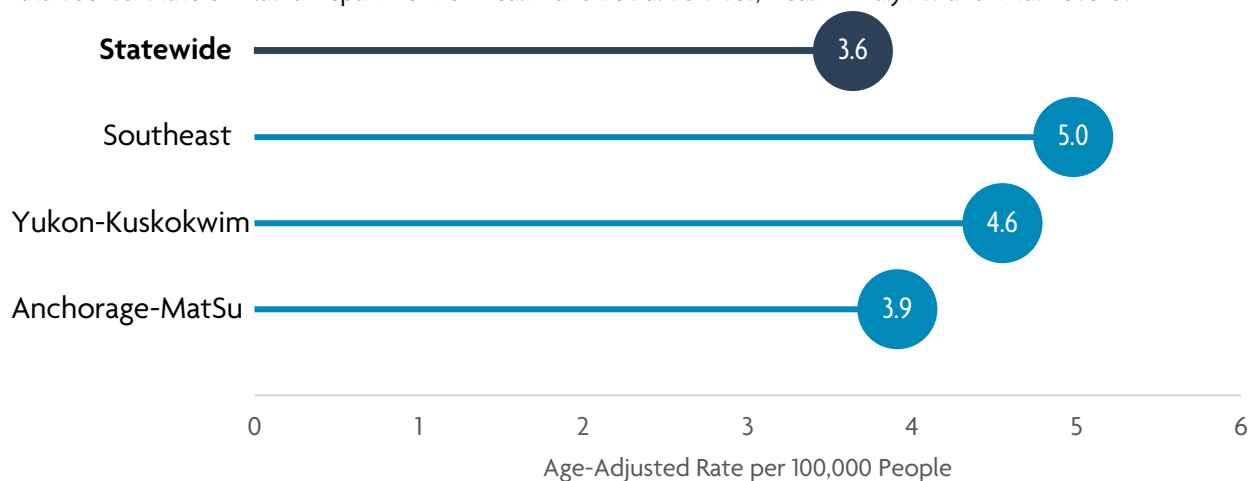


Figure 130b. Congenital Malformation Mortality Rates by Region, Alaska Native Females, 2014 – 2018 (no regions reportable)

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

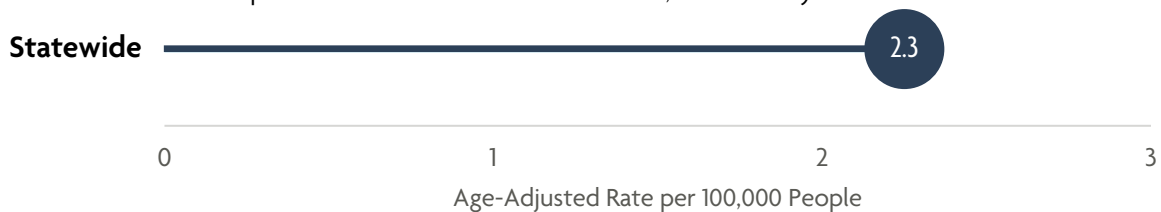
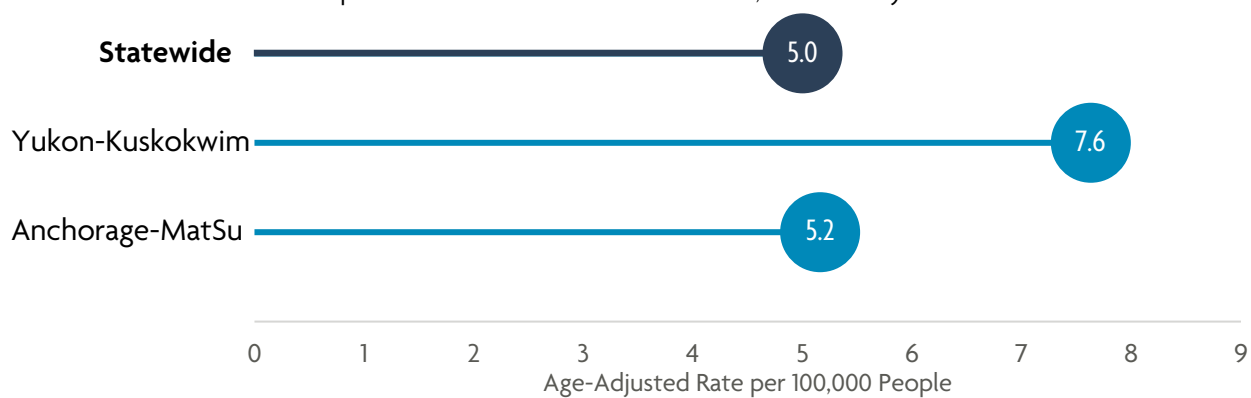


Figure 130c. Congenital Malformation Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 131a. Parkinson's Disease Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

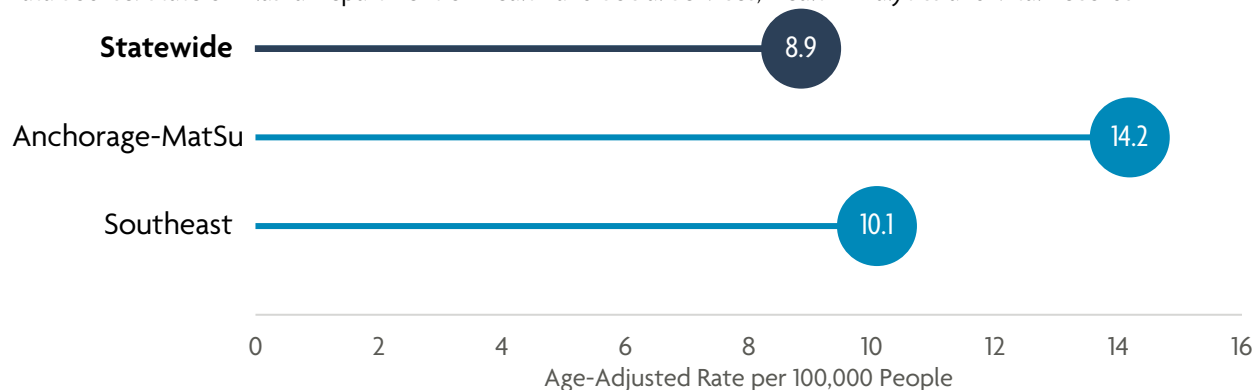


Figure 131b. Parkinson's Disease Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

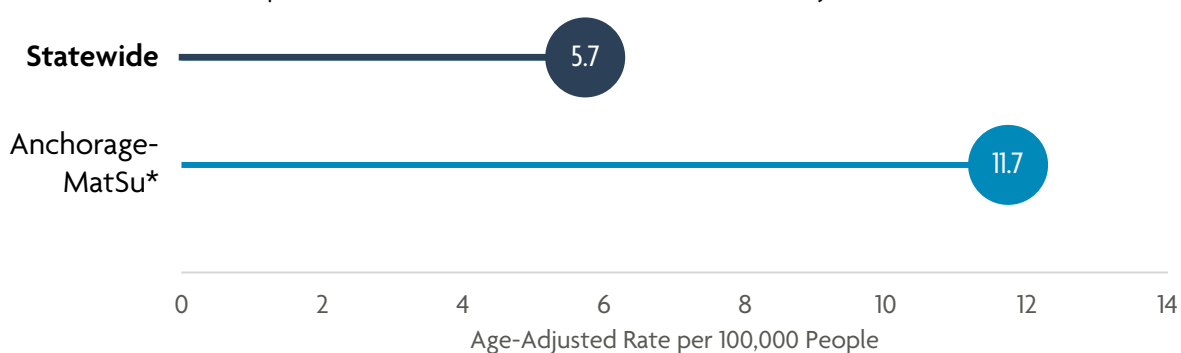
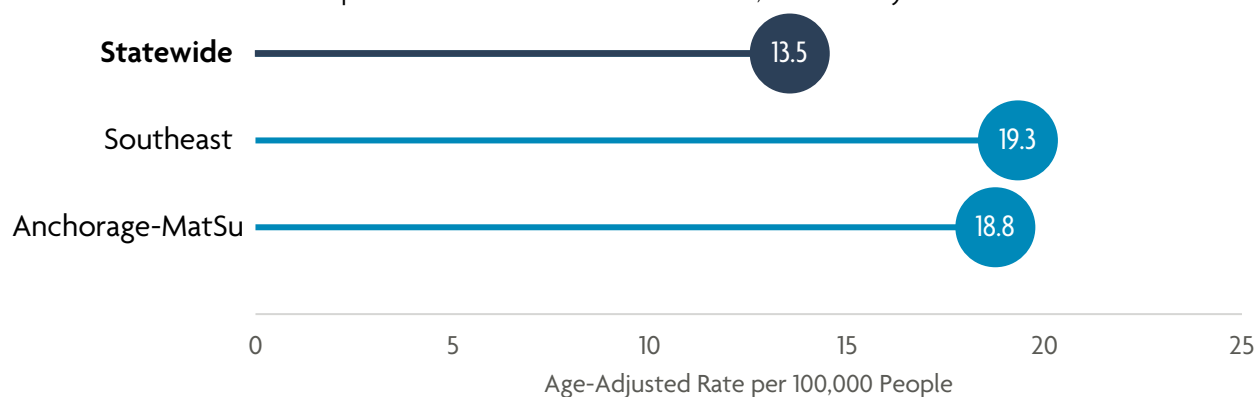


Figure 131c. Parkinson's Disease Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

MORTALITY RATES BY REGION

Figure 132a. Perinatal Conditions Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

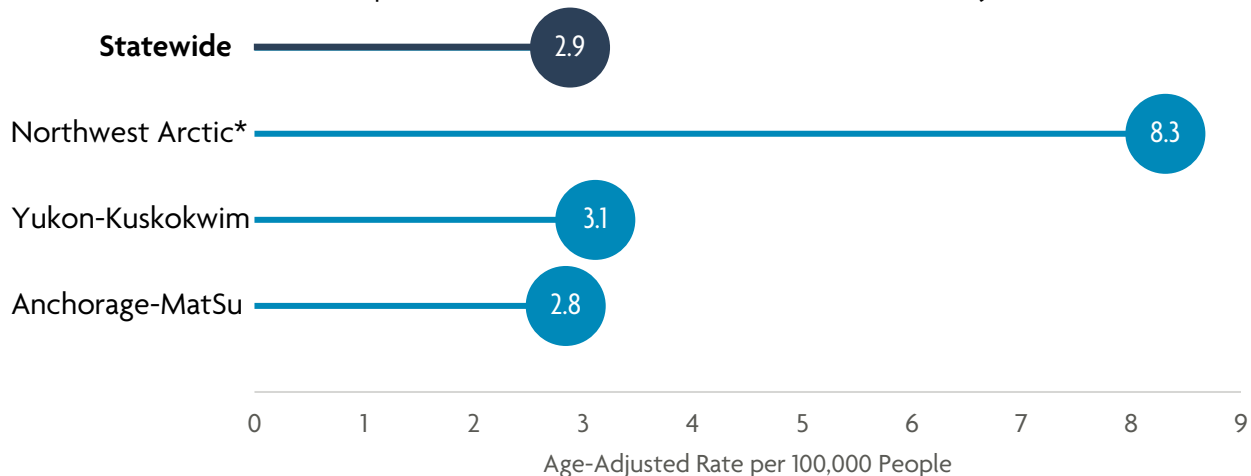


Figure 132b. Perinatal Conditions Mortality Rates by Region, Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

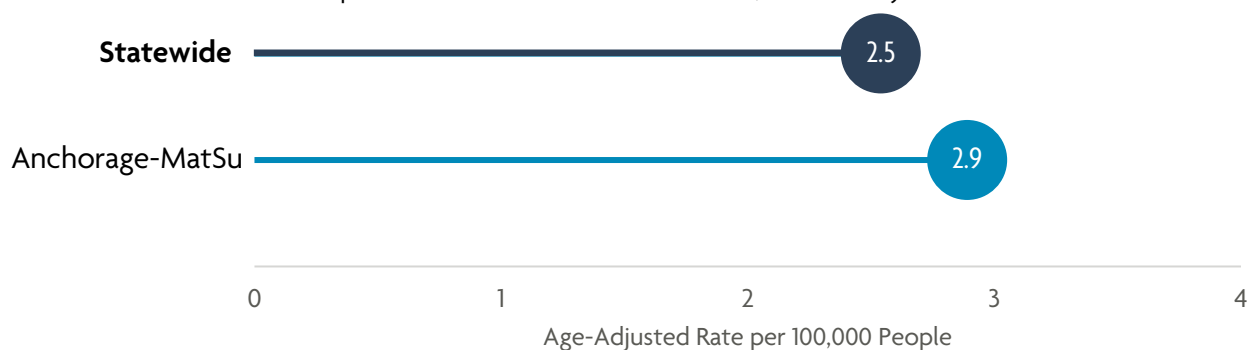
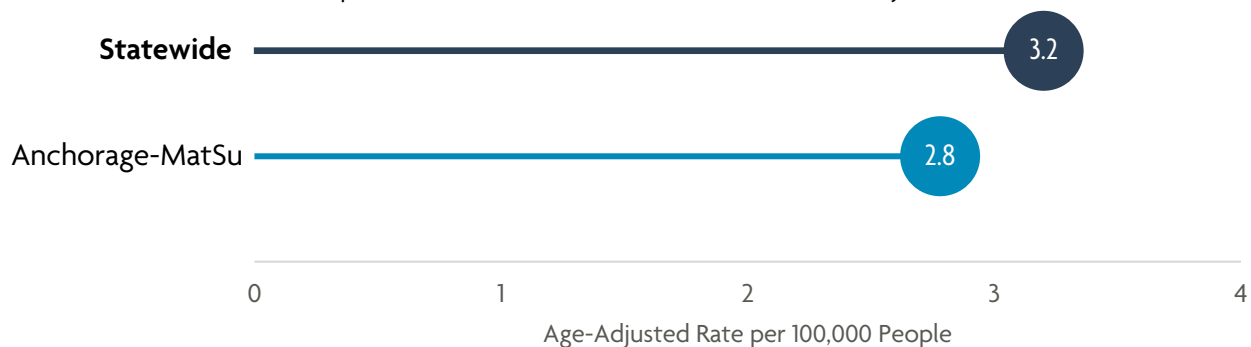


Figure 132c. Perinatal Conditions Mortality Rates by Region, Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Excess Deaths

Percentages presented in this chapter refer to the total number of excess deaths, unless otherwise noted.

Key Findings

- The three leading causes of excess deaths among Alaska Native people, both sexes combined, were unintentional injury (19.7%), cancer (12.2%), and heart disease (10.3%).
- among Alaska Native females, unintentional injury (16.7%), cancer (14.6%), and chronic liver disease (11.6%) were the leading causes of excess deaths.
- Among Alaska Native males, unintentional injury (22.2%), suicide (13.2%), and heart disease (12.2%) were the leading causes of excess deaths.
- The total excess deaths among Alaska Native people, both sexes combined, represented 41.9% of all deaths among Alaska Native people.
- The total excess deaths among Alaska Native females represented 42.5% of all deaths among Alaska Native females.
- The total excess deaths among Alaska Native males represented 41.1% of all deaths among Alaska Native males.

Overview

Excess deaths for Alaska Native people are determined in relation to the U.S. all races rates. Excess deaths are calculated by multiplying the U.S. all races age-specific death rate for each cause of death by the Alaska Native population for each age group. This determines the expected number of deaths. The difference between the expected and the observed number of deaths among Alaska Native people is the excess. If the number is positive, it means there were more deaths among Alaska Native people than expected. If the number is negative, it means there were fewer deaths among Alaska Native people than expected.

Tables 16a-c in this chapter list the ten leading causes of excess deaths among Alaska Native people for the five-year period, 2014-2018. Separate tables are presented for Alaska Native people, both sexes combined, females, and males.

This chapter also contains Figures 133a-c, displaying the numbers of excess deaths among Alaska Native people in rank order. Separate figures are presented for Alaska Native people, both sexes combined, females, and males. Data for these figures are available in Tables 16a-c.

EXCESS DEATHS

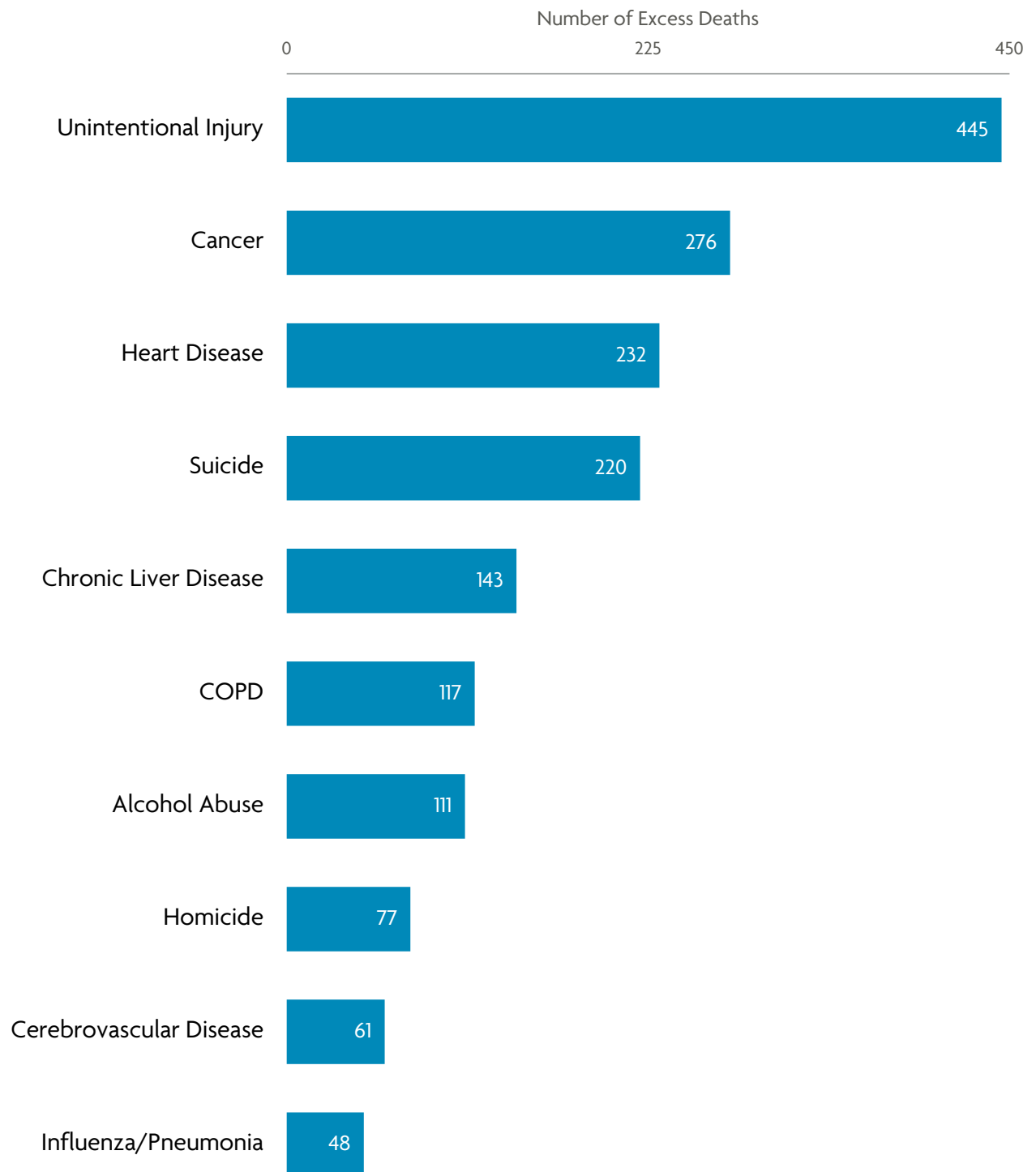
Table 16a. Leading Causes of Excess Death among Alaska Native People, Both Sexes Combined, 2014-2018
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Excess Deaths	% Total Excess Deaths	Total Alaska Native Deaths
1 Unintentional Injury	445	19.7%	698
2 Cancer	276	12.2%	979
3 Heart Disease	232	10.3%	893
4 Suicide	220	9.7%	302
5 Chronic Liver Disease	143	6.3%	203
6 COPD	117	5.2%	277
7 Alcohol Abuse	111	4.9%	126
8 Homicide	77	3.4%	115
9 Cerebrovascular Disease	61	2.7%	200
10 Influenza/Pneumonia	48	2.1%	104
All Others	529	23.4%	1,499
All-Cause	2,259	100.0%	5,396

EXCESS DEATHS

Figure 133a. Leading Causes of Excess Death among Alaska Native People, Both Sexes Combined, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



EXCESS DEATHS

Table 16b. Leading Causes of Excess Death among Alaska Native Females, 2014-2018

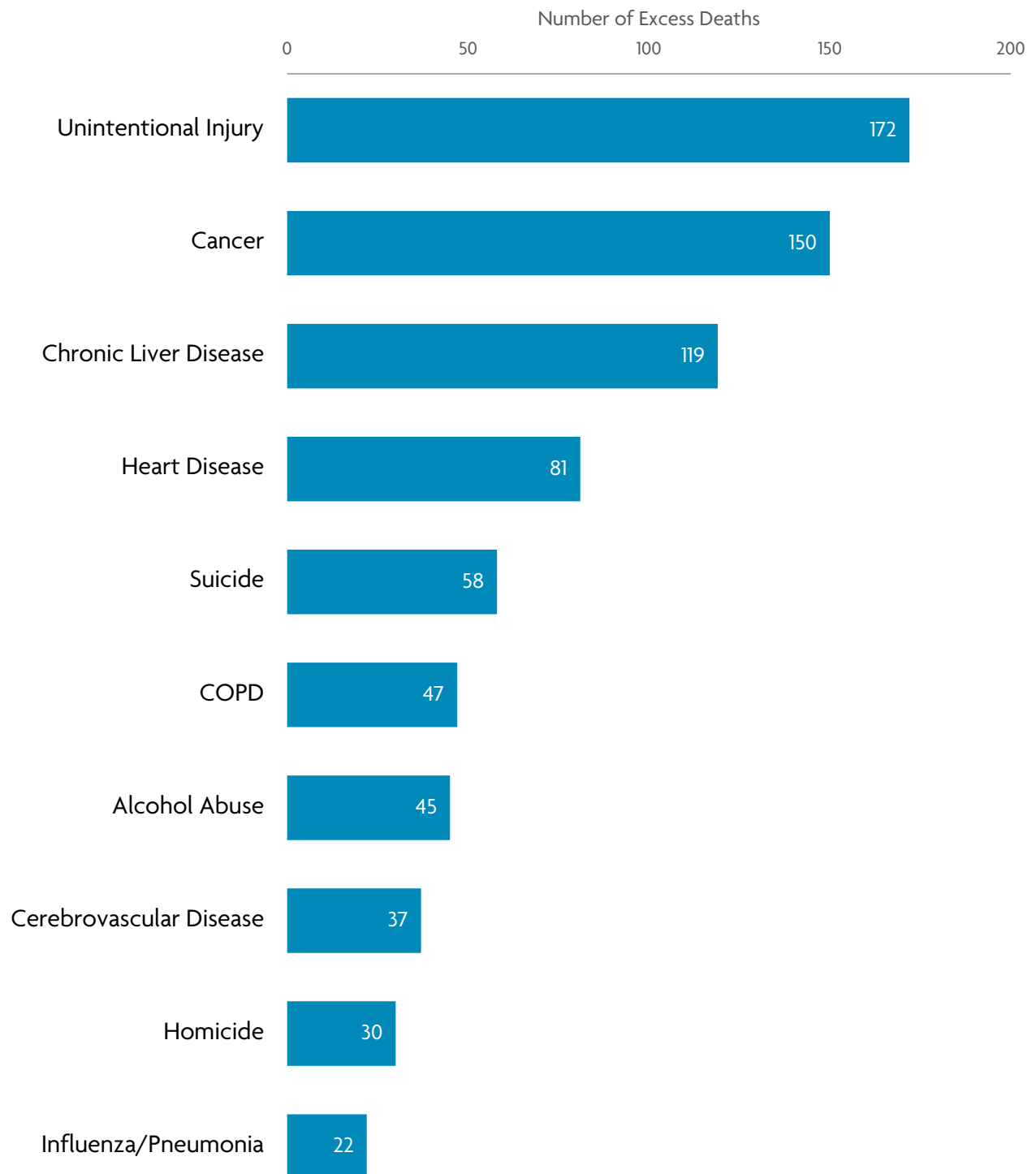
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Excess Deaths	% Total Excess Deaths	Total Alaska Native Deaths
1 Unintentional Injury	172	16.7%	254
2 Cancer	150	14.6%	478
3 Chronic Liver Disease	119	11.6%	140
4 Heart Disease	81	7.9%	352
5 Suicide	58	5.6%	77
6 COPD	47	4.6%	129
7 Alcohol Abuse	45	4.4%	48
8 Cerebrovascular Disease	37	3.6%	110
9 Homicide	30	2.9%	38
10 Influenza/Pneumonia	22	2.1%	49
All Others	268	26.0%	746
All-Cause	1,029	100.0%	2,421

EXCESS DEATHS

Figure 133b. Leading Causes of Excess Death among Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



EXCESS DEATHS

Table 16c. Leading Causes of Excess Death among Alaska Native Males, 2014-2018

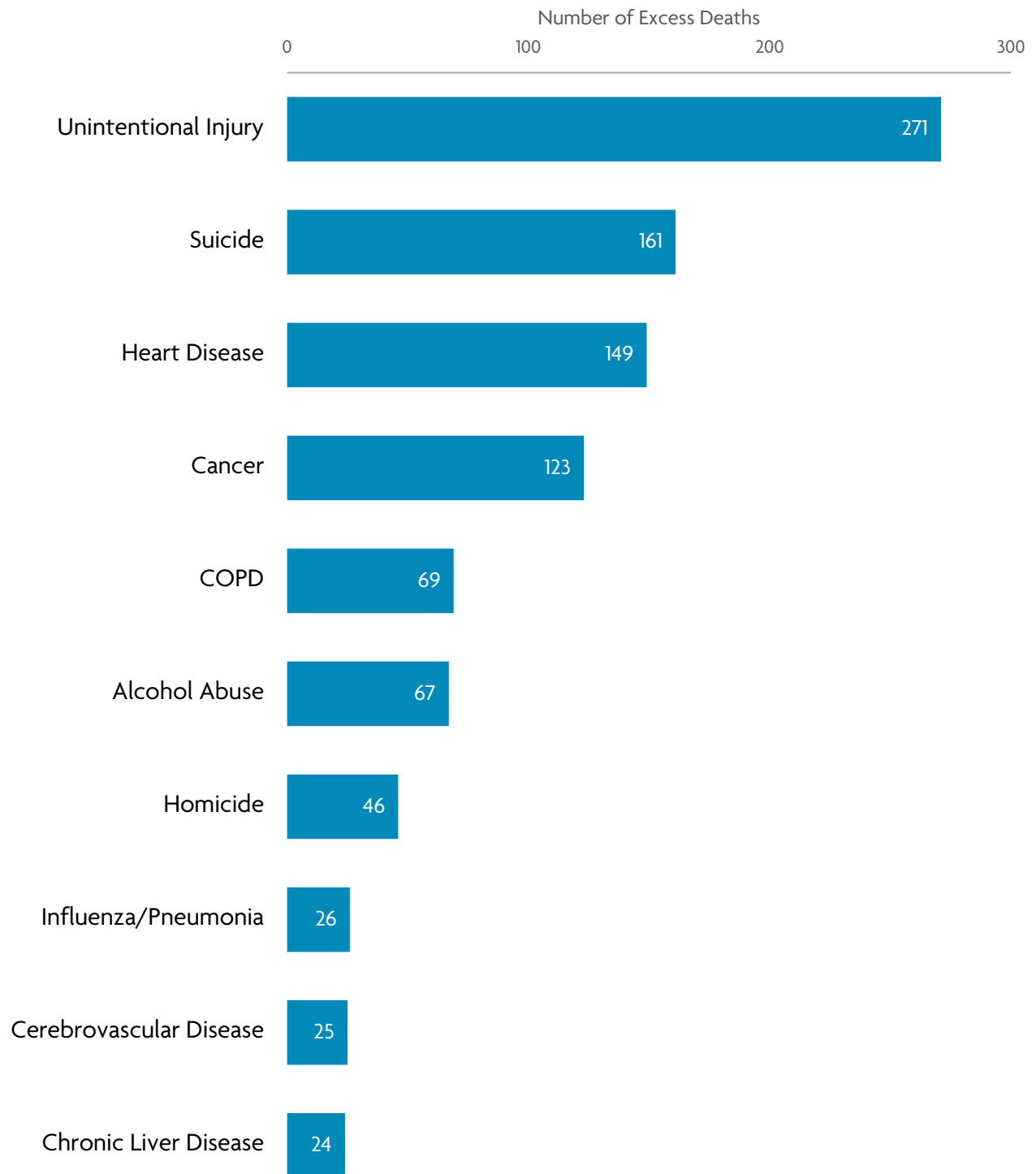
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Excess Deaths	% Total Excess Deaths	Total Alaska Native Deaths
1 Unintentional Injury	271	22.2%	444
2 Suicide	161	13.2%	225
3 Heart Disease	149	12.2%	541
4 Cancer	123	10.1%	501
5 COPD	69	5.6%	148
6 Alcohol Abuse	67	5.5%	78
7 Homicide	46	3.8%	77
8 Influenza/Pneumonia	26	2.1%	55
9 Cerebrovascular Disease	25	2.0%	90
10 Chronic Liver Disease	24	2.0%	63
All Others	262	21.4%	752
All-Cause	1,223	100.0%	2,974

EXCESS DEATHS

Figure 133c. Leading Causes of Excess Death among Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records





Life Expectancy at Birth

Main Findings

- Life expectancy for Alaska Native people born during 2014-2018 is estimated to be 70.4 years. This assumes the age-specific mortality rates of the 2014-2018 period.
- Among Alaska Native people, both sexes combined, life expectancy was 8.2 years less than U.S. all races. For Alaska Native females, life expectancy was 72.8 years (8.3 years less than U.S. females). For Alaska Native males, life expectancy was 68.1 years (8.0 years less than U.S. males).
- Alaska Native life expectancy increased 7.8% between 1980-1983 and 2014-2018. The U.S. all races life expectancy increased 5.4% during the same time period.
- All regions had increases in life expectancy since 1980 ranging from 1% to 27%. The region with the highest life expectancy for Alaska Native people was the Kenai Peninsula region at 74.4 years.

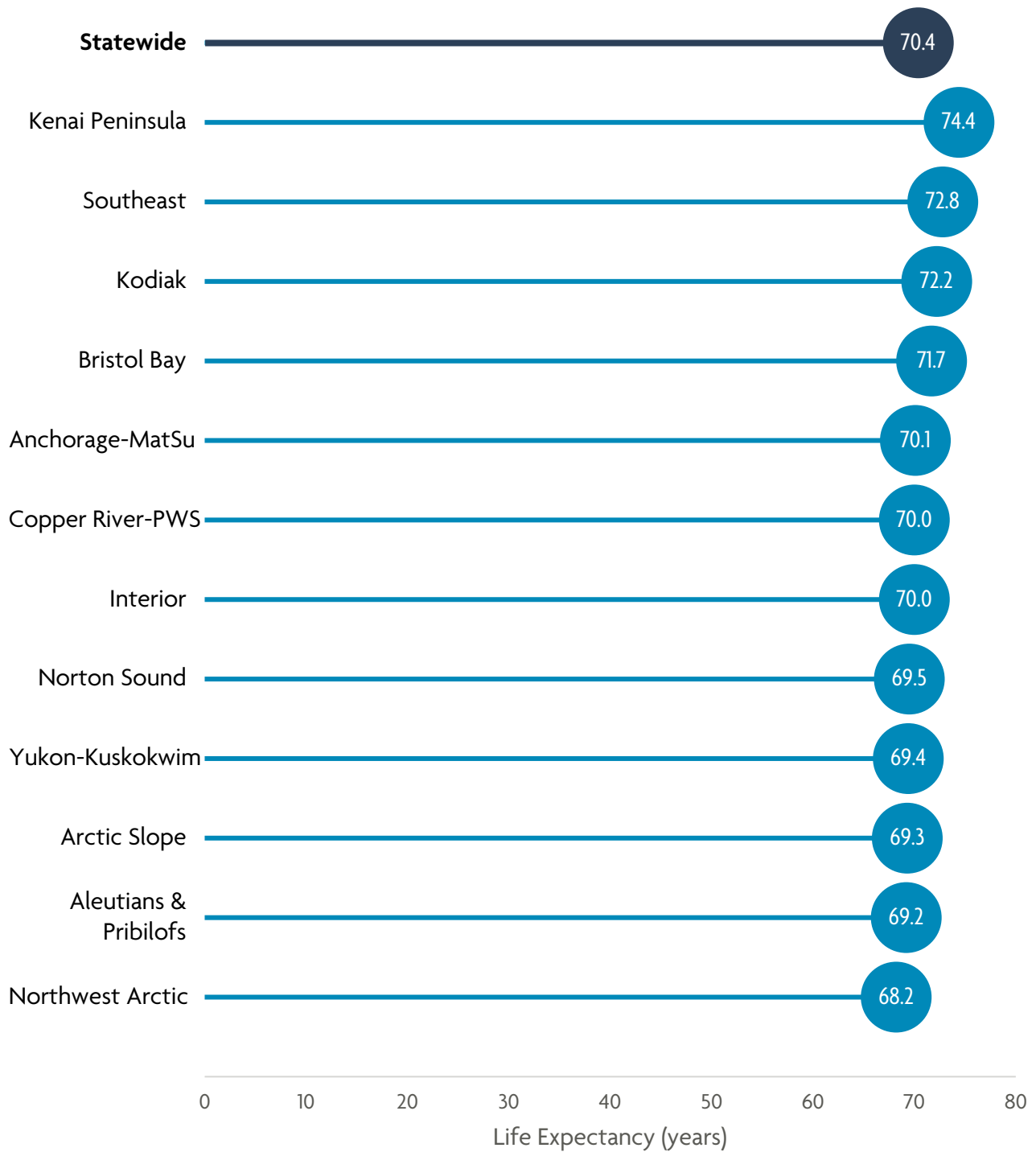
Overview

This chapter compares life expectancy among Alaska Native people for the five-year period, 2014-2018. All life expectancies in this report refer to life expectancy at birth. Figure 134 compares life expectancy among service regions and Alaska Native people statewide. Figures 135a-c compare Alaska Native people's life expectancy to U.S. all races for both sexes combined, females, and males. Figures 136a-c compare life expectancy gaps between Alaska Native people and U.S. all races for both sexes combined, females, and males. Data for these figures are available in tables located in Appendix B.

LIFE EXPECTANCY AT BIRTH

Figure 134. Life Expectancy at Birth by Region among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



LIFE EXPECTANCY AT BIRTH

Figure 135a. Trend in Life Expectancy at Birth among Alaska Native People and U.S. All Races

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

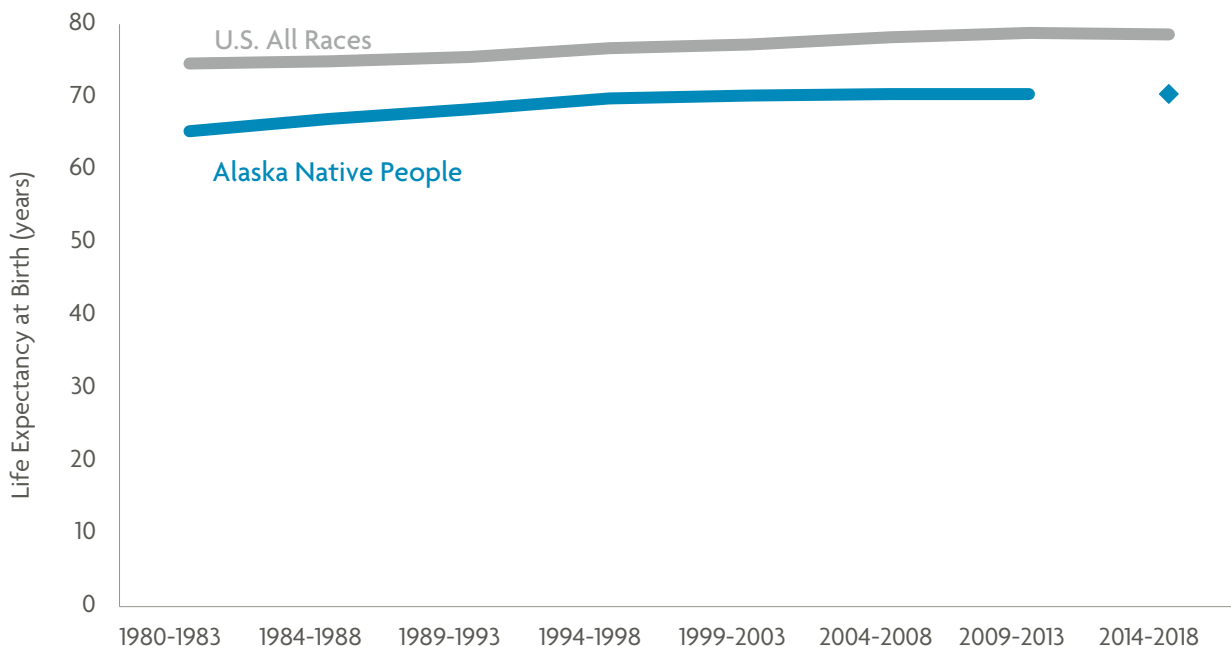
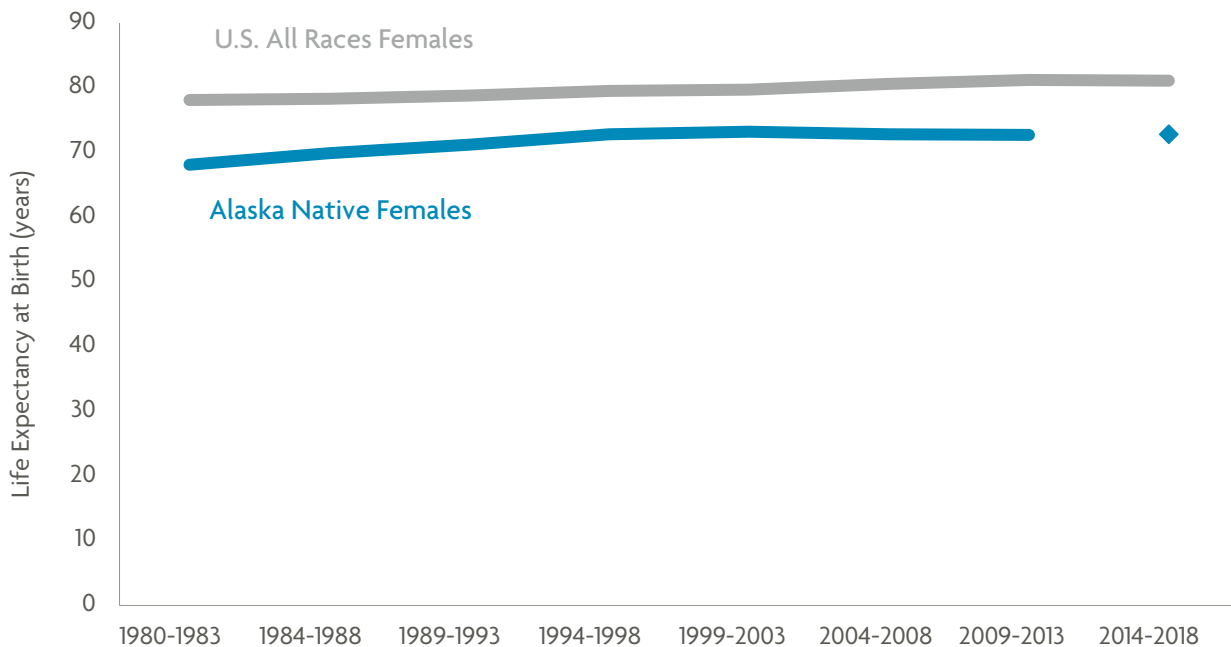


Figure 135b. Trend in Life Expectancy at Birth among Alaska Native Females and U.S. All Races Females

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



LIFE EXPECTANCY AT BIRTH

Figure 135c. Trend in Life Expectancy at Birth among Alaska Native Males and U.S. All Races Males

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

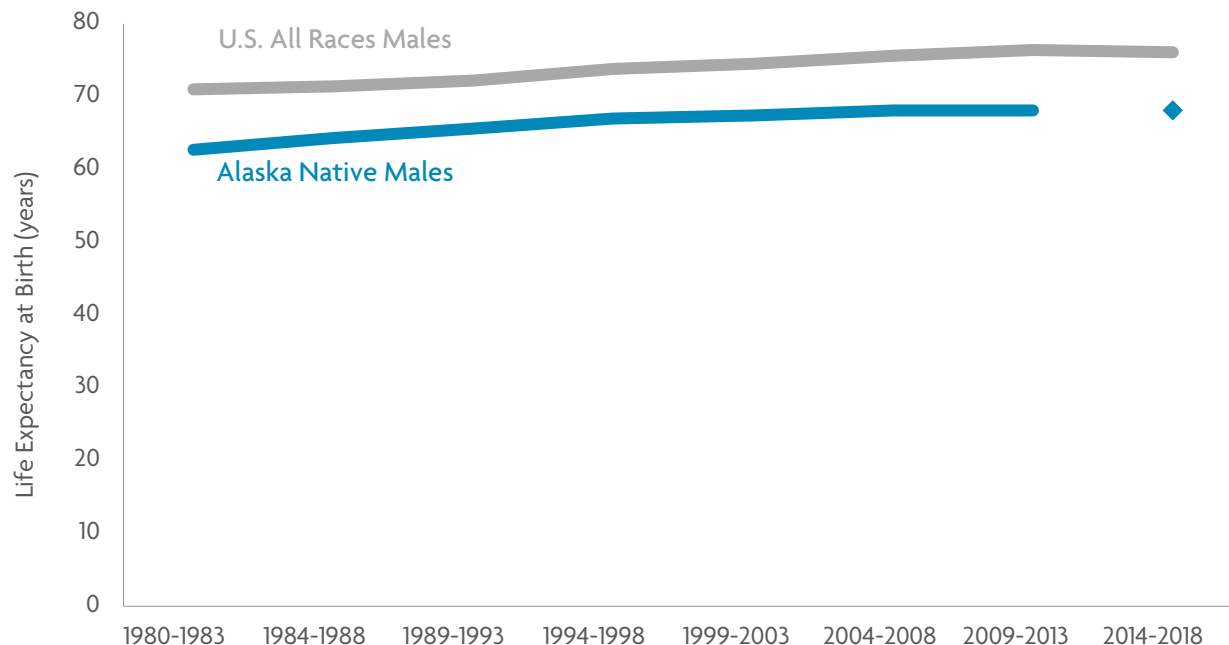
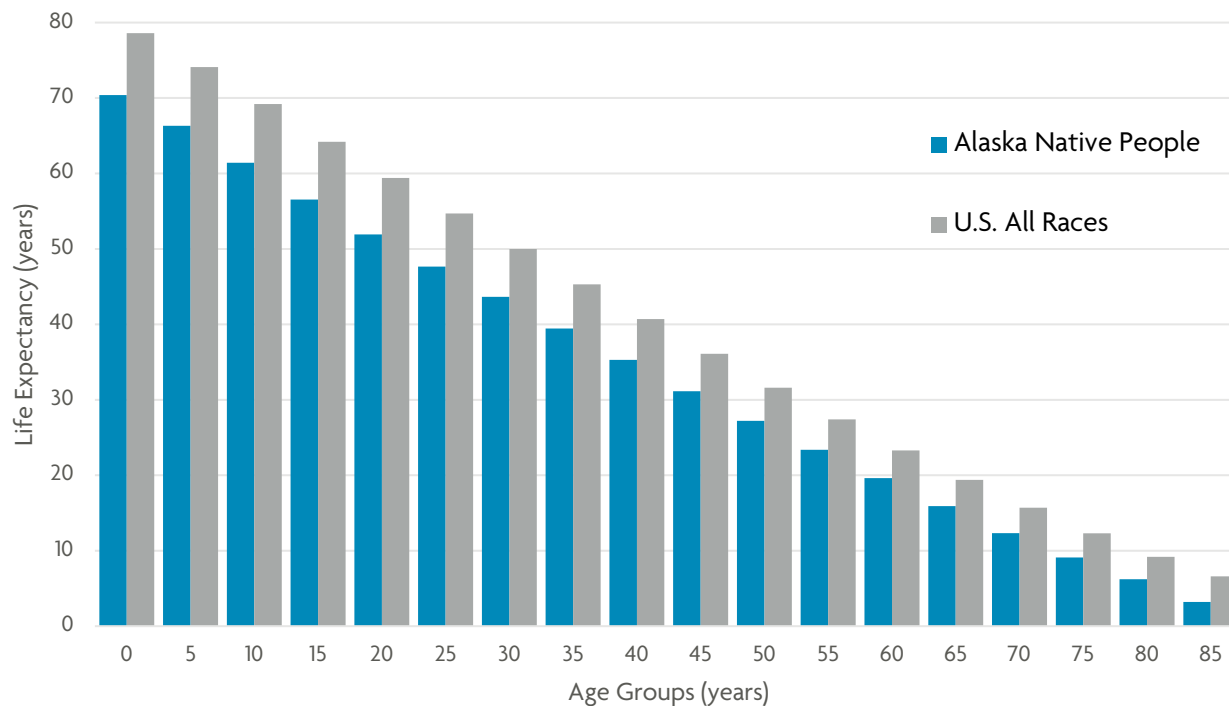


Figure 136a. Life Expectancy by Age Groups, Alaska Native People and U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



LIFE EXPECTANCY AT BIRTH

Figure 136b. Life Expectancy by Age Groups, Alaska Native Females and U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

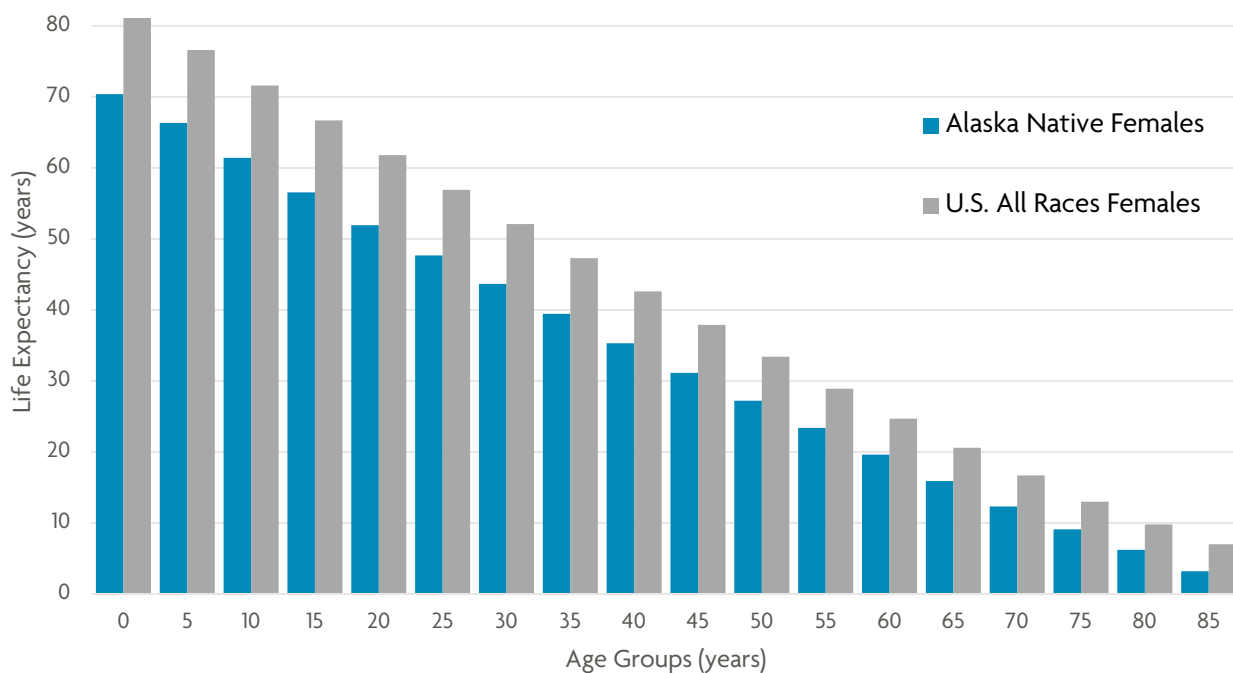
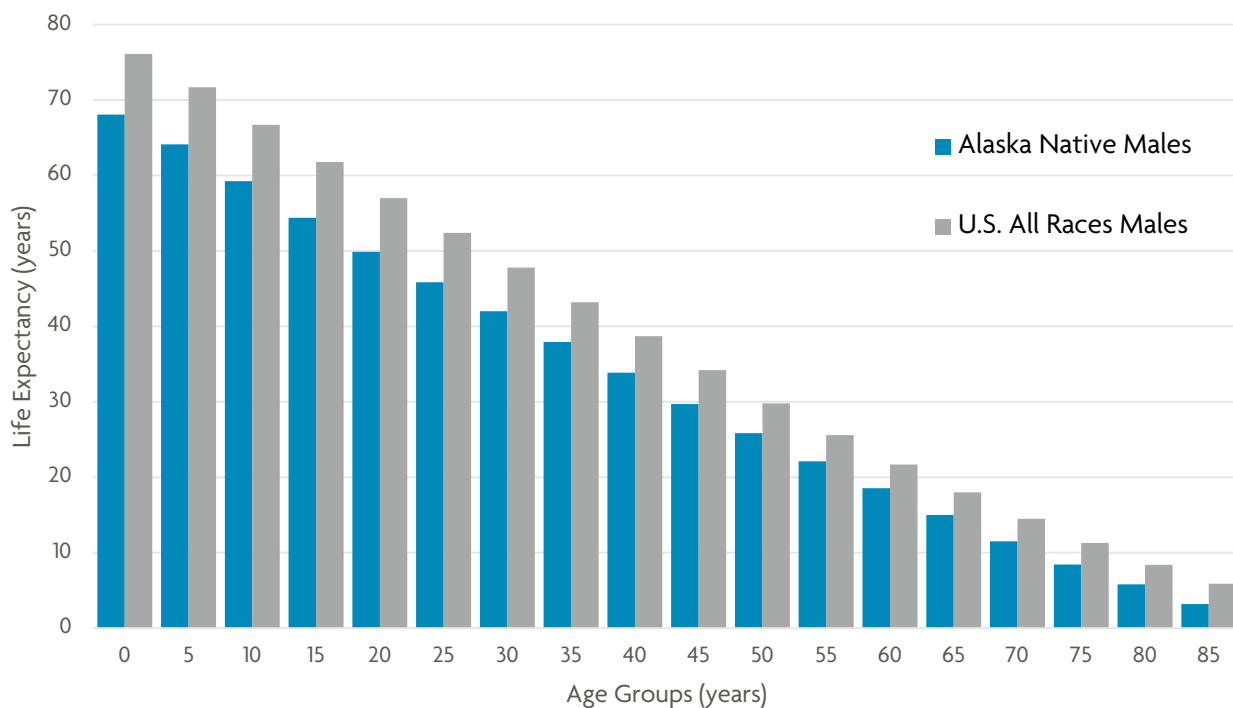


Figure 136c. Life Expectancy by Age Groups, Alaska Native Males and U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records





Detailed Leading Causes of Death

All-Cause Mortality

During the five-year period, 2014-2018, a total of 5,396 Alaska Native deaths were reported. The average annual age-adjusted mortality from all causes for Alaska Native people, both sexes combined, was 1120.7 compared to 728.3 per 100,000 population for U.S. all races. The rate ratio (RR) of 1.5 was statistically significant. The rates for Alaska Native females and males, separately, were also significantly higher than U.S. all races females and males respectively (RR = 1.5 for females, RR=1.6 for males) as shown in Table 40.

