Alaska Native Injury Atlas | 3rd Edition

MARCH 2020

ALASKA NATIVE TRIBAL HEALTH CONSORTIUM

INJURY PREVENTION PROGRAM and
ALASKA NATIVE EPIDEMIOLOGY CENTER

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Alaska Trauma Registry

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Bristol Bay Area Health Corporation

Yukon-Kuskokwim Health Corporation

Introduction

This report provides an update of injury among Alaska Native and American Indian (AN/AI) people reported in State of Alaska data sets. It describes the leading causes of injury-related death and hospitalization statewide and within each region. It presents stories about successes in Tribal injury prevention (IP), and describes some challenges to IP efforts in Alaska. Monitoring injuries over time can help identify which injury prevention efforts are successful and which may need to be improved. In addition, this surveillance can identify disparities and trends to help prioritize injury prevention efforts.

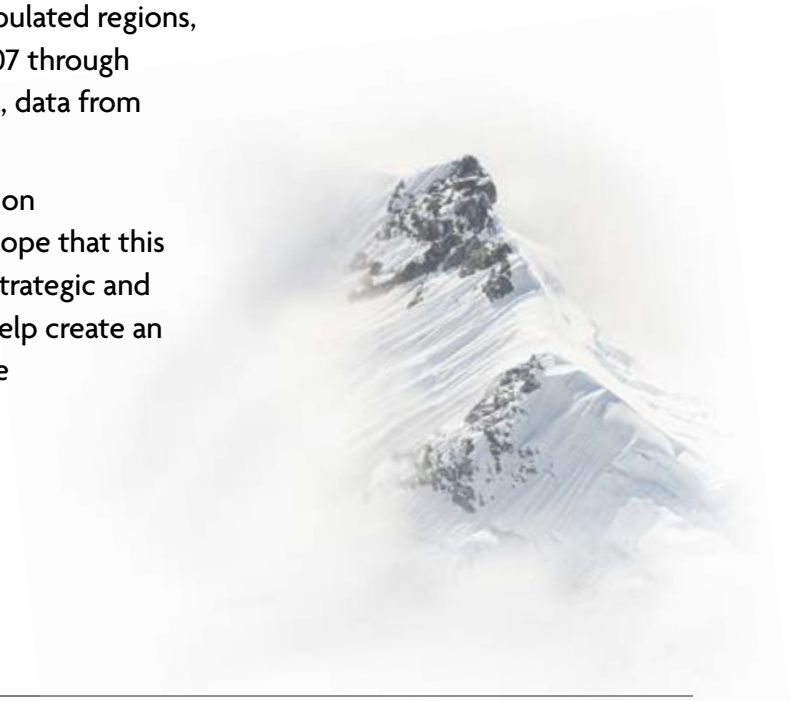
Injuries are broadly classified into two major categories: intentional and unintentional. Intentional injuries are purposeful or deliberate harm caused by one person to themselves or another person, such as homicide, assault, suicide and suicide attempt. Unintentional injuries are those where the harmful outcome was not intended, such as some poisonings, drowning, or motor vehicle crashes. **Intentional and unintentional injuries combined were the second leading cause of death for AN/AI people during 2007-2016.**

"Alaska Native people are the healthiest people in the world."

Alaska Native Tribal Health Consortium's Vision

Statewide data summaries use the most recent decade of data available, 2007 through 2016, for both deaths and hospitalizations. Regional trends are reported for thirteen regions. In the past, the Anchorage Municipality and Matanuska-Susitna regions were combined. In this edition these two regions are reported separately. For the more populated regions, the Regional Injury Profiles include data from 2007 through 2016. For regions with smaller numbers of people, data from 1997 to 2016 were analyzed.

Data and information gained from its interpretation contribute to the decision-making process. We hope that this information can guide advocacy, policy making, strategic and program planning, and program evaluation, and help create an environment where "Alaska Native people are the healthiest people in the world".