The three leading causes of death for Alaska Native people, cancer, heart disease, and unintentional injury, were responsible for 2,570 deaths, just under half (47.6%) of the total 5,396 deaths. The Alaska Native and U.S. all races populations shared eight of the ten leading causes of death, although in different rank order. Mortality rates for Alaska Native people, both sexes combined, were significantly higher than U.S. all races for all of the leading causes of death (cancer, heart disease, unintentional injury, suicide, COPD, chronic liver disease and cirrhosis, cerebrovascular disease, alcohol abuse, homicide, and influenza and pneumonia). Rate ratios of Alaska Native people compared to U.S. all races were highest for alcohol abuse (8.0), chronic liver disease and cirrhosis (3.1), suicide (3.0), homicide (2.8) and unintentional injury (2.5).

Compared to U.S. all races, rates were significantly higher among Alaska Native females for nine of the ten leading causes of death: cancer, heart disease, unintentional injury, chronic liver disease and cirrhosis, COPD, cerebrovascular disease, suicide, influenza/pneumonia, and alcohol abuse. The mortality rate due to Alzheimer's disease among Alaska Native females was significantly lower than the rate for U.S. all races females. The mortality rate due to diabetes among Alaska Native females was lower than U.S. all races females, but not significantly. Alaska Native males had a higher mortality rate than U.S. all races males for nine of the ten leading causes: heart disease, cancer, unintentional injury, suicide, COPD, cerebrovascular disease, alcohol abuse, homicide, and chronic liver disease and cirrhosis. Alaska Native males had a higher mortality rate due to diabetes than U.S. all races males, though the difference was not statistically significant.

Age-specific mortality rates for all causes combined showed significantly higher mortality rates among Alaska Native people than among U.S. all races for all age categories except the 5-14 year old age group. Disparities between the two populations were highest among those 15-24 years old. Rate ratios progressively decrease in the 55+ age group, in both sexes combined as well as among Alaska Native females and Alaska Native males separately.

All-cause mortality rates were significantly higher for the Anchorage-MatSu service region as compared to all other service regions combined. All-cause rates were significantly lower for the Interior, Southeast, Kenai Peninsula, and Bristol Bay service regions than all other service regions combined.

The all-cause mortality rate for Alaska Native people declined significantly (9%) between 1980-1983 and 2014-2018. There was a significant 25% decline among U.S. all races during the same time period. The disparity in the all-cause mortality rate has increased (15.4%) since 1980.

DETAILED LEADING CAUSES OF DEATH

Table 17. All-Cause Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

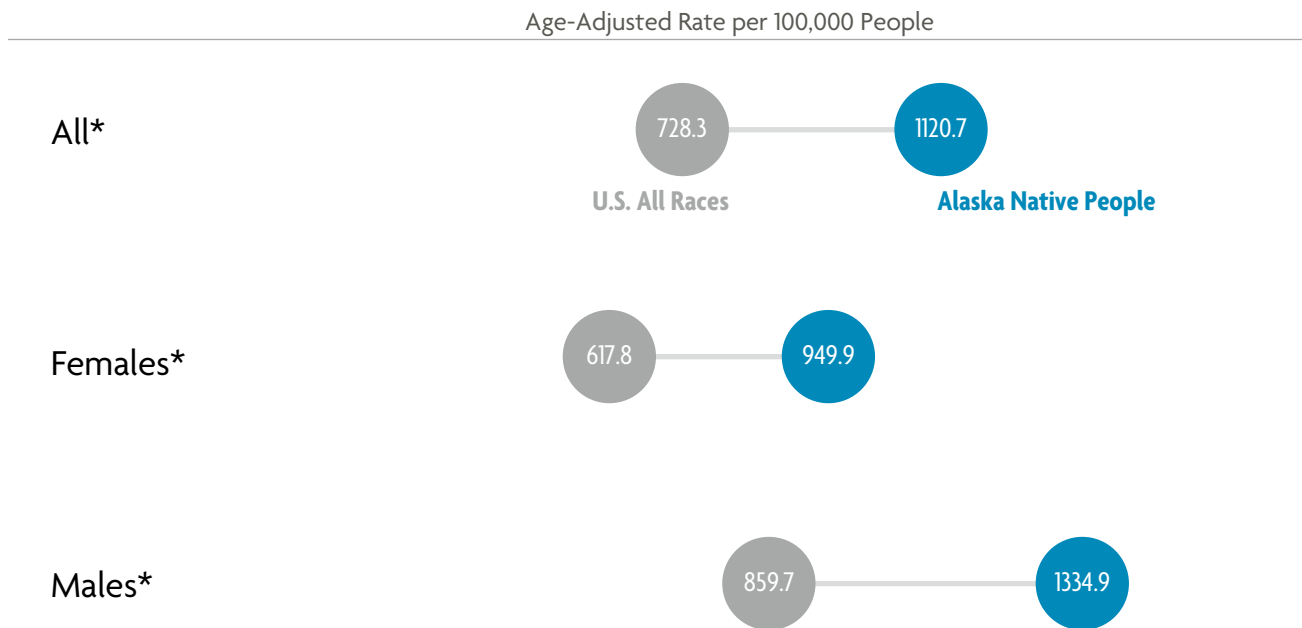
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
All	5,396	100.0%	1120.7	13,736,004	100.0%	728.3	1.5	1.50 - 1.58
Female	2,421	100.0%	949.9	6,736,547	100.0%	617.8	1.5	1.48 - 1.60
Male	2,974	100.0%	1334.9	6,999,457	100.0%	859.7	1.6	1.50 - 1.61

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Figure 137. All-Cause Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

All-Cause Age-Specific Mortality Rates

Figure 138a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

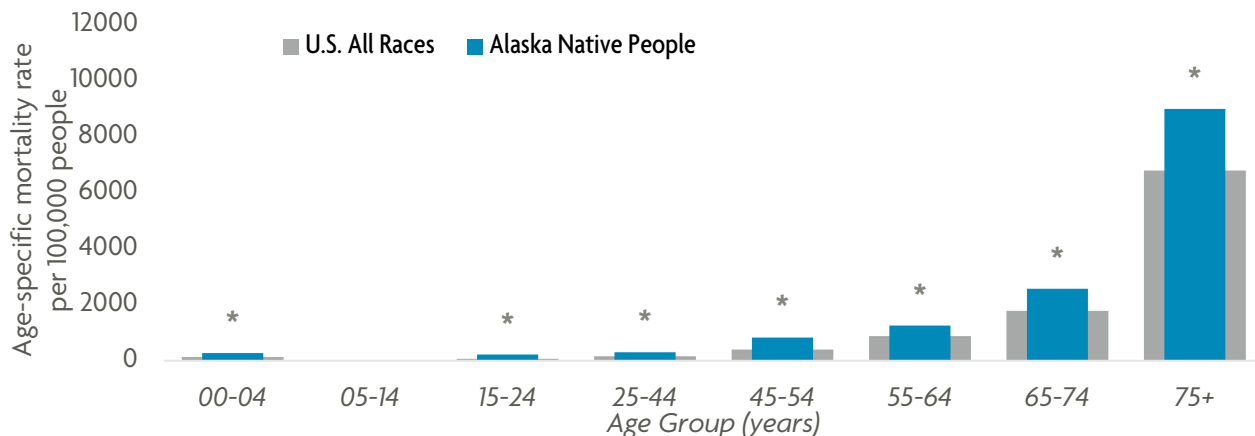


Figure 138b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

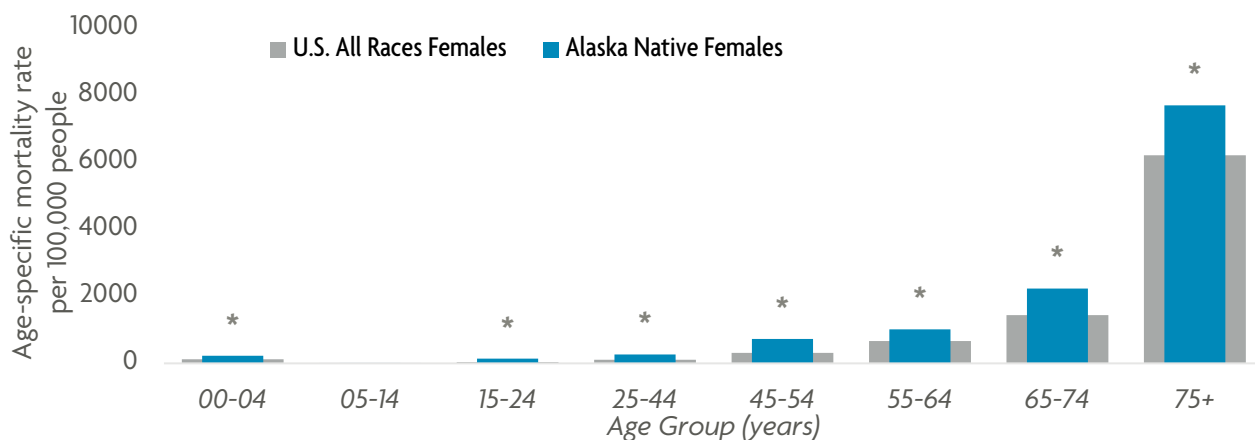
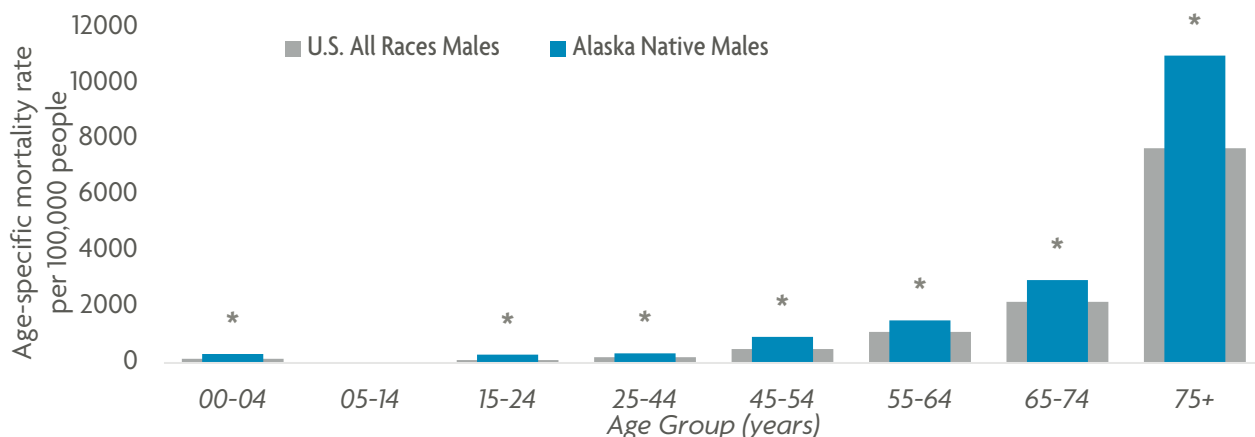


Figure 138c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Table 18. Age-Specific All-Cause Mortality Rates among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

All								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	276.0	14.8	221.2	305.9	830.5	1257.9	2577.7	9009.9
U.S. All Races	135.0	13.2	70.8	158.3	402.4	880.5	1789.1	6807.2
Rate Ratio	2.0	1.1	3.1	1.9	2.1	1.4	1.4	1.3
Females								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	229.1	11.2	140.6	265.2	727.5	1012.1	2231.8	7692.1
U.S. All Races	121.8	11.3	38.7	109.8	311.6	667.4	1438.8	6202.9
Rate Ratio	1.9	1.0	3.6	2.4	2.3	1.5	1.6	1.2
Males								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	321.2	18.2	297.5	346.0	933.1	1521.0	2967.0	10996.6
U.S. All Races	147.6	15.0	101.4	206.5	495.7	1109.2	2187.9	7682.3
Rate Ratio	2.2	1.2	2.9	1.7	1.9	1.4	1.4	1.4

Table 19. Trends in All-Cause Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People	U.S. All Races	Rate Ratio	
1980-1983	1234.0	982.7	1.3	*
1984-1988	1226.5	955.8	1.3	*
1989-1993	1202.1	898.6	1.3	*
1994-1998	1151.6	867.5	1.3	*
1999-2003	1111.6	860.3	1.3	*
2004-2008	1033.3	793.7	1.3	*
2009-2013	1076.7	740.3	1.5	*
2014-2018	1120.7	728.3	1.5	*
% Change	-9.2%	-25.9%		

*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 139. Overall Change in All-Cause Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

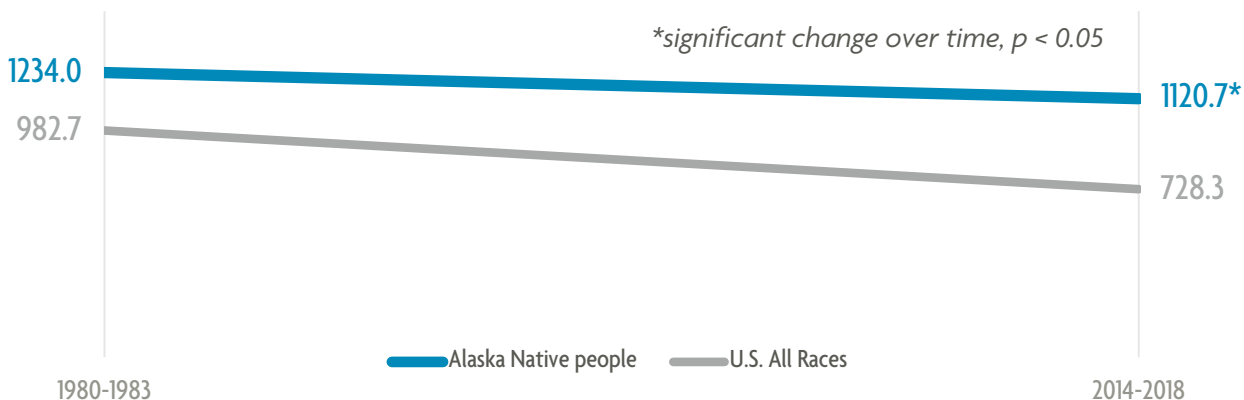
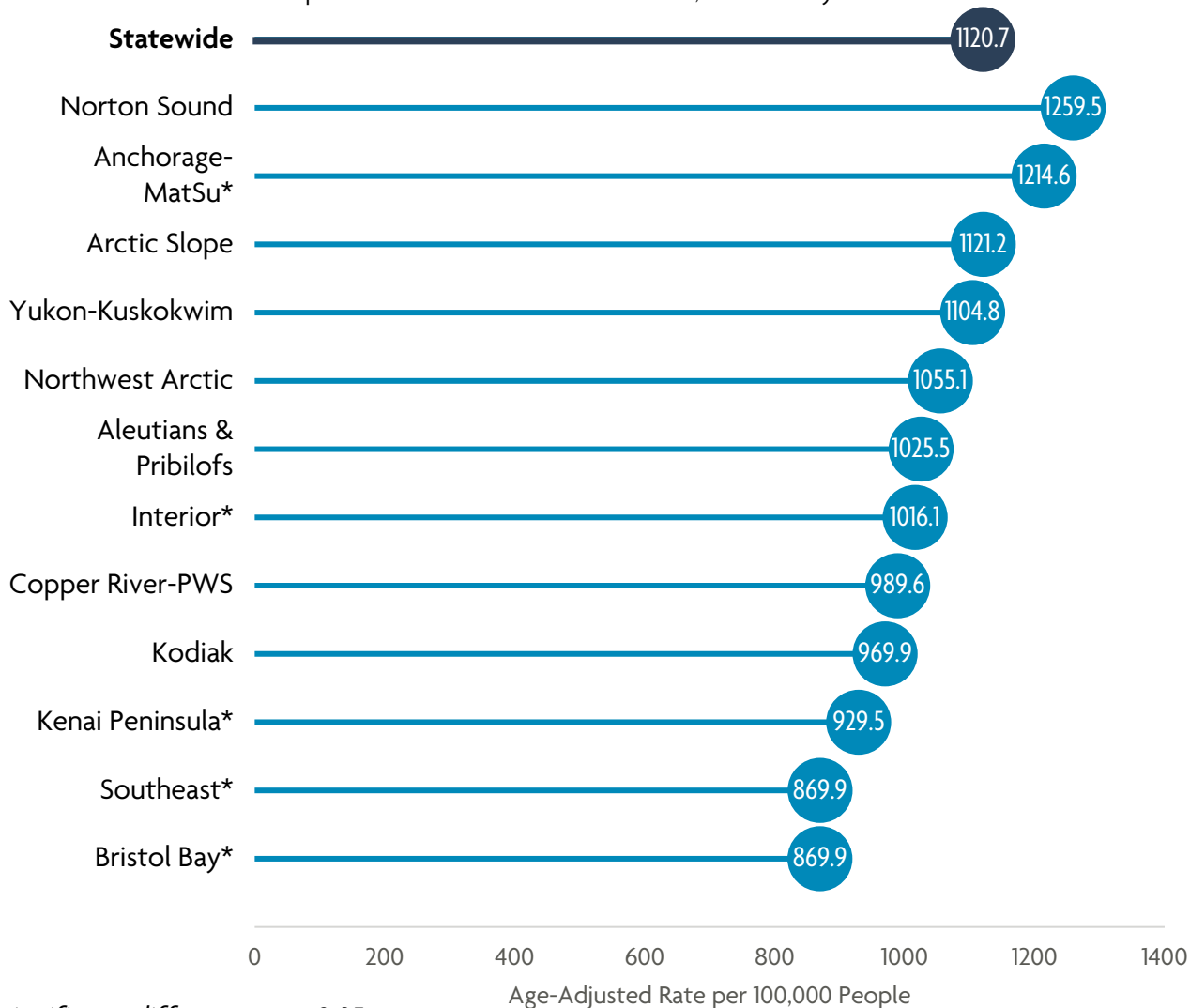


Figure 140. All-Cause Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

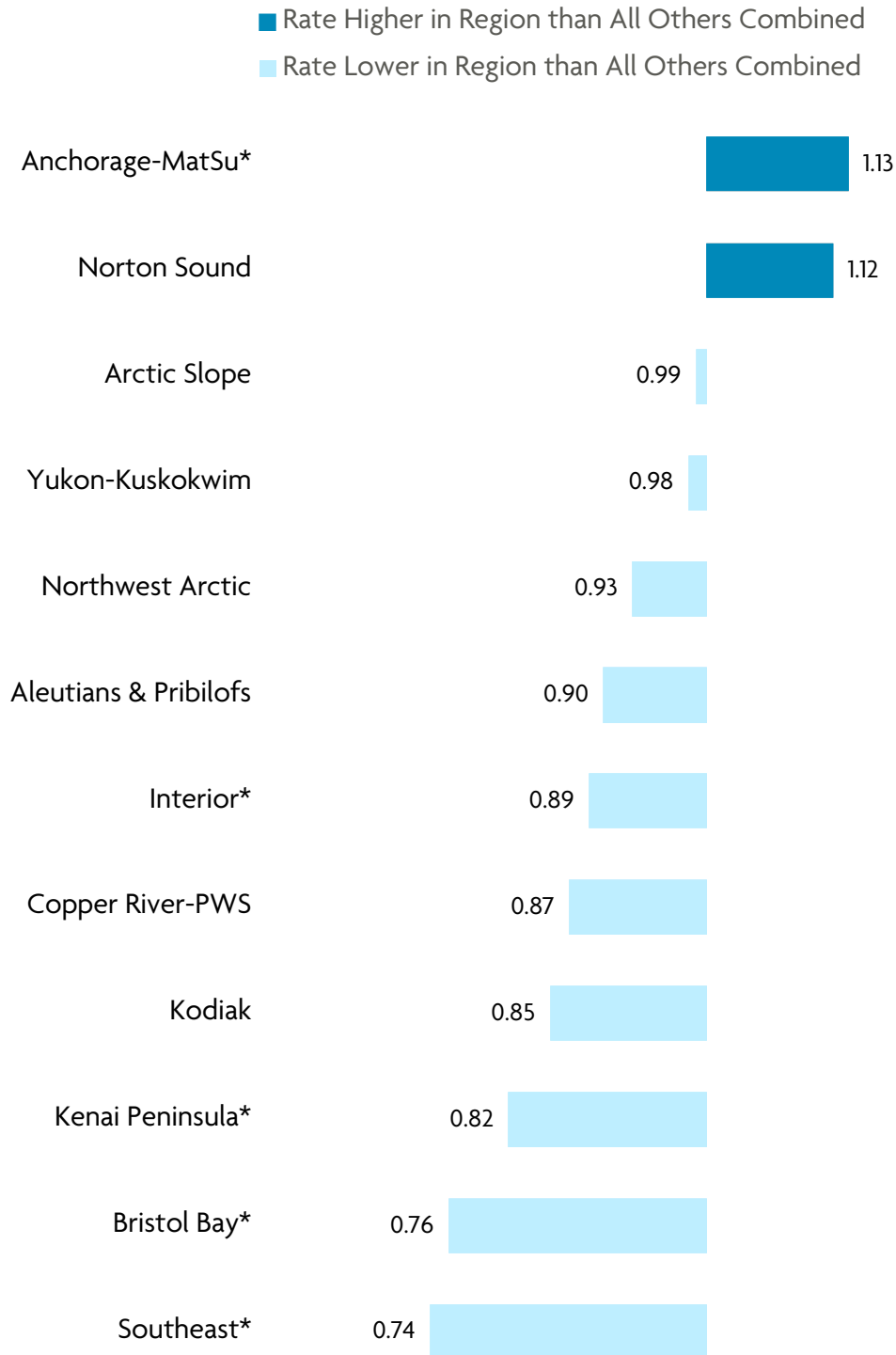


**significant difference, p < 0.05*

DETAILED LEADING CAUSES OF DEATH

Figure 141. All-Cause Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Detailed Leading Causes of Death

1. Cancer Mortality

Cancer was the leading cause of death among Alaska Native people, both sexes combined. It was the leading cause of death among Alaska Native females and the second leading cause of death among Alaska Native males. Cancer accounted for 18.1% (n=979) of all deaths. The cancer mortality rate for Alaska Native people, both sexes combined, was significantly higher than for U.S. all races (RR=1.3). Rates were significantly higher for Alaska Native females (RR=1.4) and Alaska Native males (RR=1.3) separately, compared to U.S. all races females and males, respectively.

Among Alaska Native people, both sexes combined, three types of cancers comprised half (50%) of all cancer deaths: cancer of the lung and bronchus 23%; colon and rectum 16%; and breast cancer 6%. Among Alaska Native females, the leading cancer deaths were lung and bronchus (22%), colon and rectum (17%), and breast cancers (12%). Among Alaska Native males, the leading cancer deaths were lung and bronchus (23%), colon and rectum (14%), and oral cancers (5%).

During 2014-2018, there were 276 excess deaths from cancer among Alaska Native people, both sexes combined. This comprised 12.2% of all excess deaths. Among Alaska Native females cancer accounted for 14.6% (n=150) of excess deaths, the second largest cause of excess female deaths. Among Alaska Native males, cancer accounted for 10.1% (n=123) of all excess deaths, the fourth largest cause of excess male deaths.

Age-specific cancer mortality rate ratios for Alaska Native people, both sexes combined, compared to U.S. all races, ranged from 1.0 to 1.3, and were highest in the 45 year and older age groups. Rates were significantly higher for Alaska Native females compared to U.S. all races females for all age groups 45 years and older. Among Alaska Native males, cancer mortality rates were significantly higher than U.S. all races male rates for the 45–54 years and 65 years and older age groups.

Among Alaska Native people, the Arctic Slope (RR=1.5) service region had a significantly higher cancer mortality rate than the rest of the state combined. The Southeast (RR=0.7) service region had a significantly lower cancer mortality rate than the rest of the state combined.

There was a significant decrease (8.2%) in Alaska Native cancer mortality rates between 1980-1983 and 2014-2018. U.S. all races rates also decreased significantly (23.8%) during the same time period.

DETAILED LEADING CAUSES OF DEATH

Table 20. Cancer Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

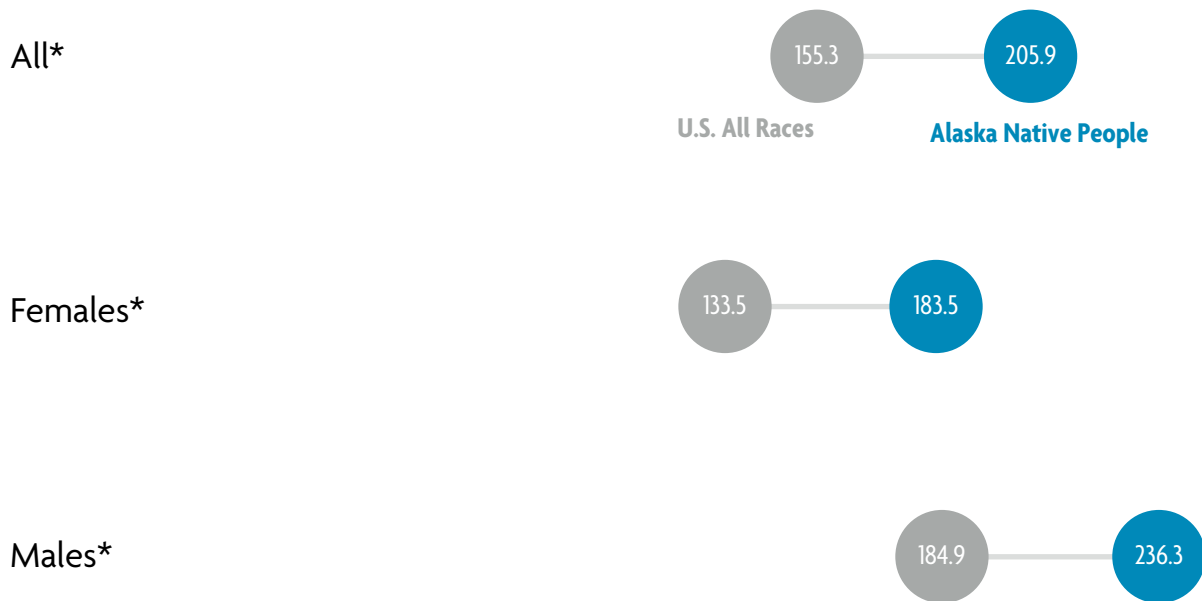
	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
All	979	18.1%	205.9	2,984,050	21.7%	155.3	1.3	1.25 - 1.58
Female	478	19.7%	183.5	1,413,665	21.0%	133.5	1.4	1.26 - 1.50
Male	501	16.8%	236.3	1,570,385	22.5%	184.9	1.3	1.17 - 1.39

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Figure 142. Cancer Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Age-Adjusted Rate per 100,000 People



* significant difference, $p < 0.05$

Cancer Age-Specific Mortality Rates

Figure 143a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

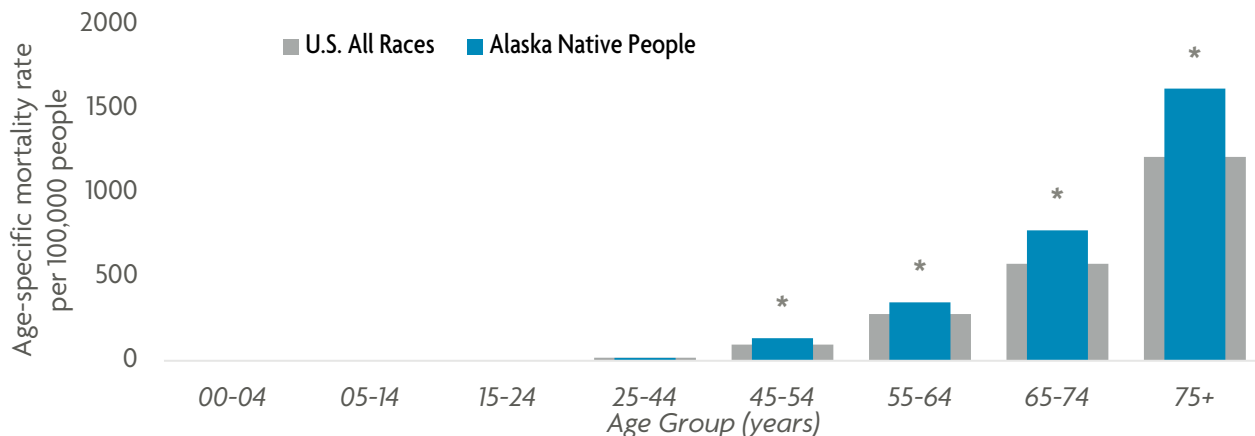


Figure 143b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

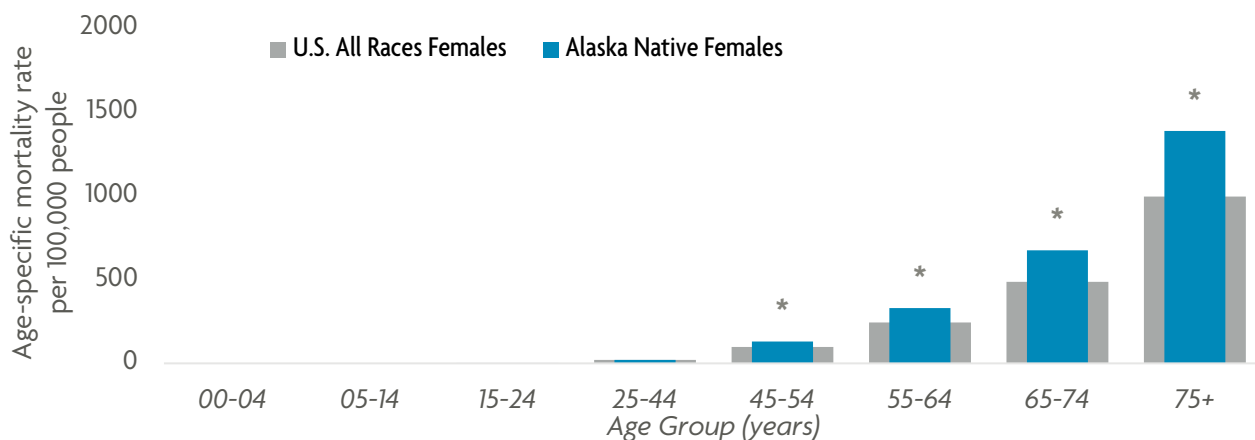
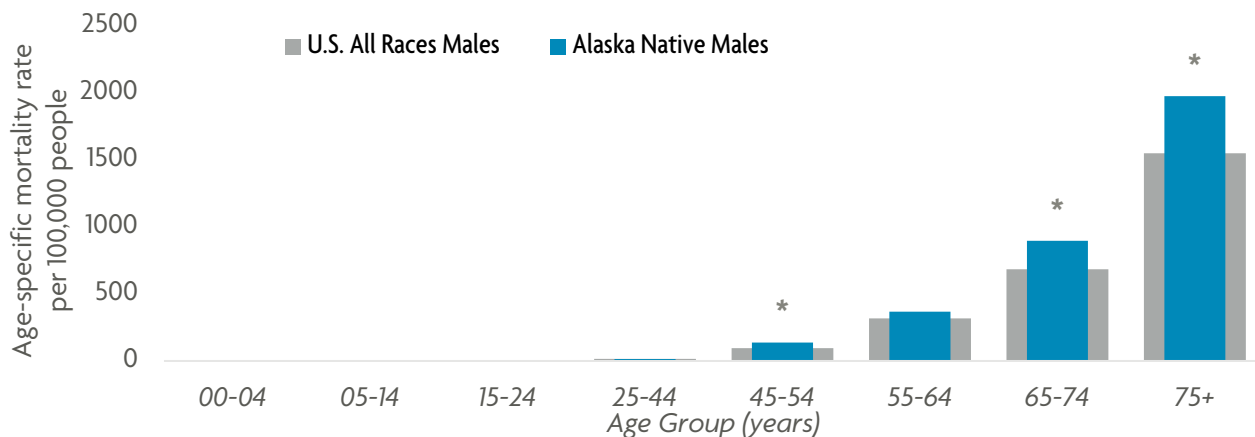


Figure 143c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Table 21. Age-Specific Cancer Mortality Rates among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

All								
Age Groups (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	2.0	-	17.5	134.1	348.0	777.7	1622.8
U.S. All Races	2.0	2.1	3.3	18.3	96.4	278.9	578.6	1215.6
Rate Ratio	-	1.0	-	1.0	1.4	1.2	1.3	1.3
Females								
Age Groups (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	20.6	130.6	329.5	674.4	1385.8
U.S. All Races	1.8	1.9	2.6	20.6	97.8	243.5	486.4	995.1
Rate Ratio	-	-	-	1.0	1.3	1.4	1.4	1.4
Males								
Age Groups (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	14.4	137.6	367.9	895.5	1973.3
U.S. All Races	2.1	2.2	4.0	16.1	95.0	317.0	683.7	1548.6
Rate Ratio	-	-	-	0.9	1.4	1.2	1.3	1.3

- Rate not reported for < 5 cases

Table 22. Trends in Cancer Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People	U.S. All Races	Rate Ratio	
1980-1983	224.3	203.9	1.1	
1984-1988	243.3	207.6	1.2	*
1989-1993	245.4	209.9	1.2	*
1994-1998	248.9	202.9	1.2	*
1999-2003	239.5	196.3	1.2	*
2004-2008	226.3	181.7	1.2	*
2009-2013	234.6	168.9	1.4	*
2014-2018	205.9	155.3	1.3	*
% Change	-8.2%	-23.8%		

*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 144. Overall Change in Cancer Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

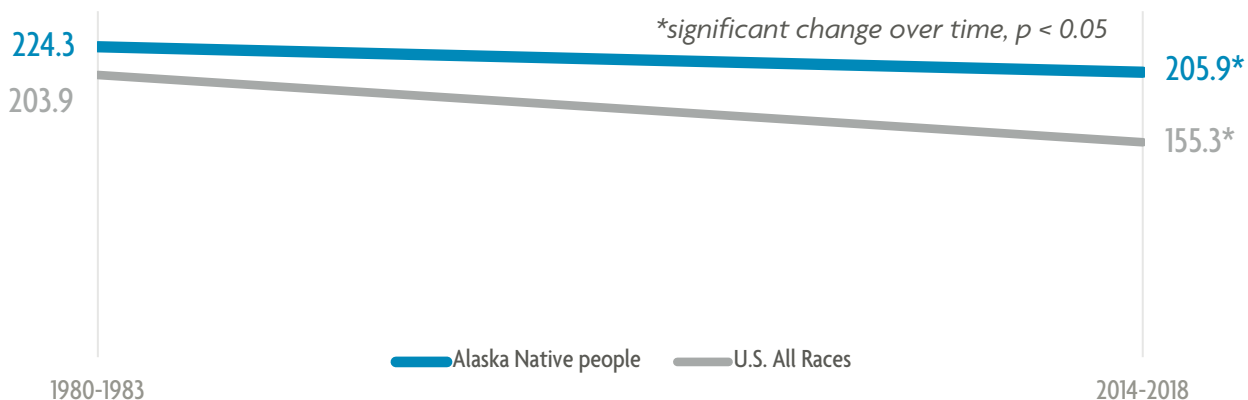
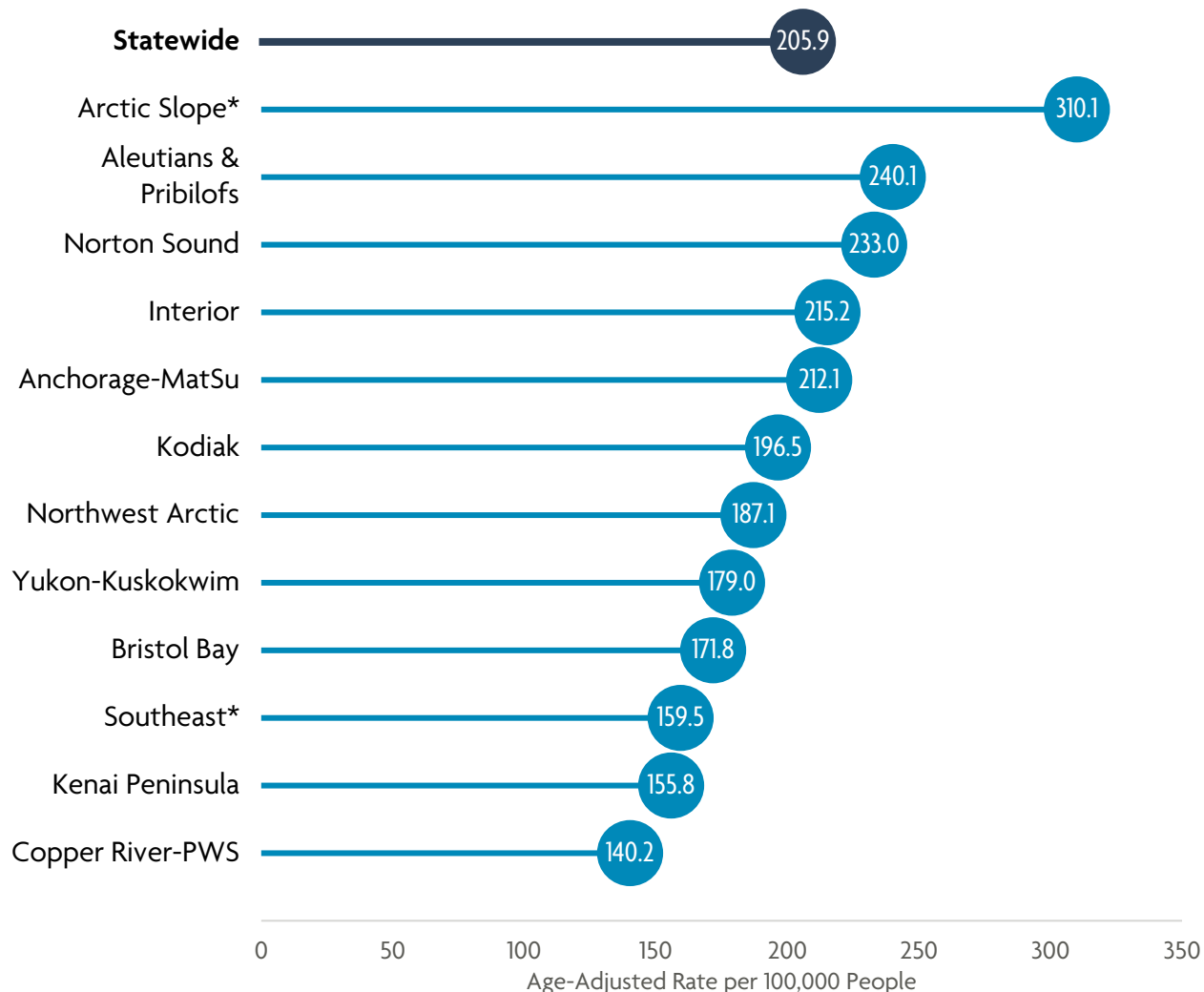


Figure 145. Cancer Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

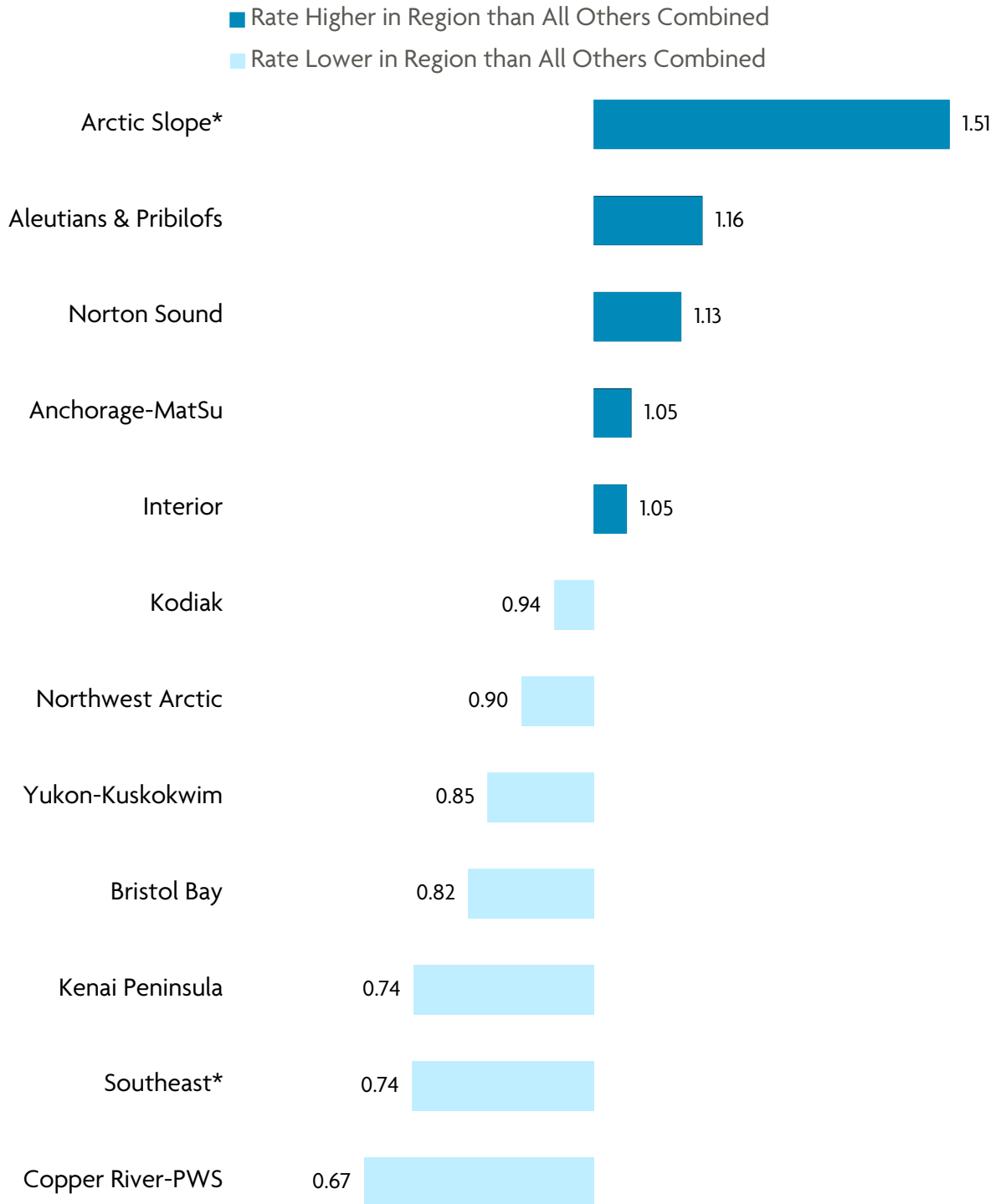


**significant difference, p < 0.05*

DETAILED LEADING CAUSES OF DEATH

Figure 146. Cancer Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Detailed Leading Causes of Death

2. Heart Disease Mortality

Heart disease was the second leading cause of death among Alaska Native people, both genders combined. It ranked second among Alaska Native females and first among Alaska Native males. Heart disease accounted for 16.5% (n=893) of all deaths among Alaska Native people. For the first time, Alaska Native females had a significantly higher heart disease mortality rate than U.S. all races females. The rates for Alaska Native males were significantly higher than those of U.S. all races males (RR=1.3).

Compared to U.S. all races, age-specific rates of heart disease mortality for Alaska Native people, both genders combined, ranged from 1.1 to 3.2. Rate ratios were significantly higher for Alaska Native people compared to U.S. all races for the 25 to 75+ year age groups. These trends were similar for Alaska Native males. Among Alaska Native females, the 25-44 year age group had significantly higher heart disease mortality rates compared to U.S. all races females.

Examining heart disease mortality rates by service region showed that no regions had significantly different heart disease mortality rates than the respective remainder of the state.

Heart disease mortality rates for Alaska Native people declined 23.5% between 1980-1983 and 2014-2018. Heart disease mortality for U.S. all races declined 58% during this time period.

DETAILED LEADING CAUSES OF DEATH

Table 23. Heart Disease Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

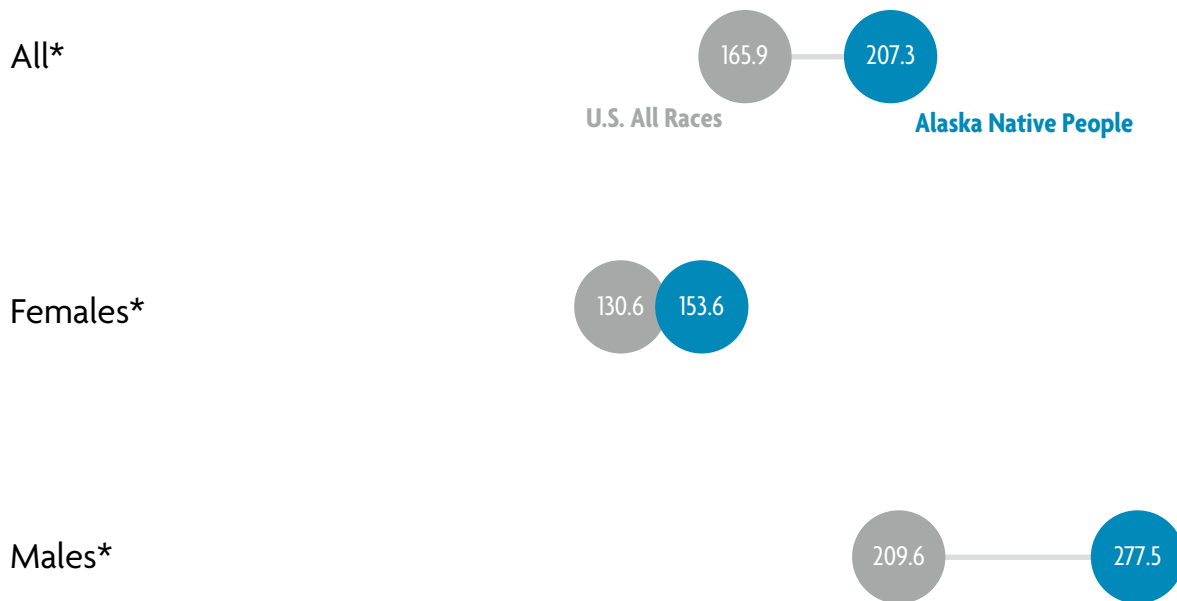
	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
All	893	16.5%	207.3	3,186,288	23.2%	165.9	1.2	1.17 - 1.33
Female	352	14.5%	153.6	1,484,661	22.0%	130.6	1.2	1.06 - 1.31
Male	541	18.2%	277.5	1,702,627	24.2%	209.6	1.3	1.22- 1.44

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Figure 147. Heart Disease Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Age-Adjusted Rate per 100,000 People



*significant difference, $p < 0.05$

Heart Disease Age-Specific Mortality Rates

Figure 148a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

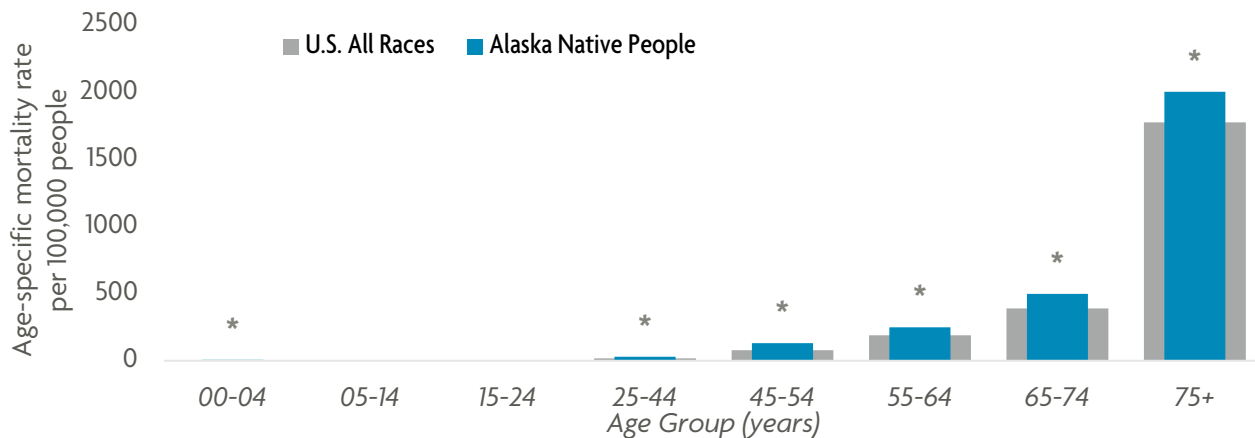


Figure 148b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

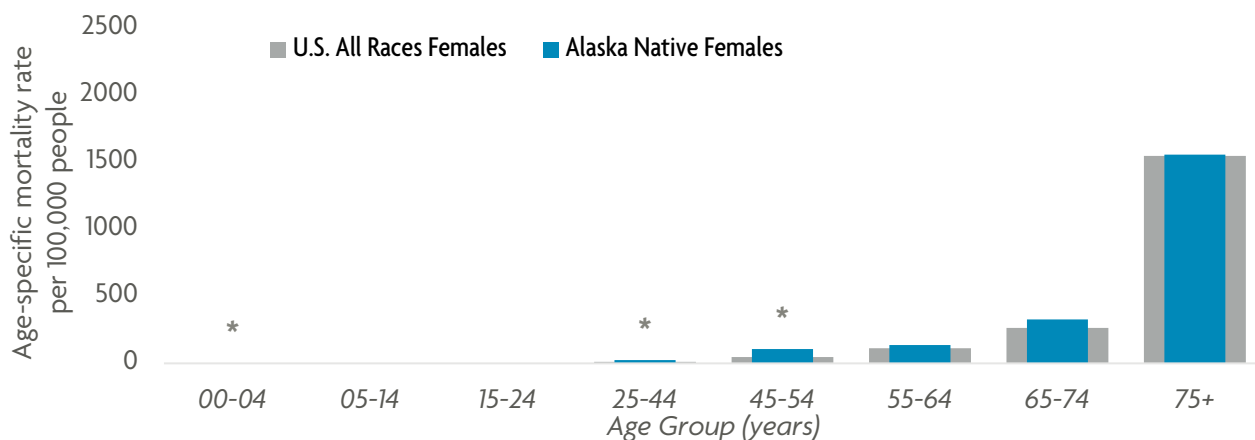
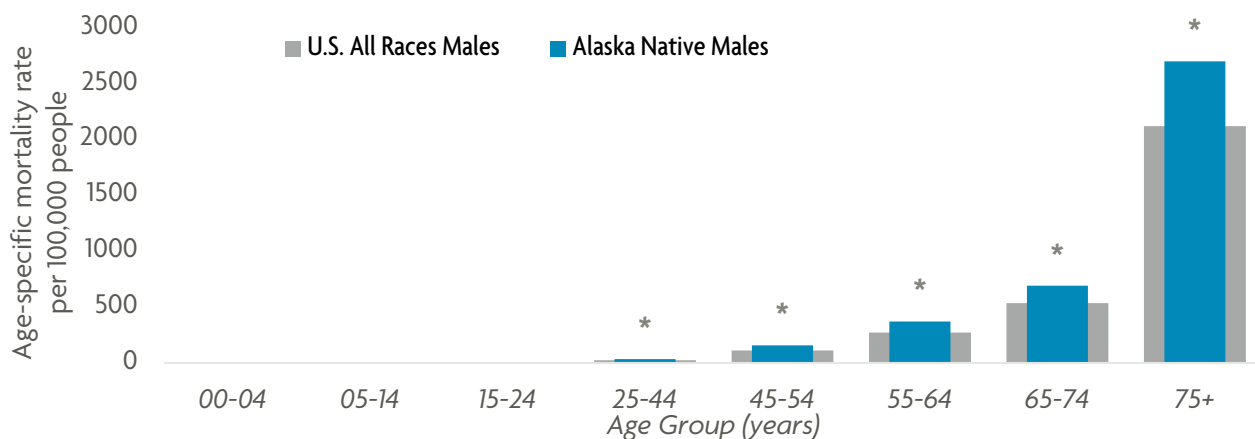


Figure 148c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Table 24. Age-Specific Heart Disease Mortality Rates among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

All								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	6.9	-	4.2	29.4	131.8	249.5	499.1	2005.0
U.S. All Races	2.2	0.5	2.2	17.6	78.7	189.2	390.6	1776.8
Rate Ratio	3.2	-	1.9	1.7	1.7	1.3	1.3	1.1
Females								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	25.0	106.7	136.5	327.2	1555.7
U.S. All Races	2.1	0.4	1.5	11.2	46.8	112.4	264.1	1545.7
Rate Ratio	-	-	-	2.2	2.3	1.2	1.2	1.0
Males								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	33.8	156.9	370.3	690.9	2697.1
U.S. All Races	2.2	0.5	2.8	23.8	111.5	271.7	534.7	2118.5
Rate Ratio	-	-	-	1.4	1.4	1.4	1.3	1.3

- Rate not reported for < 5 cases

Table 25. Trends in Heart Disease Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People	U.S. All Races	Rate Ratio	
1980-1983	270.9	395.1	0.7	*
1984-1988	288.1	362.5	0.8	*
1989-1993	271.9	310.2	0.9	*
1994-1998	252.0	280.2	0.9	*
1999-2003	211.6	247.2	0.9	*
2004-2008	169.0	206.1	0.8	*
2009-2013	190.3	175.0	1.1	*
2014-2018	207.3	165.9	1.2	*
% Change	-23.5%	-58.0%		

*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 149. Overall Change in Heart Disease Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

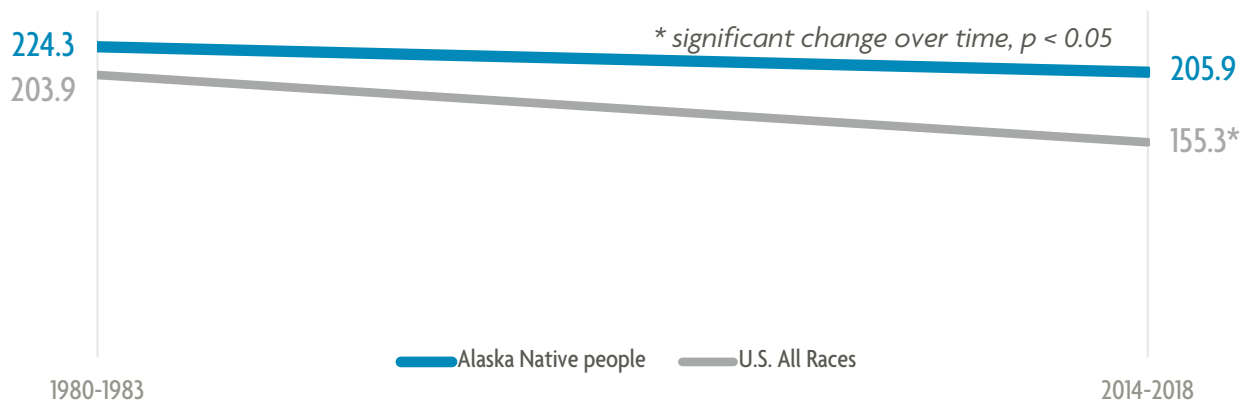
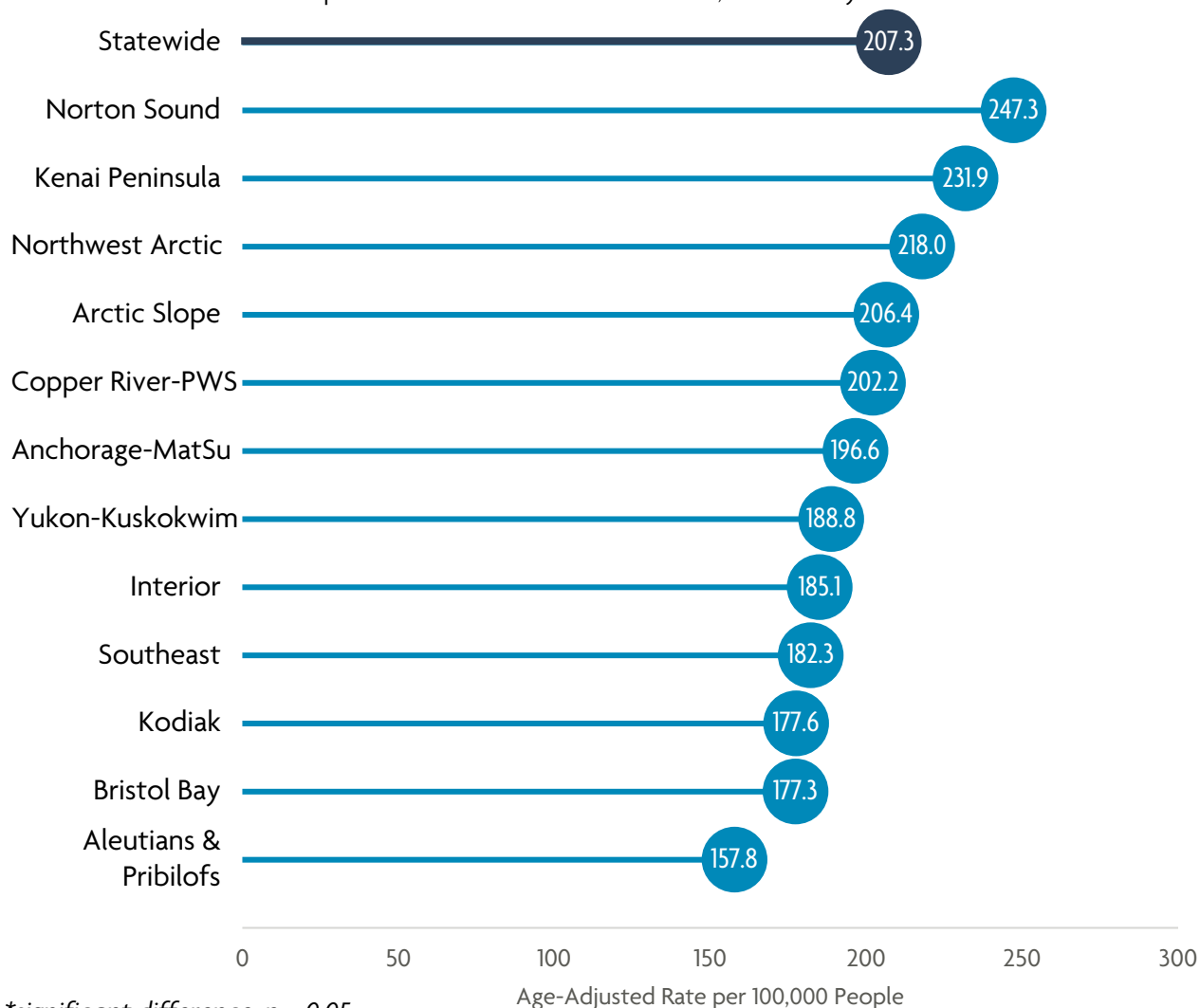


Figure 150. Heart Disease Mortality Rates by Region, Alaska Native People, 2014-2018

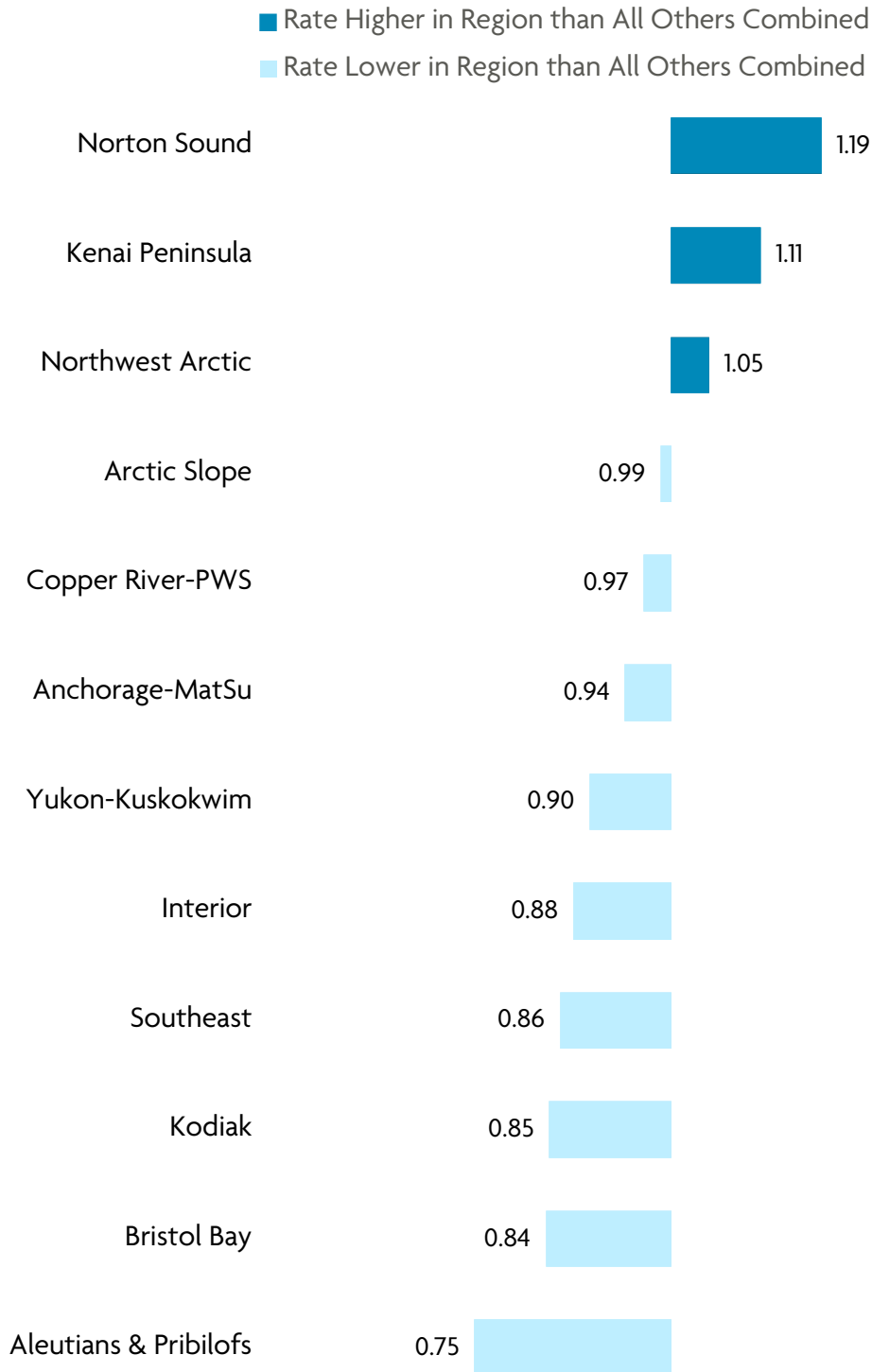
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



DETAILED LEADING CAUSES OF DEATH

Figure 151. Heart Disease Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



**significant difference, $p < 0.05$*

Detailed Leading Causes of Death

3. Unintentional Injury Mortality

Unintentional injury was the third leading cause of death for Alaska Native people, both sexes combined. It ranked third among causes of death for both Alaska Native females and males. Unintentional injury comprised 12.9% (n= 698) of all Alaska Native deaths. For Alaska Native people, both sexes combined, unintentional injury mortality rates were 2.5 times the U.S. all races rate. Rates for Alaska Native females were 2.8 times the U.S. all races female rate. Rates for Alaska Native males were 2.3 times those for U.S. all races males.

The top five causes of unintentional injury deaths among Alaska Native people, both sexes combined, accounted for 70% of all unintentional injury deaths. The leading causes were: poisoning (28%) – just more than half of which were overdoses of alcohol or drugs, motor vehicle traffic injuries (14%), drowning and watercraft injuries (11%), exposure to the elements (10%), and ATV injuries (7%). Firearm injuries comprised less than 1% of all unintentional injury mortality.

Unintentional injury was the number one cause of excess deaths among Alaska Native people, accounting for 19.7% (n=445) among both sexes combined. Unintentional injury comprised 16.7% (n=172) of all excess deaths among Alaska Native females and 22.2% (n=271) of excess deaths among Alaska Native males.

Unintentional injuries were the leading cause of years of potential life lost. This cause accounted for 23% (23,323 years) of all years of potential life lost before age 75 for Alaska Native people, both sexes combined; 20.3% (8,243 years) for Alaska Native females; and 24.9% (15,080 years) for Alaska Native males.

Unintentional injury mortality rates were significantly higher for every age group among Alaska Native people, both sexes combined, as compared to U.S. all races. Alaska Native females had significantly higher unintentional injury mortality rates for the 24-64 and the 75+ age groups as compared U.S. all races females. Unintentional injury mortality rates were significantly higher for all age groups, except for 5-14 year olds, among Alaska Native males as compared to U.S. all races males.

The Southeast (RR=0.7), Arctic Slope (RR=0.6), and Kenai Peninsula (RR=0.4) service regions had significantly lower mortality rates.

The unintentional injury mortality rate appears to have declined 37.7% for Alaska Native people, both sexes combined, between 1980-1983 and 2014-2018. U.S. all races experienced a 4% decline during this time period. Caution is warranted when interpreting the trend, as coding and policy changes have had an effect on the frequency that these ICD codes are used on death certificates within the state of Alaska. See further details in Appendix A - Methods.

DETAILED LEADING CAUSES OF DEATH

Table 26. Unintentional Injury Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

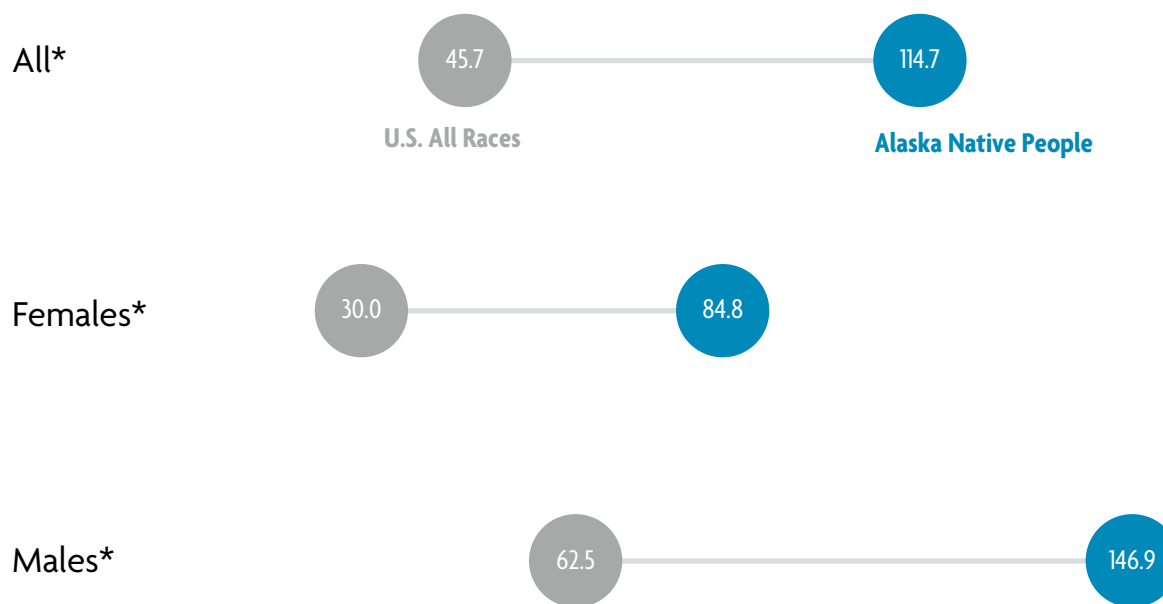
	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
All	698	12.9%	114.7	780,936	5.7%	45.7	2.5	2.33 - 2.70
Female	254	10.5%	84.8	281,207	4.2%	30.0	2.8	2.50 - 3.20
Male	444	14.9%	146.9	499,729	7.4%	62.5	2.3	2.14 - 2.58

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Figure 152. Unintentional Injury Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Age-Adjusted Rate per 100,000 People



*significant difference, $p < 0.05$

Unintentional Injury Age-Specific Mortality Rates

Figure 153a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

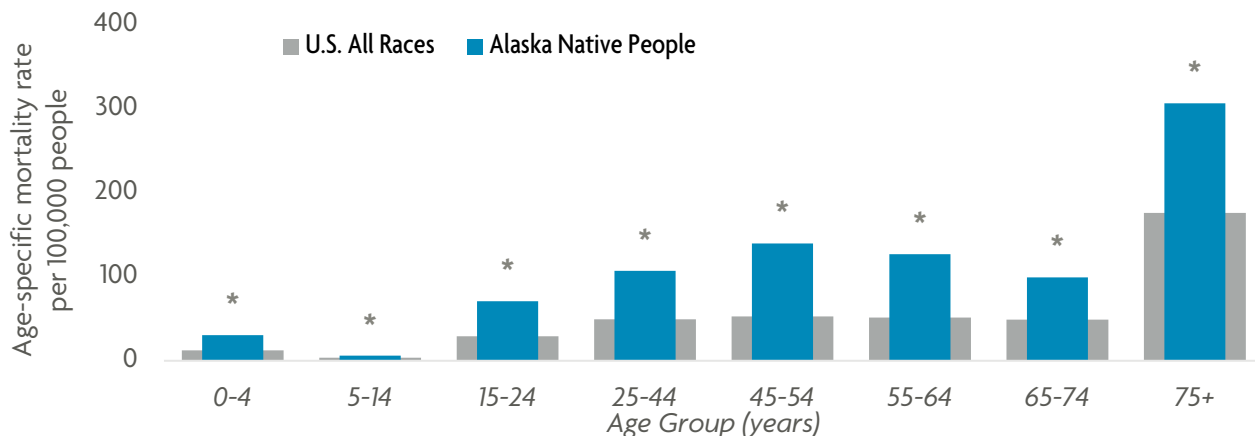


Figure 153b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

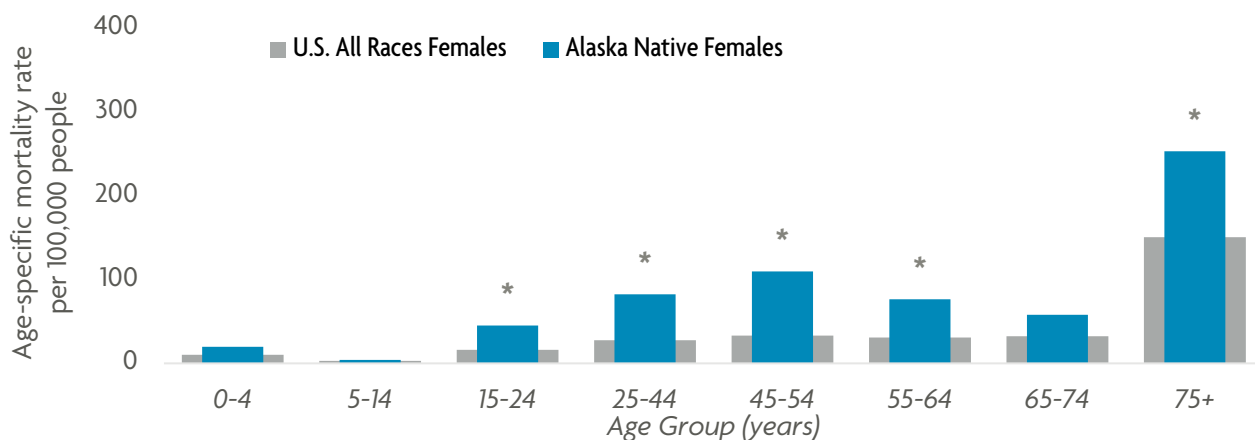
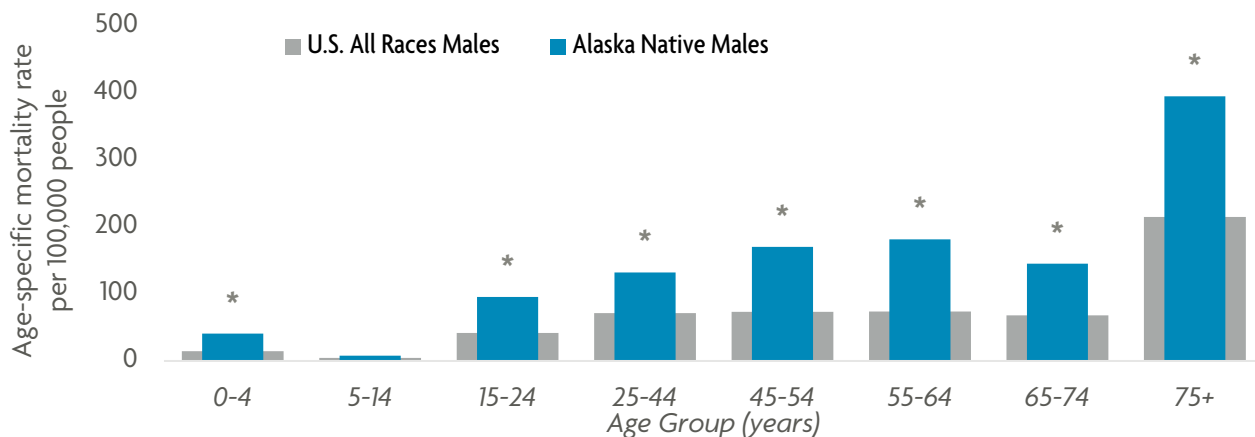


Figure 153c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Table 27. Age-Specific Unintentional Injury Mortality Rates among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

All								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	30.5	6.1	70.9	107.3	139.9	127.2	99.4	307.0
U.S. All Races	12.5	3.7	29.3	49.5	52.9	51.5	49.0	176.3
Rate Ratio	2.4	1.6	2.4	2.2	2.6	2.5	2.0	1.7
Females								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	19.8	4.2	45.1	82.3	109.7	76.5	58.0	253.0
U.S. All Races	10.2	2.9	16.2	27.6	33.1	30.8	32.3	150.5
Rate Ratio	1.9	1.5	2.8	3.0	3.3	2.5	1.8	1.7
Males								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	40.8	7.8	95.5	132.0	170.0	181.4	145.1	394.6
U.S. All Races	14.6	4.5	41.8	71.3	73.3	73.8	67.9	214.7
Rate Ratio	2.8	1.7	2.3	1.9	2.3	2.5	2.1	1.8

Table 28. Trends in Unintentional Injury Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People	U.S. All Races	Rate Ratio	
1980-1983	184.1	47.6	3.9	*
1984-1988	174.0	46.1	3.8	*
1989-1993	133.0	41.5	3.2	*
1994-1998	111.0	38.9	2.9	*
1999-2003	107.4	36.1	3.0	*
2004-2008	97.7	40.0	2.4	*
2009-2013	104.8	40.1	2.6	*
2014-2018	114.7	45.7	2.5	*
% Change	-37.7%	-4.0%		

*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 154. Overall Change in Unintentional Injury Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

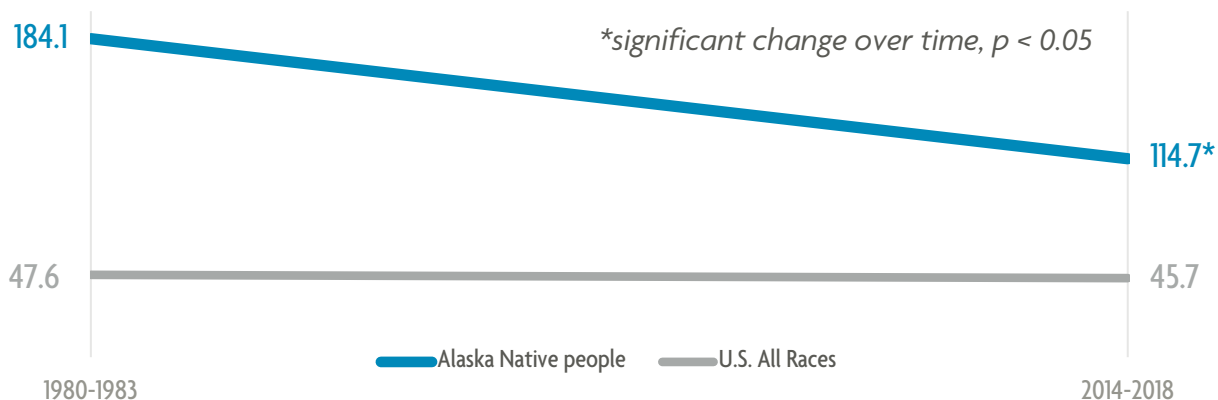
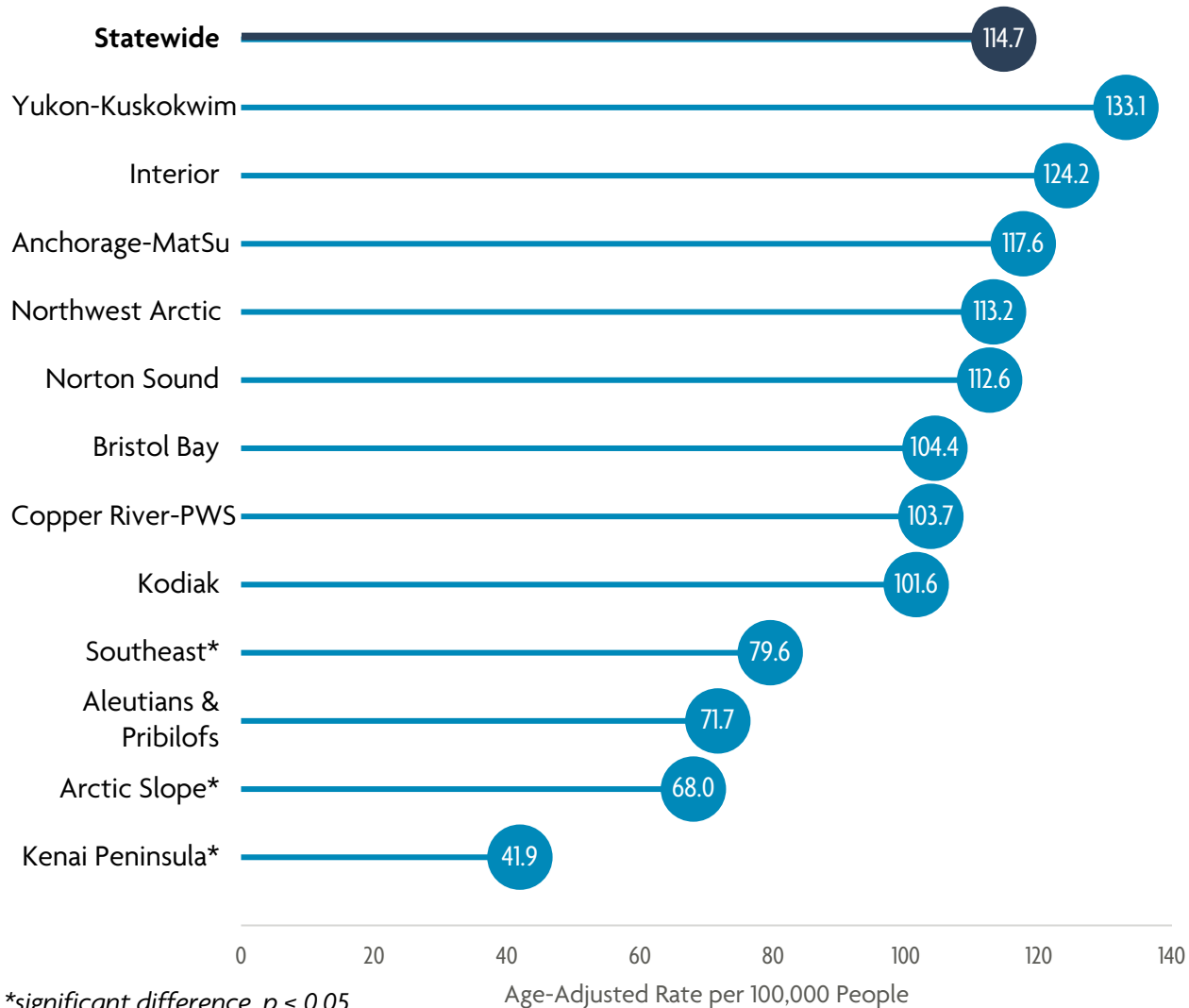


Figure 155. Unintentional Injury Mortality Rates by Region, Alaska Native People, 2014-2018

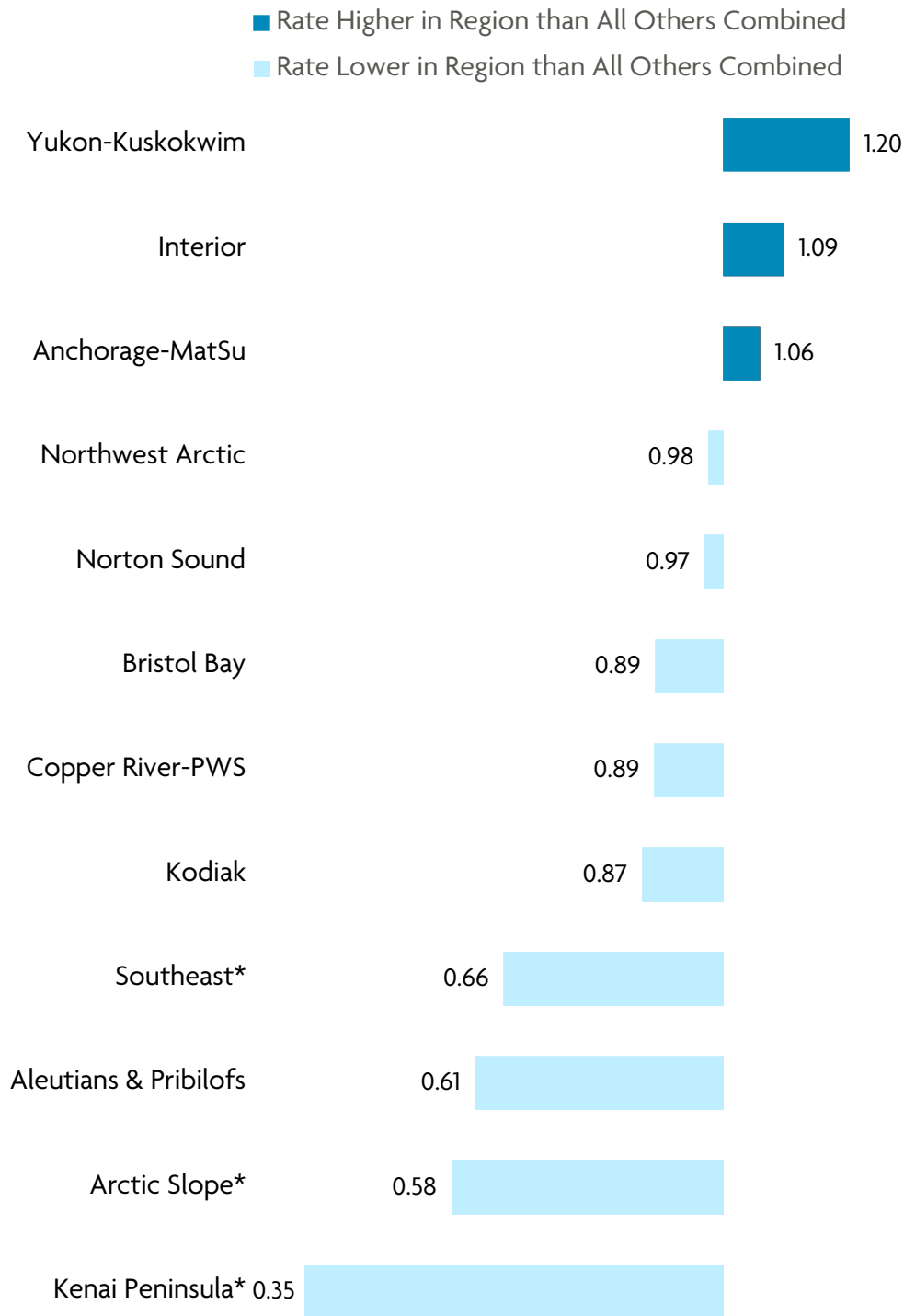
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



DETAILED LEADING CAUSES OF DEATH

Figure 156. Unintentional Injury Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Detailed Leading Causes of Death

4. Suicide Mortality

Suicide was the fourth leading cause of death among Alaska Native people, both sexes combined. It ranked fourth among Alaska Native males and seventh among Alaska Native females. among Alaska Native people, both sexes combined, suicide accounted for 5.6% (n=302) of all death. The suicide mortality rate for Alaska Native people, both sexes combined, was 3.0 times the U.S. all races rates. The rate ratios were 3.5 for Alaska Native females and 2.7 for Alaska Native males compared to U.S. all races females and males respectively.

Nearly half (49%) of suicides among Alaska Native people, both sexes combined, involved firearms. among Alaska Native females, 33% of suicides involved firearms. among Alaska Native males, 54% of suicides involved firearms.

Suicide accounted for 9.7% of all excess deaths among Alaska Native people, both sexes combined (n=220). among Alaska Native females, suicide accounted for 5.6% (n=58) of excess deaths. Suicide accounted for 13.2% (n=161) of excess deaths among Alaska Native males and was the second leading cause of excess deaths for Alaska Native males.

Suicide was the second leading cause of years of potential life lost. Suicide accounted for 13.4% (13,591 years) of all years of potential life lost before age 75 for Alaska Native people, both sexes combined. Suicide accounted for 8.4% (3,409 years) of all years of potential life lost before age 75 for Alaska Native females, and 16.8% (10,182 years) of all years of potential life lost before age 75 for Alaska Native males.

Alaska Native people, both sexes combined, experienced 0.9 to 7.4 times the suicide rates of U.S. all races across age groups. Alaska Native females and Alaska Native males separately had significantly higher suicide mortality rates across age groups from 15 – 54 years. Alaska Native females had suicide rates 2.4 to 9.3 times the U.S. all races female rate. Alaska Native males had rate ratios of 0.8 to 6.9 compared to U.S. all races males.

The Northwest Arctic (RR=1.8) and Yukon-Kuskokwim (RR=1.5) service regions had significantly higher suicide mortality rates than the rest of the state combined. The Bristol Bay (RR=0.50) and Southeast (RR=0.3) service regions had significantly lower suicide mortality rates than the rest of the state combined.

There has been a decrease of 3.3% in the suicide mortality rate among Alaska Native people between 1980-1983 and 2014-2018, but this change was statistically insignificant. U.S. all races had a 3.8% increase, which was also statistically insignificant during this same time period.