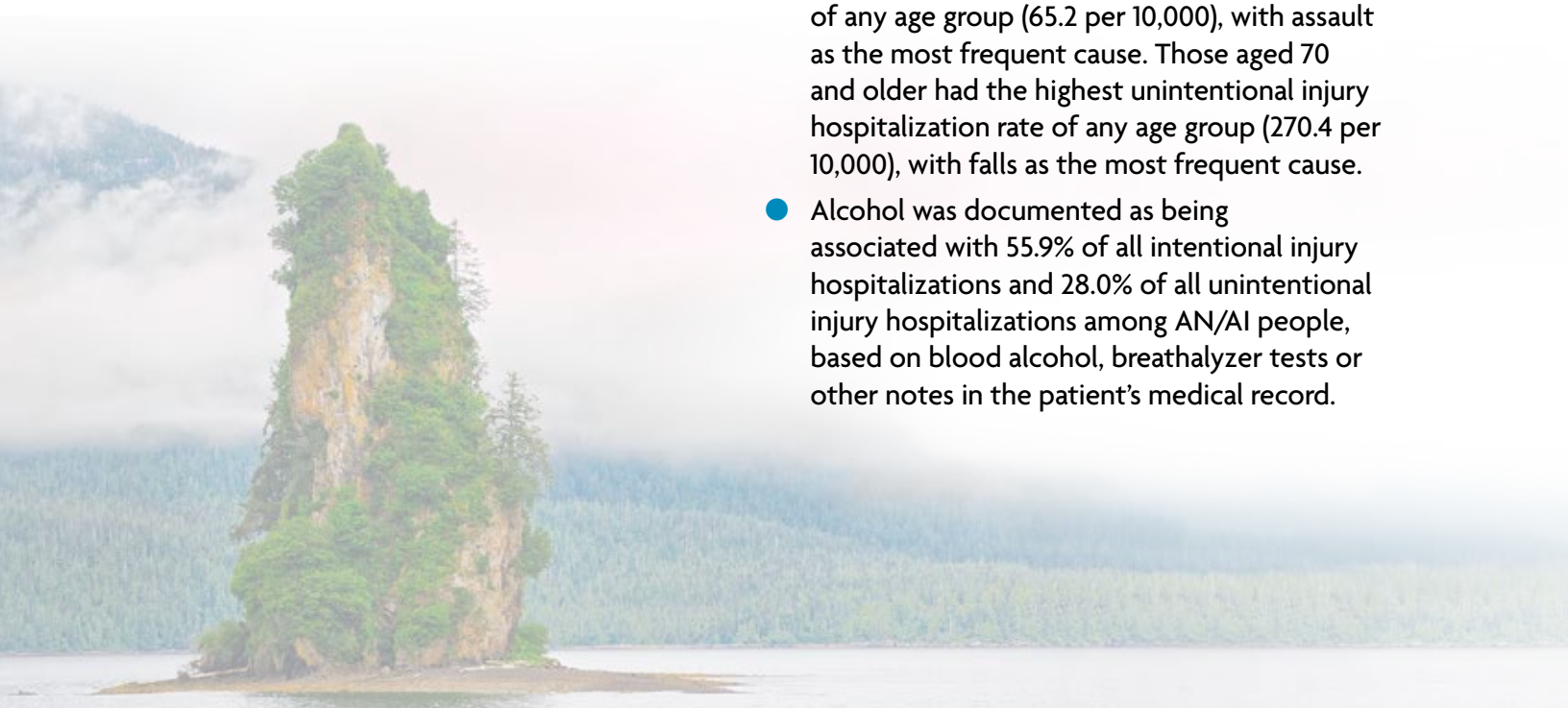
Executive Summary

Injury Deaths 2007-2016

- 1,966 Alaska Native/American Indian (AN/AI) people died from injuries: 1,194 (60.7%) due to unintentional injuries, 675 (34.4%) due to intentional injuries, and 97 (4.9%) with undetermined intent. The three leading causes of injury death among AN/AI people were suicide, poisoning, and drowning. These three causes comprised 56.0% of all injury deaths.
- Between 1992-1996 and 2012-2016, there was a significant decrease in the rates of AN/AI people death due to drowning (34.7%) and motor vehicle crashes (44.5%).
- The drowning death rate of AN/AI people was 5.1 times that of non-Native people statewide.
- AN/AI people aged 20-29 years had the highest intentional injury death rate of any age group (131.7 per 100,000), with suicide as the most frequent cause. Those aged 70 and older had the highest unintentional injury death rate of any age group (237.5 per 100,000), with falls as the most frequent cause.