DETAILED LEADING CAUSES OF DEATH

Table 29. Suicide Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

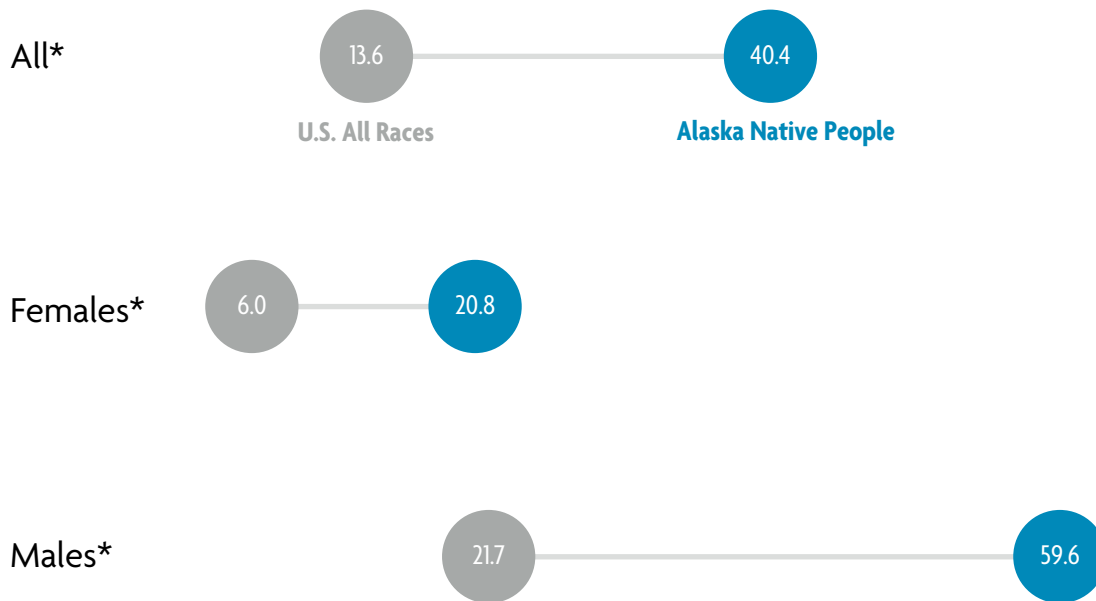
	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
All	302	5.6%	40.4	227,501	1.7%	13.6	3.0	2.66 - 3.33
Female	77	3.2%	20.8	51,075	0.8%	6.0	3.5	2.78 - 4.34
Male	225	7.6%	59.6	176,426	2.5%	21.7	2.7	2.41 - 3.13

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Figure 157. Suicide Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Age-Adjusted Rate per 100,000 People



*significant difference, $p < 0.05$

Suicide Age-Specific Mortality Rates

Figure 158a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

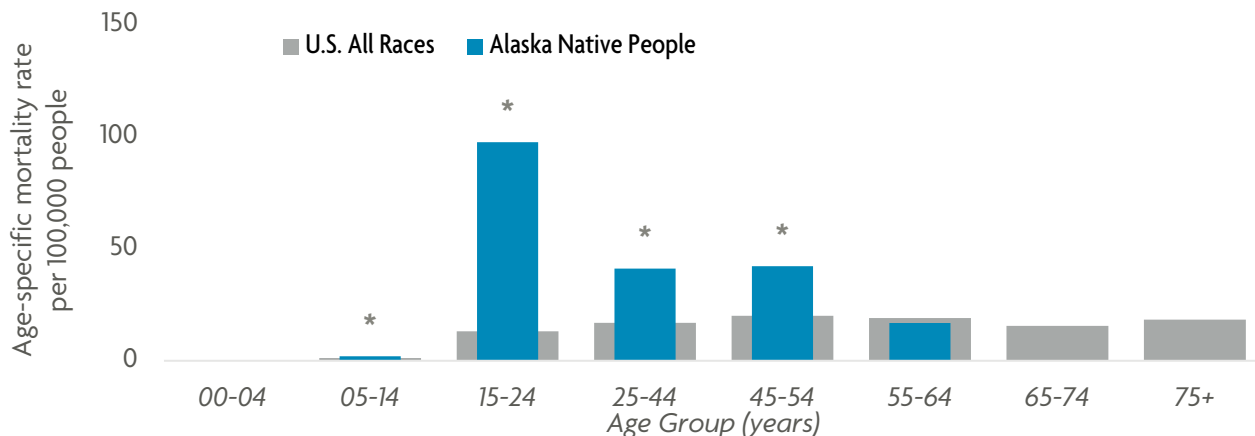


Figure 158b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

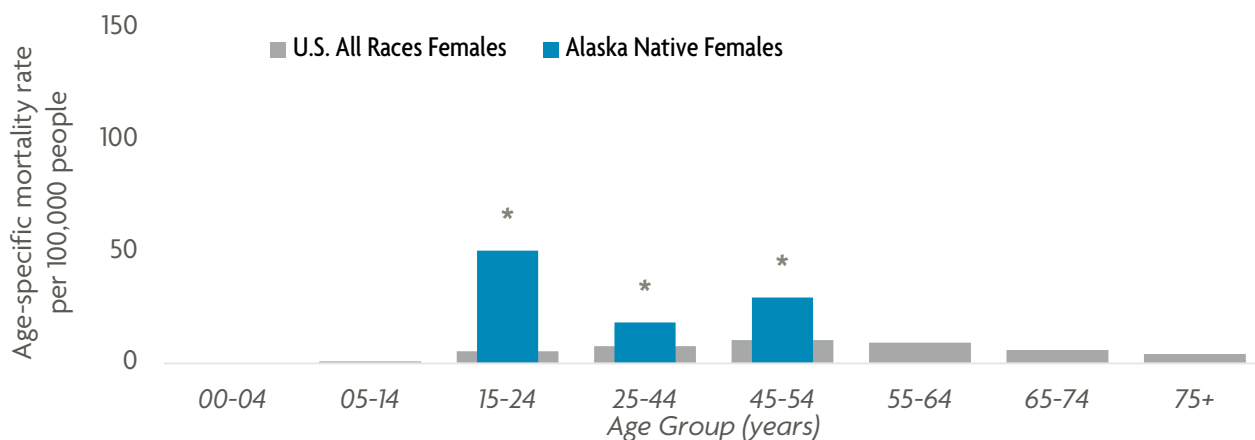
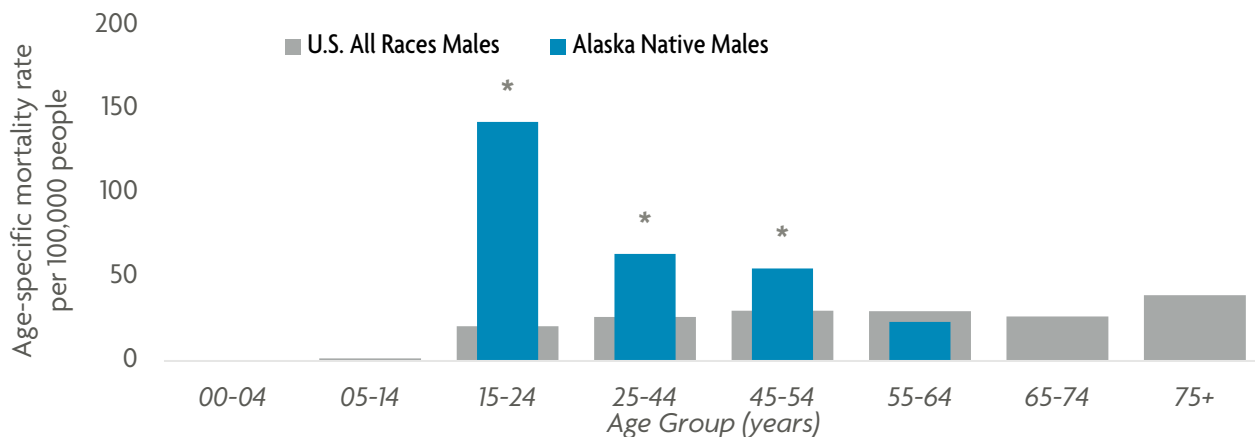


Figure 158c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Table 30. Age-Specific Suicide Mortality Rates among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

All								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	2.0	97.8	41.3	42.3	16.9	-	-
U.S. All Races	-	1.2	13.2	17.0	20.1	19.1	15.6	18.4
Rate Ratio	-	1.7	7.4	2.4	2.1	0.9	-	-
Females								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	50.4	18.3	29.4	-	-	-
U.S. All Races	-	0.9	5.4	7.7	10.4	9.3	6.0	4.2
Rate Ratio	-	-	9.3	2.4	2.8	-	-	-
Males								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	142.5	63.8	55.1	23.3	-	-
U.S. All Races	-	1.5	20.7	26.2	30.0	29.7	26.5	39.2
Rate Ratio	-	-	6.9	2.4	1.8	0.8	-	-

- Rate not reported for < 5 cases

Table 31. Trends in Suicide Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People	U.S. All Races	Rate Ratio	
1980-1983	41.8	13.1	3.2	*
1984-1988	49.5	13.5	3.7	*
1989-1993	46.8	13.0	3.6	*
1994-1998	42.8	12.4	3.5	*
1999-2003	34.7	10.7	3.2	*
2004-2008	42.3	11.3	3.7	*
2009-2013	40.6	12.6	3.2	*
2014-2018	40.4	13.6	3.0	*
% Change	-3.3%	3.8%		

*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 159. Overall Change in Suicide Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

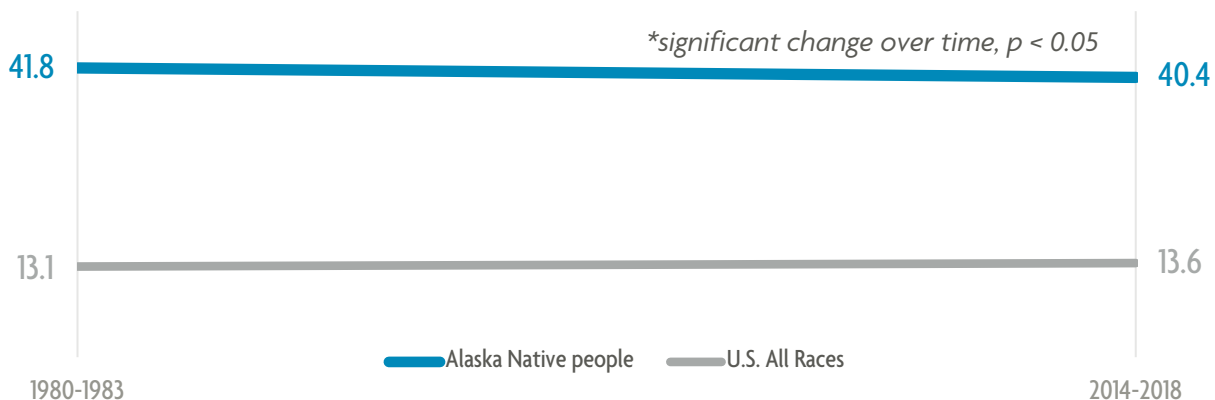
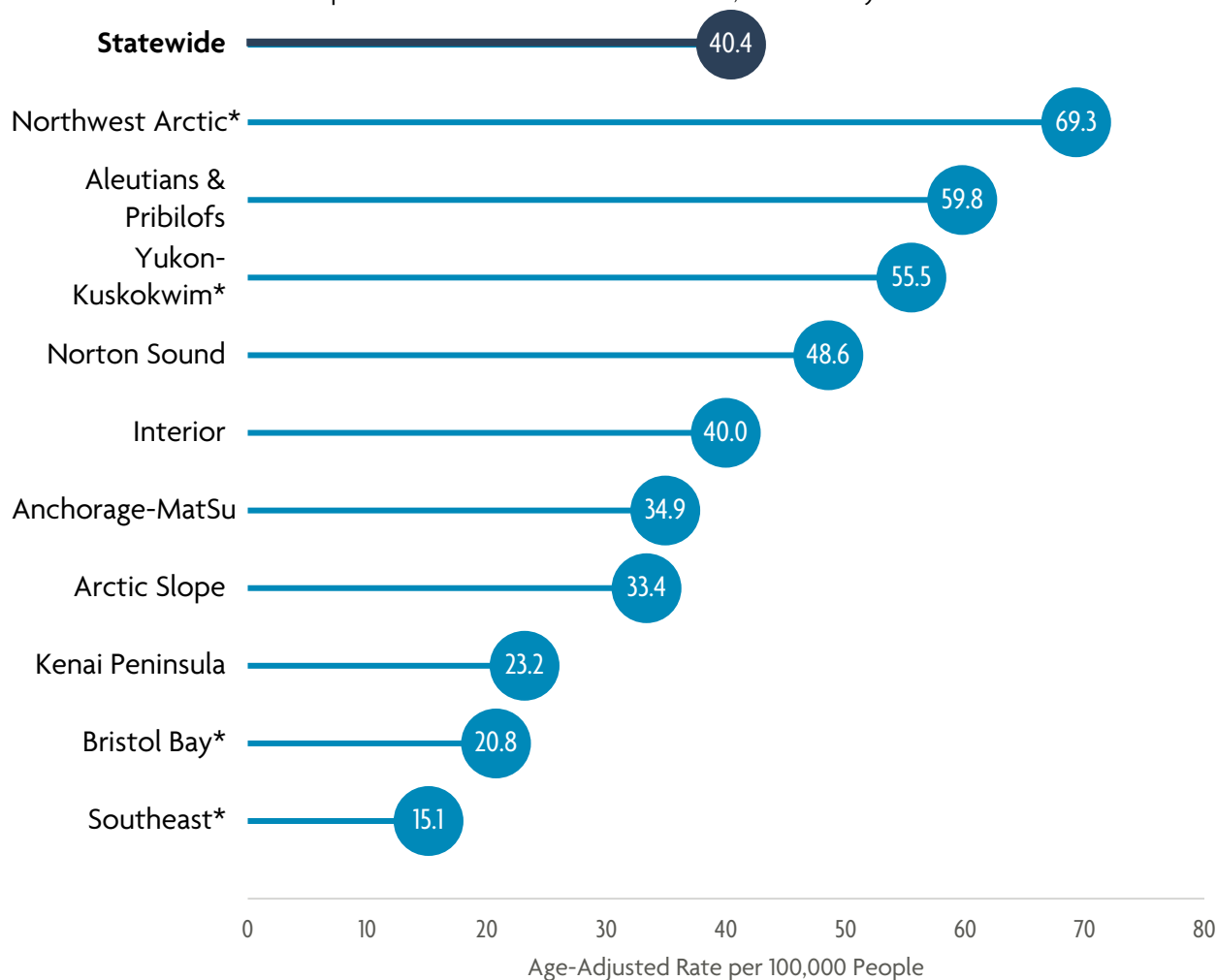


Figure 160. Suicide Mortality Rates by Region, Alaska Native People, 2014-2018

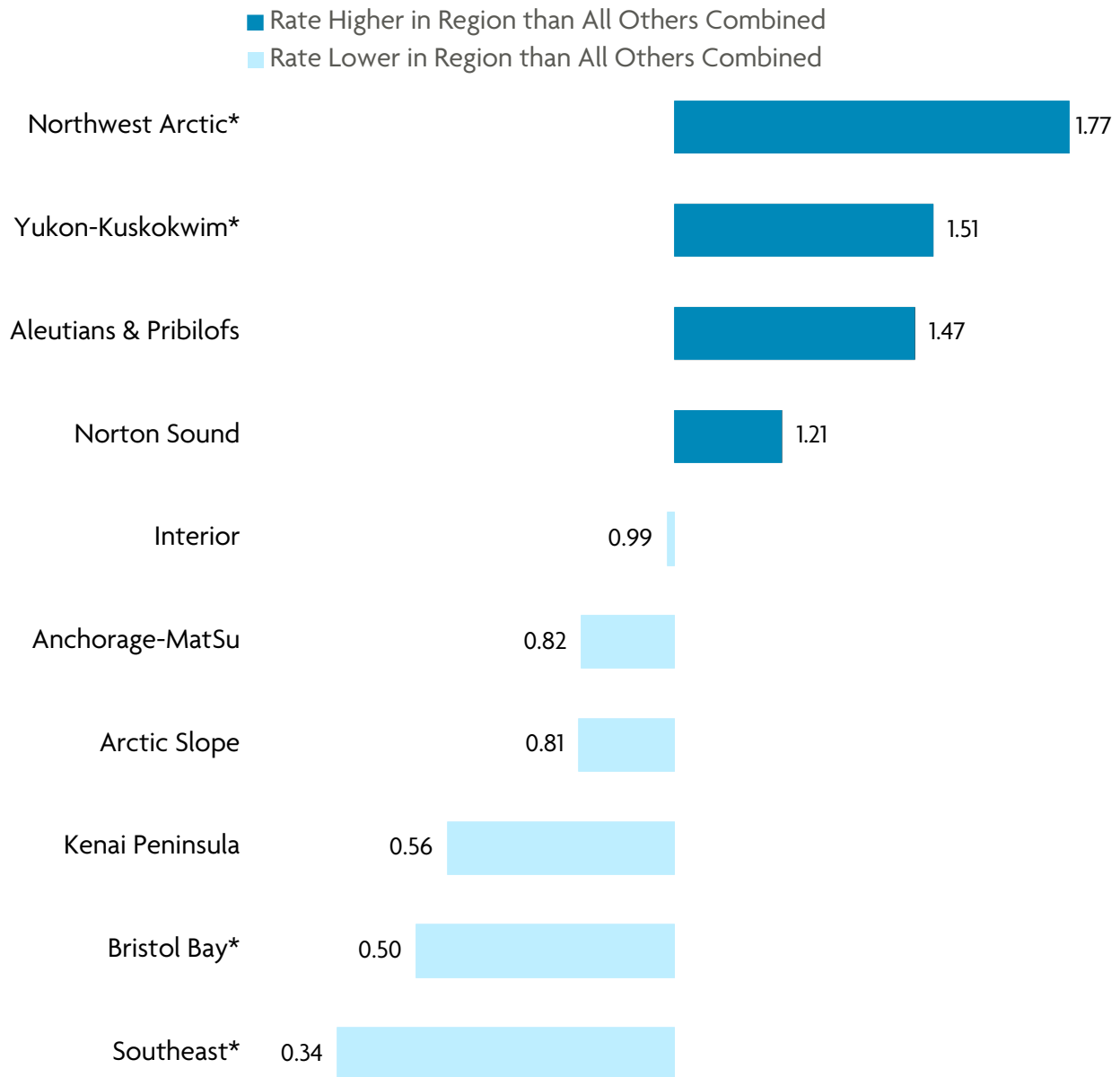
Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



DETAILED LEADING CAUSES OF DEATH

Figure 161. Suicide Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Detailed Leading Causes of Death

5. Chronic Obstructive Pulmonary Disease (COPD) Mortality

COPD was the fifth leading cause of death among Alaska Native people, both sexes combined, and for each sex separately. COPD accounted for 5.1% (n=277) of all deaths. Alaska Native people, both sexes combined, had a COPD mortality rate 1.7 times the U.S. all races rate. The mortality rate for Alaska Native females was 1.5 times the U.S. all races female rate. The mortality rate for Alaska Native males was 1.9 times the U.S. all races male rate.

COPD accounted for 5.2% (n=177) of excess deaths among Alaska Native people, both sexes combined. Among Alaska Native females, COPD accounted for 4.6% (n=47) of excess female deaths whereas among Alaska Native males, COPD accounted for 5.6% (n=69) of excess male deaths.

Age-specific COPD mortality rates were a significant 1.5 to 1.7 times higher for Alaska Native people, both sexes combined, compared to U.S. all races.

The Norton Sound (RR=1.8) service region had significantly higher rates than the rest of the state. The Southeast (RR=0.7) service region had significantly lower rates than the rest of the state.

Alaska Native COPD mortality rates rose 163.8% between 1980-1983 and 2014-2018. COPD mortality rates increased 33.1% among U.S. all races during this same time period.

DETAILED LEADING CAUSES OF DEATH

Table 32. COPD Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

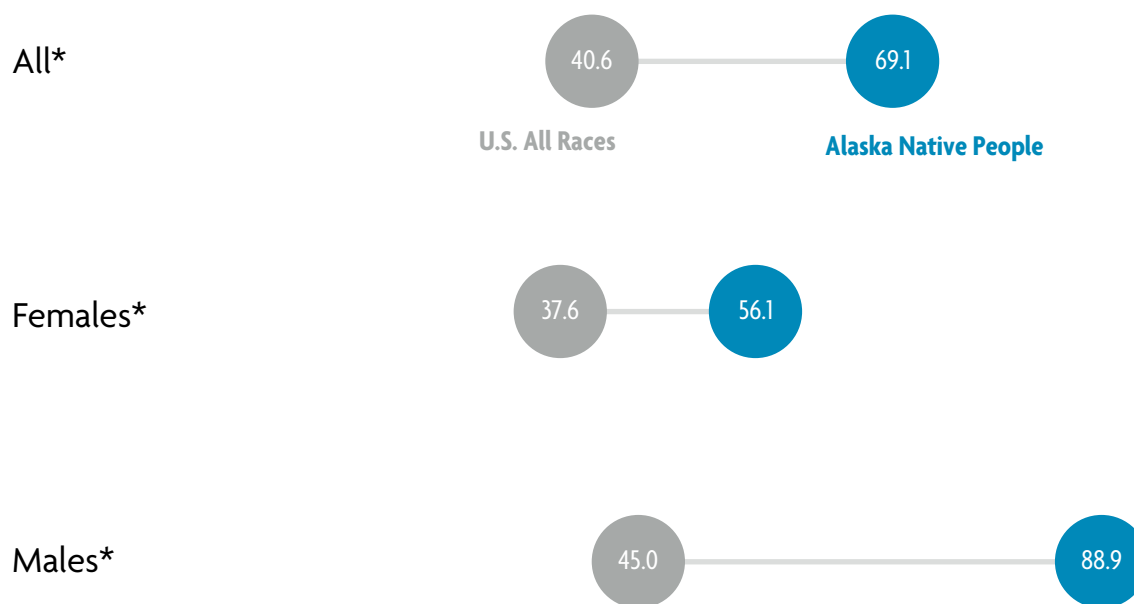
	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
All	277	5.1%	69.1	776,425	5.7%	40.6	1.7	1.51 - 1.92
Female	129	5.3%	56.1	411,171	6.1%	37.6	1.5	1.26 - 1.77
Male	148	5.0%	88.9	365,254	5.2%	45.0	2.0	1.68 - 2.32

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Figure 162. COPD Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Age-Adjusted Rate per 100,000 People



*significant difference, $p < 0.05$

COPD Age-Specific Mortality Rates

Figure 163a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

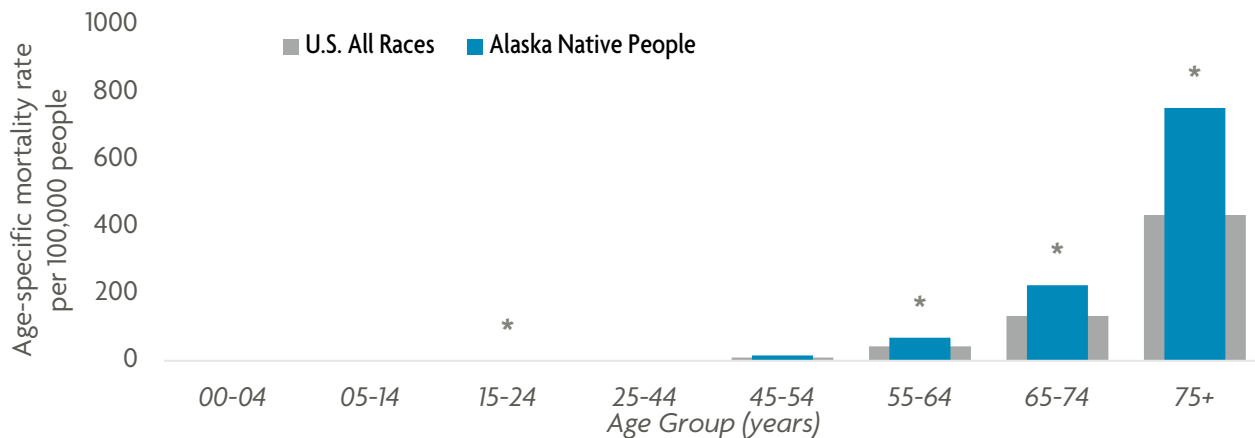


Figure 163b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

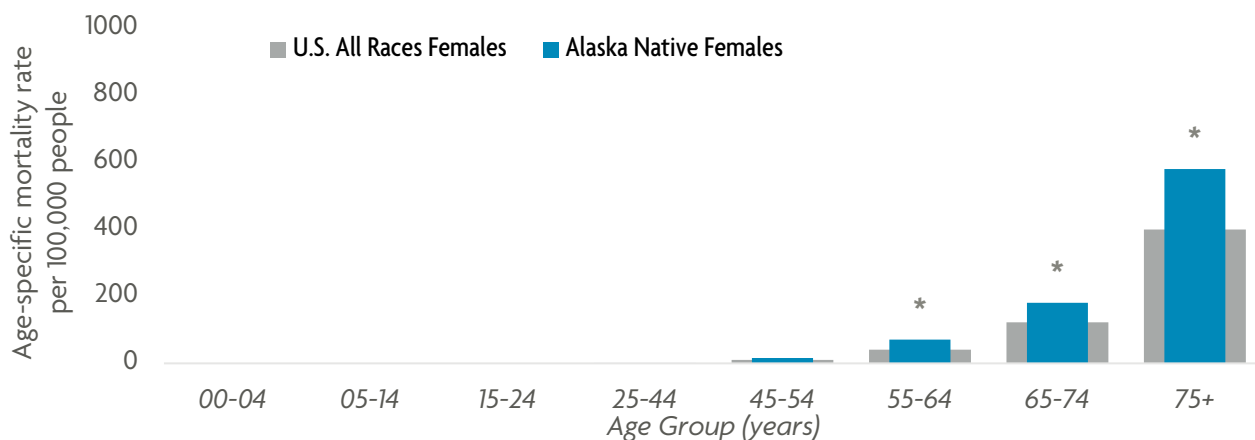
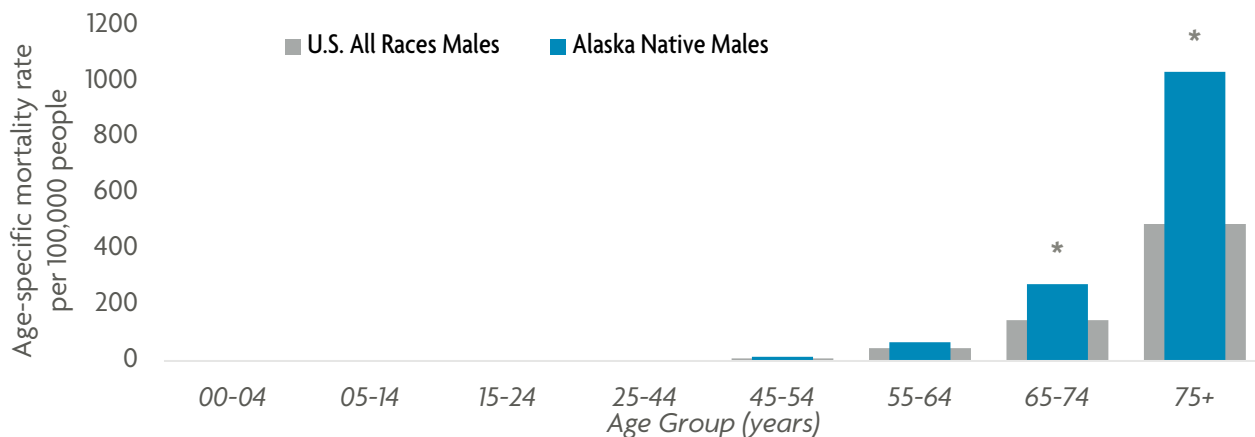


Figure 163c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Table 33. Age-Specific COPD Mortality Rates among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

All								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	-	15.6	68.9	225.0	753.6
U.S. All Races	0.3	0.4	0.4	1.2	9.8	43.2	133.5	434.6
Rate Ratio	-	-	-	-	1.6	1.6	1.7	1.7
Females								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	-	16.0	70.7	180.5	579.5
U.S. All Races	0.2	0.3	0.3	1.3	10.4	40.7	122.5	398.9
Rate Ratio	-	-	-	-	1.5	1.7	1.5	1.5
Males								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	-	15.2	67.0	274.7	1034.2
U.S. All Races	0.4	0.4	0.5	1.3	9.1	45.8	146.1	490.2
Rate Ratio	-	-	-	-	1.7	1.5	1.9	2.1

- Rate not reported for < 5 cases

Table 34. Trends in COPD Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People	U.S. All Races	Rate Ratio	
1980-1983	26.2	30.5	0.9	
1984-1988	44.5	35.8	1.2	*
1989-1993	58.4	39.2	1.5	*
1994-1998	68.3	42.2	1.6	*
1999-2003	63.0	43.6	1.4	*
2004-2008	57.3	43.3	1.3	*
2009-2013	65.7	45.7	1.4	*
2014-2018	69.1	40.6	1.7	*
% Change	163.8%	33.1%		

*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 164. Overall Change in COPD Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

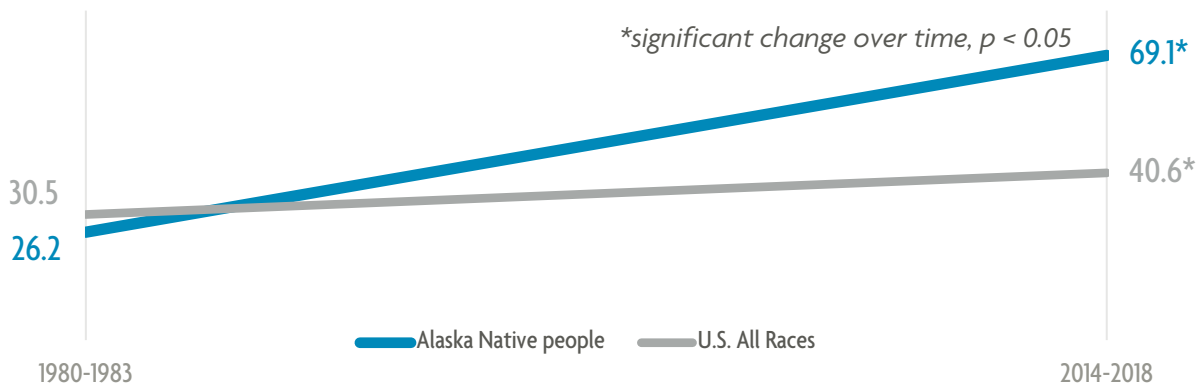
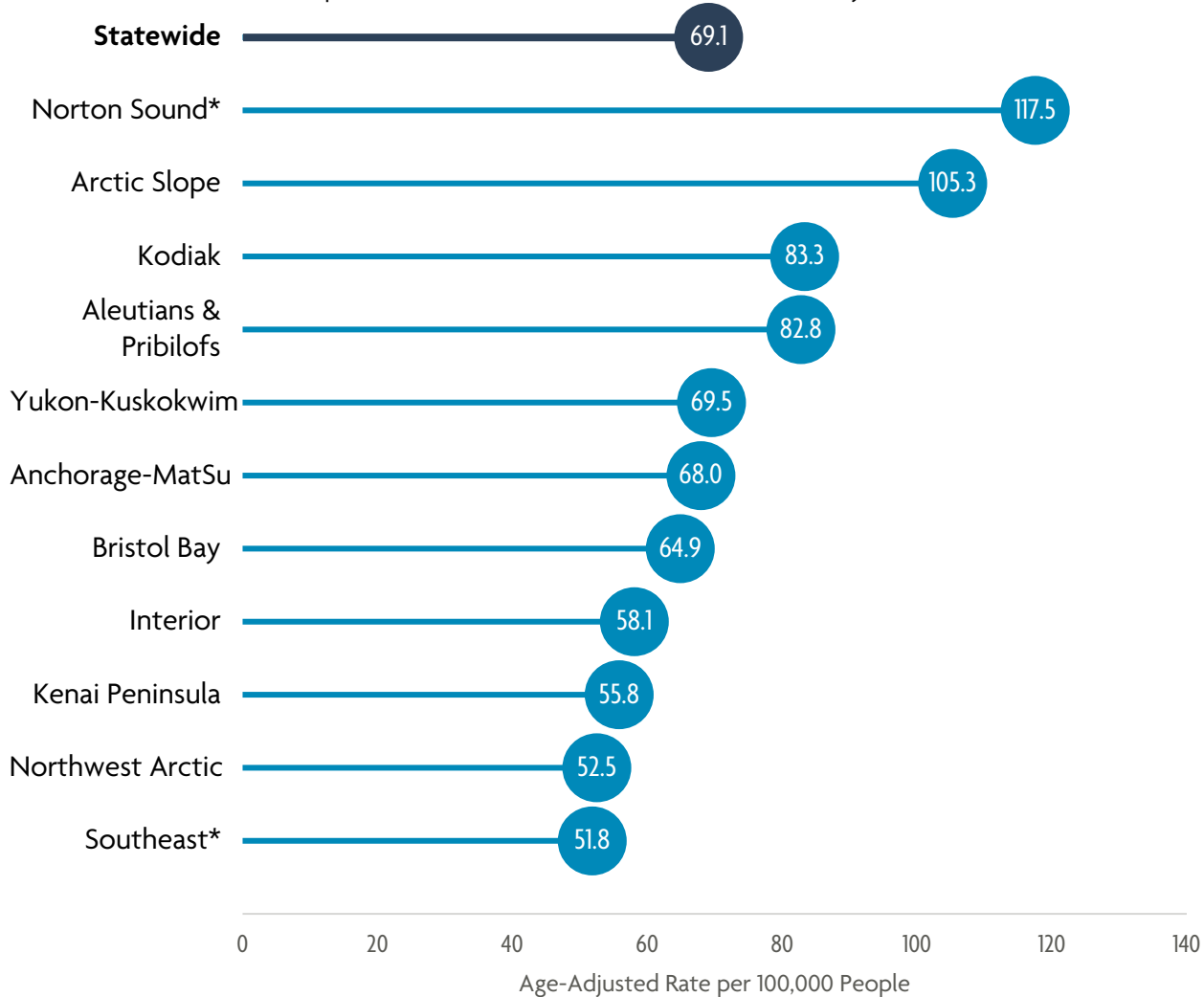


Figure 165. COPD Mortality Rates by Region, Alaska Native People, 2014 -2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

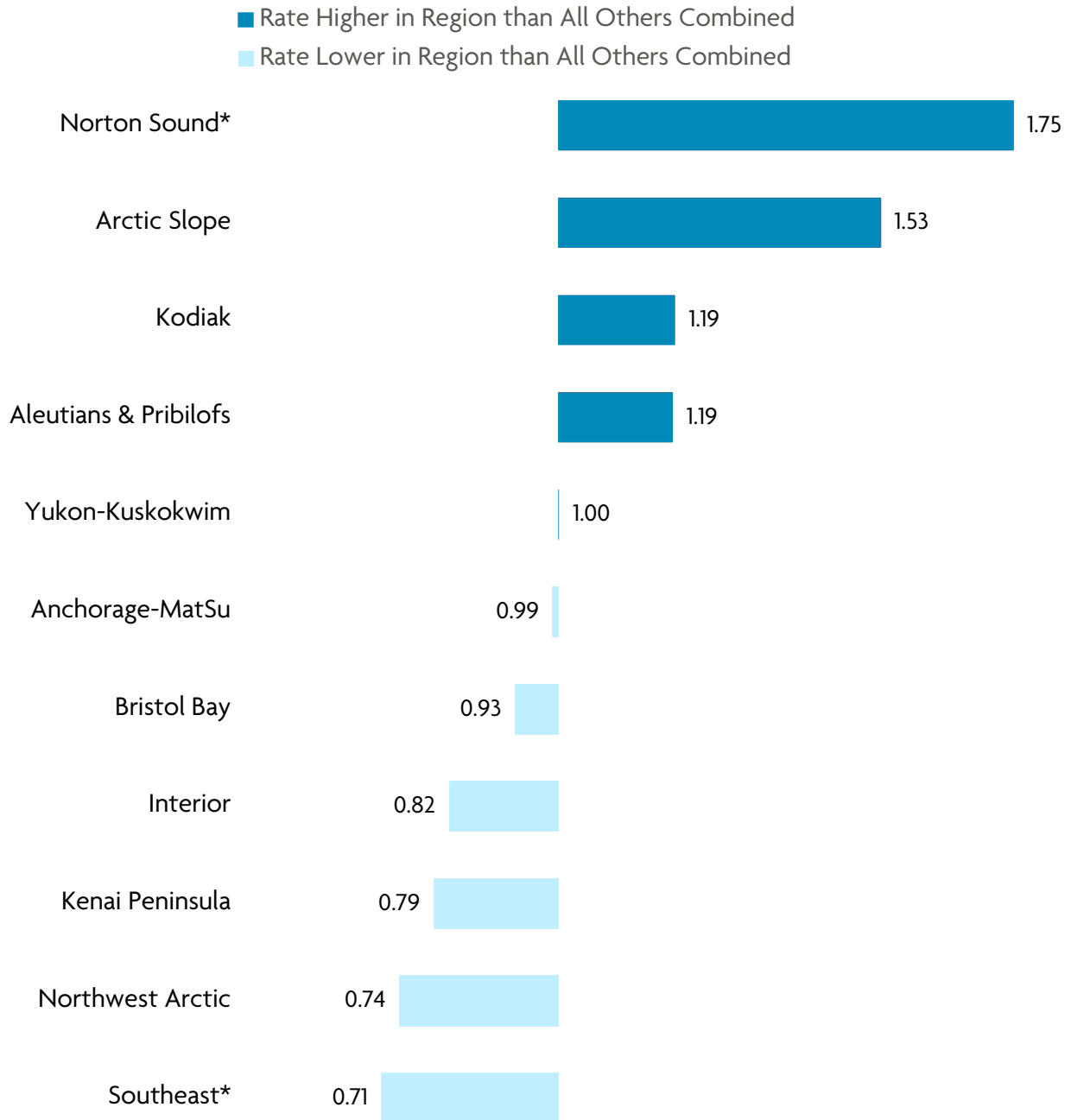


*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 166. COPD Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Detailed Leading Causes of Death

6. Chronic Liver Disease Mortality

Chronic liver disease (includes cirrhosis) was the sixth leading cause of death among Alaska Native people, both sexes combined. It ranked fourth among Alaska Native females and ninth among Alaska Native males. Chronic liver disease accounted for 3.8% (n=203) of all deaths among Alaska Native people during 2014-2018. The chronic liver disease mortality rate for Alaska Native people, both sexes combined, was a significant 3.1 times the U.S. all races rate. The chronic liver disease mortality rate for Alaska Native females was a significant 6.1 times the U.S. all races female rate, and for Alaska Native males was a significant 1.5 times the U.S. all races male rate.

Chronic liver disease accounted for 6.3% (n=143) of excess deaths among Alaska Native people, both sexes combined. Among Alaska Native females, 11.6% (n=119) of all excess deaths and 2% (n=24) among Alaska Native males were attributed to chronic liver disease.

Among Alaska Native people, both sexes combined, rates were significantly higher than U.S. all races rates for ages 25 through 74. Rate ratios between the two populations decreased with increasing age, becoming non-significant for the 75 and older age groups. Alaska Native females had significantly higher rates for age groups between 25 to 74 years. Alaska Native males had a significantly higher rate only for the 25 to 54 age group.

The Anchorage-MatSu (RR=1.8) service region had significantly higher chronic liver disease mortality rate than the rest of the state combined. The Yukon-Kuskokwim (RR=0.4) service region had a significantly lower chronic liver disease mortality rate than the rest of the state combined.

Chronic liver disease mortality rates for Alaska Native people increased significantly (19.3%) between 1980-1983 and 2014-2018. Rates declined 16.3% among U.S. all races during this same time period. Caution is warranted when interpreting the trend, as coding and policy changes have had an effect on the frequency that these ICD codes are used on death certificates within the state of Alaska. See further details in Appendix A - Methods.

Only deaths with an underlying cause of chronic liver disease are included in this analysis. In other words, deaths with a contributing cause of chronic liver disease are not included here.

DETAILED LEADING CAUSES OF DEATH

Table 35. Chronic Liver Disease Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

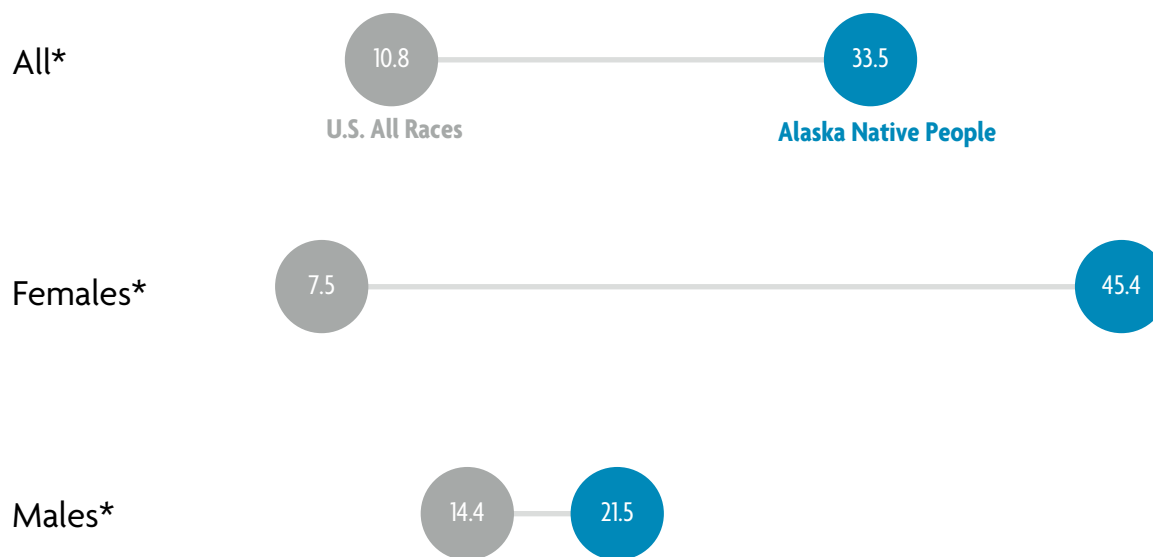
	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
All	203	3.8%	33.5	203,622	1.5%	10.8	3.1	2.71 - 3.56
Female	140	5.8%	45.4	73,876	1.1%	7.5	6.1	5.13 - 7.14
Male	63	2.1%	21.5	129,746	1.8%	14.4	1.5	1.16 - 1.91

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Figure 167. Chronic Liver Disease Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Age-Adjusted Rate per 100,000 People



*significant difference, $p < 0.05$

Chronic Liver Disease Age-Specific Mortality Rates

Figure 168a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

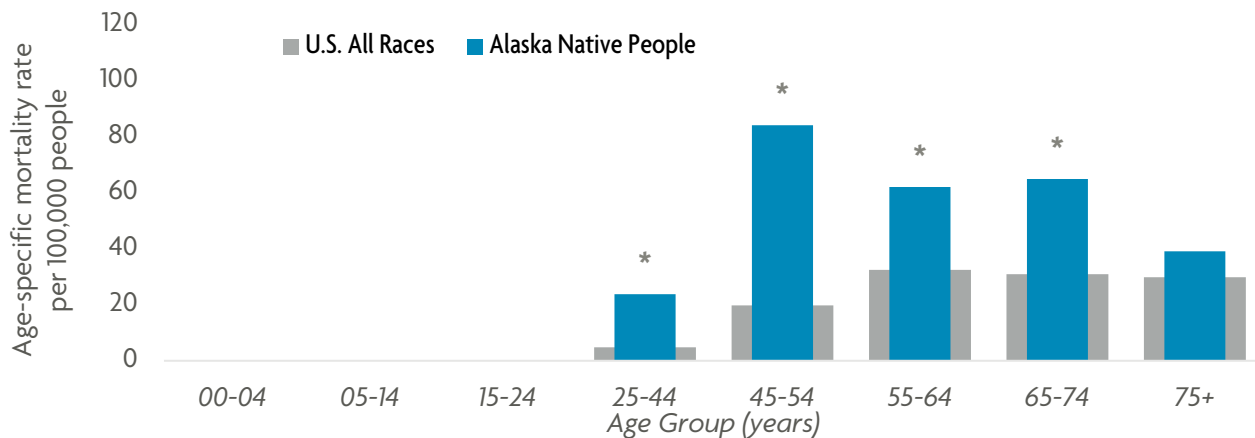


Figure 168b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

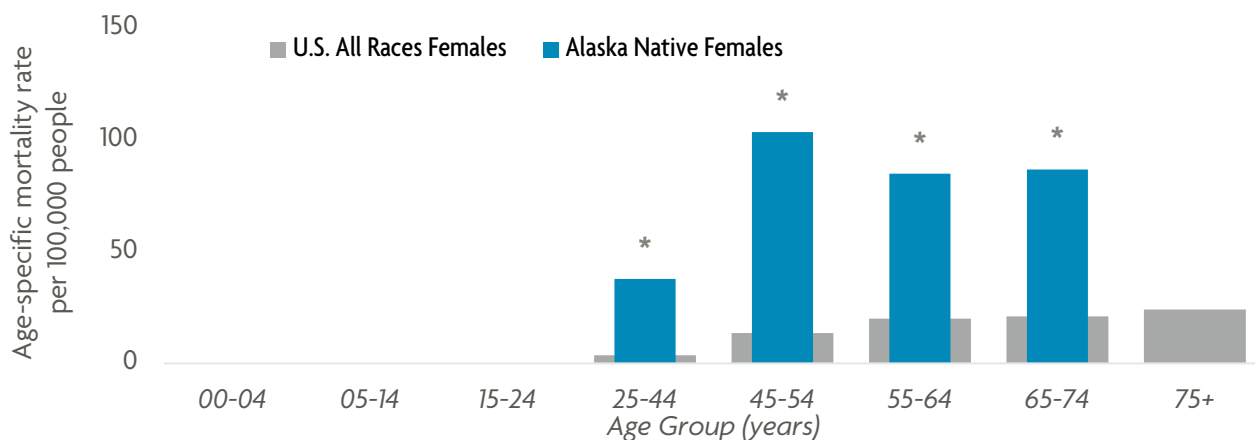
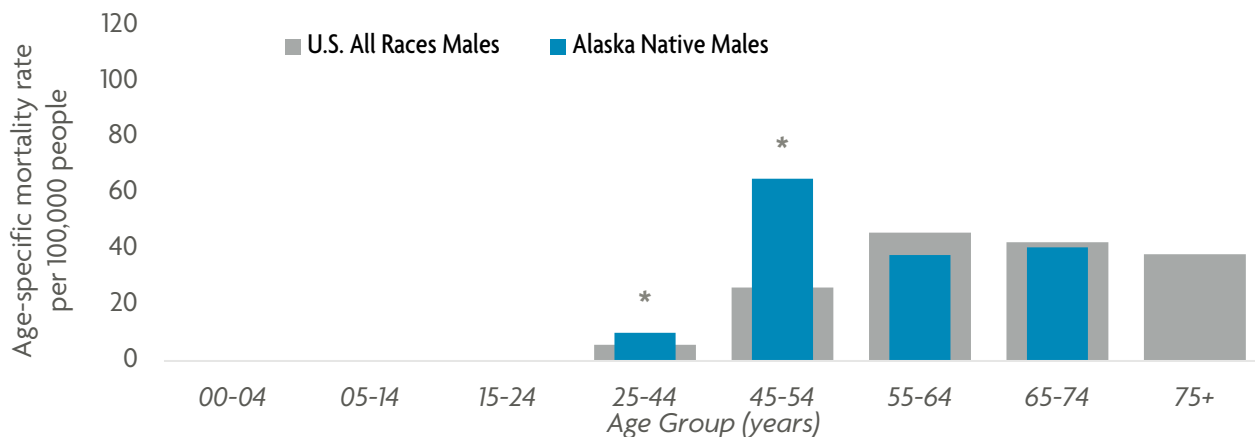


Figure 168c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Table 36. Age-Specific Chronic Liver Disease Mortality Rates among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

All								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	23.8	84.3	62.2	65.1	39.2
U.S. All Races	-	-	0.1	4.8	19.8	32.5	31.0	29.9
Rate Ratio	-	-	-	5.0	4.3	1.9	2.1	1.3
Females								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	37.8	103.5	84.8	86.7	-
U.S. All Races	-	-	0.1	3.6	13.6	20.0	21.0	24.1
Rate Ratio	-	-	-	10.5	7.6	4.2	4.1	-
Males								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	10.1	65.2	37.9	40.6	-
U.S. All Races	-	-	0.1	5.8	26.3	45.9	42.5	38.2
Rate Ratio	-	-	-	1.7	2.5	0.8	1.0	-

- Rate not reported for < 5 cases

Table 37. Trends in Chronic Liver Disease Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People	U.S. All Races	Rate Ratio	
1980-1983	28.1	12.9	2.2	*
1984-1988	20.4	11.3	1.8	*
1989-1993	26.8	10.3	2.6	*
1994-1998	18.3	9.6	1.9	*
1999-2003	19.4	9.5	2.0	*
2004-2008	18.0	9.5	1.9	*
2009-2013	24.0	10.8	2.2	*
2014-2018	33.5	10.8	3.1	*
% Change	19.3%	-16.3%		

*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 169. Overall Change in Chronic Liver Disease Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

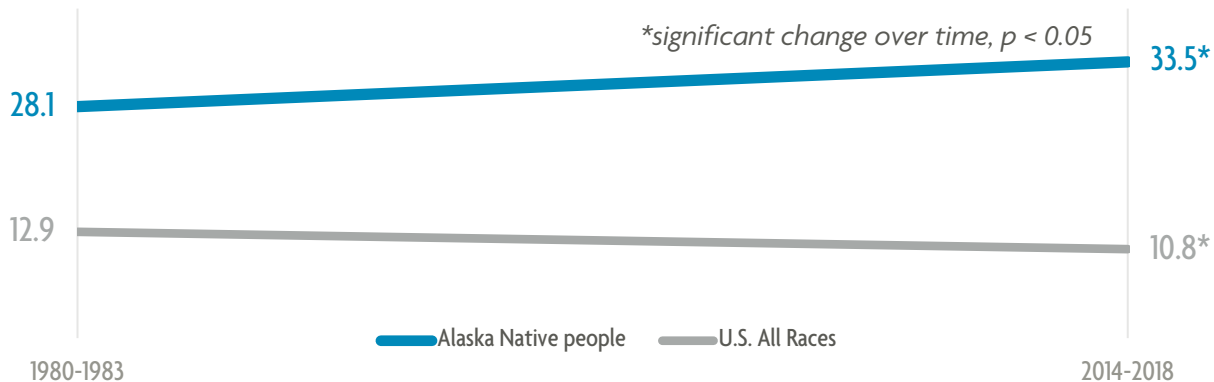
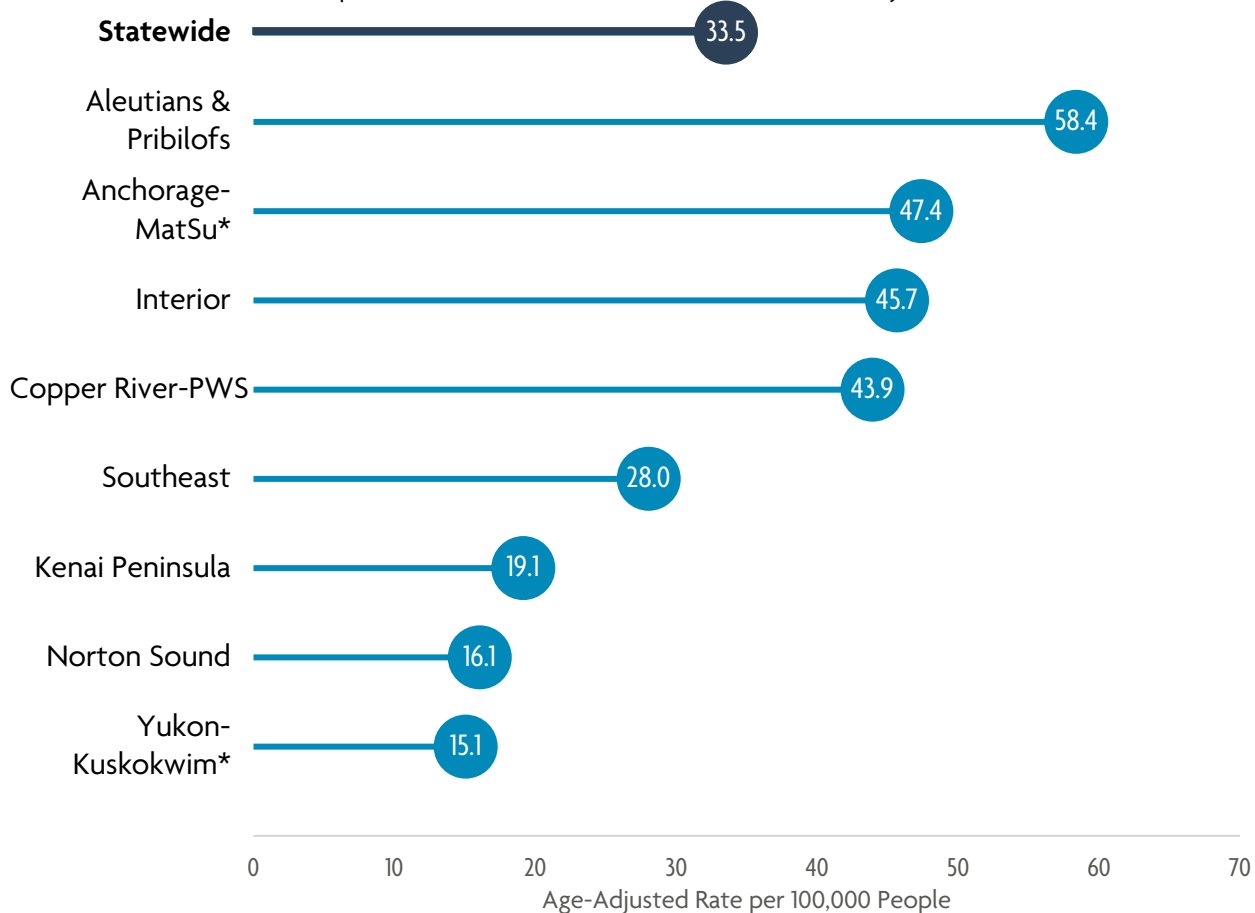


Figure 170. Chronic Liver Disease Mortality Rates by Region, Alaska Native People, 2014 - 2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

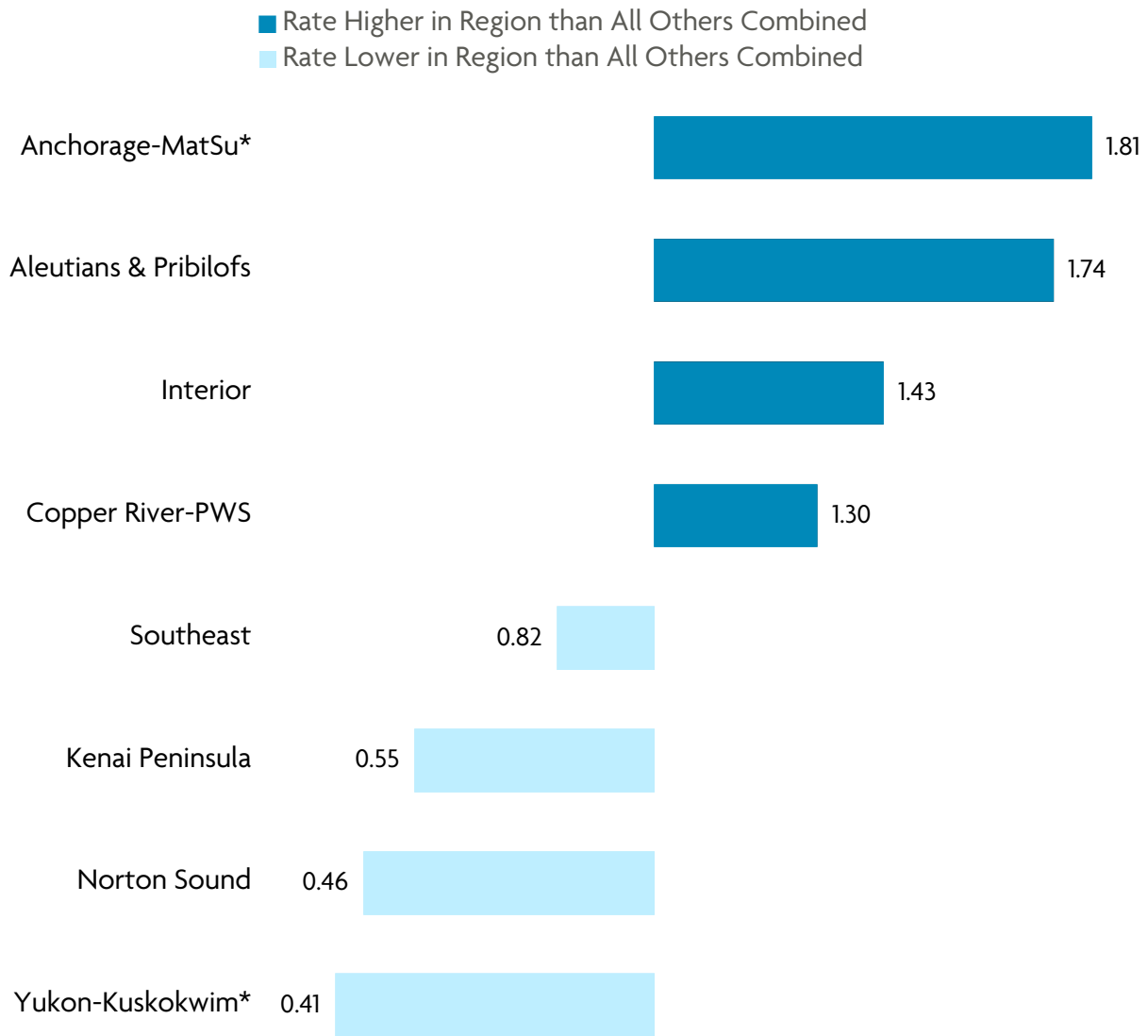


*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 171. Chronic Liver Disease Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



**significant difference, $p < 0.05$*

Detailed Leading Causes of Death

7. Cerebrovascular Disease Mortality

Cerebrovascular disease was the seventh leading cause of death among Alaska Native people, both sexes combined. Cerebrovascular disease mortality ranked sixth among Alaska Native females and Alaska Native males respectively. Cerebrovascular disease accounted for 3.7% (n=200) of all deaths. Alaska Native people, both sexes combined, had a cerebrovascular disease mortality rate 1.4 times the U.S. all races rate. The mortality rate for Alaska Native females was a significant 1.4 times the rate for U.S. all races females. The mortality rate for Alaska Native males was 1.3 times the U.S. all races male rate.

Age-specific cerebrovascular disease mortality rates were significantly higher for Alaska Native people, both sexes combined, compared to U.S. all races among those 45-54 and 65 years of age or older. Alaska Native females had significantly higher cerebrovascular disease mortality rates as compared to U.S. all races females for the age groups 45-54 years and 75 and older. Mortality rates due to cerebrovascular disease were significantly higher for Alaska Native males compared to U.S. all races males in the 65–74 year old age group.

The Yukon-Kuskokwim (RR=1.5) service region had a significantly higher cerebrovascular disease mortality rate than the rest of the state combined. The Southeast (RR=0.6) and the Interior (RR=0.6) service regions had significantly lower mortality rates when compared to the rest of the state.

Alaska Native cerebrovascular disease mortality rates decreased 19.5% between the 1980-1983 and 2014-2018. Cerebrovascular disease mortality rates decreased 56.4% among U.S. all races during this same time period.

DETAILED LEADING CAUSES OF DEATH

Table 38. Cerebrovascular Disease Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
All	200	3.7%	51.9	709,761	5.2%	37.2	1.4	1.22 - 1.60
Female	110	4.5%	51.5	412,158	6.1%	36.3	1.4	1.18 - 1.71
Male	90	3.0%	50.7	297,603	4.2%	37.6	1.3	1.10 - 1.66

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Figure 172. Cerebrovascular Disease Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Age-Adjusted Rate per 100,000 People

All*



Females*



Males*



*significant difference, $p < 0.05$

Cerebrovascular Disease Age-Specific Mortality Rates

Figure 173a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

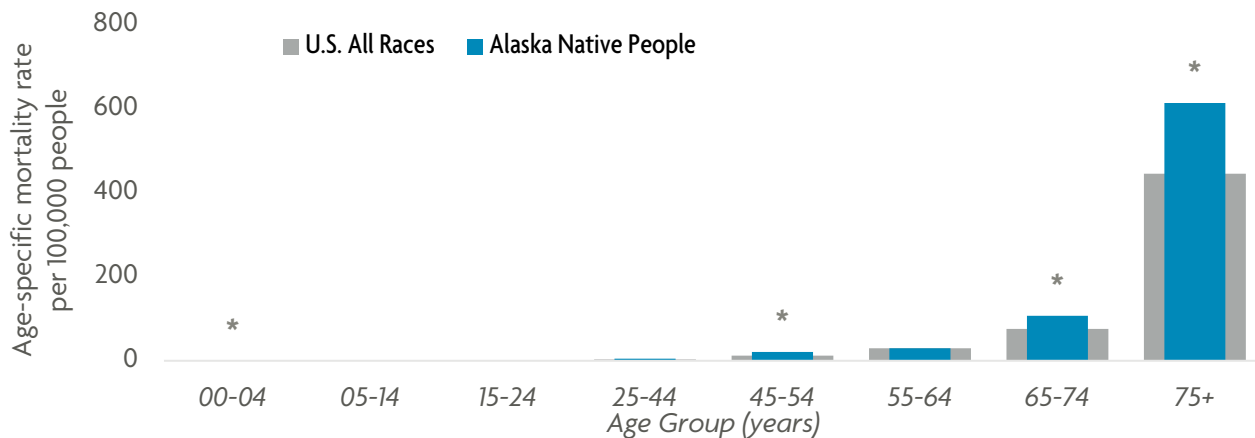


Figure 173b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

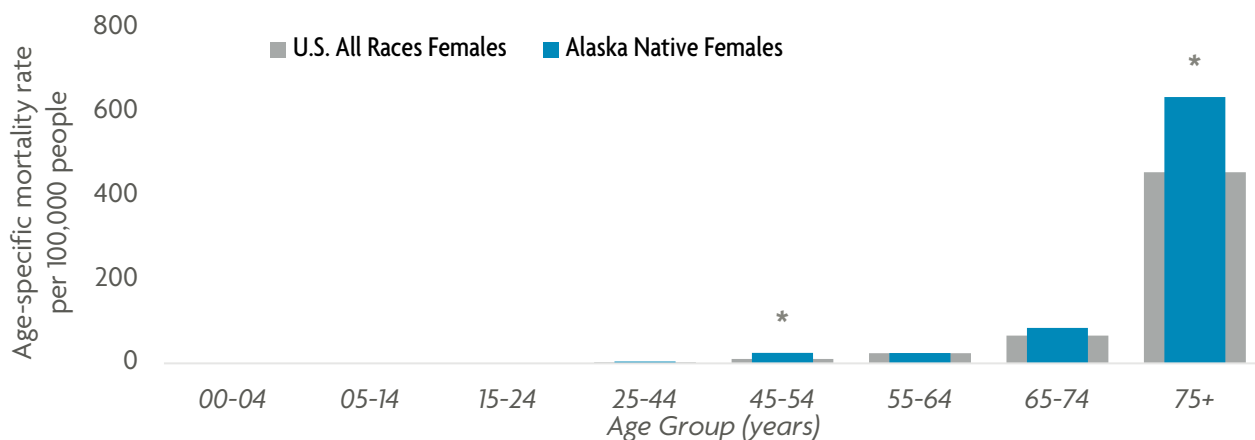
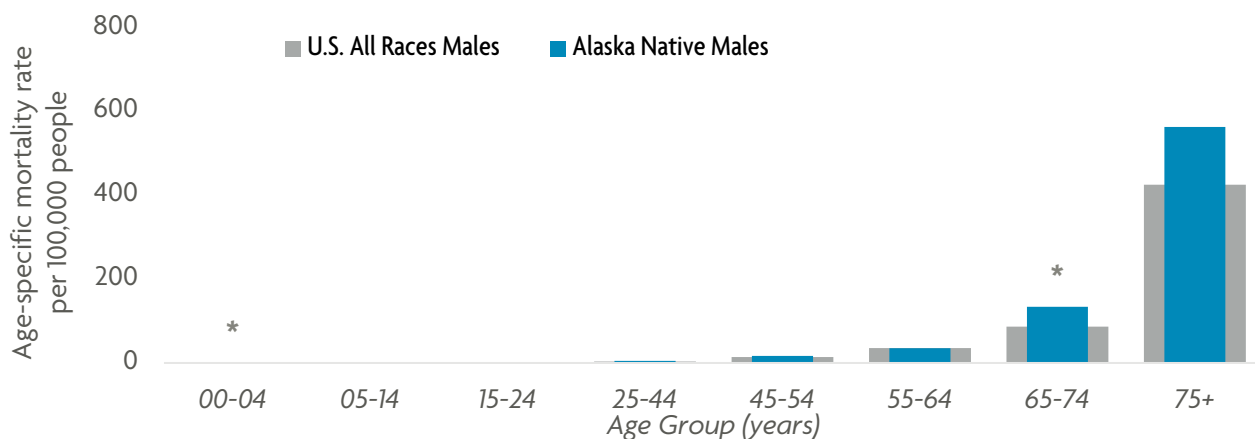


Figure 173c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Table 39. Age-Specific Cerebrovascular Disease Mortality Rates among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

All								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	4.8	20.9	29.7	107.3	615.0
U.S. All Races	0.8	0.2	0.4	3.0	12.3	29.8	75.9	446.2
Rate Ratio	-	-	-	1.6	1.7	1.0	1.4	1.4
Females								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	4.5	25.0	24.6	84.7	635.4
U.S. All Races	0.7	0.2	0.3	2.6	10.6	24.3	66.4	455.7
Rate Ratio	-	-	-	1.7	2.4	1.0	1.3	1.4
Males								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	5.1	16.8	35.2	133.9	563.0
U.S. All Races	0.8	0.2	0.4	3.4	14.1	35.7	86.7	425.2
Rate Ratio	-	-	-	1.5	1.2	1.0	1.5	1.3

- Rate not reported for < 5 cases

Table 40. Trends in Cerebrovascular Disease Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People	U.S. All Races	Rate Ratio	
1980-1983	64.5	85.4	0.8	*
1984-1988	65.1	72.0	0.9	
1989-1993	67.5	61.5	1.1	
1994-1998	84.1	59.6	1.4	*
1999-2003	66.5	57.5	1.2	*
2004-2008	56.7	47.0	1.2	*
2009-2013	54.7	41.4	1.3	*
2014-2018	51.9	37.2	1.4	*
% Change	-19.5%	-56.4%		

*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 174. Overall Change in Cerebrovascular Disease Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

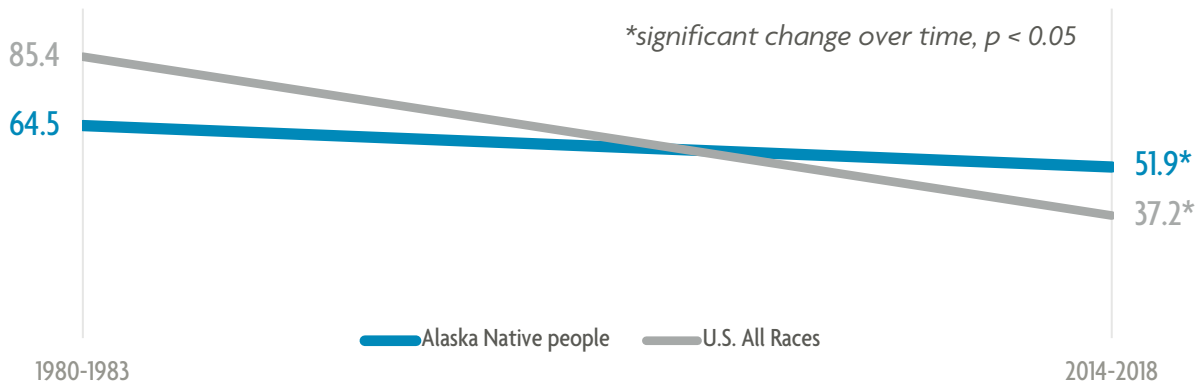
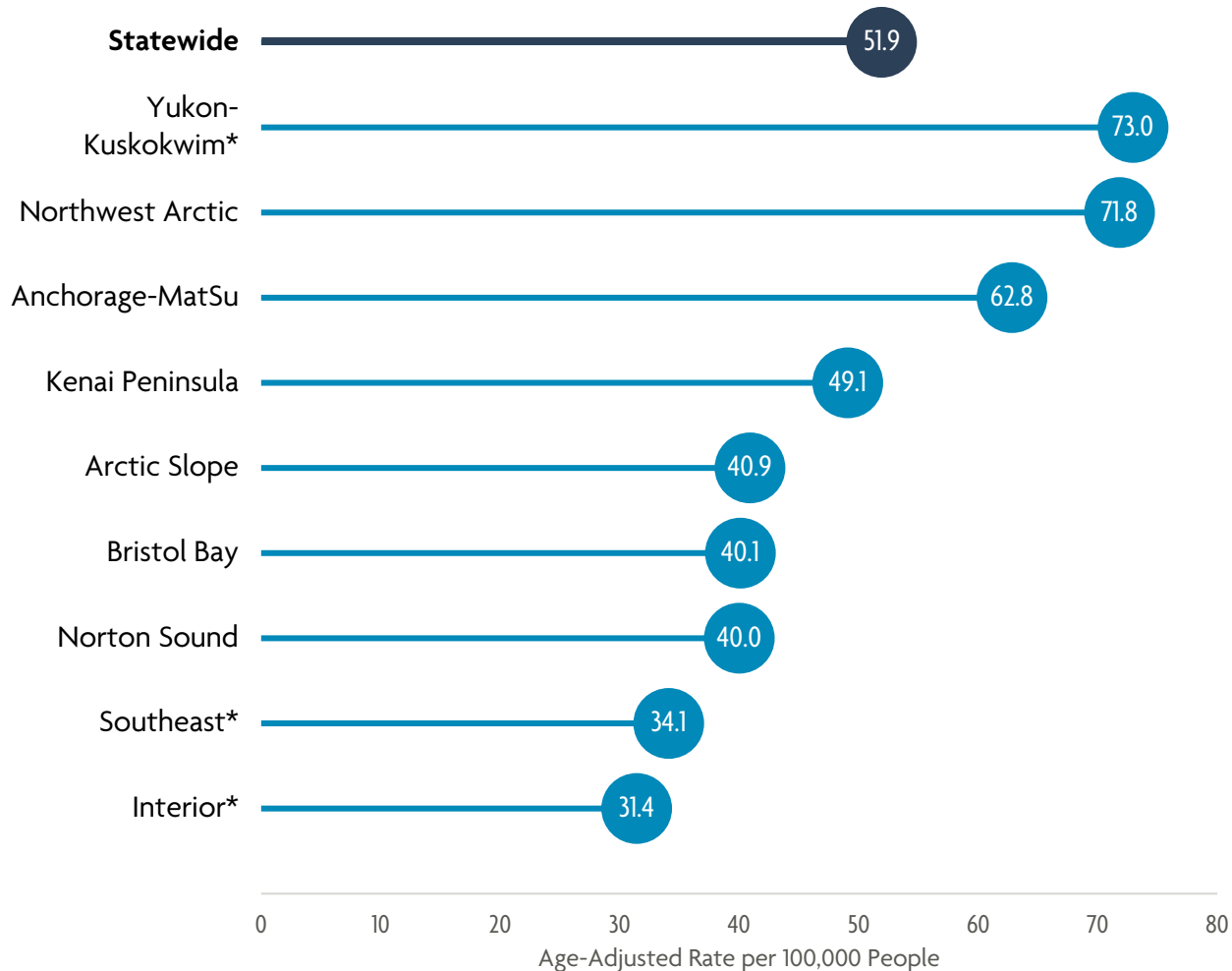


Figure 175. Cerebrovascular Disease Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

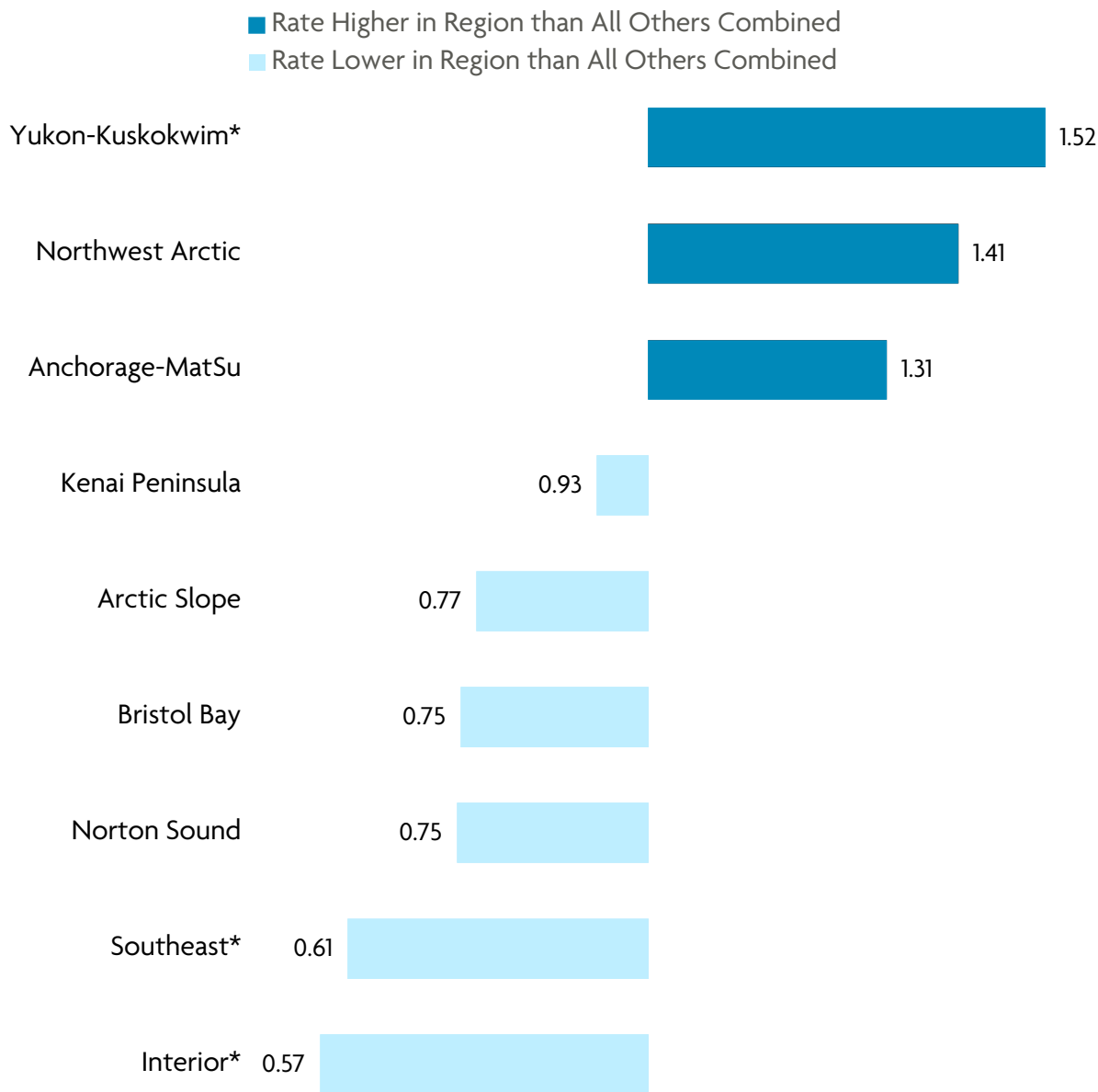


**significant difference, p < 0.05*

DETAILED LEADING CAUSES OF DEATH

Figure 176. Cerebrovascular Disease Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Detailed Leading Causes of Death

8. Alcohol Abuse Mortality

Alcohol abuse was the eighth leading cause of death among Alaska Native people, both sexes combined. It ranked ninth among Alaska Native females and seventh among Alaska Native males. During the 2014-2018 time period, alcohol abuse accounted for 2.3% (n=73) of all Alaska Native deaths. The alcohol abuse mortality rate for Alaska Native people, both sexes combined, was 8.0 times the U.S. all races rate. Alaska Native females had an alcohol abuse mortality rate 12.5 times the U.S. all races female rate. Alaska Native males had an alcohol abuse mortality rate 6.4 times the rate for U.S. all races males.

Alcohol abuse accounted for 4.9% (n=111) of all excess deaths among Alaska Native people, both sexes combined. Among Alaska Native females, alcohol abuse accounted for 4.4% (n=45) of all excess deaths. Among Alaska Native males, alcohol abuse accounted for 5.5% (n=67) of excess deaths.

Alcohol abuse mortality was the seventh leading cause of years of potential life lost before 75 years (2,635) for Alaska Native people, both sexes combined. Alcohol abuse mortality was the seventh leading cause of years of potential life lost before 75 years for Alaska Native females.

Among Alaska Native people, both sexes combined, age-specific alcohol abuse mortality rates were a significant 4.8 to 14.6 times the U.S. all races rate for age groups 25 to 75+ years old. Alaska Native females had a significant 9.1 to 13.3 times the U.S. all races female mortality rate in the 25 to 74 year age groups. Rate ratios for Alaska Native males were a significant 3.0 to 9.6 times the U.S. all races male rate in the 25 to 75+ year age groups.

The Anchorage-MatSu (RR=1.4) service region had significantly higher alcohol abuse mortality rate than the rest of the state.

Alaska Native alcohol abuse rates declined 30.3% between 1980-1983 and 2014-2018. U.S. all races did not change significantly between 1980-1983 and 2014-2018. Caution is warranted when interpreting the trend, as coding and policy changes have had an effect on the frequency that these ICD codes are used on death certificates within the state of Alaska. See further details in Appendix A - Methods.

Only deaths with an underlying cause of alcohol abuse (F10) are included in this analysis. In other words, deaths with a contributing cause of alcohol abuse are not included in this analysis. A special analysis based on the CDC's Alcohol Related Disease Impact (ARDI) coding framework is included in the chapter Alcohol-Related Mortality.

DETAILED LEADING CAUSES OF DEATH

Table 41. Alcohol Abuse Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
All	126	2.3%	20.1	46,566	0.3%	2.5	8.0	6.74 - 9.56
Female	48	2.0%	15.0	10,933	0.2%	1.2	12.5	9.39- 16.56
Male	78	2.6%	25.6	36,633	0.5%	4.0	6.4	5.12 - 7.98

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Figure 177. Alcohol Abuse Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Age-Adjusted Rate per 100,000 People



*significant difference, $p < 0.05$

Alcohol Abuse Age-Specific Mortality Rates

Figure 178a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

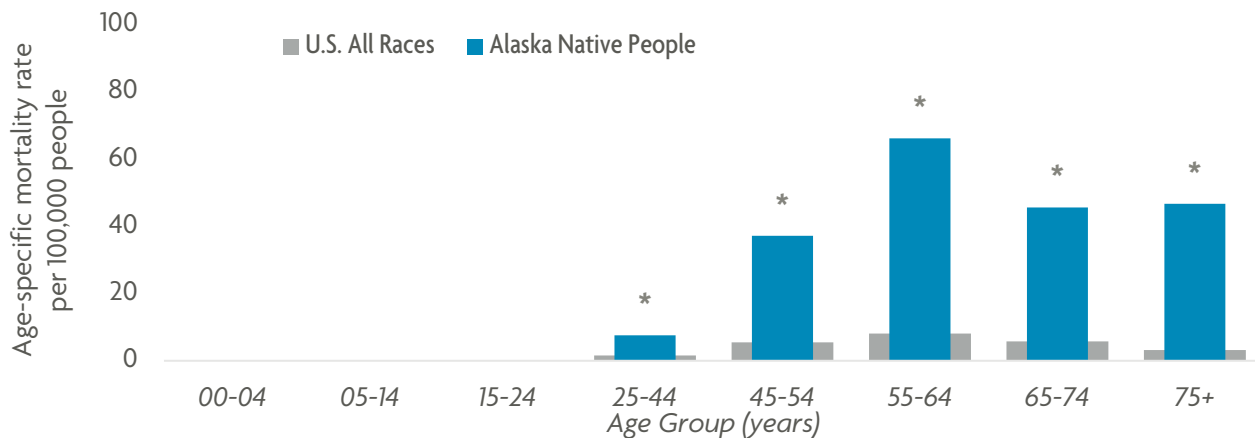


Figure 178b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

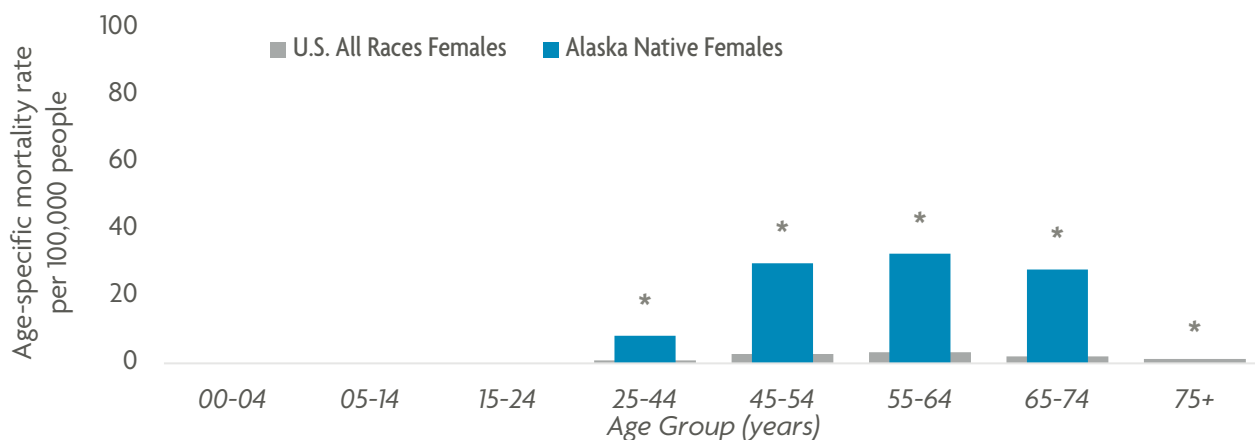
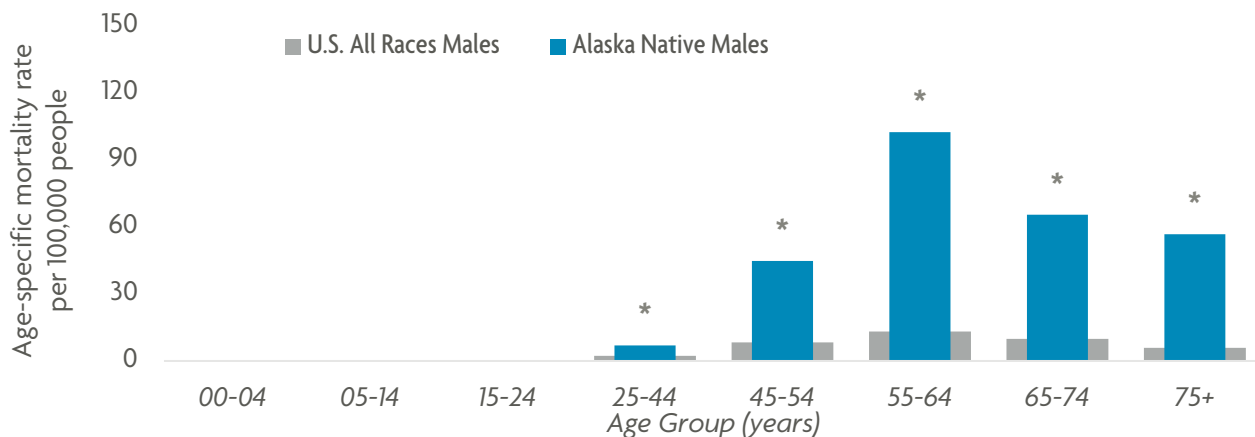


Figure 178c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Table 42. Age-Specific Alcohol Abuse Mortality Rates among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

All								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	7.6	37.3	66.3	45.7	46.8
U.S. All Races	-	-	-	1.6	5.5	8.1	5.8	3.2
Rate Ratio	-	-	-	4.7	6.8	8.2	7.9	14.6
Females								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	8.2	29.8	32.7	28.0	-
U.S. All Races	-	-	-	0.9	2.8	3.3	2.1	1.3
Rate Ratio	-	-	-	9.1	10.7	9.9	13.3	-
Males								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	6.9	44.7	102.3	65.4	56.7
U.S. All Races	-	-	-	2.3	8.3	13.2	9.9	5.9
Rate Ratio	-	-	-	3.0	5.4	7.8	6.6	9.6

Table 43. Trends in Alcohol Abuse Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People	U.S. All Races	Rate Ratio	
1980-1983	28.8	2.0	14.4	*
1984-1988	23.2	1.9	12.2	*
1989-1993	20.6	2.2	9.4	*
1994-1998	31.7	2.3	13.8	*
1999-2003	40.9	2.3	17.8	*
2004-2008	38.7	2.3	16.8	*
2009-2013	14.2	2.2	6.5	*
2014-2018	20.1	2.5	8.0	*
% Change	-30.3%	25.0%		

*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 179. Overall Change in Alcohol Abuse Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

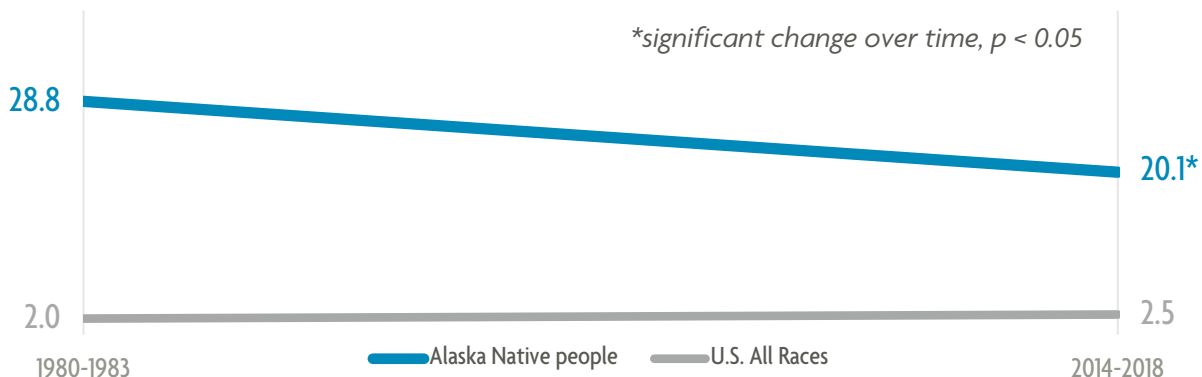
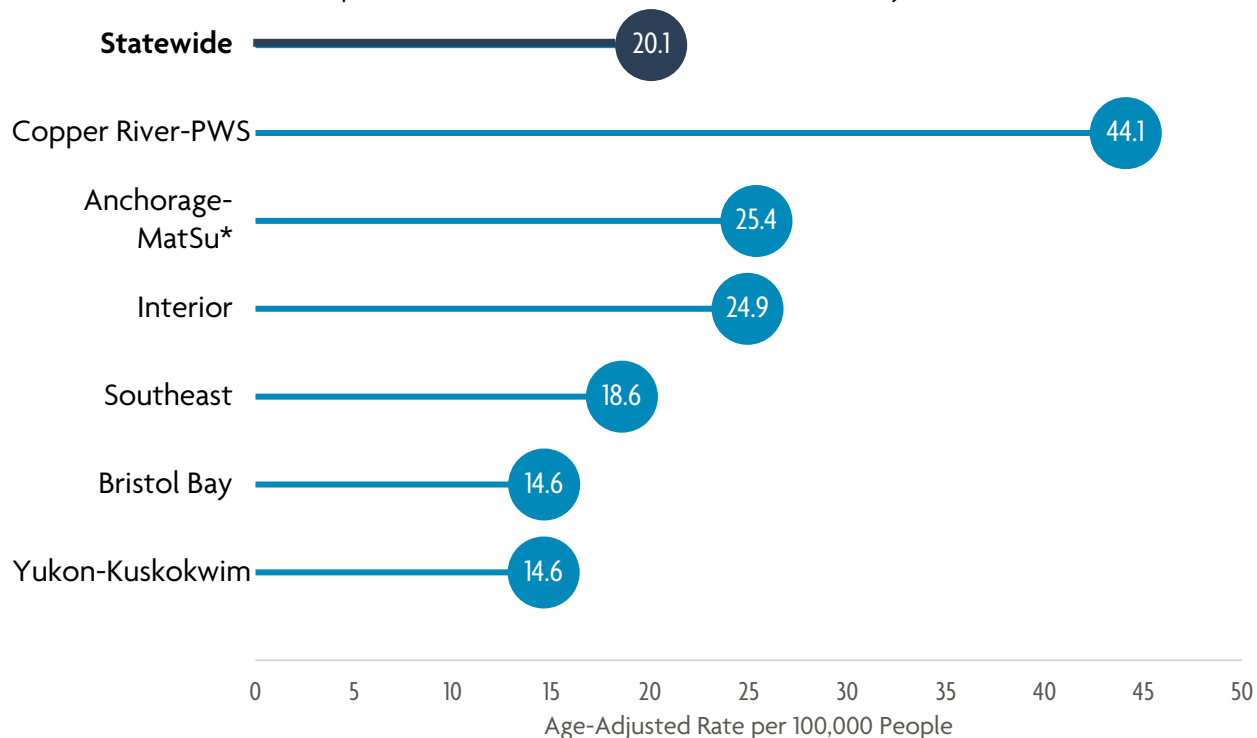


Figure 180. Alcohol Abuse Mortality Rates by Region, Alaska Native People, 2014 -2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

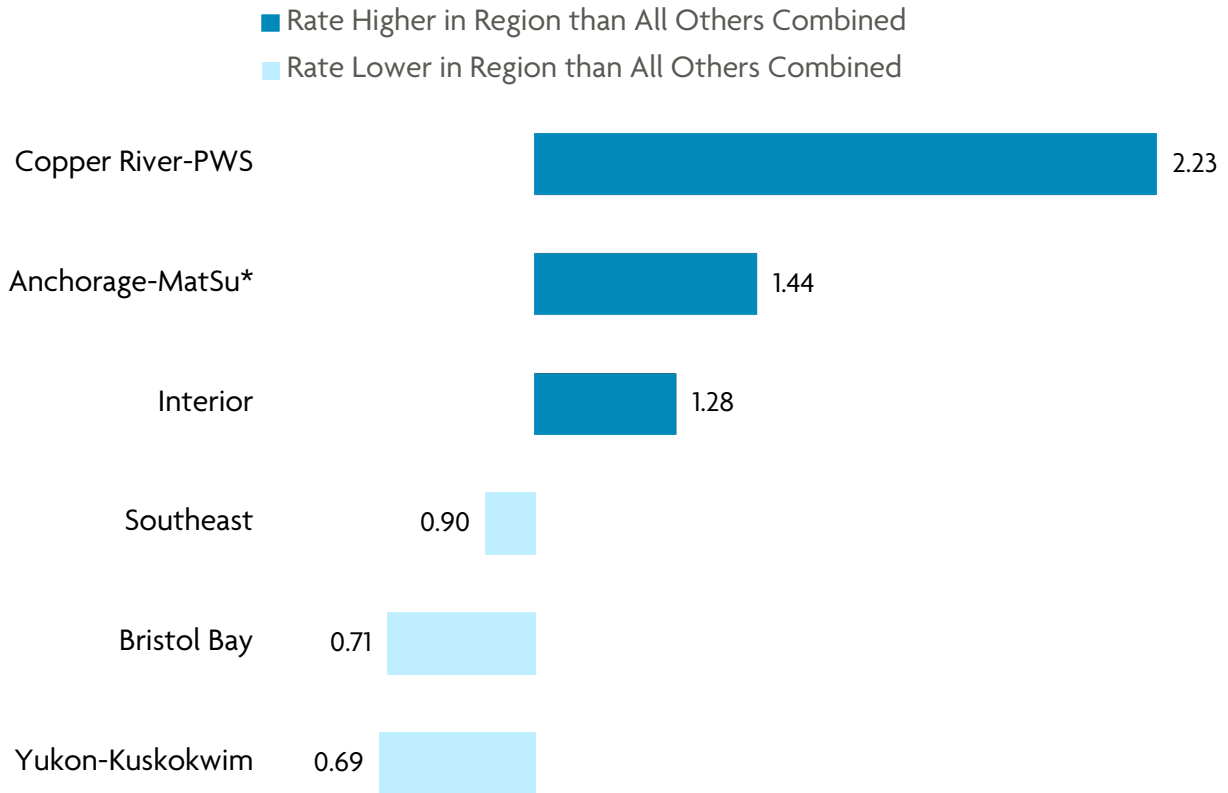


**significant difference, $p < 0.05$*

DETAILED LEADING CAUSES OF DEATH

Figure 181. Alcohol Abuse Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Detailed Leading Causes of Death

9. Homicide Mortality

Homicide was the ninth leading cause of death among Alaska Native people, both sexes combined. It ranked twelfth for Alaska Native females and eighth for Alaska Native males. Homicide mortality accounted for 12.1% (n=115) of all deaths. The homicide mortality rate among Alaska Native people, both sexes combined, was 2.8 times the U.S. all races rate. Alaska Native females had a homicide mortality rate 1.4 times the rate for U.S. all races females. Alaska Native males had a homicide mortality rate 8.2 times the rate for U.S. all races males.

Among Alaska Native people, both sexes combined, homicide accounted for 3.4% (n=77) of all excess deaths. Among Alaska Native females it accounted for 2.9% (n=30) of excess female deaths, while among males it accounted for 3.8% (n=46) of excess male deaths.

Examining homicide mortality rates by age group showed that rates were significantly higher among Alaska Native people, both sexes combined, for age groups 15-64. Among Alaska Native females, the homicide mortality rate was significantly higher than U.S. all races rate for age groups 15-54. Rate ratios between Alaska Native males and U.S. all races males were significantly different for age groups 25-64.

The Interior (RR=1.8) service region had a significantly higher homicide mortality rate than the rest of the state. The Southeast (RR=0.5) service region had a significantly lower homicide mortality rate.

Alaska Native people had a significant 56% decrease in homicide mortality rates between 1980-1983 and 2014-2018. Among U.S. all races, there was a 19.4% decrease during the same time period.

DETAILED LEADING CAUSES OF DEATH

Table 44. Homicide Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

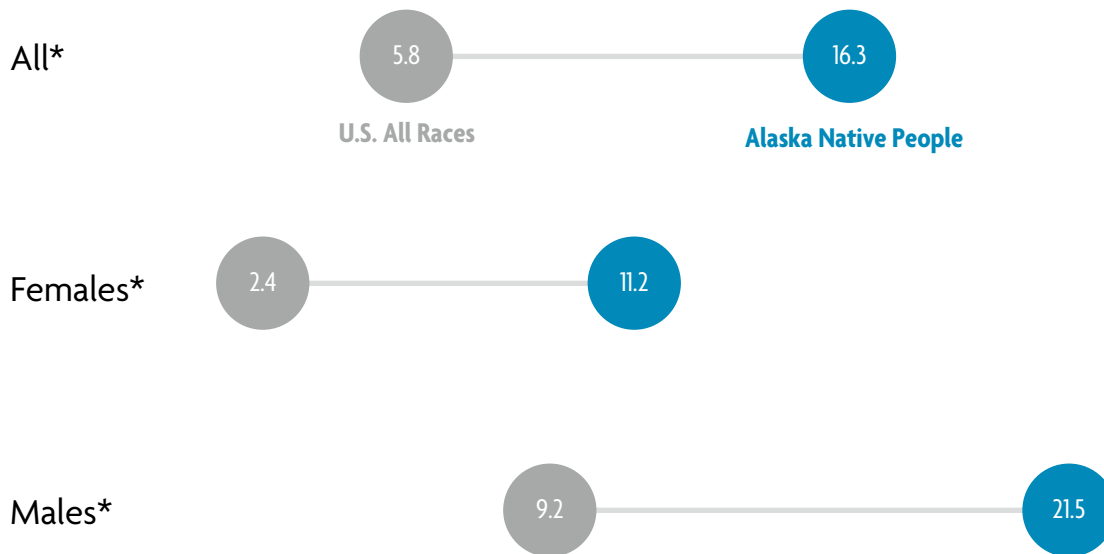
	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
All	115	2.1%	16.3	91,367	0.7%	5.8	2.8	2.34 - 3.37
Female	38	1.6%	11.2	18,731	0.3%	2.4	4.6	3.38 - 6.39
Male	77	2.6%	21.5	762,636	1.1%	9.2	2.3	1.87 - 2.92

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Figure 182. Homicide Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Age-Adjusted Rate per 100,000 People



*significant difference, $p < 0.05$

Homicide Age-Specific Mortality Rates

Figure 183a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

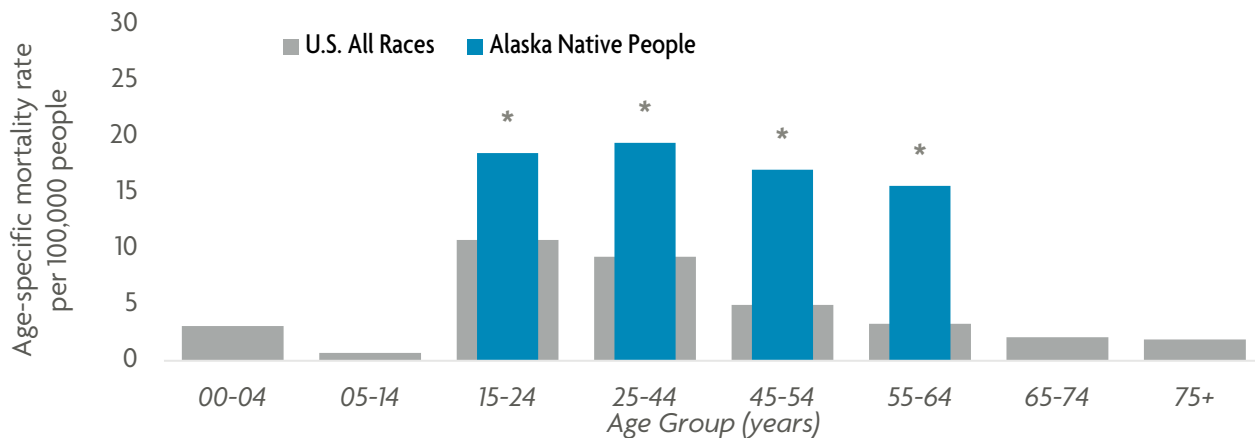


Figure 183b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

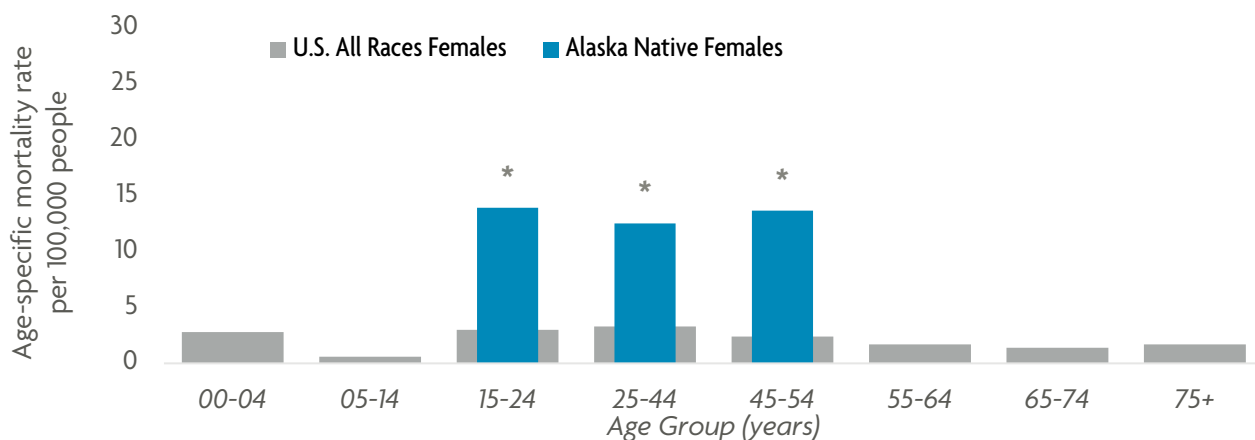
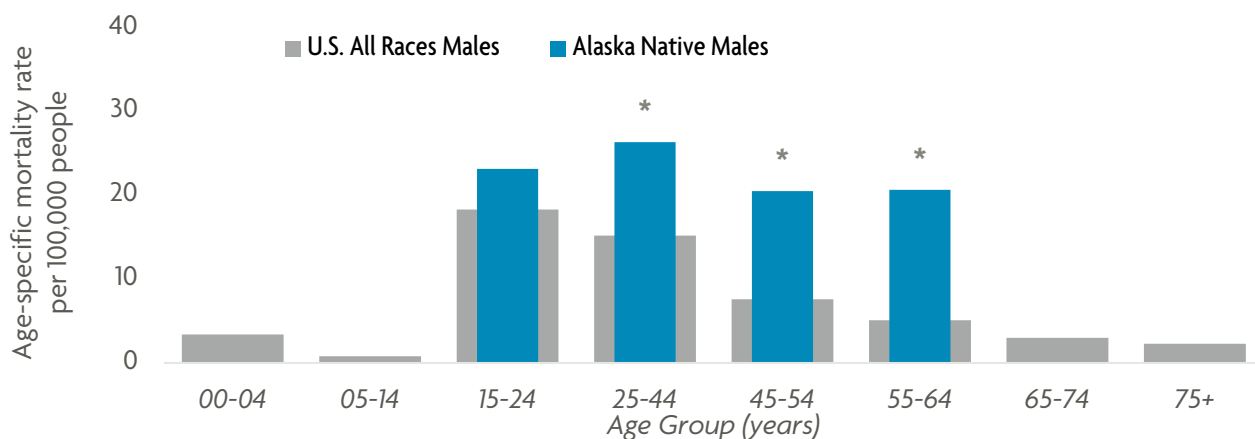