Injury Hospitalizations 2007-2016

- There were 13,527 hospitalizations for injury among AN/AI people: 9,667 (71.5%) due to unintentional injuries, 3,752 (27.7%) due to intentional injuries, and 108 (0.8%) with undetermined intent. The three leading causes of injury hospitalizations among AN/AI people were falls, suicide attempts, and assaults. These three caused 61.4% of all injury hospitalizations.
- Between 1992-1996 and 2012-2016, there was a significant decrease in the rates of falls (13.7%), assault (34.7%), and snowmachine-related (59.7%) injury hospitalizations among AN/AI people.
- Between 1992-1996 and 2012-2016, there was a significant increase in the rate of suicide attempt hospitalizations among AN/AI people (29.1%). This did not include hospitalization for intentional self-poisoning.
- The assault hospitalization rate of AN/AI people was 7.6 times that of non-Native people and the snowmachine-related injury rate of AN/AI people was 6.4 times that of non-Native people.
- AN/AI people aged 20-29 years had the highest intentional injury hospitalization rate of any age group (65.2 per 10,000), with assault as the most frequent cause. Those aged 70 and older had the highest unintentional injury hospitalization rate of any age group (270.4 per 10,000), with falls as the most frequent cause.
- Alcohol was documented as being associated with 55.9% of all intentional injury hospitalizations and 28.0% of all unintentional injury hospitalizations among AN/AI people, based on blood alcohol, breathalyzer tests or other notes in the patient's medical record.



Success Stories

INCREASING YOUTH HELMET USE in the Bristol Bay Area

In the winter of 2016-2017, several youth in the Bristol Bay region sustained severe injuries from snowmachine or all-terrain vehicle (ATV) crashes, one of which resulted in a death. A Community Health Aide (CHA) in the Bristol Bay village of Pilot Point had treated a number of youth in her village for head injuries. One of the risks noted for these events was the lack of a helmet when riding on ATVs and snowmachines.

To address this concern, the CHA contacted the Injury Prevention Specialist at the Bristol Bay Area Health Corporation (BBAHC) asking if there were any helmets that could be given to the youth in her community. In the past simply providing helmets to community members had not resulted in long-term increases in helmet use, so they discussed enforcement and helmet style. Their conversations led to collaborations with the Village Council and community Village Public Safety Office (VPSO).

Funding was found to purchase helmets, and popular styles and designs of helmets were evaluated. A community event was held where youth were allowed to choose the design of their helmet. After distributing the helmets, anecdotally there was an increase in voluntary helmet use by youth. It was noted that the youth enjoyed sharing the designs of their helmets.

The Village Council was interested in establishing a municipal ordinance to require helmet use by youth in the community. The Anchorage helmet law was used as a model, but there were concerns about the appropriateness of ticketing and fines as the penalty. A recommendation was made to require community service in place of ticketing, and the ordinance was passed. In Pilot Point, all youth under the age of 18 are now required to wear a helmet when riding on an ATV, snowmachine, or motorcycle.

As part of the enforcement effort, community members are allowed to report riders without helmets to the VPSO. The community service penalty includes assisting Elders or painting community buildings among other activities. The community service was often done with groups of youth working together. Since the ordinance was established, there have been no ATV or snowmachine-related head injuries at Pilot Point.

The BBAHC Injury Prevention Specialist subsequently worked on a new project in New Stuyahok in collaboration with the Tribal council, the local school, the Alaska Native Medical Center, and the ANTHC Injury Prevention Program. The collaborators developed an ATV safety curriculum adapted from ATV safety material created by the Arkansas Children's Hospital. It was revised to be appropriate for Alaska Native youth in New Stuyahok, and adds a youth education component. If successful, this safety education may be considered for other communities.