Figure 183c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Table 45. Age-Specific Homicide Mortality Rates among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

All								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	18.6	19.5	17.1	15.6	-	-
U.S. All Races	3.1	0.7	10.8	9.3	5.0	3.3	2.1	1.9
Rate Ratio	-	-	1.7	2.1	3.4	4.7	-	-
Females								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	13.9	12.5	13.7	-	-	-
U.S. All Races	2.8	0.6	3.0	3.3	2.4	1.7	1.4	1.7
Rate Ratio	-	-	4.6	3.8	5.7	-	-	-
Males								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	23.2	26.3	20.5	20.6	-	-
U.S. All Races	3.4	0.8	18.3	15.2	7.6	5.1	3.0	2.3
Rate Ratio	-	-	1.3	1.7	2.7	4.0	-	-

- Rate not reported for < 5 cases

Table 46. Trends in Homicide Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People	U.S. All Races	Rate Ratio	
1980-1983	36.8	7.2	5.1	*
1984-1988	22.6	6.3	3.6	*
1989-1993	18.7	6.6	2.8	*
1994-1998	16.1	5.7	2.8	*
1999-2003	16.8	6.3	2.7	*
2004-2008	11.2	6.0	1.9	*
2009-2013	11.2	5.3	2.1	*
2014-2018	16.3	5.8	2.8	*
% Change	-55.7%	-19.4%		

*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 184. Overall Change in Homicide Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

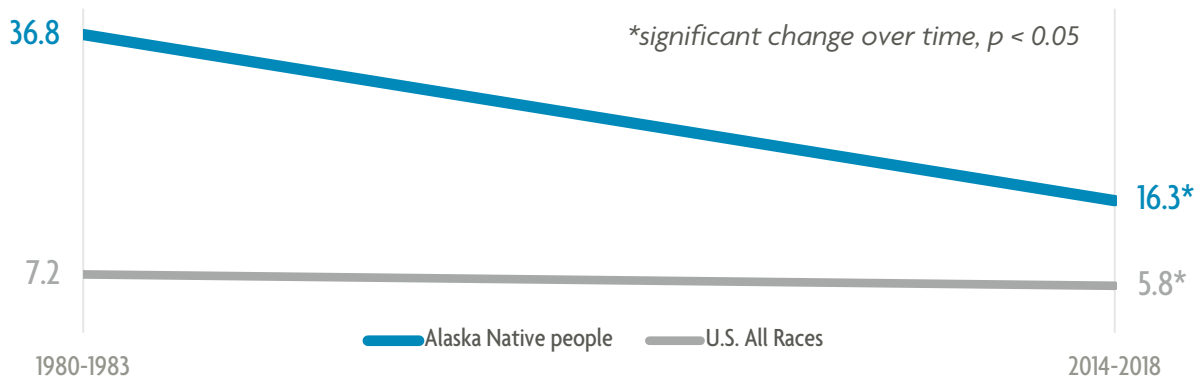
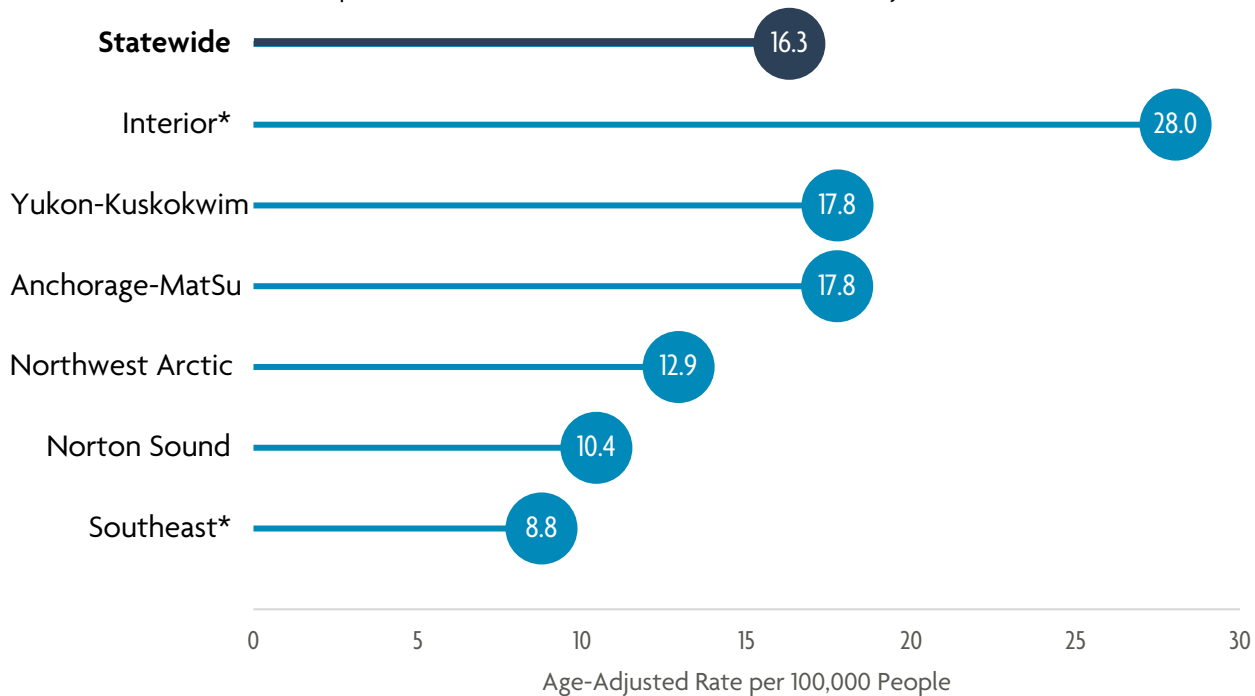


Figure 185. Homicide Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

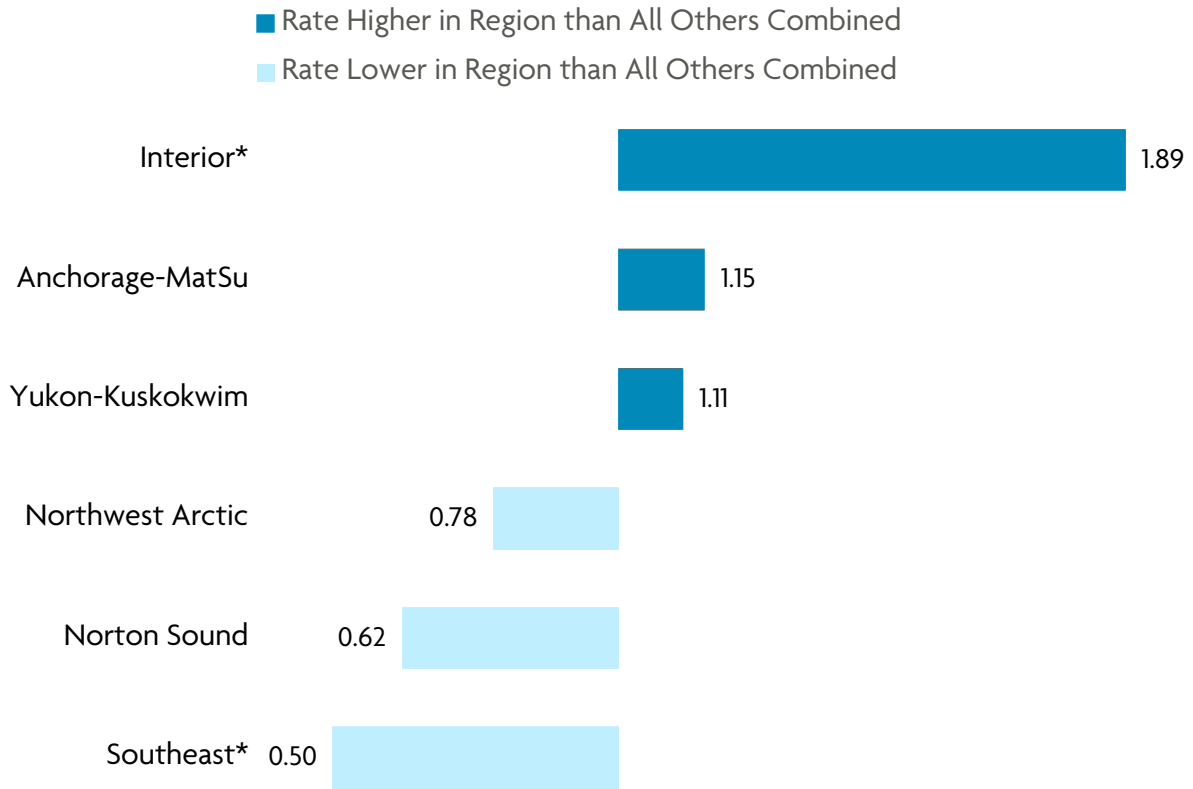


*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 186. Homicide Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Detailed Leading Causes of Death

10. Influenza and Pneumonia Mortality

Influenza and pneumonia was the tenth leading cause of death among Alaska Native people, both sexes combined. It ranked eighth among Alaska Native females and eleventh among Alaska Native males. Influenza and pneumonia accounted for 1.9% (n=104) of all deaths. The mortality rate for Alaska Native people, both sexes combined, was 1.9 times the U.S. all races rate. The rate for Alaska Native females was 1.8 times those for U.S. all races females. The rate for Alaska Native males was 1.6 times the U.S. all races male rate.

Influenza and pneumonia accounted for 2.1% (n=48) of all excess deaths among Alaska Native people, both sexes combined. among Alaska Native females, influenza and pneumonia accounted for 2.1% (n=22) of all excess female deaths. among Alaska Native males, influenza and pneumonia accounted for 2.1% (n=26) of all excess male deaths.

Examining age-specific influenza and pneumonia mortality rates for Alaska Native people, both sexes combined, the rate was 2.2 times the U.S. all races rate for the age group 25 through 44 years. Rates were also significantly higher for 65 and older age groups, both sexes combined. among Alaska Native females, influenza and pneumonia mortality rates were 1.6 to 3.1 times the U.S. all races female rates, with significant differences in the 25 to 44 year old age group (RR=3.1) and 75+ year old age group (RR=1.9). among Alaska Native males, influenza and pneumonia mortality rates were 1.4 to 2.0 times the rate for U.S. all races males, with significant differences in the 65 to 74 year old age group (RR=1.9) and 75+year old age group (RR=2.0).

The Yukon-Kuskokwim (RR=2.4) service region had a significantly higher influenza and pneumonia mortality rate than the rest of the state. The Southeast (RR=0.5) and the Interior (RR=0.5) service regions had significantly lower influenza and pneumonia mortality rates.

There was a significant 46.9% decline in the influenza and pneumonia mortality rate for Alaska Native people, both sexes combined, between 1980-1983 and 2014-2018. U.S. all races had a significant 50% decline during this same time period.

DETAILED LEADING CAUSES OF DEATH

Table 47. Influenza/Pneumonia Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
All	104	1.9%	27.7	278,618	2.0%	14.6	1.9	1.57 - 2.30
Female	49	2.0%	23.2	144,877	2.2%	12.9	1.8	1.36 - 2.38
Male	55	1.8%	33.6	133,741	1.9%	17.0	1.6	1.52 - 2.57

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Figure 187. Influenza/Pneumonia Mortality among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Age-Adjusted Rate per 100,000 People

All*



Females*



Males*



*significant difference, $p < 0.05$

Influenza/Pneumonia Age-Specific Mortality Rates

Figure 188a. Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

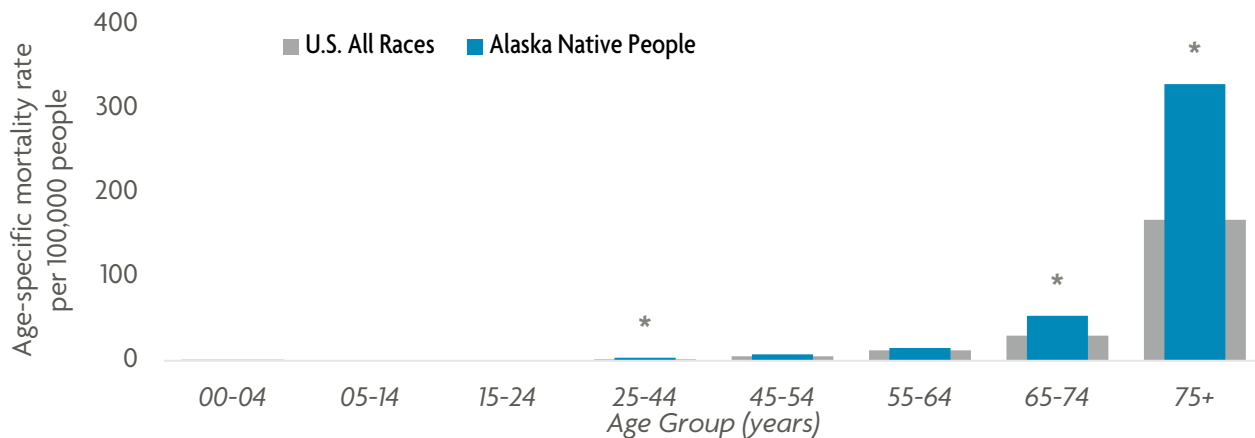


Figure 188b. Alaska Native Females Compared to U.S. All Races Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

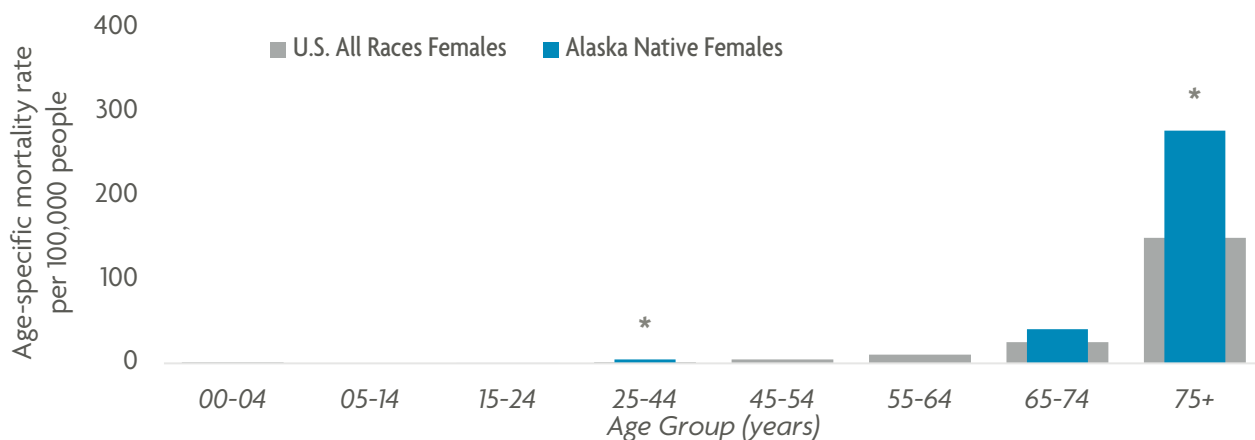
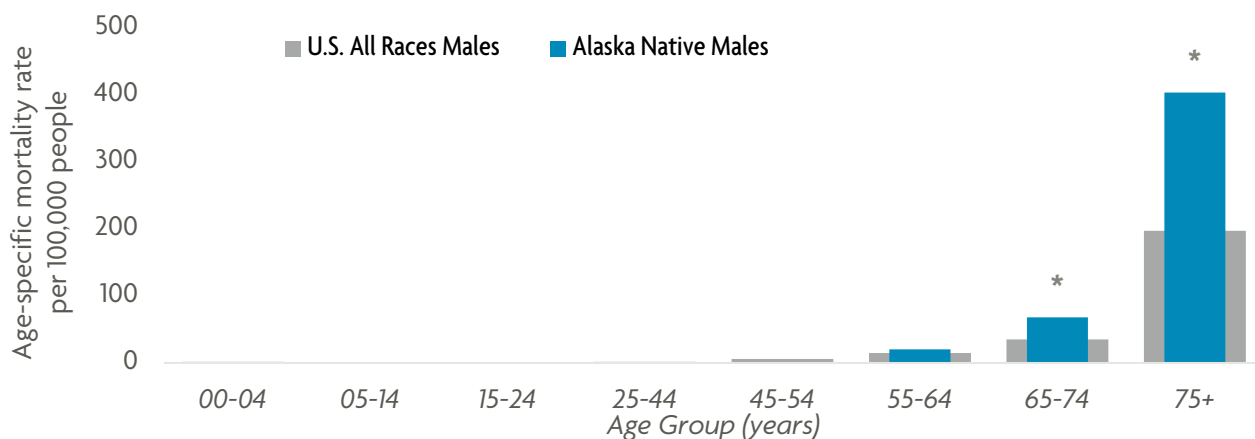


Figure 188c. Alaska Native Males Compared to U.S. All Races Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Table 48. Age-Specific Influenza/Pneumonia Mortality Rates among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

All								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	3.7	7.6	15.4	53.7	329.9
U.S. All Races	1.4	0.2	0.4	1.7	5.3	12.5	29.9	168.1
Rate Ratio	-	-	-	2.2	1.4	1.2	1.8	2.0
Females								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	4.6	-	-	40.8	277.6
U.S. All Races	1.2	0.3	0.4	1.5	4.7	10.5	25.3	149.7
Rate Ratio	-	-	-	3.1	-	-	1.6	1.9
Males								
Age Group (years)	0-4	5-14	15-24	25-44	45-54	55-64	65-74	75+
Alaska Native people	-	-	-	-	-	20.2	68.0	403.2
U.S. All Races	1.6	0.2	0.5	1.8	5.9	14.7	35.1	197.0
Rate Ratio	-	-	-	-	-	1.4	1.9	2.0

- Rate not reported for < 5 cases

Table 49. Trends in Influenza/Pneumonia Mortality among Alaska Native People Compared to U.S. All Races, 1980-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People	U.S. All Races	Rate Ratio	
1980-1983	52.2	29.2	1.8	*
1984-1988	60.5	34.2	1.8	*
1989-1993	56.2	34.6	1.6	*
1994-1998	39.6	33.2	1.2	*
1999-2003	35.8	22.6	1.6	*
2004-2008	25.5	19.3	1.3	*
2009-2013	26.0	17.0	1.5	*
2014-2018	27.7	14.6	1.9	*
% Change	-46.9%	-50.0%		

*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 189. Overall Change in Influenza/Pneumonia Mortality Rates, Alaska Native People Compared to U.S. All Races, 1980-1983 to 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

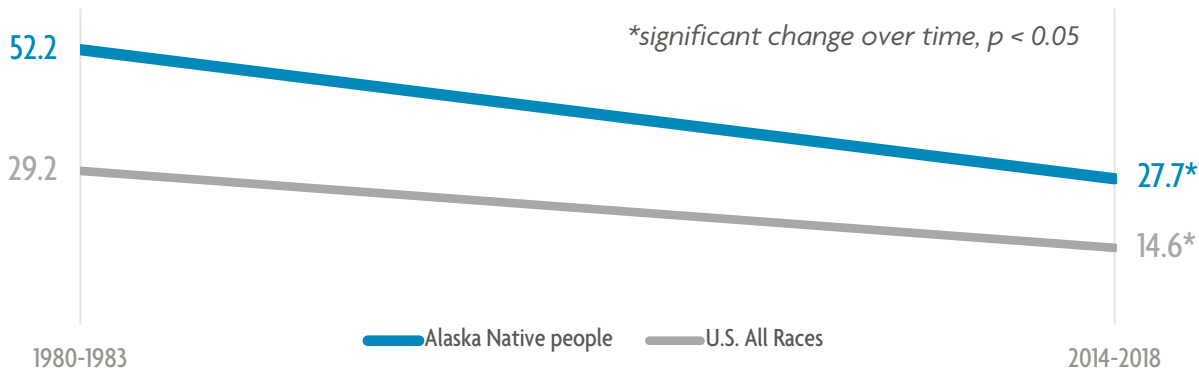
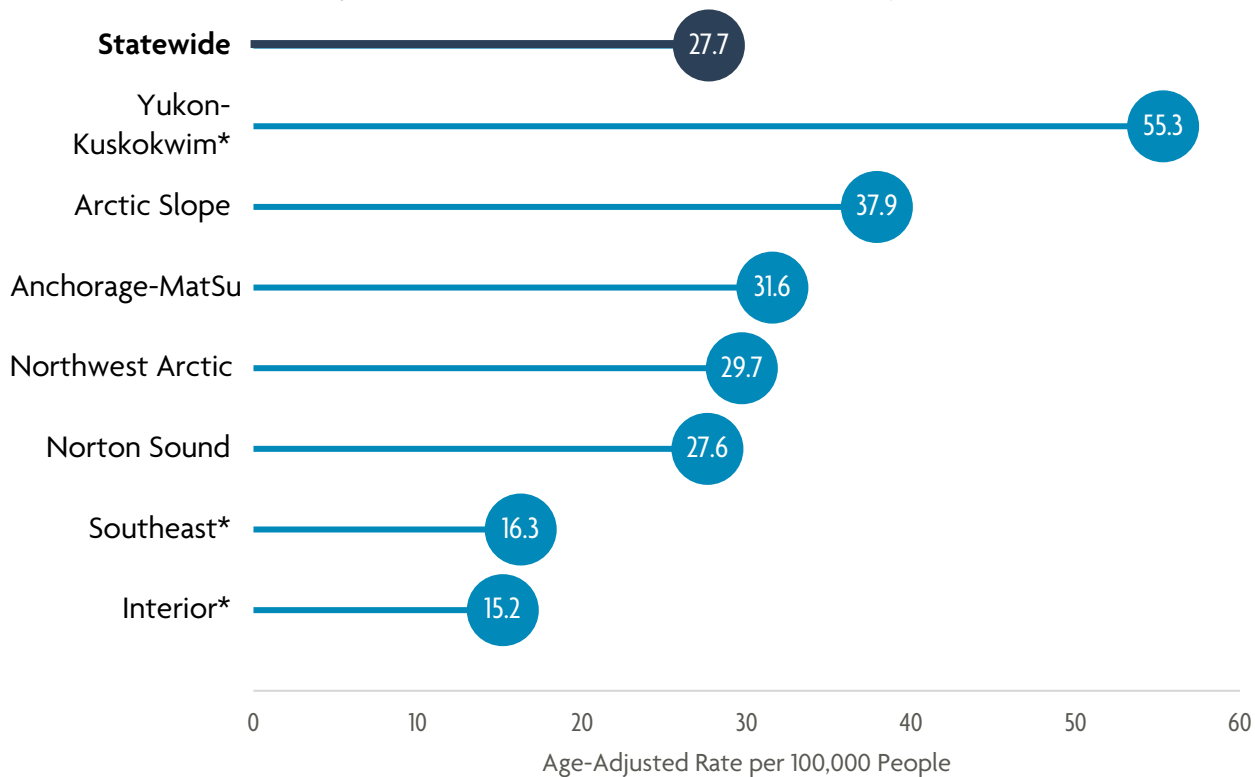


Figure 190. Influenza/Pneumonia Mortality Rates by Region, Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

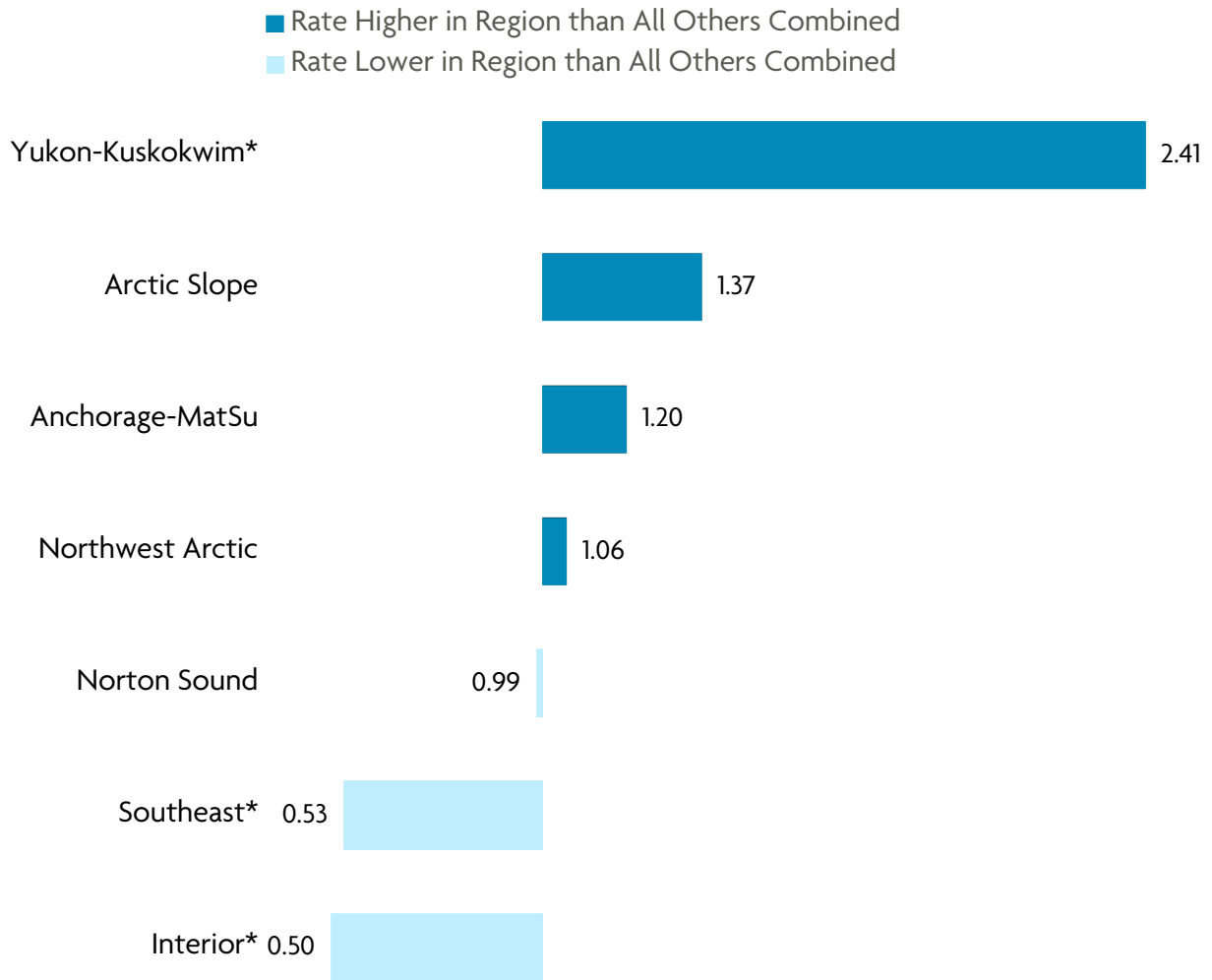


*significant difference, $p < 0.05$

DETAILED LEADING CAUSES OF DEATH

Figure 191. Influenza/Pneumonia Mortality Rate Ratio Comparison between Regions among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



*significant difference, $p < 0.05$

Alcohol-Related Mortality

The purpose of this chapter is to explore deaths influenced by alcohol use (as per the death certificate) but do not have an underlying cause of alcohol abuse (ICD10 code F10). There are several ICD codes related to alcohol-related mortality, including chronic liver disease, heart disease, unintentional injury, and other codes which are not classified as “alcohol abuse” by the CDC’s classification guidelines. The codes included for this special analysis are from the CDC’s Alcohol Related Disease Impact (ARDI) framework. See Appendix A for full details about methods.

Limiting analysis to only the underlying cause of death does not capture the full extent of impact of alcohol on mortality among Alaska Native people. The inclusion of additional alcohol-related ICD codes in the analysis presented in this chapter provides more information to better understand the long term health and mortality impacts of alcohol use. This understanding is vital to developing public health strategies and interventions to mitigate the impact of excessive alcohol use.

In contrast to the other chapters in this report which rely solely on the underlying cause of death, this special analysis uses both the underlying and contributing causes of death on the death certificate. See Appendix C for a full list of codes included in this analysis.

Main Findings

- During 2014-2018, alcohol use contributed to 721 deaths among Alaska Native people, both sexes combined. This accounted for 13.4% of all deaths among Alaska Native people.
- Unintentional injury was the leading cause of alcohol-related mortality among both sexes combined (194 deaths; or 27.8% of all unintentional injury deaths) and among males (121 deaths; or 27.3% of all male unintentional injury deaths). Unintentional injury was the second leading cause of alcohol-related mortality among Alaska Native females (73 deaths; or 28.7% of all female unintentional injury deaths).
- Chronic liver disease was the leading cause of alcohol-related mortality for Alaska Native females (119 deaths; or 85% of all chronic liver disease/cirrhosis deaths among females). Among Alaska Native males, chronic liver disease/cirrhosis was the fourth leading cause of alcohol-related deaths (55 deaths; or 87.3% of all chronic liver disease/cirrhosis deaths among males).
- Alcohol abuse (ICD10 code F10) was the second most common cause of death among Alaska Native males (78 deaths) within this special analysis framework. It was the third leading cause of alcohol-related mortality among Alaska Native females (48 deaths).

Overview

This chapter provides more detail about alcohol-related mortality rates among Alaska Native people for the five-year period, 2014-2018. Tables 50a-c report the leading causes, rates, and percentages of alcohol-related deaths among Alaska Native people, both sexes combined, females, and males, separately. Figures 192a-193a present this information for Alaska Native people, both sexes combined, Figures 192b-193b present this for females, and Figures 192c-193c for males. Data for these figures are available in Tables 50a-c.

ALCOHOL-RELATED MORTALITY

Table 50a. Leading Causes of Alcohol-Related Mortality by Underlying Cause of Death among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alcohol-Related Deaths	Rate ¹	% Total Deaths	Total Alaska Native Deaths
1 Unintentional Injury	194	33.7	27.8%	698
2 Chronic Liver Disease	174	30.3	85.7%	203
3 Alcohol Abuse	126	21.6	100.0%	126
4 Heart Disease	109	18.7	12.2%	893
5 Cancer	21	3.8	2.1%	979
6 COPD	10	2.2	3.6%	277
7 Suicide	7	1.2	2.3%	302
All Others	95	14.5	9.6%	1,918
All-Cause	721	125.8	13.4%	5,396

¹Age-adjusted rate per 100,000 people, standardized to U.S. 2000 population

ALCOHOL-RELATED MORTALITY

Figure 192a. Leading Causes of Alcohol-Related Mortality by Underlying Cause of Death among Alaska Native People, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

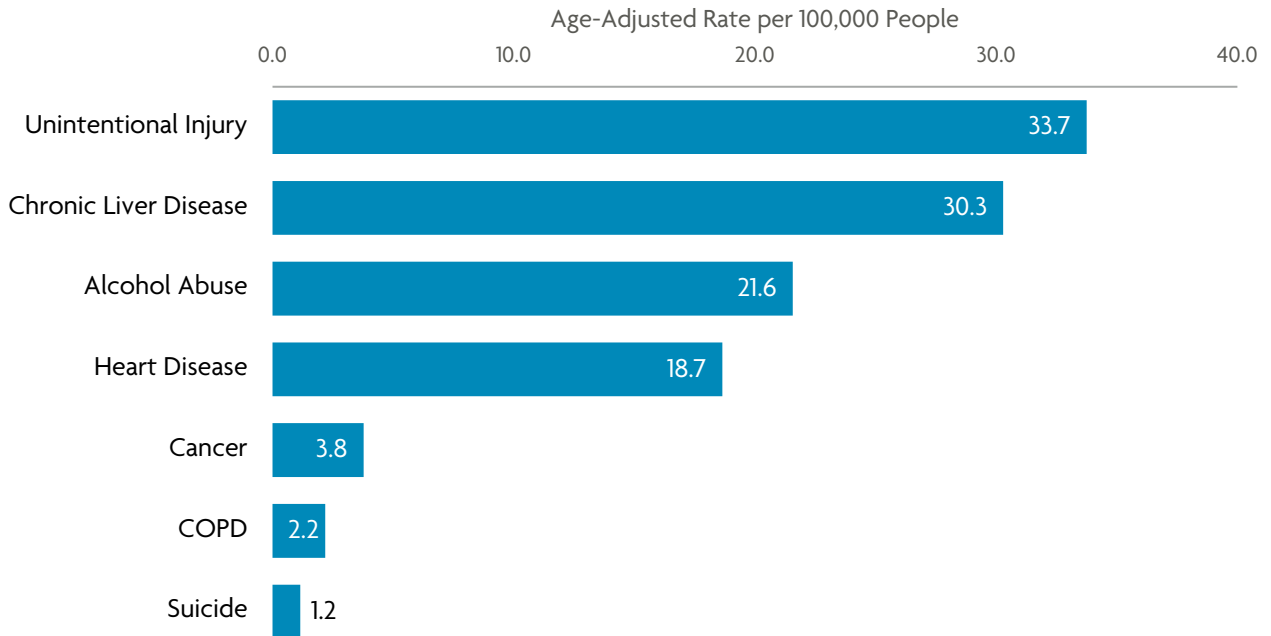
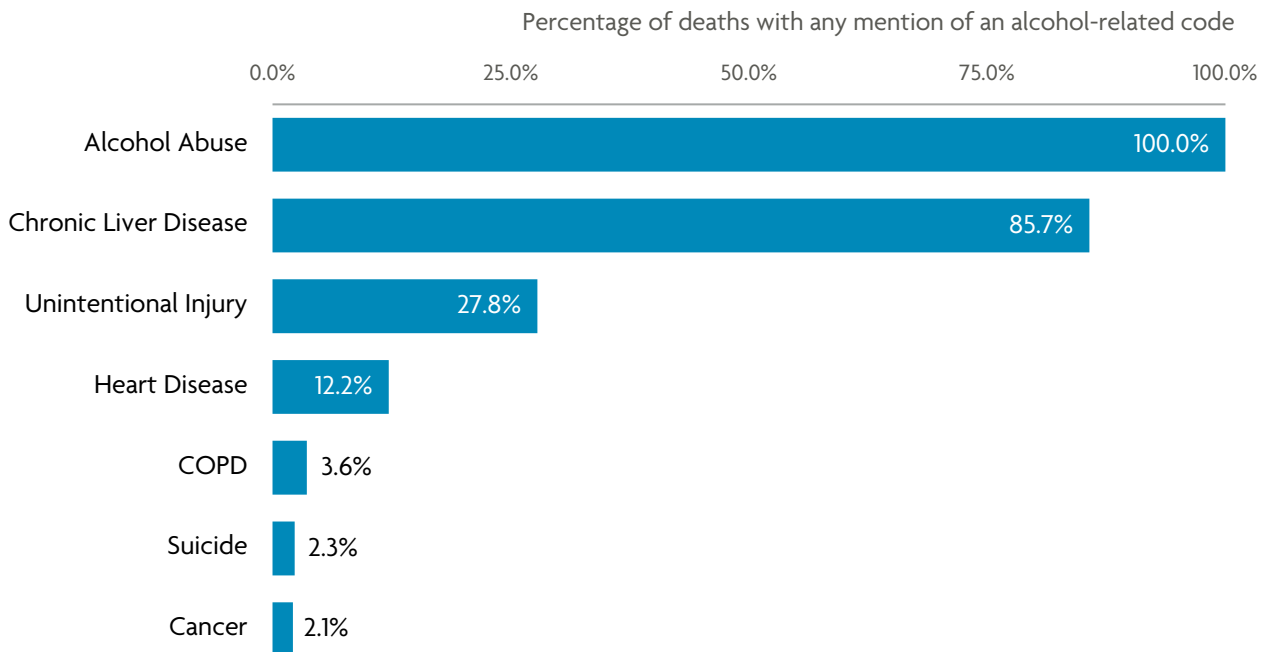


Figure 193a. Leading Causes of Death with any Mention of Alcohol on the Death Certificate, Alaska Native People, 2014 -2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



ALCOHOL-RELATED MORTALITY

Table 50b. Leading Causes of Alcohol-Related Mortality by Underlying Cause of Death among Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alcohol-Related Deaths	Rate ¹	% Total Deaths	Total Alaska Native Deaths
1 Chronic Liver Disease	119	40.8	85.0%	140
2 Unintentional Injury	73	25.9	28.7%	254
3 Alcohol Abuse	48	16.1	100.0%	48
4 Heart Disease	37	12.2	10.5%	352
5 Suicide	6	2.0	7.8%	77
All Others	40	13.8	12.4%	1,550
All-Cause	323	110.8	13.3%	2,421

¹Age-adjusted rate per 100,000 people, standardized to U.S. 2000 population

ALCOHOL-RELATED MORTALITY

Figure 192b. Leading Causes of Alcohol-Related Mortality by Underlying Cause of Death among Alaska Native Females, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

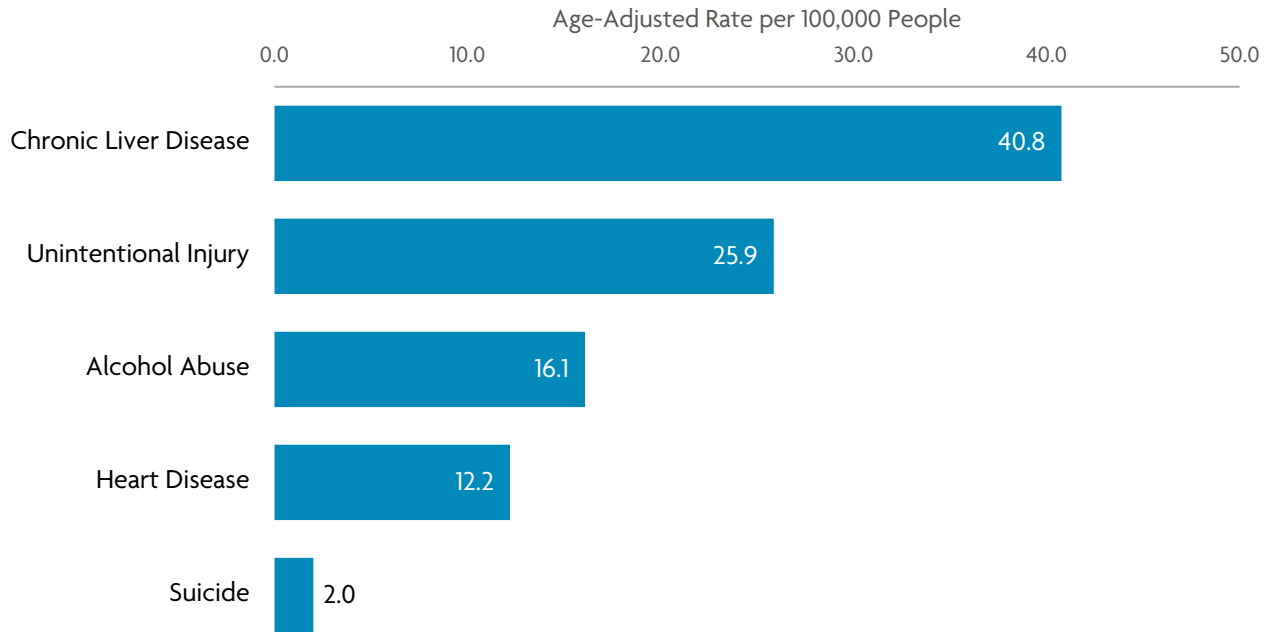
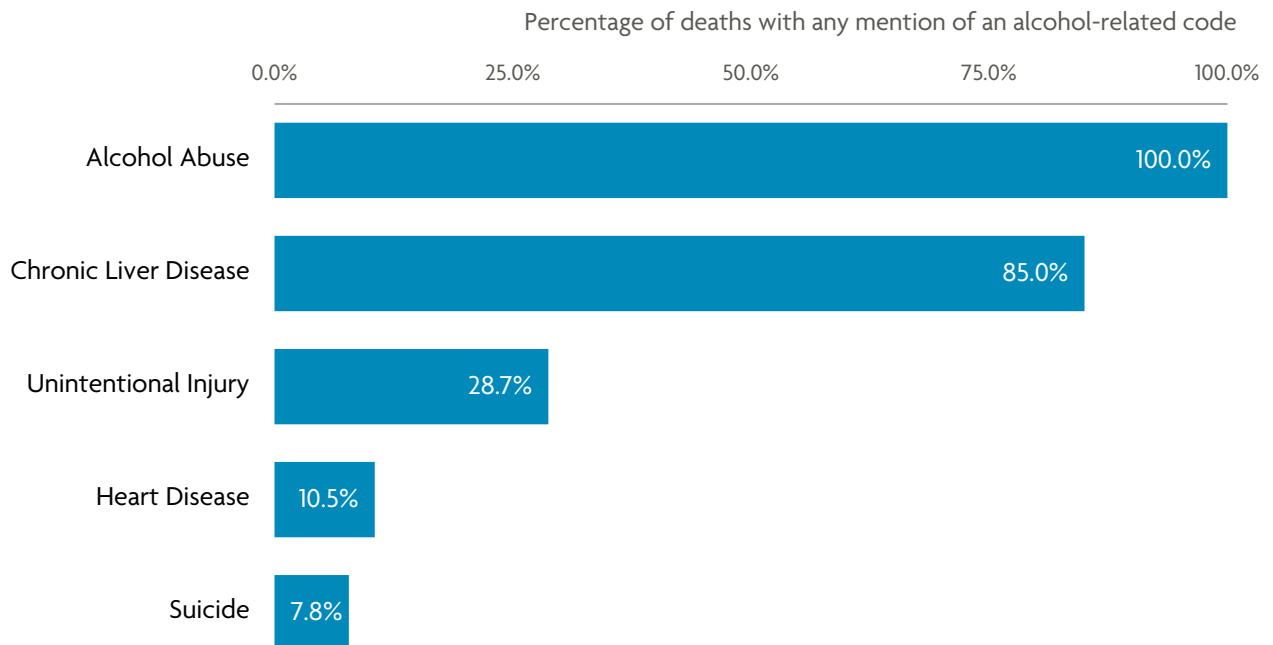


Figure 193b. Leading Causes of Death with any Mention of Alcohol on the Death Certificate, Alaska Native Females, 2014 -2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records



ALCOHOL-RELATED MORTALITY

Table 50c. Leading Causes of Alcohol-Related Mortality by Underlying Cause of Death among Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alcohol-Related Deaths	Rate ¹	% Total Deaths	Total Alaska Native Deaths
1 Unintentional Injury	121	41.9	27.3%	444
2 Alcohol Abuse	78	27.5	100.0%	78
3 Heart Disease	72	25.2	13.3%	541
4 Chronic Liver Disease	55	19.7	87.3%	63
5 Cancer	17	7.0	3.4%	501
6 COPD	8	4.1	5.4%	148
All Others	55	21.6	13.8%	1,347
All-Cause	398	142.9	13.4%	2,974

¹Age-adjusted rate per 100,000 people, standardized to U.S. 2000 population

ALCOHOL-RELATED MORTALITY

Figure 192c. Leading Causes of Alcohol-Related Mortality by Underlying Cause of Death among Alaska Native Males, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

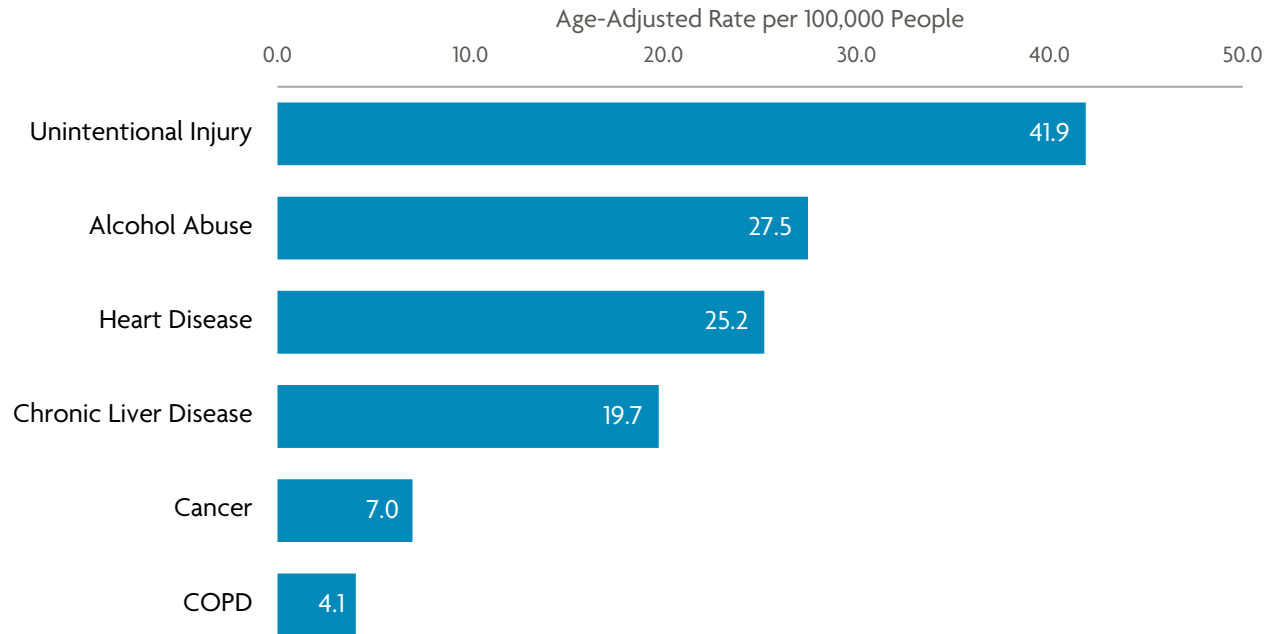
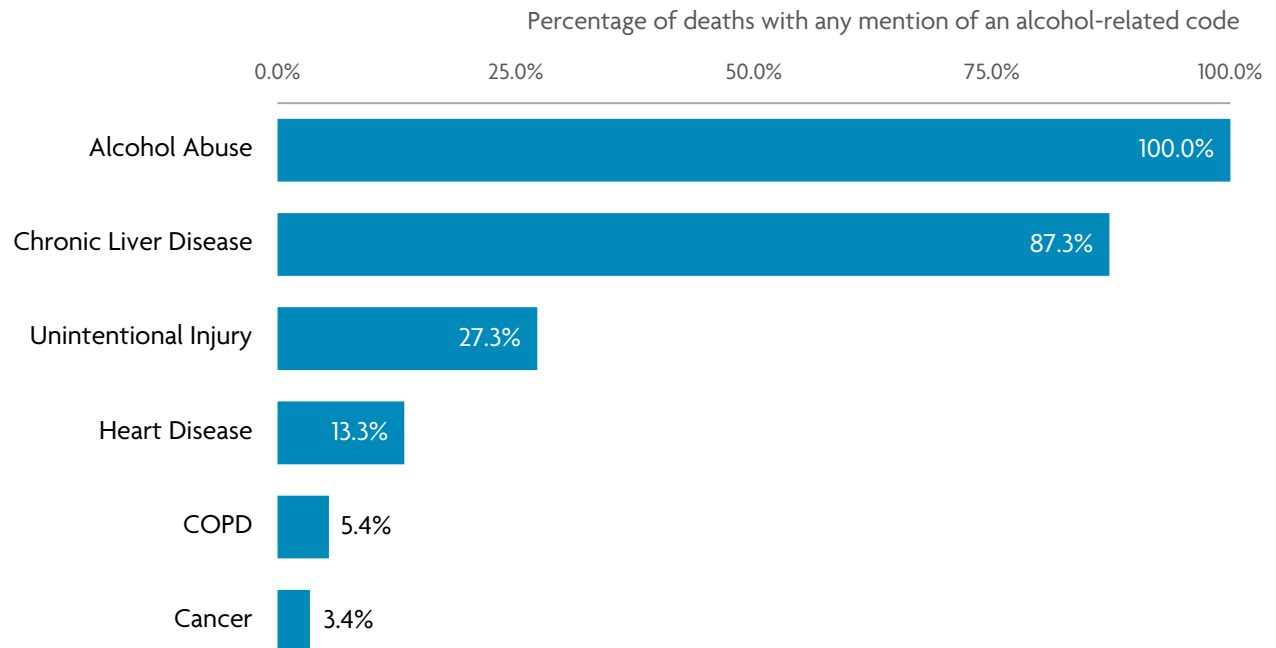


Figure 193c. Leading Causes of Death with any Mention of Alcohol on the Death Certificate, Alaska Native Males, 2014 -2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records





Appendix A – Methods

This appendix provides the methods used in each chapter in order. Mortality reporting is essential to monitoring the health and well-being of a population. This report serves as an update to prior mortality statistics published by the Alaska Native Epidemiology Center, with a new edition published approximately every five-years.

Population Overview

Alaska Native people are the Alutiiq, Athabascan, Cup'ik, Eyak, Haida, Iñupiaq, St. Lawrence Yup'ik, Tlingit, Tsimshian, Unangax̂, and Yup'ik peoples who have lived and thrived in the land now known as Alaska since time immemorial. The U.S. Bureau of the Census estimates that in the year 2010 there were 130,998 Alaska Native people residing in Alaska, 104,871 of whom checked only the American Indian/Alaska Native category for race among multiple options.

For this report, bridged race population estimates were used for statistics calculated prior to 2014. The bridged estimate for the year 2010 Alaska Native population was 120,767, an intermediate value between the single race and multiple race estimates reported by the census.^a For the most recent time period, 2014-2018, the racial classification includes Alaska Native people alone or in combination with other races. Population tables for the 2014-2018 time period are presented in Appendix E.

Mortality Data Overview

Mortality records for the years 1980-2018 were obtained from the State of Alaska's Department of Health and Social Services, Health Analytics and Vital Records Section. The analyses in this report include all Alaska Native people who were a resident in Alaska and died in Alaska. Individuals with no underlying cause of death listed were excluded from the analysis. For most chapters in this report, we calculated mortality rates for Alaska Native people using only the underlying cause of death. For one chapter, *Alcohol-Related Mortality*, all causes of death listed on the certificate were considered for analysis.

Because of small numbers, deaths were aggregated for the five-year time period, 2014-2018. Race, alone or in combination, of the Alaska Native population estimate for this period was used as the population denominator.^b We only reported and calculated rates for those causes that had at least five deaths during the interval studied.

Race is assigned at time of death by either next of kin, or the coroner. There is often concern about under-reporting of minority groups on death certificate data. However, a 2014 study estimated that misclassification of Alaska Native people on death certificates is relatively low (6.5%).^c

Alaska Native rates for 2014-2018 were compared to mortality rates for U.S. all races for the time period, 2014-2018. These large numbers provide accurate estimates by age and sex for comparison. U.S. all races data, numerators and denominators, came from the CDC National Center for Health Statistics.^d Data for U.S. all races are available for the years 1969-2018.

Age-adjusted mortality rates control for the effects of differences in population age distributions. Direct age-adjustment is the same as calculating a weighted average. It weights the age-specific rates observed in a population by the proportion of each age group in a standard population. All mortality rates were age-adjusted to the 2000 standard population by the direct method.

Rate ratios, a calculation of relative difference between two incidence rates, were created to compare Alaska Native to U.S. all races rates. The denominators used in these rate ratio calculations are the U.S. all races rates. Confidence intervals were calculated around these rate ratios.^e Alaska Native rates were considered significantly different if the 95% confidence interval did not contain one. Age-adjusted rates based on fewer than 20 occurrences are statistically unreliable and should be used with caution.

Most chapters focus on the ten leading causes of death among Alaska Native people, both sexes combined. Some chapters include statistics for the top 18 causes of death that have at least 30 deaths occurring statewide among Alaska Native people during the five-year time period 2014-2018.

Leading Causes of Death

This report shows causes of death among Alaska Native people in rank order. Numbers of deaths for each cause and age-adjusted rates are listed for both Alaska Native people and U.S. all races. Rate ratios with 95% confidence intervals are used to compare the two populations. Rates are considered statistically different if the confidence intervals do not contain one.

In order for the data in this report to be comparable to other studies, mortality rates for the 10 leading causes of death for Alaska Native people statewide were calculated from a standardized list of 50 leading causes of death as defined by the National Center for Health Statistics (NCHS) with the exception of alcohol abuse (F10). Deaths due to Alcohol Abuse (F10) do not appear on the NCHS list of leading causes because of its low rate of occurrence nationwide. It does, however, rank in the top 10 leading causes of death among Alaska Native people, and was included in this report. A list of ICD-9 and ICD-10 code groupings used is included in the Appendix C.

Throughout this document, certain conditions originating in the perinatal period are listed as perinatal conditions; chronic liver disease and cirrhosis are referred to as chronic liver disease; chronic obstructive pulmonary disease is listed as COPD; congenital malformations, deformations and chromosomal abnormalities are listed as congenital abnormalities; diseases of heart are listed as heart disease; essential (primary) hypertension and hypertensive renal disease are listed as hypertension; homicide and legal intervention is listed as homicide; nephritis, nephrotic syndrome and nephrosis are listed as nephritis; and mental and behavioral disorders due to alcohol abuse are listed as alcohol abuse; diabetes mellitus are listed as diabetes.

Age-Specific Rates

Age-specific mortality rates are the total number of deaths per year per 100,000 people of a given age and allow an examination of health risks for each age group of the population. For the most recent time period, 2014-2018, age-specific rates for Alaska Native people were compared with age-

specific U.S. all races rates using rate ratios and 95% confidence intervals. Rates are considered statistically different if the confidence intervals of the rate ratios do not contain one. Age-specific rates are not age-adjusted.

Years of Potential Life Lost (YPLL)

Years of potential life lost (YPLL) is a measure of premature mortality. It is an estimate of the years a person would have lived if s/he had lived to age 75. For the purpose of this publication, the number of YPLL is calculated by subtracting the age at death for each individual from 75. Only those people who died before 75 years of age are included in the calculation. YPLL is an alternative death statistic to mortality rates that gives more insight into deaths that occur among younger people. This section lists the fifteen leading causes of YPLL among Alaska Native people.

Trends Over Time

Changes in mortality rates over the period, 1980-1983 to 2014-2018, were analyzed for the leading causes of death among Alaska Native people statewide and in each service region.

Historical data is presented for five-year aggregated time periods with the exception of the first time period, 1980-1983. While the first time period presented here, 1980-1983, is only a four year aggregate (compared to five-years for all other time periods), there is no reason to believe the inclusion of an additional year in the first time period would substantially change the overall trend calculation. We assume the risk of mortality in 1979 is not significantly different than the 1980-1983 time period.

Percentage change between the 1980-1983 time period and the 2014-2018 time period was calculated by subtracting the rate for the first time period from the rate for the most recent time period and dividing by the rate for the first time period. Rates over time were reported for both Alaska Native people and U.S. all races.

Rates were not calculated for a cause that had fewer than five cases. Rates based on fewer than 20 occurrences are statistically unreliable and should be used with caution.

Mantel-Haenszel Chi-square tests for trend stratified by age group were used to test for a significant trend over time for each age-adjusted time period.^f

Service Regions

Alaska is divided into twelve service regions for reporting health data. In general, these regions match the larger Tribal Health Organization (THO) service areas. Smaller service areas required aggregation. There are twelve service regions: Aleutians & Pribilofs; Anchorage-MatSu; Arctic Slope; Bristol Bay; Copper River/Prince William Sound; Interior; Kenai Peninsula; Kodiak Area; Northwest Arctic; Norton Sound; Southeast; Yukon-Kuskokwim. Refer to Appendix D for details on region definitions.

Deaths were assigned to the service region in which the person was resident, regardless of place of death in Alaska. This report does not include deaths of Alaska residents who died outside of Alaska as well as Alaska residents without an underlying cause of death.

Rate ratios were used to compare each region to all regions combined minus the region of interest. Confidence intervals for the rate ratios were calculated around the ratios. Mortality rates for a region were considered to be significantly different from the rest of the state if the rate ratio of the region compared to the rest of the state combined does not include one.

Regional data is presented for the top 18 causes of death, where reportable. Fewer causes were reported in individual regions if causes had fewer than five cases.

Excess Deaths

Excess deaths were calculated by multiplying the age-specific and cause-specific death rates for U.S. all races by the Alaska Native population for each age group to determine the expected number of deaths. The difference between the expected and the observed number of Alaska Native deaths was considered excess.^g If the number is positive, it means there were more deaths among Alaska Native people than expected. If the number is negative, it means there were fewer deaths among Alaska Native people than expected.

Life Expectancy

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 tables report the number of years a person can expect to live if they have survived to a given age. Reported life expectancy for this report is calculated via a traditional life-table method.^h

Alcohol-Related Mortality

Inclusion of records in this section is defined by any mention of one alcohol-associated code anywhere in the certificates' cause of death, whether underlying or contributing. The codes included for this special analysis are developed from the CDC's Alcohol-Related Disease Impact (ARDI) framework.ⁱ Death certificates were then analyzed according to the underlying cause listed, in accordance with the methodology in the rest of this report.

^a Population bridging is a method used to make multiple-race and single-race data comparable enough for analysis. In population bridging, all single race respondents are counted in the race category (in this case, all 104,871 AN). Persons who reported multiple races (in this case, an additional 26,127 individuals) are assigned to a single race category based upon fairly complex mathematical models.

^b Population estimates for Alaska Native people for the years 1980-1998 are based on the NCHS postcensal series by year, census area, age, sex, single race, and Hispanic origin. Population estimates for Alaska Native people for the years 1999-2013 are based on the NCHS postcensal series by year, census area, age, sex, bridged race, and Hispanic origin. Population estimates for Alaska Native people for the years 2014-2018 are based on the State of Alaska, Department of Labor and Workforce Development by year, census area, age, sex, race (alone or in combination), and Hispanic origin. Census areas were combined to form Service Regions as outlined in Appendix D. Population counts for communities that received health services from regions other than those to which their census areas belonged were added or subtracted

- from the appropriate service region. Counts for Alaska Native people in these villages came from 2010 Census data. Changes in annual community estimates were calculated based on annual changes for the census area of the community. Data for 1990-2013 is available on the Internet at: http://www.cdc.gov/nchs/nvss/bridged_race.htm as of December 1, 2020. Data for 2014-2018 is available on the internet at: <https://live.laborstats.alaska.gov/pop/> as of December 1, 2020.
- ^c Espey, D. K., Jim, M. A., Richards, T. B., Begay, C., Haverkamp, D., & Roberts, D. (2014). Methods for improving the quality and completeness of mortality data for American Indians and Alaska Natives. *American journal of public health*, 104 Suppl 3(Suppl 3), S286–S294. <https://doi.org/10.2105/AJPH.2013.301716>
- ^d Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, accessed 2020. Data are from the Multiple Cause of Death Files, 1999-2018, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html>. Underlying mortality data provided by NCHS (www.cdc.gov/nchs).
- ^e Armitage P, Berry G, Matthews. *JNS. Statistical Methods in Medical Research* (4th edition). Oxford: Blackwell Science 2002.
- ^f Schlesselman. “Case-Control Studies”, New York, Oxford Univ. Press, 1982, pp.203-206.
- ^g Berry G. The Analysis of Mortality by the Subject-Years Method. *Biometrics*. 1983;39(1): 173-184.
- ^h For more information, see “WHO methods for life expectancy and healthy life expectancy,” http://www.who.int/healthinfo/statistics/LT_method.pdf
- ⁱ For more information, see “ARDI methods,” <https://www.cdc.gov/alcohol/ardi/methods.html>



Appendix B – Data Tables

Data Source for all tables: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

Table 51a. Deaths among Alaska Native People, 0-4 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Perinatal Conditions	30	41.6	56,596	57.4	0.7	0.51 - 1.04
Congenital Malformations	22	30.5	25,515	25.9	1.2	0.78 - 1.79
Unintentional Injury	22	30.5	12,360	12.5	2.4	1.61 - 3.71
Heart Disease	5	6.9	2,151	2.2	3.2	1.31 - 7.58
Septicemia	5	6.9	1,108	1.1	6.3	2.62 - 15.18
All-Cause	199	276.0	133,183	135.0	2.0	1.78 - 2.35

Table 52a. Deaths among Alaska Native People, 5-14 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Unintentional Injury	16	6.1	7,636	3.7	1.6	1.01 - 2.68
Cancer	6	2.0	4,295	2.1	1.0	0.43 - 2.14
Suicide	6	2.0	2,411	1.2	1.7	1.40 - 4.31
All-Cause	49	14.8	27,185	13.2	1.1	0.85 - 1.49

Table 53a. Deaths among Alaska Native People, 15-24 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Suicide	116	97.8	28,767	13.2	7.4	6.17 - 8.89
Unintentional Injury	84	70.9	63,691	29.3	2.4	1.95 - 3.00
Homicide	22	18.6	23,588	10.8	1.7	1.13 - 2.61
Heart Disease	5	4.2	4,717	2.2	1.9	0.80 - 4.62
All-Cause	262	221.2	154,039	70.8	3.1	2.77 - 3.53

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 54a. Deaths among Alaska Native People, 25-44 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Unintentional Injury	288	107.3	211,716	49.5	2.2	1.93 - 2.43
Suicide	132	41.3	72,392	17.0	2.4	2.05 - 2.88
Heart Disease	69	29.4	69,715	17.6	1.7	1.32 - 2.12
Chronic Liver Disease	63	23.8	18,822	4.8	5.0	3.88 - 6.36
Homicide	58	19.5	40,649	9.3	2.1	1.62 - 2.71
Cancer	43	17.5	73,038	18.3	1.0	0.71 - 1.29
Alcohol Abuse	23	7.6	6,511	1.6	4.7	3.14 - 7.13
Cerebrovascular Disease	11	4.8	11,780	3.0	1.6	0.89 - 2.89
Influenza/Pneumonia	8	3.7	6,725	1.7	2.2	1.08 - 4.34
Septicemia	6	2.9	6,189	1.6	1.8	0.80 - 3.98
Legal Intervention	5	1.7	1,564	0.3	5.6	2.33 - 13.48
All-Cause	834	305.9	657,421	158.3	1.9	1.81 - 2.07

Table 55a. Deaths among Alaska Native People, 45-54 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Unintentional Injury	108	139.9	112,986	52.9	2.6	2.19 - 3.19
Cancer	107	134.1	205,746	96.4	1.4	1.15 - 1.68
Heart Disease	101	131.8	167,944	78.7	1.7	1.38 - 2.04
Chronic Liver Disease	64	84.3	42,334	19.8	4.3	3.33 - 5.44
Suicide	30	42.3	42,868	20.1	2.1	1.47 - 3.01
Alcohol Abuse	29	37.3	11,746	5.5	6.8	4.71 - 9.76
Cerebrovascular Disease	16	20.9	26,335	12.3	1.7	1.04 - 2.77
Diabetes Mellitus	13	16.4	31,364	14.7	1.1	0.65 - 1.92
Homicide	13	17.1	10,610	5.0	3.4	1.98 - 5.89
COPD	12	15.6	20,836	9.8	1.6	0.90 - 2.8
Septicemia	7	8.8	12,349	5.8	1.5	0.72 - 3.17
Influenza/Pneumonia	6	7.6	11,266	5.3	1.4	0.65 - 3.2
All-Cause	640	830.5	858,906	402.4	2.1	1.91 - 2.23

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Table 56a. Deaths among Alaska Native People, 55-64 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Cancer	247	348.0	576,525	278.9	1.2	1.10 - 1.41
Heart Disease	177	249.5	391,099	189.2	1.3	1.14 - 1.53
Unintentional Injury	90	127.2	106,463	51.5	2.5	2.01 - 3.04
COPD	49	68.9	89,230	43.2	1.6	1.21 - 2.11
Alcohol Abuse	47	66.3	16,673	8.1	8.2	6.15 - 10.9
Chronic Liver Disease	44	62.2	67,200	32.5	1.9	1.42 - 2.57
Cerebrovascular Disease	21	29.7	61,650	29.8	1.0	0.65 - 1.53
Diabetes Mellitus	19	26.6	71,604	34.6	0.8	0.49 - 1.21
Suicide	12	16.9	39,559	19.1	0.9	0.50 - 1.56
Homicide	11	15.6	6,915	3.3	4.7	2.62 - 8.56
Influenza/Pneumonia	11	15.4	25,928	12.5	1.2	0.68 - 2.22
Septicemia	8	11.2	29,218	14.1	0.8	0.40 - 1.59
Essential Hypertension	6	8.5	18,799	9.1	0.9	0.42 - 2.07
Viral Hepatitis	5	7.1	15,130	7.3	1.0	0.40 - 2.33
All-Cause	892	1257.9	1,819,880	880.5	1.4	1.34 - 1.53

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 57a. Deaths among Alaska Native People, 65-74 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Cancer	274	777.7	826,034	578.6	1.3	1.19 - 1.51
Heart Disease	173	499.1	557,644	390.6	1.3	1.10 - 1.48
COPD	75	225.0	190,587	133.5	1.7	1.34 - 2.11
Cerebrovascular Disease	38	107.3	108,328	75.9	1.4	1.03 - 1.94
Unintentional Injury	35	99.4	69,907	49.0	2.0	1.46 - 2.82
Diabetes Mellitus	33	90.2	100,974	70.7	1.3	0.91 - 1.79
Chronic Liver Disease	25	65.1	44,322	31.0	2.1	1.42 - 3.11
Influenza/Pneumonia	18	53.7	42,621	29.9	1.8	1.13 - 2.85
Alcohol Abuse	16	45.7	8,214	5.8	7.9	4.82 - 12.86
Septicemia	16	45.7	43,949	30.8	1.5	0.91 - 2.42
Essential Hypertension	8	22.8	26,917	18.9	1.2	0.60 - 2.42
Nephritis	6	18.3	49,769	34.9	0.5	0.24 - 1.17
In Situ/Benign Neoplasm	5	13.7	15,541	10.9	1.3	0.52 - 3.02
Parkinson's Disease	5	17.1	20,934	14.7	1.2	0.49 - 2.80
Peptic Ulcer	5	13.7	3,137	2.2	6.2	2.59 - 14.97
Viral Hepatitis	5	12.6	6,779	4.7	2.7	1.11 - 6.42
All-Cause	901	2577.7	2,554,025	1789.1	1.4	1.35 - 1.54

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 58a. Deaths among Alaska Native People, 75+ Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Heart Disease	360	2005.0	1,991,895	1776.8	1.1	1.02 - 1.25
Cancer	298	1622.8	1,289,166	1215.6	1.3	1.19 - 1.50
COPD	136	753.6	468,611	434.6	1.7	1.47 - 2.05
Cerebrovascular Disease	111	615.0	499,663	446.2	1.4	1.14 - 1.66
Alzheimer's Disease	61	350.0	524,825	457.6	0.8	0.60 - 0.98
Influenza/Pneumonia	58	329.9	189,218	168.1	2.0	1.52 - 2.54
Unintentional Injury	55	307.0	196,075	176.3	1.7	1.34 - 2.27
Diabetes Mellitus	31	169.6	184,983	172.0	1.0	0.69 - 1.4
Nephritis	30	168.2	156,443	142.0	1.2	0.83 - 1.69
Essential Hypertension	22	126.3	110,333	97.8	1.3	0.85 - 1.96
Parkinson's Disease	22	121.3	124,911	114.7	1.1	0.70 - 1.61
Septicemia	17	93.6	108,205	99.2	0.9	0.59 - 1.52
Pneumonitis	13	72.0	71,877	63.8	1.1	0.66 - 1.94
Cholelithiasis	11	60.7	12,790	11.5	5.3	2.92 - 9.53
In Situ/Benign Neoplasm	11	61.9	50,259	45.9	1.3	0.75 - 2.44
Nutritional Deficiencies	10	55.6	25,443	22.3	2.5	1.34 - 4.64
Alcohol Abuse	9	46.8	3,311	3.2	14.6	7.60 - 28.12
Chronic Liver Disease	7	39.2	30,749	29.9	1.3	0.62 - 2.75
Anemia	6	36.5	16,348	14.5	2.5	1.13 - 5.60
All-Cause	1,618	9009.9	7,530,654	6807.2	1.3	1.26 - 1.39

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 51b. Deaths among Alaska Native Females, 0-4 Age Group, 2014-2018

	Alaska Native Females		U.S. All Races			
	Count	Rate ¹	Count	Rate ¹	Rate Ratio	95% CI
Perinatal conditions	13	36.8	24,774	51.5	0.7	0.41 - 1.23
Congenital Malformations	8	22.6	12,148	25.2	0.9	0.45 - 1.80
Unintentional Injury	7	19.8	4,968	10.2	1.9	0.92 - 4.07
All-Cause	81	229.1	58,702	121.8	1.9	1.51 - 2.34

Table 52b. Deaths among Alaska Native Females, 5-14 Age Group, 2014-2018

	Alaska Native Females		U.S. All Races			
	Count	Rate ¹	Count	Rate ¹	Rate Ratio	95% CI
Unintentional Injury	6	4.2	2,891	2.9	1.5	0.65 - 3.23
All-Cause	18	11.2	11,413	11.3	1.0	0.63 - 1.58

Table 53b. Deaths among Alaska Native Females, 15-24 Age Group, 2014-2018

	Alaska Native Females		U.S. All Races			
	Count	Rate ¹	Count	Rate ¹	Rate Ratio	95% CI
Suicide	29	50.4	5,717	5.4	9.3	6.49 - 13.46
Unintentional Injury	26	45.1	17,165	16.2	2.8	1.90 - 4.09
Homicide	8	13.9	3,196	3.0	4.6	2.32 - 9.29
All-Cause	81	140.6	41,052	38.7	3.6	2.92 - 4.52

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 54b. Deaths among Alaska Native Females, 25-44 Age Group, 2014-2018

	Alaska Native Females		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Unintentional Injury	108	82.3	58,309	27.6	3.0	2.47 - 3.60
Chronic Liver Disease	49	37.8	7,186	3.6	10.5	7.92 - 13.89
Suicide	31	18.3	16,142	7.7	2.4	1.67 - 3.38
Heart Disease	29	25.0	22,503	11.2	2.2	1.55 - 3.22
Cancer	26	20.6	40,782	20.6	1.0	0.68 - 1.47
Homicide	17	12.5	7,116	3.3	3.8	2.36 - 6.11
Alcohol Abuse	13	8.2	1,893	0.9	9.1	5.30 - 15.78
Cerebrovascular Disease	5	4.5	5,084	2.6	1.7	0.71 - 4.12
Influenza/Pneumonia	5	4.6	3,020	1.5	3.1	1.28 - 7.42
All-Cause	350	265.2	224,927	109.8	2.4	2.17 - 2.68

Table 55b. Deaths among Alaska Native Females, 45-54 Age Group, 2014-2018

	Alaska Native Females		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Cancer	52	130.6	105,778	97.8	1.3	1.02 - 1.75
Unintentional Injury	42	109.7	35,853	33.1	3.3	2.45 - 4.48
Heart Disease	41	106.7	50,574	46.8	2.3	1.68 - 3.10
Chronic Liver Disease	39	103.5	14,697	13.6	7.6	5.56 - 10.42
Alcohol Abuse	12	29.8	3,031	2.8	10.7	6.04 - 18.78
Suicide	10	29.4	11,299	10.4	2.8	1.52 - 5.26
Cerebrovascular Disease	9	25.0	11,507	10.6	2.4	1.23 - 4.54
COPD	6	16.0	11,249	10.4	1.5	0.69 - 3.42
Septicemia	6	15.3	5,773	5.3	2.9	1.29 - 6.41
Homicide	5	13.7	2,557	2.4	5.7	2.37 - 13.69
All-Cause	279	727.5	337,062	311.6	2.3	2.08 - 2.63

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 56b. Deaths among Alaska Native Females, 55-64 Age Group, 2014-2018

	Alaska Native Females		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Cancer	121	329.5	260,488	243.5	1.4	1.13 - 1.62
Heart Disease	50	136.5	120,243	112.4	1.2	0.92 - 1.60
Chronic Liver Disease	31	84.8	21,431	20.0	4.2	2.98 - 6.03
Unintentional Injury	28	76.5	32,912	30.8	2.5	1.71 - 3.60
COPD	26	70.7	43,538	40.7	1.7	1.18 - 2.55
Alcohol Abuse	12	32.7	3,539	3.3	9.9	5.62 - 17.47
Cerebrovascular Disease	9	24.6	26,041	24.3	1.0	0.53 - 1.95
Diabetes Mellitus	7	19.0	27,253	25.5	0.7	0.35 - 1.56
Septicemia	7	19.0	13,525	12.6	1.5	0.72 - 3.17
All-Cause	371	1012.1	714,064	667.4	1.5	1.37 - 1.68

Table 57b. Deaths among Alaska Native Females, 65-74 Age Group, 2014-2018

	Alaska Native Females		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Cancer	127	674.4	369,641	486.4	1.4	1.17 - 1.65
Heart Disease	58	327.2	200,695	264.1	1.2	0.96 - 1.60
COPD	31	180.5	93,069	122.5	1.5	1.04 - 2.09
Cerebrovascular Disease	17	84.7	50,448	66.4	1.3	0.79 - 2.05
Chronic Liver Disease	17	86.7	15,927	21.0	4.1	2.57 - 6.64
Diabetes Mellitus	17	86.7	41,655	54.8	1.6	0.98 - 2.55
Septicemia	10	52.0	21,248	28.0	1.9	1.00 - 3.45
Unintentional Injury	10	58.0	24,577	32.3	1.8	0.97 - 3.34
Influenza/Pneumonia	7	40.8	19,216	25.3	1.6	0.77 - 3.38
Alcohol Abuse	5	28.0	1,616	2.1	13.3	5.54 - 32.07
Essential Hypertension	5	28.0	12,017	15.8	1.8	0.74 - 4.26
All-Cause	412	2231.8	1,093,446	1438.8	1.6	1.41 - 1.71

¹ Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Table 58b. Deaths among Alaska Native Females, 75+ Age Group, 2014-2018

	Alaska Native Females		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Heart Disease	168	1555.7	1,087,551	1545.7	1.0	0.87 - 1.17
Cancer	150	1385.8	631,332	995.1	1.4	1.19 - 1.63
Cerebrovascular Disease	69	635.4	318,215	455.7	1.4	1.10 - 1.77
COPD	63	579.5	260,015	398.9	1.5	1.13 - 1.86
Alzheimer's Disease	39	362.9	368,563	511.9	0.7	0.52 - 0.97
Influenza/Pneumonia	30	277.6	105,042	149.7	1.9	1.30 - 2.65
Unintentional Injury	27	253.0	104,510	150.5	1.7	1.15 - 2.45
Nephritis	17	155.7	81,192	120.3	1.3	0.80 - 2.08
Essential Hypertension	15	141.6	70,632	100.0	1.4	0.85 - 2.35
Diabetes Mellitus	12	110.8	95,988	146.7	0.8	0.43 - 1.33
Parkinson's Disease	7	64.9	51,013	76.2	0.9	0.41 - 1.79
Nutritional Deficiencies	6	54.8	16,697	23.4	2.3	1.05 - 5.22
In Situ/Benign Neoplasm	5	47.4	24,736	36.8	1.3	0.54 - 3.10
Septicemia	5	47.6	60,589	91.1	0.5	0.22 - 1.26
All-Cause	829	7692.1	4,255,672	6202.9	1.2	1.16 - 1.33

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 51c. Deaths among Alaska Native Males, 0-4 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Perinatal conditions	17	46.3	31,822	63.2	0.7	0.46 - 1.18
Unintentional Injury	15	40.8	7,392	14.6	2.8	1.69 - 4.64
Congenital Malformations	14	38.1	13,367	26.5	1.4	0.85 - 2.43
All-Cause	118	321.2	74,481	147.6	2.2	1.82 - 2.61

Table 52c. Deaths among Alaska Native Males, 5-14 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Unintentional Injury	10	7.8	4,745	4.5	1.7	0.93 - 3.22
All-Cause	31	18.2	15,772	15.0	1.2	0.85 - 1.72

Table 53c. Deaths among Alaska Native Males, 15-24 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Suicide	87	142.5	23,050	20.7	6.9	5.58 - 8.50
Unintentional Injury	58	95.5	46,526	41.8	2.3	1.77 - 2.96
Homicide	14	23.2	20,392	18.3	1.3	0.75 - 2.14
All-Cause	181	297.5	112,987	101.4	2.9	2.54 - 3.39

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Table 54c. Deaths among Alaska Native Males, 25-44 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Unintentional Injury	180	132.0	153,407	71.3	1.9	1.60 - 2.14
Suicide	101	63.8	56,250	26.2	2.4	2.00 - 2.96
Homicide	41	26.3	33,533	15.2	1.7	1.28 - 2.35
Heart Disease	40	33.8	47,212	23.8	1.4	1.04 - 1.93
Cancer	17	14.4	32,256	16.1	0.9	0.56 - 1.44
Chronic Liver Disease	14	10.1	11,636	5.8	1.7	1.03 - 2.94
Alcohol Abuse	10	6.9	4,618	2.3	3.0	1.62 - 5.61
Cerebrovascular Disease	6	5.1	6,696	3.4	1.5	0.68 - 3.37
Legal Intervention	5	3.3	1,501	0.6	5.6	2.31 - 13.36
All-Cause	484	346.0	432,494	206.5	1.7	1.53 - 1.83

Table 55c. Deaths among Alaska Native Males, 45-54 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Unintentional Injury	66	170.0	77,133	73.3	2.3	1.82 - 2.95
Heart Disease	60	156.9	117,370	111.5	1.4	1.09 - 1.81
Cancer	55	137.6	99,968	95.0	1.4	1.11 - 1.89
Chronic Liver Disease	25	65.2	27,637	26.3	2.5	1.67 - 3.67
Suicide	20	55.1	31,569	30.0	1.8	1.19 - 2.85
Alcohol Abuse	17	44.7	8,715	8.3	5.4	3.35 - 8.67
Diabetes Mellitus	9	22.1	19,733	18.7	1.2	0.61 - 2.27
Homicide	8	20.5	8,053	7.6	2.7	1.35 - 5.39
Cerebrovascular Disease	7	16.8	14,828	14.1	1.2	0.57 - 2.50
COPD	6	15.2	9,587	9.1	1.7	0.75 - 3.72
All-Cause	361	933.1	521,844	495.7	1.9	1.70 - 2.09

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 56c. Deaths among Alaska Native Males, 55-64 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Heart Disease	127	370.3	270,856	271.7	1.4	1.15 - 1.62
Cancer	126	367.9	316,037	317.0	1.2	0.97 - 1.38
Unintentional Injury	62	181.4	73,551	73.8	2.5	1.92 - 3.15
Alcohol Abuse	35	102.3	13,134	13.2	7.8	5.56 - 10.8
COPD	23	67.0	45,692	45.8	1.5	0.97 - 2.20
Chronic Liver Disease	13	37.9	45,769	45.9	0.8	0.48 - 1.42
Cerebrovascular Disease	12	35.2	35,609	35.7	1.0	0.56 - 1.73
Diabetes Mellitus	12	34.8	44,351	44.5	0.8	0.44 - 1.38
Suicide	8	23.3	29,641	29.7	0.8	0.39 - 1.57
Homicide	7	20.6	5,069	5.1	4.0	1.93 - 8.50
Influenza/Pneumonia	7	20.2	14,642	14.7	1.4	0.66 - 2.89
All-Cause	521	1521.0	1,105,816	1109.2	1.4	1.26 - 1.49

Table 57c. Deaths among Alaska Native Males, 65-74 Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Cancer	147	895.5	456,393	683.7	1.3	1.11 - 1.54
Heart Disease	115	690.9	356,949	534.7	1.3	1.08 - 1.55
COPD	44	274.7	97,518	146.1	1.9	1.40 - 2.53
Unintentional Injury	25	145.1	45,330	67.9	2.1	1.44 - 3.16
Cerebrovascular Disease	21	133.9	57,880	86.7	1.5	1.01 - 2.37
Diabetes Mellitus	16	94.4	59,319	88.9	1.1	0.65 - 1.73
Alcohol Abuse	11	65.4	6,598	9.9	6.6	3.66 - 11.93
Influenza/Pneumonia	11	68.0	23,405	35.1	1.9	1.07 - 3.50
Chronic Liver Disease	8	40.6	28,395	42.5	1.0	0.48 - 1.91
Septicemia	6	39.0	22,701	34.0	1.1	0.52 - 2.55
All-Cause	489	2967.0	1,460,579	2187.9	1.4	1.24 - 1.48

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Table 58c. Deaths among Alaska Native Males, 75+ Age Group, 2014-2018

	Alaska Native People		U.S. All Races		Rate Ratio	95% CI
	Count	Rate ¹	Count	Rate ¹		
Heart Disease	192	2697.1	904,344	2118.5	1.3	1.11 - 1.47
Cancer	148	1973.3	657,834	1548.6	1.3	1.08 - 1.50
COPD	73	1034.2	208,596	490.2	2.1	1.68 - 2.65
Cerebrovascular Disease	42	563.0	181,448	425.2	1.3	0.98 - 1.79
Influenza/Pneumonia	28	403.2	84,176	197.0	2.0	1.41 - 2.96
Unintentional Injury	28	394.6	91,565	214.7	1.8	1.27 - 2.66
Alzheimer's Disease	22	328.8	156,262	365.1	0.9	0.59 - 1.37
Diabetes Mellitus	19	256.9	88,995	209.3	1.2	0.78 - 1.92
Parkinson's Disease	15	204.0	73,898	173.5	1.2	0.71 - 1.95
Nephritis	13	188.8	75,251	176.4	1.1	0.62 - 1.84
Septicemia	12	167.9	47,616	111.8	1.5	0.85 - 2.64
Pneumonitis	9	122.8	38,661	90.4	1.4	0.71 - 2.61
Cholelithiasis	8	110.0	5,690	13.3	8.3	4.13 - 16.54
Essential Hypertension	7	97.6	39,701	92.9	1.1	0.50 - 2.20
In Situ/Benign Neoplasm	6	76.2	25,523	59.9	1.3	0.57 - 2.83
Alcohol Abuse	5	56.7	2,498	5.9	9.6	3.99 - 23.1
All-Cause	789	10996.6	3,274,982	7682.3	1.4	1.33 - 1.53

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 59. Count of Deaths among Alaska Native People in the Aleutians & Pribilofs Region, 1980-2018

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018
Cancer	14	13	12	25	20	17	20	19
Heart Disease	17	18	21	15	6	14	11	11
Unintentional Injury	32	21	9	13	9	10	6	6
All-Cause	100	82	81	79	68	75	67	79

Table 60. Count of Deaths among Alaska Native People in the Anchorage-MatSu Region, 1980-2018

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018
Cancer	34	54	84	118	147	159	227	295
Heart Disease	36	53	83	76	123	144	204	248
Unintentional Injury	41	64	85	87	108	110	140	235
Suicide	12	21	32	22	26	43	52	85
COPD	5	12	19	29	36	39	55	76
Chronic Liver Disease	15	18	30	19	27	38	57	95
Cerebrovascular Disease	8	15	21	43	38	35	41	62
Alcohol Abuse	11	12	19	21	55	52	28	50
Homicide	19	13	20	29	23	14	31	40
Influenza/Pneumonia	18	22	14	5	14	14	27	33
All-Cause	261	384	522	592	802	931	1,232	1,720

Table 61. Count of Deaths among Alaska Native People in the Arctic Slope Region, 1980-2018

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018
Cancer	10	26	20	30	28	42	47	19
Heart Disease	13	10	20	25	17	28	21	11
Unintentional Injury	15	27	22	23	16	16	13	6
Suicide	5	6	10	11	7	14	8	5
COPD	5	6	7	7	8	12	12	6
Homicide	6	5	7	6	5	6	5	5
All-Cause	77	117	113	130	120	163	168	183

APPENDIX B – DATA TABLES

Table 62. Count of Deaths among Alaska Native People in the Bristol Bay Region, 1980-2018

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018
Cancer	12	26	30	31	40	42	50	46
Heart Disease	9	30	28	23	26	29	36	43
Unintentional Injury	45	53	42	31	48	41	40	35
Suicide	6	8	12	10	6	6	12	8
COPD	-	-	13	12	11	10	9	15
All-Cause	116	160	180	169	209	191	237	232

Table 63. Count of Deaths among Alaska Native People in the Copper River-PWS Region, 1980-2018

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018
Cancer	5	11	11	6	19	15	20	14
Heart Disease	7	10	8	9	8	10	9	16
Unintentional Injury	15	9	10	12	9	6	12	10
All-Cause	50	53	49	54	67	68	66	87

Table 64. Count of Deaths among Alaska Native People in the Interior Region, 1980-2018

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018
Cancer	28	49	64	66	66	93	100	134
Heart Disease	30	68	61	65	52	47	85	111
Unintentional Injury	58	85	62	66	66	63	69	91
Suicide	16	24	38	33	31	27	27	33
COPD	8	8	5	12	17	15	26	31
Chronic Liver Disease	5	6	8	10	12	9	16	35
Cerebrovascular Disease	7	18	13	16	18	17	17	17
Alcohol Abuse	9	11	9	17	33	40	9	19
Influenza/Pneumonia	12	15	16	5	7	10	17	9
All-Cause	258	361	375	373	386	446	475	658

APPENDIX B – DATA TABLES

Table 65. Count of Deaths among Alaska Native People in the Kenai Peninsula Region, 1980-2018

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018
Cancer	11	23	19	27	22	38	38	42
Heart Disease	13	17	11	27	26	35	29	45
Unintentional Injury	5	10	16	13	15	15	19	14
All-Cause	49	78	75	101	124	172	168	214

Table 66. Count of Deaths among Alaska Native People in the Kodiak Region, 1980-2018

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018
Cancer	5	19	18	17	17	19	20	18
Heart Disease	15	21	21	23	17	8	20	17
Unintentional Injury	14	17	10	9	5	6	10	11
All-Cause	60	87	85	84	71	82	95	95

Table 67. Count of Deaths among Alaska Native People in the Northwest Arctic Region, 1980-2018

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018
Cancer	16	37	30	38	38	51	49	45
Heart Disease	23	27	33	34	28	32	39	53
Unintentional Injury	33	41	57	28	38	43	33	39
Suicide	19	22	24	25	30	30	17	29
COPD	5	8	7	8	8	10	12	11
Cerebrovascular Disease	6	6	9	8	12	6	7	14
All-Cause	147	212	214	195	222	219	229	283

Table 68. Count of Deaths among Alaska Native People in the Norton Sound Region, 1980-2018

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018
Cancer	38	40	41	51	56	48	73	57
Heart Disease	30	44	44	43	36	33	64	57
Unintentional Injury	31	39	39	51	41	43	36	43
Suicide	19	26	27	26	34	29	37	24
COPD	5	7	10	17	13	11	17	23
Cerebrovascular Disease	6	7	11	14	12	9	19	7
All-Cause	195	213	259	272	291	260	322	307

APPENDIX B – DATA TABLES

Table 69. Count of Deaths among Alaska Native People in the Southeast Region, 1980-2018

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018
Cancer	38	37	57	67	88	108	115	135
Heart Disease	70	71	82	99	91	79	94	136
Unintentional Injury	52	59	53	49	34	44	48	68
Suicide	18	18	19	18	7	14	13	14
COPD	5	7	12	14	15	27	23	40
Chronic Liver Disease	6	6	14	12	10	11	15	25
Cerebrovascular Disease	19	18	18	17	22	26	21	26
All-Cause	321	334	365	373	412	503	520	699

Table 70. Count of Deaths among Alaska Native People in Yukon-Kuskokwim Region, 1980-2018

Cause	1980-1983	1984-1988	1989-1993	1994-1998	1999-2003	2004-2008	2009-2013	2014-2018
Cancer	62	98	94	110	119	140	149	129
Heart Disease	28	67	63	79	87	80	103	123
Unintentional Injury	122	148	136	102	111	94	113	127
Suicide	14	49	49	65	47	74	70	78
COPD	7	13	22	24	26	28	44	36
Cerebrovascular Disease	8	16	22	24	22	31	42	45
Alcohol Abuse	9	12	13	18	21	20	9	14
Homicide	16	19	17	7	20	15	19	23
Influenza/Pneumonia	10	15	30	15	25	22	16	28
All-Cause	344	559	560	554	619	676	763	832

APPENDIX B – DATA TABLES

Table 71a. Deaths among Alaska Native People, Aleutians & Pribilofs, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	19	24.1%	240.1	960	18.1%	207.5	1.2	0.73 - 1.82
2 Heart Disease	11	13.9%	157.8	882	16.6%	210.4	0.7	0.41 - 1.36
3 COPD	6	7.6%	82.8	271	5.1%	69.6	1.2	0.53 - 2.67
4 Unintentional Injury	6	7.6%	71.7	692	13.0%	116.6	0.6	0.28 - 1.37
5 Chronic Liver Disease	5	6.3%	58.4	198	3.7%	33.5	1.7	0.72 - 4.23
5 Suicide	5	6.3%	59.8	297	5.6%	40.6	1.5	0.61 - 3.56
All-Cause	79	100.0%	1025.5	5,316	100.0%	1134.7	0.9	1.07 - 1.20

Table 71b. Deaths among Alaska Native Females, Aleutians & Pribilofs, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
All-Cause	28	100.0%	931.1	2,393	100.0%	961.2	1.0	0.67 - 1.41

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Table 71c. Deaths among Alaska Native Males, Aleutians & Pribilofs, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	15	29.4%	323.9	486	16.6%	236.0	1.4	0.82 - 2.29
2 Heart Disease	7	13.7%	152.8	534	18.3%	283.6	0.5	0.26 - 1.14
3 Unintentional Injury	6	11.8%	134.9	438	15.0%	149.1	0.9	0.40 - 2.03
All-Cause	51	100.0%	1127.0	2,923	100.0%	1355.4	0.8	0.63 - 1.10

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 72a. Deaths among Alaska Native People, Anchorage-MatSu, 2014-2018

		Region			All Other Regions Combined			Rate Ratio	95% CI
		Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1	Cancer	295	17.2%	212.1	684	18.6%	155.8	1.1	0.92 - 1.21
2	Heart Disease	248	14.4%	196.6	645	17.6%	165.5	0.9	0.81 - 1.09
3	Unintentional Injury	235	13.7%	117.6	463	12.6%	45.7	1.1	0.90 - 1.24
4	Chronic Liver Disease	95	5.5%	47.4	108	2.9%	13.6	1.8	1.38 - 2.39
5	Suicide	85	4.9%	34.9	217	5.9%	40.6	0.8	0.64 - 1.05
6	COPD	76	4.4%	68.0	201	5.5%	10.8	1.0	0.76 - 1.29
7	Cerebrovascular Disease	62	3.6%	62.8	138	3.8%	37.2	1.3	0.97 - 1.77
8	Alcohol Abuse	50	2.9%	25.4	76	2.1%	2.5	1.4	1.01 - 2.06
9	Homicide	40	2.3%	17.8	75	2.0%	5.8	1.2	0.78 - 1.69
10	Diabetes mellitus	34	2.0%	22.2	66	1.8%	14.6	1.1	0.71 - 1.62
All-Cause		1,720	100.0%	1214.6	3,675	100.0%	1072.9	1.1	1.07 - 1.20

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 72b. Deaths among Alaska Native Females, Anchorage-MatSu, 2014-2018

		Region			All Other Regions Combined			Rate Ratio	95% CI
		Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1	Cancer	295	33.6%	201.8	306	19.8%	171.9	1.2	0.97 - 1.42
2	Heart Disease	248	28.2%	155.8	243	15.7%	150.5	1.0	0.83 - 1.30
3	Unintentional Injury	235	26.8%	98.7	150	9.7%	75.3	1.3	1.02 - 1.68
4	Chronic Liver Disease	95	10.8%	63.5	70	4.5%	34.2	1.9	1.33 - 2.59
5	COPD	85	9.7%	55.2	89	5.8%	54.9	1.0	0.69 - 1.46
6	Cerebrovascular Disease	76	8.7%	62.7	73	4.7%	46.7	1.3	0.91 - 2.00
7	Suicide	62	7.1%	21.9	47	3.0%	19.8	1.1	0.70 - 1.75
8	Alcohol Abuse	50	5.7%	19.0	27	1.7%	12.8	1.5	0.84 - 2.63
9	Alzheimer's Disease	40	4.6%	37.5	24	1.6%	17.2	2.2	1.19 - 4.03
10	Diabetes mellitus	34	3.9%	14.5	28	1.8%	16.6	0.9	0.46 - 1.66
All-Cause		878	100.0%	1066.9	1,543	100.0%	880.6	1.2	1.12 - 1.32

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 72c. Deaths among Alaska Native Males, Anchorage-MatSu, 2014-2018

		Region			All Other Regions Combined			Rate Ratio	95% CI
		Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1	Heart Disease	139	16.5%	271.3	402	18.9%	277.9	1.0	0.80 - 1.18
2	Unintentional Injury	131	15.6%	143.9	313	14.7%	147.1	1.0	0.80 - 1.2
3	Cancer	123	14.6%	233.9	378	17.7%	235.9	1.0	0.81 - 1.22
4	Suicide	55	6.5%	50.5	170	8.0%	63.9	0.8	0.58 - 1.07
5	COPD	36	4.3%	96.9	112	5.3%	86.6	1.1	0.77 - 1.63
6	Alcohol Abuse	29	3.4%	34.3	49	2.3%	22.5	1.5	0.96 - 2.41
7	Homicide	27	3.2%	25.1	50	2.3%	19.8	1.3	0.79 - 2.02
8	Cerebrovascular Disease	25	3.0%	62.3	65	3.0%	47.7	1.3	0.82 - 2.07
9	Chronic Liver Disease	25	3.0%	29.6	38	1.8%	18.3	1.6	0.97 - 2.68
10	Diabetes mellitus	20	2.4%	34.5	38	1.8%	26.0	1.3	0.77 - 2.28
All-Cause		842	100.0%	1482.2	2,132	100.0%	1290.0	1.1	1.06 - 1.24

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 73a. Deaths among Alaska Native People, Arctic Slope, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	45	24.6%	310.1	934	17.9%	205.0	1.5	1.12 - 2.04
2 Heart Disease	33	18.0%	206.4	860	16.5%	209.2	1.0	0.70 - 1.4
3 Unintentional Injury	16	8.7%	68.0	682	13.1%	117.6	0.6	0.35 - 0.95
4 COPD	14	7.7%	105.3	263	5.0%	68.7	1.5	0.90 - 2.62
5 Suicide	11	6.0%	33.4	291	5.6%	41.1	0.8	0.44 - 1.48
6 Cerebrovascular Disease	6	3.3%	40.9	194	3.7%	52.8	0.8	0.34 - 1.75
7 Influenza/Pneumonia	5	2.7%	37.9	99	1.9%	27.6	1.4	0.56 - 3.37
All-Cause	183	100.0%	1121.2	5,212	100.0%	1132.3	1.0	0.85 - 1.15

Table 73b. Deaths among Alaska Native Females, Arctic Slope, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	23	35.9%	287.0	455	19.3%	182.2	1.6	1.04 - 2.39
2 Heart Disease	10	15.6%	143.0	342	14.5%	155.6	0.9	0.49 - 1.72
3 COPD	6	9.4%	75.6	123	5.2%	56.1	1.3	0.59 - 3.06
All-Cause	64	100.0%	826.3	2,357	100.0%	964.4	0.9	0.67 - 1.10

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Table 73c. Deaths among Alaska Native Males, Arctic Slope, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	23	19.3%	272.1	518	18.1%	280.3	1.0	0.64 - 1.47
2 Cancer	22	18.5%	332.7	479	16.8%	236.0	1.4	0.92 - 2.16
3 Unintentional Injury	14	11.8%	127.3	430	15.1%	149.1	0.9	0.50 - 1.45
4 Suicide	11	9.2%	61.9	214	7.5%	60.1	1.0	0.56 - 1.89
5 COPD	8	6.7%	156.1	140	4.9%	87.8	1.8	0.87 - 3.62
All-Cause	119	100.0%	1443.8	2,855	100.0%	1345.0	1.1	0.89 - 1.29