INJURY PREVENTION TRAINING for COMMUNITY LEADERS
in the YKHC Region

Each year the Yukon Kuskokwim Health Corporation (YKHC) holds an Annual Tribal Gathering where Tribal delegates come together to discuss and vote on a broad range of concerns.

During the 2018 Tribal Gathering, YKHC took a slightly different approach to seeking input from community representatives on important health care issues vital to realizing their vision of becoming the "healthiest people." On the second day of the gathering, Tribal delegates were asked, "How can YKHC work with your tribe to meet these healthy people goals?" This question stimulated dozens of community-driven ideas on how their communities can help, including improve children's oral health, reduce drowning and unintentional injuries, and prevent suicide.

After the suggestions were reviewed and summarized by YKHC's Leadership and Board, intervention strategies were identified for development and implementation. Among the strategies, the Indian Health Service's "Introduction to Injury Prevention" course was identified as a collective resource to empower community self-determination to develop and implement culturally-relevant injury prevention programs.

In November 2018, participants from the surrounding Yukon-Kuskokwim communities, Anchorage, Fairbanks and Kotzebue attended the Injury Prevention course. The course offered to support community leaders and provide them with resources to address public health issues in their home communities.

Instructors included YKHC's Injury Control and Emergency Medical Service Manager, Injury Prevention staff from ANTHC, and the Indian Health Services Liaison to the Centers for Disease Control and Prevention. Students became engaged in the public health model and learned the need for proper data collection and how to use the tools provided to improve their community's well-being.

The course provided information on identifying target populations, choosing appropriate intervention strategies, and evaluating those strategies' strengths, weaknesses, and effectiveness. Students collected field data on helmet usage among ATV and snowmachine riders. This exercise initiated conversations about how to identify potential solutions to improve motor vehicle safety. The training culminated in presentations and a request for funds to support injury prevention projects.

Work has now begun on coordinating local projects led by grassroots efforts to improve health and safety. A second similar training at YKHC for regional community members was provided in August, 2019.

Injury Hospitalizations

Leading Causes of Hospitalization by Age Group, AN/AI People, 2015-2016

Data Source: Alaska Health Facility Data Reporting System
Note: Blue shaded blocks indicate causes of hospitalizations related to injury

Age					
0-9 Years	Newborn 1,980	Other Respiratory Diseases 385	Influenza and Pneumonia 366	Perinatal Conditions 288	Acute Bronchitis 160
10-19 Years	Behavioral Health 993	Pregnancy/ Childbirth 566	Diseases of the Digestive System 85	**Unintentional Injuries 77**	Diseases of the Skin 39
20-29 Years	Pregnancy/ Childbirth 3,231	Behavioral Health 746	Diseases of the Digestive System 127	**Unintentional Injuries 98**	Diseases of the Skin 84
30-39 Years	Pregnancy/ Childbirth 1,452	Behavioral Health 618	Diseases of the Digestive System 214	Diseases of the Skin 115	Septicemia 103
40-49 Years	Behavioral Health 388	Diseases of the Digestive System 225	Diseases of the Skin 123	Septicemia 110	Heart Disease 106
50-59 Years	Behavioral Health 388	Diseases of the Digestive System 329	Heart Disease 238	Septicemia 201	Infectious Disease 138
60-69 Years	Heart Disease 278	Diseases of the Digestive System 244	Septicemia 143	Cancer 139	Influenza and Pneumonia 137
70+ Years	Heart Disease 723	Influenza and Pneumonia 284	Diseases of the Digestive System 246	Septicemia 207	Infectious Disease 192
All Ages	**Pregnancy/ Childbirth 5,342**	**Behavioral Health 3,347**	**Newborn 1,980**	**Heart Disease 1,800**	**Diseases of the Digestive System 1,559**

Leading Causes of Injury Hospitalization by Region, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