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 74a. Deaths among Alaska Native People, Bristol Bay, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	46	19.8%	171.8	933	18.1%	209.5	0.8	0.61 - 1.10
2 Heart Disease	43	18.5%	177.3	850	16.5%	210.9	0.8	0.62 - 1.14
3 Unintentional Injury	35	15.1%	104.4	663	12.8%	116.7	0.9	0.64 - 1.26
4 COPD	15	6.5%	64.9	262	5.1%	69.9	0.9	0.55 - 1.56
5 Cerebrovascular Disease	9	3.9%	40.1	191	3.7%	53.2	0.8	0.39 - 1.47
6 Suicide	8	3.4%	20.8	294	5.7%	41.9	0.5	0.25 - 0.99
7 Diabetes mellitus	6	2.6%	25.5	94	1.8%	21.4	1.2	0.52 - 2.71
8 Alcohol Abuse	5	2.2%	14.6	121	2.3%	20.6	0.7	0.29 - 1.73
All-Cause	232	100.0%	869.9	5,163	100.0%	1145.7	0.8	0.67 - 0.87

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 74b. Deaths among Alaska Native Females, Bristol Bay, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	17	20.5%	133.3	461	19.7%	187.7	0.7	0.44 - 1.15
2 Heart Disease	15	18.1%	122.5	337	14.4%	157.0	0.8	0.47 - 1.31
3 COPD	7	8.4%	56.9	122	5.2%	56.6	1.0	0.47 - 2.15
4 Unintentional Injury	6	7.2%	32.4	248	10.6%	88.4	0.4	0.16 - 0.82
All-Cause	83	100.0%	621.6	2,338	100.0%	976.7	0.6	0.51 - 0.79

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 74c. Deaths among Alaska Native Males, Bristol Bay, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	29	19.5%	203.0	472	16.7%	240.4	0.8	0.58 - 1.23
2 Unintentional Injury	29	19.5%	173.9	415	14.7%	147.6	1.2	0.81 - 1.72
3 Heart Disease	28	18.8%	237.8	513	18.2%	282.3	0.8	0.58 - 1.23
4 COPD	8	5.4%	81.6	140	5.0%	90.0	0.9	0.44 - 1.85
5 Cerebrovascular Disease	7	4.7%	56.0	83	2.9%	51.0	1.1	0.51 - 2.37
6 Suicide	7	4.7%	36.5	218	7.7%	61.6	0.6	0.28 - 1.26
7 Diabetes mellitus	5	3.4%	42.1	53	1.9%	27.9	1.5	0.60 - 3.77
All-Cause	149	100.0%	1122.9	2,825	100.0%	1362.3	0.8	0.70 - 0.97

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 75a. Deaths among Alaska Native People, Copper River-PWS, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	16	18.4%	202.2	877	16.5%	209.3	1.0	0.59 - 1.58
2 Cancer	14	16.1%	140.2	965	18.2%	209.5	0.7	0.40 - 1.13
3 Unintentional Injury	10	11.5%	103.7	688	13.0%	116.2	0.9	0.48 - 1.67
4 Alcohol Abuse	5	5.7%	44.1	121	2.3%	19.8	2.2	0.91 - 5.45
5 Chronic Liver Disease	5	5.7%	43.9	198	3.7%	33.7	1.3	0.54 - 3.17
All-Cause	87	100.0%	989.6	5,308	100.0%	1134.9	0.9	0.71 - 1.08

Table 75b. Deaths among Alaska Native Females, Copper River-PWS, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	7	19.4%	159.6	345	14.5%	154.7	1.0	0.49 - 2.18
All-Cause	36	100.0%	788.4	2,385	100.0%	962.7	0.8	0.59 - 1.14

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Table 75c. Deaths among Alaska Native Males, Copper River-PWS, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	10	19.6%	179.9	491	16.8%	240.3	0.7	0.40 - 1.40
2 Heart Disease	9	17.6%	243.9	532	18.2%	281.5	0.9	0.45 - 1.67
3 Unintentional Injury	6	11.8%	132.6	438	15.0%	148.8	0.9	0.40 - 1.99
All-Cause	51	100.0%	1206.4	2,923	100.0%	1352.2	0.9	0.68 - 1.18

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 76a. Deaths among Alaska Native People, Interior, 2014-2018

		Region			All Other Regions Combined			Rate Ratio	95% CI
		Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1	Cancer	134	20.4%	215.2	845	17.8%	205.4	1.0	0.87 - 1.26
2	Heart Disease	111	16.9%	185.1	782	16.5%	211.3	0.9	0.72 - 1.07
3	Unintentional Injury	91	13.8%	124.2	607	12.8%	113.5	1.1	0.88 - 1.36
4	Chronic Liver Disease	35	5.3%	45.7	168	3.5%	32.0	1.4	0.99 - 2.05
5	Suicide	33	5.0%	40.0	269	5.7%	40.6	1.0	0.69 - 1.41
6	COPD	31	4.7%	58.1	246	5.2%	70.8	0.8	0.56 - 1.19
7	Homicide	23	3.5%	28.0	92	1.9%	14.8	1.9	1.20 - 2.98
8	Alcohol Abuse	19	2.9%	24.9	107	2.3%	19.5	1.3	0.79 - 2.08
9	Cerebrovascular Disease	17	2.6%	31.4	183	3.9%	55.2	0.6	0.35 - 0.94
10	Diabetes mellitus	10	1.5%	19.2	90	1.9%	21.8	0.9	0.46 - 1.69
All-Cause		658	100.0%	1016.1	4,737	100.0%	1141.4	0.9	0.82 - 0.97

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 76b. Deaths among Alaska Native Females, Interior, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	67	22.3%	205.3	411	19.4%	181.4	1.1	0.87 - 1.47
2 Heart Disease	49	16.3%	153.8	303	14.3%	153.5	1.0	0.74 - 1.35
3 Unintentional Injury	29	9.6%	76.8	225	10.6%	86.1	0.9	0.61 - 1.31
4 Chronic Liver Disease	22	7.3%	55.9	118	5.6%	44.1	1.3	0.80 - 2.00
5 COPD	16	5.3%	50.1	113	5.3%	57.0	0.9	0.52 - 1.49
6 Cerebrovascular Disease	11	3.7%	33.4	99	4.7%	54.4	0.6	0.33 - 1.15
7 Homicide	8	2.7%	19.6	30	1.4%	10.0	2.0	0.90 - 4.27
8 Suicide	7	2.3%	18.7	70	3.3%	21.1	0.9	0.41 - 1.92
9 Alcohol Abuse	5	1.7%	12.2	43	2.0%	15.5	0.8	0.31 - 1.99
All-Cause	301	100.0%	882.7	2,120	100.0%	963.3	0.9	0.81 - 1.03

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 76c. Deaths among Alaska Native Males, Interior, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	67	18.8%	231.7	434	16.6%	237.7	1.0	0.75 - 1.26
2 Heart Disease	62	17.4%	217.8	479	18.3%	289.1	0.8	0.58 - 0.98
3 Unintentional Injury	62	17.4%	178.2	382	14.6%	142.2	1.3	0.96 - 1.64
4 Suicide	26	7.3%	62.7	199	7.6%	59.6	1.1	0.70 - 1.58
5 COPD	15	4.2%	70.9	133	5.1%	91.8	0.8	0.45 - 1.32
6 Homicide	15	4.2%	37.0	62	2.4%	19.7	1.9	1.07 - 3.30
7 Alcohol Abuse	14	3.9%	38.9	64	2.4%	23.8	1.6	0.92 - 2.92
8 Chronic Liver Disease	13	3.6%	35.0	50	1.9%	19.9	1.8	0.95 - 3.23
9 Cerebrovascular Disease	6	1.7%	30.1	84	3.2%	53.9	0.6	0.24 - 1.28
10 Diabetes mellitus	6	1.7%	26.2	52	2.0%	28.7	0.9	0.39 - 2.12
All-Cause	357	100.0%	1176.5	2,617	100.0%	1368.0	0.9	0.77 - 0.96

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 77a. Deaths among Alaska Native People, Kenai Peninsula, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	45	21.0%	231.9	848	16.4%	208.0	1.1	0.83 - 1.50
2 Cancer	42	19.6%	155.8	937	18.1%	210.2	0.7	0.54 - 1.01
3 COPD	14	6.5%	55.8	263	5.1%	70.3	0.8	0.46 - 1.36
4 Unintentional Injury	14	6.5%	41.9	684	13.2%	119.5	0.4	0.21 - 0.60
5 Diabetes mellitus	10	4.7%	31.6	90	1.7%	21.0	1.5	0.78 - 2.89
6 Cerebrovascular Disease	8	3.7%	49.1	192	3.7%	52.6	0.9	0.46 - 1.89
7 Suicide	8	3.7%	23.2	294	5.7%	41.7	0.6	0.28 - 1.12
8 Chronic Liver Disease	6	2.8%	19.1	197	3.8%	34.6	0.6	0.25 - 1.25
All-Cause	214	100.0%	929.5	5,181	100.0%	1140.3	0.8	0.71 - 0.93

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 77b. Deaths among Alaska Native Females, Kenai Peninsula, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	25	23.6%	161.8	453	19.6%	185.9	0.9	0.58 - 1.30
2 Heart Disease	17	16.0%	152.5	335	14.5%	155.0	1.0	0.60 - 1.60
3 Unintentional Injury	8	7.5%	53.0	246	10.6%	87.2	0.6	0.30 - 1.23
4 COPD	5	4.7%	23.3	124	5.4%	58.1	0.4	0.16 - 0.98
4 Cerebrovascular Disease	5	4.7%	54.4	105	4.5%	52.0	1.0	0.43 - 2.57
4 Chronic Liver Disease	5	4.7%	31.4	135	5.8%	46.4	0.7	0.28 - 1.65
All-Cause	106	100.0%	823.1	2,315	100.0%	964.4	0.9	0.70 - 1.04

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Table 77c. Deaths among Alaska Native Males, Kenai Peninsula, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	28	25.9%	459.9	513	17.9%	276.1	1.7	1.14 - 2.44
2 Cancer	17	15.7%	159.6	484	16.9%	242.7	0.7	0.41 - 1.07
3 COPD	9	8.3%	97.3	139	4.8%	88.5	1.1	0.56 - 2.16
4 Suicide	7	6.5%	37.2	218	7.6%	61.4	0.6	0.29 - 1.29
5 Diabetes mellitus	6	5.6%	47.4	52	1.8%	27.5	1.7	0.74 - 4.02
6 Unintentional Injury	6	5.6%	30.9	438	15.3%	154.2	0.2	0.09 - 0.45
All-Cause	108	100.0%	1218.5	2,866	100.0%	1358.4	0.9	0.74 - 1.09

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 78a. Deaths among Alaska Native People, Kodiak, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	18	18.9%	196.5	961	18.1%	208.2	0.9	0.59 - 1.50
2 Heart Disease	17	17.9%	177.6	876	16.5%	210.1	0.8	0.52 - 1.37
3 Unintentional Injury	11	11.6%	101.6	687	13.0%	116.2	0.9	0.48 - 1.59
4 COPD	7	7.4%	83.3	270	5.1%	69.9	1.2	0.56 - 2.53
5 Diabetes mellitus	5	5.3%	55.8	95	1.8%	20.9	2.7	1.08 - 6.55
All-Cause	95	100.0%	969.9	5,300	100.0%	1135.8	0.9	0.70 - 1.05

Table 78b. Deaths among Alaska Native Females, Kodiak, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	10	24.4%	204.5	468	19.7%	184.9	1.1	0.59 - 2.07
All-Cause	41	100.0%	790.0	2,380	100.0%	963.4	0.8	0.60 - 1.12

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Table 78c. Deaths among Alaska Native Males, Kodiak, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	14	25.9%	331.7	527	18.0%	279.1	1.2	0.70 - 2.02
2 Cancer	8	14.8%	177.4	493	16.9%	239.8	0.7	0.37 - 1.49
2 Unintentional Injury	8	14.8%	154.0	436	14.9%	148.5	1.0	0.52 - 2.09
All-Cause	54	100.0%	1215.3	2,920	100.0%	1352.8	0.9	0.69 - 1.18

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 79a. Deaths among Alaska Native People, Northwest Arctic, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	53	18.7%	218.0	840	16.4%	207.8	1.0	0.79 - 1.38
2 Cancer	45	15.9%	187.1	934	18.3%	208.7	0.9	0.66 - 1.21
3 Unintentional Injury	39	13.8%	113.2	659	12.9%	115.8	1.0	0.71 - 1.35
4 Suicide	29	10.2%	69.3	273	5.3%	39.1	1.8	1.21 - 2.60
5 Cerebrovascular Disease	14	4.9%	71.8	186	3.6%	51.0	1.4	0.82 - 2.42
6 COPD	11	3.9%	52.5	266	5.2%	71.2	0.7	0.40 - 1.35
7 Diabetes mellitus	6	2.1%	26.7	94	1.8%	21.1	1.3	0.55 - 2.89
8 Homicide	6	2.1%	12.9	109	2.1%	16.6	0.8	0.34 - 1.78
9 Influenza/Pneumonia	6	2.1%	29.7	98	1.9%	28.1	1.1	0.46 - 2.41
10 Perinatal conditions	5	1.8%	8.3	25	0.5%	2.6	3.2	1.24 - 8.46
All-Cause	283	100.0%	1055.1	5,112	100.0%	1133.3	0.9	0.83 - 1.05

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 79b. Deaths among Alaska Native Females, Northwest Arctic, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	24	19.5%	177.5	328	14.3%	153.0	1.2	0.77 - 1.76
2 Cancer	19	15.4%	147.0	459	20.0%	186.3	0.8	0.50 - 1.25
3 Unintentional Injury	13	10.6%	80.1	241	10.5%	85.7	0.9	0.53 - 1.63
4 Cerebrovascular Disease	9	7.3%	76.9	101	4.4%	50.3	1.5	0.77 - 3.02
5 Suicide	7	5.7%	44.8	70	3.0%	19.9	2.3	1.04 - 4.90
6 COPD	5	4.1%	46.9	124	5.4%	57.6	0.8	0.33 - 1.99
All-Cause	123	100.0%	885.7	2,298	100.0%	961.0	0.9	0.77 - 1.11

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 79c. Deaths among Alaska Native Males, Northwest Arctic, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	29	18.1%	299.1	512	18.2%	278.8	1.1	0.74 - 1.56
2 Cancer	26	16.3%	204.7	475	16.9%	239.5	0.9	0.58 - 1.27
3 Unintentional Injury	26	16.3%	137.4	418	14.9%	148.4	0.9	0.62 - 1.38
4 Suicide	22	13.8%	93.1	203	7.2%	58.1	1.6	1.03 - 2.49
5 COPD	6	3.8%	54.6	142	5.0%	91.3	0.6	0.26 - 1.35
6 Cerebrovascular Disease	5	3.1%	57.4	85	3.0%	50.5	1.1	0.46 - 2.8
6 Homicide	5	3.1%	20.9	72	2.6%	21.7	1.0	0.39 - 2.39
All-Cause	160	100.0%	1257.8	2,814	100.0%	1348.8	0.9	0.80 - 1.09

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 80a. Deaths among Alaska Native People, Norton Sound, 2014-2018

		Region			All Other Regions Combined			Rate Ratio	95% CI
		Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1	Cancer	57	18.6%	233.0	922	18.1%	206.9	1.1	0.86 - 1.47
2	Heart Disease	57	18.6%	247.3	836	16.4%	207.4	1.2	0.91 - 1.56
3	Unintentional Injury	43	14.0%	112.6	655	12.9%	115.9	1.0	0.71 - 1.32
4	Suicide	24	7.8%	48.6	278	5.5%	40.1	1.2	0.80 - 1.84
5	COPD	23	7.5%	117.5	254	5.0%	67.1	1.8	1.14 - 2.68
6	Alzheimer's Disease	8	2.6%	59.3	57	1.1%	20.3	2.9	1.40 - 6.13
7	Cerebrovascular Disease	7	2.3%	40.0	193	3.8%	53.4	0.7	0.35 - 1.59
8	Chronic Liver Disease	6	2.0%	16.1	197	3.9%	35.0	0.5	0.20 - 1.03
9	Septicemia	6	2.0%	18.9	54	1.1%	12.3	1.5	0.66 - 3.57
10	Homicide	5	1.6%	10.4	110	2.2%	16.8	0.6	0.25 - 1.52
10	Influenza/Pneumonia	5	1.6%	27.6	99	1.9%	28.0	1.0	0.40 - 2.42
All-Cause		307	100.0%	1259.5	5,088	100.0%	1126.8	1.1	1.00 - 1.25

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 80b. Deaths among Alaska Native Females, Norton Sound, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	25	21.2%	197.1	453	19.7%	185.0	1.1	0.71 - 1.59
2 Heart Disease	22	18.6%	206.7	330	14.3%	153.3	1.3	0.88 - 2.08
3 Unintentional Injury	13	11.0%	70.6	241	10.5%	86.3	0.8	0.47 - 1.43
4 COPD	8	6.8%	71.9	121	5.3%	55.8	1.3	0.63 - 2.64
5 Chronic Liver Disease	5	4.2%	27.9	135	5.9%	46.9	0.6	0.24 - 1.45
All-Cause	118	100.0%	1000.3	2,303	100.0%	960.4	1.0	0.87 - 1.25

Table 80c. Deaths among Alaska Native Males, Norton Sound, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	35	18.5%	277.8	506	18.2%	279.3	1.0	0.71 - 1.40
2 Cancer	32	16.9%	283.5	469	16.8%	236.7	1.2	0.84 - 1.71
3 Unintentional Injury	30	15.9%	159.6	414	14.9%	147.9	1.1	0.75 - 1.56
4 Suicide	22	11.6%	84.2	203	7.3%	58.1	1.4	0.93 - 2.25
5 COPD	15	7.9%	177.7	133	4.8%	84.9	2.1	1.23 - 3.57
All-Cause	189	100.0%	1550.1	2,785	100.0%	1338.0	1.2	1.00 - 1.34

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 81a. Deaths among Alaska Native People, Southeast, 2014-2018

		Region			All Other Regions Combined			Rate Ratio	95% CI
		Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1	Heart Disease	136	19.5%	182.3	757	16.1%	212.2	0.9	0.72 - 1.03
2	Cancer	135	19.3%	159.5	844	18.0%	215.9	0.7	0.62 - 0.89
3	Unintentional Injury	68	9.7%	79.6	630	13.4%	120.8	0.7	0.51 - 0.85
4	COPD	40	5.7%	51.8	237	5.0%	73.2	0.7	0.51 - 0.99
5	Cerebrovascular Disease	26	3.7%	34.1	174	3.7%	56.3	0.6	0.40 - 0.91
6	Chronic Liver Disease	25	3.6%	28.0	178	3.8%	34.2	0.8	0.54 - 1.25
7	Diabetes mellitus	18	2.6%	23.7	82	1.7%	20.7	1.1	0.69 - 1.91
8	Alcohol Abuse	17	2.4%	18.6	109	2.3%	20.6	0.9	0.54 - 1.51
9	Suicide	14	2.0%	15.1	288	6.1%	44.3	0.3	0.20 - 0.58
10	Influenza/Pneumonia	11	1.6%	16.3	93	2.0%	30.4	0.5	0.29 - 0.99
All-Cause		699	100.0%	869.9	4,696	100.0%	1172.2	0.7	0.69 - 0.80

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 81b. Deaths among Alaska Native Females, Southeast, 2014-2018

		Region			All Other Regions Combined			Rate Ratio	95% CI
		Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1	Cancer	70	22.6%	155.1	408	19.3%	189.7	0.8	0.63 - 1.05
2	Heart Disease	41	13.2%	100.7	311	14.7%	164.8	0.6	0.44 - 0.85
3	Unintentional Injury	23	7.4%	55.9	231	10.9%	90.0	0.6	0.40 - 0.95
4	Cerebrovascular Disease	18	5.8%	41.4	92	4.4%	54.1	0.8	0.46 - 1.27
5	Chronic Liver Disease	18	5.8%	39.9	122	5.8%	45.7	0.9	0.53 - 1.43
6	COPD	17	5.5%	43.2	112	5.3%	58.8	0.7	0.44 - 1.22
7	Diabetes mellitus	11	3.5%	29.5	31	1.5%	13.3	2.2	1.11 - 4.40
8	Septicemia	7	2.3%	17.2	26	1.2%	10.3	1.7	0.72 - 3.84
9	Influenza/Pneumonia	6	1.9%	16.2	43	2.0%	24.6	0.7	0.28 - 1.55
10	Alcohol Abuse	5	1.6%	10.4	43	2.0%	16.0	0.7	0.26 - 1.65
All-Cause		310	100.0%	732.6	2,111	100.0%	993.5	0.7	0.65 - 0.83

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 81c. Deaths among Alaska Native Males, Southeast, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	95	24.4%	280.2	446	17.3%	275.7	1.0	0.81 - 1.27
2 Cancer	65	16.7%	166.8	436	16.9%	252.2	0.7	0.51 - 0.86
3 Unintentional Injury	45	11.6%	105.4	399	15.4%	153.7	0.7	0.50 - 0.93
4 COPD	23	5.9%	62.3	125	4.8%	96.5	0.6	0.41 - 1.01
5 Alcohol Abuse	12	3.1%	27.6	66	2.6%	25.4	1.1	0.59 - 2.01
6 Suicide	10	2.6%	20.1	215	8.3%	65.8	0.3	0.16 - 0.58
7 Cerebrovascular Disease	8	2.1%	24.2	82	3.2%	57.1	0.4	0.21 - 0.88
8 Chronic Liver Disease	7	1.8%	14.9	56	2.2%	23.1	0.6	0.30 - 1.42
8 Diabetes mellitus	7	1.8%	17.6	51	2.0%	30.8	0.6	0.26 - 1.25
10 Homicide	6	1.5%	12.0	71	2.7%	23.0	0.5	0.23 - 1.20
10 Parkinson's Disease	6	1.5%	19.3	12	0.5%	11.7	1.7	0.62 - 4.41
All-Cause	389	100.0%	1028.0	2,585	100.0%	1403.3	0.7	0.66 - 0.82

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 82a. Deaths among Alaska Native People, Yukon-Kuskokwim, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	129	15.5%	179.0	850	18.6%	211.1	0.8	0.70 - 1.02
2 Unintentional Injury	127	15.3%	133.1	571	12.5%	111.4	1.2	0.99 - 1.45
3 Heart Disease	123	14.8%	188.8	770	16.9%	210.6	0.9	0.74 - 1.08
4 Suicide	78	9.4%	55.5	224	4.9%	36.9	1.5	1.16 - 1.95
5 Cerebrovascular Disease	45	5.4%	73.0	155	3.4%	48.0	1.5	1.09 - 2.12
6 COPD	36	4.3%	69.5	241	5.3%	69.5	1.0	0.71 - 1.42
7 Influenza/Pneumonia	28	3.4%	55.3	76	1.7%	22.9	2.4	1.56 - 3.72
8 Homicide	23	2.8%	17.8	92	2.0%	16.0	1.1	0.71 - 1.76
9 Alcohol Abuse	14	1.7%	14.6	112	2.5%	21.1	0.7	0.40 - 1.21
9 Chronic Liver Disease	14	1.7%	15.1	189	4.1%	37.1	0.4	0.24 - 0.70
All-Cause	832	100.0%	1104.8	4,563	100.0%	1123.9	1.0	0.91 - 1.06

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 82b. Deaths among Alaska Native Females, Yukon-Kuskokwim, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Heart Disease	51	15.5%	151.8	301	14.4%	154.0	1.0	0.73 - 1.33
2 Unintentional Injury	48	14.6%	111.4	206	9.8%	80.1	1.4	1.02 - 1.90
3 Cancer	42	12.8%	111.2	436	20.8%	195.7	0.6	0.41 - 0.78
4 Suicide	20	6.1%	29.0	57	2.7%	18.7	1.5	0.93 - 2.58
5 Cerebrovascular Disease	19	5.8%	61.7	91	4.3%	50.0	1.2	0.75 - 2.02
6 COPD	17	5.2%	57.9	112	5.4%	56.2	1.0	0.62 - 1.72
7 Influenza/Pneumonia	14	4.3%	50.0	35	1.7%	18.7	2.7	1.44 - 4.96
8 Homicide	10	3.0%	17.1	28	1.3%	9.9	1.7	0.84 - 3.54
9 Alcohol Abuse	7	2.1%	14.1	41	2.0%	15.0	0.9	0.42 - 2.08
9 Chronic Liver Disease	7	2.1%	14.2	133	6.4%	50.9	0.3	0.13 - 0.60
All-Cause	329	100.0%	882.5	2,092	100.0%	962.0	0.9	0.82 - 1.03

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

APPENDIX B – DATA TABLES

Table 82c. Deaths among Alaska Native Males, Yukon-Kuskokwim, 2014-2018

	Region			All Other Regions Combined			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	87	17.3%	262.7	414	16.8%	231.7	1.1	0.90 - 1.43
2 Unintentional Injury	79	15.7%	149.7	365	14.8%	146.3	1.0	0.80 - 1.30
3 Heart Disease	72	14.3%	238.5	469	19.0%	285.3	0.8	0.65 - 1.07
4 Suicide	58	11.5%	80.0	167	6.8%	54.9	1.5	1.08 - 1.97
5 Cerebrovascular Disease	26	5.2%	87.1	64	2.6%	43.6	2.0	1.27 - 3.15
6 COPD	19	3.8%	85.3	129	5.2%	89.9	0.9	0.59 - 1.54
7 Influenza/Pneumonia	14	2.8%	63.9	41	1.7%	28.1	2.3	1.24 - 4.18
8 Homicide	13	2.6%	18.1	64	2.6%	22.1	0.8	0.45 - 1.49
9 Alcohol Abuse	7	1.4%	15.4	71	2.9%	27.7	0.6	0.26 - 1.21
9 Chronic Liver Disease	7	1.4%	17.4	56	2.3%	22.4	0.8	0.35 - 1.71
9 Congenital malformation	7	1.4%	7.6	15	0.6%	4.4	1.8	0.71 - 4.30
All-Cause	503	100.0%	1375.7	2,471	100.0%	1327.7	1.0	0.94 - 1.14

¹Age-adjusted mortality rate per 100,000 people, standardized to U.S. 2000 population

Table 83a. Life Expectancy Trend among Alaska Native People, 1980-2018

	Alaska Native People	U.S. All Races	Difference
1980-1983	65.3	74.6	-9.3
1984-1988	67.0	74.9	-7.9
1989-1993	68.3	75.5	-7.2
1994-1998	69.8	76.7	-6.9
1999-2003	70.2	77.2	-7.0
2004-2008	70.4	78.2	-7.8
2009-2013	70.4	78.8	-8.4
2014-2018	70.4	78.6	-8.2
% Change	7.8%	5.4%	-11.8%

Table 83b. Life Expectancy Trend among Alaska Native Females, 1980-2018

	Alaska Native People	U.S. All Races	Difference
1980-1983	68.1	78.1	-10.0
1984-1988	69.9	78.3	-8.4
1989-1993	71.2	78.8	-7.6
1994-1998	72.8	79.5	-6.7
1999-2003	73.2	79.7	-6.5
2004-2008	72.8	80.6	-7.8
2009-2013	72.7	81.2	-8.5
2014-2018	72.8	81.1	-8.3
% Change	6.9%	3.8%	-17.0%

Table 83c. Life Expectancy Trend among Alaska Native Males, 1980-2018

	Alaska Native People	U.S. All Races	Difference
1980-1983	62.7	71.0	-8.3
1984-1988	64.3	71.4	-7.1
1989-1993	65.6	72.2	-6.6
1994-1998	67.0	73.8	-6.8
1999-2003	67.4	74.5	-7.1
2004-2008	68.1	75.6	-7.5
2009-2013	68.1	76.4	-8.3
2014-2018	68.1	76.1	-8.0
% Change	8.6%	7.2%	-3.6%

APPENDIX B – DATA TABLES

Table 84a. Life Expectancy Table, Alaska Native People 2014-2018

Age	Alaska Native People	U.S. All Races	Difference
0	70.4	78.6	-8.2 years
5	66.3	74.1	-7.8 years
10	61.4	69.2	-7.8 years
15	56.5	64.2	-7.7 years
20	51.9	59.4	-7.5 years
25	47.7	54.7	-7 years
30	43.7	50.0	-6.3 years
35	39.5	45.3	-5.8 years
40	35.3	40.7	-5.4 years
45	31.1	36.1	-5 years
50	27.2	31.6	-4.4 years
55	23.4	27.4	-4 years
60	19.6	23.3	-3.7 years
65	15.9	19.4	-3.5 years
70	12.3	15.7	-3.4 years
75	9.1	12.3	-3.2 years
80	6.2	9.2	-3 years
85	3.2	6.6	-3.4 years

Table 84b. Life Expectancy Table, Alaska Native Females 2014-2018

Age	Alaska Native People	U.S. All Races	Difference
0	72.8	81.1	-8.3 years
5	68.6	76.6	-8 years
10	63.7	71.6	-7.9 years
15	58.8	66.7	-7.9 years
20	54.0	61.8	-7.8 years
25	49.5	56.9	-7.4 years
30	45.3	52.1	-6.8 years
35	41.0	47.3	-6.3 years
40	36.7	42.6	-5.9 years
45	32.6	37.9	-5.3 years
50	28.6	33.4	-4.8 years
55	24.6	28.9	-4.3 years
60	20.6	24.7	-4.1 years
65	16.8	20.6	-3.8 years
70	13.1	16.7	-3.6 years
75	9.7	13.0	-3.3 years
80	6.5	9.8	-3.3 years
85	3.2	7.0	-3.8 years

Table 84c. Life Expectancy Table, Alaska Native Males 2014-2018

Age	Alaska Native People	U.S. All Races	Difference
0	68.1	76.1	-8 years
5	64.1	71.7	-7.6 years
10	59.2	66.7	-7.5 years
15	54.4	61.8	-7.4 years
20	49.9	57.0	-7.1 years
25	45.8	52.4	-6.6 years
30	42.0	47.8	-5.8 years
35	37.9	43.2	-5.3 years
40	33.9	38.7	-4.8 years
45	29.7	34.2	-4.5 years
50	25.8	29.8	-4 years
55	22.1	25.6	-3.5 years
60	18.6	21.7	-3.1 years
65	15.0	18.0	-3 years
70	11.5	14.5	-3 years
75	8.4	11.3	-2.9 years
80	5.8	8.4	-2.6 years
85	3.2	5.9	-2.7 years



Appendix C – ICD Code Table

Cause of Death ICD10 Classification

Cause of Death	ICD-10 codes
Enterocolitis due to Clostridium difficile	A047
Septicemia	A40-A41
Salmonella infections	A01 - A02
Shigellosis and amebiasis	A03, A06
Certain other intestinal infections	A00-A046, A048-A09
Tuberculosis	A16-A19
Whooping cough	A37
Scarlet fever and erysipelas	A38, A46
Meningococcal infection	A39
Syphilis	A50-A53
Acute poliomyelitis	A80
Arthropod-borne viral encephalitis	A83 - A84, A852
Measles	B05
Viral hepatitis	B15 - B19
Human immunodeficiency virus (HIV) disease	B20-B24
Malaria	B50 - B54
Other and unspecified infectious and parasitic diseases and their sequelae	A00, A05, A20 - A36,
Cancer (Malignant neoplasms)	C00-C97
Benign/in situ neoplasms and neoplasms of uncertain behavior	D00-D48
Diabetes	E10 - E14
Alcohol abuse	F10
Parkinson's disease	G20-G21
Alzheimer's disease	G30
Heart disease	I00 - I09, I11, I13, I20 - I51
Essential hypertension	I10, I12, I15
Stroke (cerebrovascular diseases)	I60 - I69
Aortic aneurysm and dissection	I71
Other major cardiovascular diseases	I70, I72 - I78
Atherosclerosis	I70
Other diseases of arteries, arterioles and capillaries	I72 - I78
Influenza and pneumonia	J09 - J18

APPENDIX C – ICD CODE TABLE

Cause of Death	ICD-10 codes
Chronic lower respiratory diseases	J40 - J47
Pneumonitis due to solids and liquids	J69
Acute bronchitis and bronchiolitis	J20 - J21
Other/unspecified acute lower respiratory infection	J22, U04
Pneumoconioses and chemical effects	J60 - J66, J68
Other diseases of respiratory system	J00 - J06, J30 - J39, J67,
Chronic liver disease & cirrhosis	K70, K73 - K74
Other digestive diseases	K00 - K66, K71 - K72,
Peptic ulcer	K25 - K28
Diseases of appendix	K35 - K38
Hernia	K40 - K46
Cholelithiasis and other disorders of gallbladder	K80 - K82
Other diseases of the digestive system	K00 - K22, K29 - K31, K50 - K66, K71 - K72, K75 - K76, K83 - K92
Kidney disease (nephritis, nephrotic syndrome and nephrosis)	N00 - N07, N17 - N19, N25 - N27
Conditions originating in the perinatal period	P00 - P96
Congenital anomalies	Q00 - Q99
Anemias	D50 - D64
Nutritional deficiencies	E40 - E64
Meningitis	G00, G03
Other disorders of circulatory system	I80 - I99
Infections of kidney	N10 - N12, N136, N151
Hyperplasia of prostate	N40
Female pelvic inflammatory diseases	N70 - N76
Pregnancy complications (maternal deaths)	O00 - O99
Sudden Infant Death Syndrome (SIDS)	R95
Symptoms and ill-defined conditions	R00 - R94, R96 - R99
All other diseases	D65 - D89
Accidents (unintentional injuries)	V01 - X59, Y85-Y86
Suicide (intentional self-harm)	X60 - X84, Y870, U03
Homicide (assault)	X85 - Y09, Y871,
Other external causes	Y10-Y34, Y35, Y36, Y40-Y84, Y872, Y88 - Y89
Legal intervention	Y35, Y890

APPENDIX C – ICD CODE TABLE

Cause of Death	ICD-10 codes
Discharge of firearms, undetermined intent	Y22 - Y24
Other and unspecified events of undetermined intent and their sequelae	Y10 - Y21, Y25 - Y34, Y872, Y899
Operations of war and their sequelae	Y36, Y891
Complications of medical / surgical care	Y40 - Y84, Y88

Codes Used for Alcohol-Related Mortality Chapter

ICD10 Code	Text Description
E244	Alcohol-induced pseudo-Cushing syndrome
E52	Niacin deficiency - Pellagra (alcoholic)
F10	Mental and behavioral disorders due to use of alcohol
F100	Mental and behavioral disorders due to use of alcohol : acute intoxication
F101	Mental and behavioral disorders due to use of alcohol : harmful use
F102	Mental and behavioral disorders due to use of alcohol : dependence syndrome
F103	Mental and behavioral disorders due to use of alcohol withdrawal state
F104	Mental and behavioral disorders due to use of alcohol withdrawal state with delirium
F105	Mental and behavioral disorders due to use of alcohol : psychotic disorder
F106	Mental and behavioral disorders due to use of alcohol : amnesic syndrome
F107	Mental and behavioral disorders due to use of alcohol : residual and late-onset psychotic disorder
F108	Mental and behavioral disorders due to use of alcohol : other mental and behavioral disorders
F109	Mental and behavioral disorders due to use of alcohol : unspecified mental and behavioral disorder
G312	Degeneration of nervous system due to alcohol
G621	Alcoholic polyneuropathy
G721	Alcoholic myopathy
I426	Alcoholic cardiomyopathy
K292	Alcoholic gastritis
K70	Alcoholic liver disease
K700	Alcoholic fatty liver
K701	Alcoholic hepatitis

APPENDIX C – ICD CODE TABLE

ICD10 Code	Text Description
K702	Alcoholic fibrosis and sclerosis of liver
K703	Alcoholic cirrhosis of liver
K704	Alcoholic hepatic failure
K709	Alcoholic liver disease, unspecified
K852	Alcohol-induced acute pancreatitis
K86	Other diseases of pancreas
K860	Alcohol-induced chronic pancreatitis
O354	Maternal care for (suspected) damage to fetus from alcohol
P043	Fetus and newborn affected by maternal use of alcohol
Q860	Fetal alcohol syndrome (dysmorphic)
R780	Finding of alcohol in blood
X45	Accidental poisoning by and exposure to alcohol
X65	Intentional self-poisoning by and exposure to alcohol
Y15	Poisoning by and exposure to alcohol, undetermined intent

Appendix D – Region Definitions

Region	Census Area/Boroughs included in Region	THOs in Region	Villages added	Villages removed
Aleutians & Pribilofs	Aleutians East Borough, Aleutians West Census Area	Aleutian Pribilof Islands Assoc., St. George Traditional Council, Eastern Aleutian Tribes		
Anchorage-MatSu	Anchorage Municipality, Matanuska-Susitna Borough	Southcentral Foundation, Eklutna Native Village, Chickaloon Village, Knik Tribe		
Arctic Slope	North Slope Borough	Arctic Slope Native Assoc., North Slope Borough, Ukpeagvik Inupiat Corp.		Point Hope, Anaktuvuk Pass
Bristol Bay	Dillingham Census Area, Lake and Peninsula Borough, Bristol Bay Borough	Bristol Bay Area Health Corp.	Goodnews Bay, Platinum	
Copper River/Prince William Sound	Valdez-Cordova Census Area	Chugachmiut (part), Chitina Traditional Village Council, Copper River Native Assoc., Mt. Sanford Tribal Consortium, Valdez Native Tribe	Cantwell	
Interior	Denali Borough, Fairbanks North Star Borough, Southeast Fairbanks Census Area, Yukon-Koyukuk Census Area	Tanana Chiefs Conference, Council of Athabascan Tribal Governments, Fairbanks Native Assoc., Tanana Tribal Council	Anaktuvuk Pass	Cantwell, Anvik, Grayling, Holy Cross, and Shageluk
Kenai Peninsula	Kenai Peninsula Borough	Chugachmiut (part), Kenaitze Indian Tribe, Ninilchik Traditional Council, Seldovia Village Tribe, Tyonek Native Village		
Kodiak	Kodiak Island Borough	Kodiak Area Native Assoc., Karluk Tribal Council		
Northwest Arctic	Northwest Arctic Borough	Maniilaq	Point Hope	
Norton Sound	Nome Census Area	Norton Sound Health Corp., Native Village of Diomede		

APPENDIX D – REGION DEFINITIONS

Region	Census Area/Boroughs included in Region	THOs in Region	Villages added	Villages removed
Southeast	Hoonah-Angoon Census Area, Prince of Wales-Hyder Census Area, Petersburg Borough, Haines Borough, Juneau City and Borough, Ketchikan Gateway Borough, Skagway Borough and Municipality, Sitka City and Borough, Wrangell City and Borough, and Yakutat City and Borough	Southeast Alaska Regional Health Consortium, Hoonah Indian Association, Ketchikan Indian Association, Metlakatla Indian Community, Yakutat Tlingit Tribe		
Yukon-Kuskokwim	Bethel Census Area, Kusilvak Census Area	Akiachak Native Village, Native Village of Quinhagak, Yukon-Kuskokwim Health Corporation	Anvik, Grayling, Holy Cross, and Shageluk	Goodnews Bay, Platinum

Appendix E – Population Tables

Data Source: State of Alaska Department of Labor and Workforce Development, Research and Analysis

Population Tables, 2014 – 2018 cumulative

Age Group	Statewide		
	All	Females	Males
00-04	67,060	32,886	34,174
05-09	68,767	33,050	35,717
10-14	61,932	30,088	31,844
15-19	57,940	27,610	30,330
20-24	52,559	25,839	26,720
25-29	55,352	27,339	28,013
30-34	48,841	24,154	24,687
35-39	40,019	19,895	20,124
40-44	33,882	16,879	17,003
45-49	33,777	16,861	16,916
50-54	38,414	19,154	19,260
55-59	36,276	18,763	17,513
60-64	29,611	15,291	14,320
65-69	21,161	11,002	10,159
70-74	13,051	6,985	6,066
75-79	8,231	4,439	3,792
80-84	5,392	3,238	2,154
85+	3,801	2,456	1,345
Total	676,066	335,929	340,137

APPENDIX E – POPULATION TABLES

Age Group	Aleutians & Pribilofs		
	All	Females	Males
00-04	539	273	266
05-09	607	303	304
10-14	471	214	257
15-19	497	266	231
20-24	340	157	183
25-29	400	193	207
30-34	645	322	323
35-39	494	236	258
40-44	306	119	187
45-49	405	173	232
50-54	598	285	313
55-59	612	276	336
60-64	430	165	265
65-69	483	198	285
70-74	295	130	165
75-79	118	46	72
80-84	79	34	45
85+	75	27	48
Total	7,394	3,417	3,977

APPENDIX E – POPULATION TABLES

Age Group	Anchorage-MatSu		
	All	Females	Males
00-04	21,346	10,463	10,883
05-09	20,516	9,878	10,638
10-14	18,021	8,694	9,327
15-19	17,509	8,558	8,951
20-24	17,109	8,760	8,349
25-29	17,594	9,300	8,294
30-34	15,968	8,240	7,728
35-39	13,174	6,983	6,191
40-44	11,446	5,996	5,450
45-49	11,078	5,809	5,269
50-54	11,549	6,279	5,270
55-59	10,240	5,784	4,456
60-64	8,085	4,764	3,321
65-69	5,841	3,565	2,276
70-74	3,573	2,083	1,490
75-79	2,094	1,304	790
80-84	1,174	766	408
85+	833	604	229
Total	207,150	107,830	99,320

APPENDIX E – POPULATION TABLES

Age Group	Arctic Slope		
	All	Females	Males
00-04	2,642	1,332	1,309
05-09	2,971	1,419	1,552
10-14	2,555	1,215	1,342
15-19	2,077	971	1,107
20-24	1,936	880	1,056
25-29	2,401	1,122	1,279
30-34	2,176	984	1,191
35-39	1,537	677	859
40-44	1,134	563	572
45-49	1,065	497	567
50-54	1,378	640	736
55-59	1,340	684	656
60-64	1,124	546	578
65-69	717	315	402
70-74	357	180	178
75-79	215	125	90
80-84	190	116	75
85+	99	60	39
Total	25,914	12,326	13,588

APPENDIX E – POPULATION TABLES

Age Group	Bristol Bay		
	All	Females	Males
00-04	3,519	1,810	1,668
05-09	3,586	1,616	1,924
10-14	3,239	1,549	1,649
15-19	3,128	1,475	1,616
20-24	2,949	1,369	1,543
25-29	3,050	1,384	1,634
30-34	2,189	1,082	1,084
35-39	1,727	793	917
40-44	1,372	668	689
45-49	1,591	794	781
50-54	2,107	990	1,099
55-59	2,231	1,023	1,193
60-64	1,750	764	974
65-69	1,000	510	484
70-74	764	413	347
75-79	502	231	273
80-84	331	165	169
85+	222	134	92
Total	35,257	16,770	18,136

APPENDIX E – POPULATION TABLES

Age Group	Copper River - PWS		
	All	Females	Males
00-04	694	308	386
05-09	788	368	420
10-14	719	361	358
15-19	640	271	369
20-24	507	228	279
25-29	622	305	317
30-34	564	285	279
35-39	478	217	261
40-44	380	158	222
45-49	451	224	227
50-54	590	268	321
55-59	558	292	266
60-64	513	225	288
65-69	396	159	237
70-74	270	156	115
75-79	155	81	74
80-84	116	45	71
85+	88	58	30
Total	8,529	4,009	4,520

APPENDIX E – POPULATION TABLES

Age Group	Interior		
	All	Females	Males
00-04	6,971	3,448	3,525
05-09	6,985	3,301	3,683
10-14	6,351	3,042	3,309
15-19	6,039	2,892	3,146
20-24	5,308	2,774	2,534
25-29	5,673	2,863	2,810
30-34	5,452	2,733	2,719
35-39	4,674	2,325	2,349
40-44	3,996	1,955	2,041
45-49	3,499	1,828	1,672
50-54	4,282	2,238	2,045
55-59	4,308	2,302	2,006
60-64	3,736	1,887	1,849
65-69	2,645	1,409	1,237
70-74	1,561	831	730
75-79	938	497	439
80-84	660	371	288
85+	564	351	212
Total	73,642	37,047	36,594

APPENDIX E – POPULATION TABLES

Age Group	Kenai Peninsula		
	All	Females	Males
00-04	2,681	1,343	1,338
05-09	2,738	1,304	1,434
10-14	2,729	1,319	1,410
15-19	2,709	1,277	1,432
20-24	2,321	883	1,438
25-29	2,277	1,004	1,273
30-34	2,190	1,011	1,179
35-39	1,908	872	1,036
40-44	1,673	791	882
45-49	1,735	827	908
50-54	1,751	873	878
55-59	1,809	989	820
60-64	1,603	892	711
65-69	1,275	623	652
70-74	726	393	333
75-79	374	208	166
80-84	200	116	84
85+	146	115	31
Total	30,845	14,840	16,005

APPENDIX E – POPULATION TABLES

Age Group	Kodiak		
	All	Females	Males
00-04	1,158	554	604
05-09	1,107	524	583
10-14	945	467	478
15-19	1,069	514	555
20-24	805	445	360
25-29	835	356	479
30-34	689	320	369
35-39	587	309	278
40-44	528	299	229
45-49	616	325	291
50-54	660	363	297
55-59	698	335	363
60-64	483	255	228
65-69	348	199	149
70-74	304	127	177
75-79	212	89	123
80-84	94	58	36
85+	95	55	40
Total	11,233	5,594	5,639

APPENDIX E – POPULATION TABLES

Age Group	Northwest Arctic		
	All	Females	Males
00-04	3,645	1,707	1,938
05-09	4,017	1,960	2,057
10-14	3,445	1,695	1,749
15-19	2,979	1,428	1,551
20-24	2,718	1,280	1,438
25-29	3,058	1,389	1,669
30-34	2,629	1,196	1,434
35-39	1,938	920	1,019
40-44	1,479	742	737
45-49	1,482	631	851
50-54	1,965	861	1,105
55-59	1,604	761	843
60-64	1,279	577	702
65-69	939	454	485
70-74	543	260	283
75-79	338	170	168
80-84	304	195	109
85+	258	202	56
Total	34,620	16,428	18,194

APPENDIX E – POPULATION TABLES

Age Group	Norton Sound		
	All	Females	Males
00-04	4,626	2,282	2,344
05-09	5,095	2,414	2,681
10-14	4,639	2,225	2,414
15-19	3,977	1,841	2,136
20-24	3,537	1,613	1,924
25-29	3,680	1,708	1,972
30-34	3,069	1,469	1,600
35-39	2,588	1,234	1,354
40-44	2,244	1,029	1,215
45-49	2,043	957	1,086
50-54	2,182	1,000	1,182
55-59	2,104	1,073	1,031
60-64	1,698	889	809
65-69	1,259	597	662
70-74	713	360	353
75-79	442	238	204
80-84	317	181	136
85+	119	75	44
Total	44,332	21,185	23,147

APPENDIX E – POPULATION TABLES

Age Group	Southeast		
	All	Females	Males
00-04	7,561	3,737	3,824
05-09	7,904	3,944	3,960
10-14	7,015	3,412	3,603
15-19	6,455	3,045	3,410
20-24	5,542	2,737	2,805
25-29	6,367	3,144	3,223
30-34	6,012	3,009	3,003
35-39	5,289	2,610	2,679
40-44	4,409	2,085	2,324
45-49	4,466	2,221	2,245
50-54	5,378	2,672	2,706
55-59	5,446	2,767	2,679
60-64	4,596	2,243	2,353
65-69	3,299	1,576	1,723
70-74	2,081	1,098	983
75-79	1,665	848	817
80-84	1,044	643	401
85+	815	483	332
Total	85,344	42,274	43,070

APPENDIX E – POPULATION TABLES

Age Group	Yukon-Kuskokwim		
	All	Females	Males
00-04	11,678	5,629	6,089
05-09	12,453	6,019	6,481
10-14	11,803	5,895	5,948
15-19	10,861	5,072	5,826
20-24	9,487	4,713	4,811
25-29	9,395	4,571	4,856
30-34	7,258	3,503	3,778
35-39	5,625	2,719	2,923
40-44	4,915	2,474	2,455
45-49	5,346	2,575	2,787
50-54	5,974	2,685	3,308
55-59	5,326	2,477	2,864
60-64	4,314	2,084	2,242
65-69	2,959	1,397	1,567
70-74	1,864	954	912
75-79	1,178	602	576
80-84	883	548	332
85+	487	292	192
Total	111,806	54,209	57,947