REGION	Aleutian & Pribilof Islands	Anchorage	Arctic Slope	Bristol Bay	Copper River/PWS	Interior	Kenai Peninsula
Total	106	3,426	489	665	152	1,389	428
	Fall 55	Fall 1,279	Fall 176	Fall 208	Fall 67	Fall 457	Fall 156
	Motor Vehicle 11	Assault 656	Assault 66	ATV 85	Motor Vehicle 22	Suicide Attempt 205	Motor Vehicle 76
	Assault 10	Motor Vehicle 549	Suicide Attempt 44	Assault 68	Assault 9	Assault 196	Suicide Attempt 43
	Suicide Attempt 8	Suicide Attempt 322	ATV 40	Motor Vehicle 54	Suicide Attempt 8	Motor Vehicle 141	Assault 28
	ATV 8	Pedal Cycle 96	Motor Vehicle 36 Snowmachine 36	Suicide Attempt 48	Snowmachine 7	Snowmachine 62	ATV 25

Leading Causes of Injury Hospitalization by Age, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

AGE	0 to 9 years	10 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years
Total	1,225	2,131	2,857	1,725	1,698	1,574
	Fall 476	Suicide Attempt 630	Assault 644	Assault 397	Fall 540	Fall 725
	Poisoning 102	Fall 313	Suicide Attempt 623	Fall 358	Assault 342	Assault 221
	Fire and Burn 83	Motor Vehicle 247	Fall 377	Suicide Attempt 301	Suicide Attempt 202	Motor Vehicle 167
	Motor Vehicle 74	ATV 199	Motor Vehicle 370	Motor Vehicle 176	Motor Vehicle 150	Suicide Attempt 100
	Foreign Body 65	Assault 139	ATV 199	Snowmachine 79	Snowmachine 65 ATV 65	ATV 46

continued -

Kodiak Area	Matanuska-Susitna	Norton Sound	Northwest Arctic	Southeast	Yukon-Kuskokwim	All Regions*
174	477	1,079	1,055	1,428	2,512	13,527
Fall 72	Fall 161	Suicide Attempt 311	Fall 264	Fall 658	Fall 671	Fall 4,558
Motor Vehicle 25	Motor Vehicle 86	Fall 293	Assault 184	Suicide Attempt 175	Suicide Attempt 483	Suicide Attempt 1,896
Suicide Attempt 15	Suicide Attempt 54	ATV 109	Suicide Attempt 164	Assault 149	Assault 323	Assault 1,856
Assault 11	Assault 31	Assault 107	Snowmachine 115	Motor Vehicle 136	ATV 184	Motor Vehicle 1,309
ATV 11	ATV 30	Snowmachine 47	ATV 106	Struck By or Against 46	Snowmachine 177	ATV 693

continued -

60 to 69 years	70 + years	Total**
900	1,414	13,527
Fall 601	Fall 1,166	Fall 4,558
Motor Vehicle 56	Motor Vehicle 69	Suicide Attempt 1,896
Assault 41	ATV 32	Assault 1,856
Snowmachine 29	Assault 26	Motor Vehicle 1,309
Suicide Attempt 27	Struck By or Against 21	ATV 693

** 68 cases missing location of occurrence.*
61 cases occurred in Alaska but region was not determined.
13 cases occurred outside of Alaska to Alaska residents.
75 cases missing cause of injury.

*** 75 cases missing cause of injury.*
3 cases missing age of patient.

Leading Causes of Injury Hospitalization by Age, AN/AI Females, 2007-2016

Data Source: Alaska Trauma Registry

AGE	0 to 9 years	10 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years
Total	505	934	1,002	630	643	706
	Fall 211	Suicide Attempt 419	Suicide Attempt 341	Fall 171	Fall 248	Fall 393
	Poisoning 42	Fall 103	Assault 170	Suicide Attempt 169	Suicide Attempt 132	Motor Vehicle 82
	Foreign Body 36	ATV 98	Fall 158	Assault 97	Assault 84	Suicide Attempt 67
	Motor Vehicle 30	Motor Vehicle 88	Motor Vehicle 142	Motor Vehicle 66	Motor Vehicle 52	Assault 54
	Fire and Burn 29	Poisoning 60	ATV 53	ATV 26	ATV 25	ATV 19

Leading Causes of Injury Hospitalization by Age, AN/AI Males, 2007-2016

Data Source: Alaska Trauma Registry

AGE	0 to 9 years	10 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years
Total	720	1,197	1,853	1,095	1,055	868
	Fall 265	Suicide Attempt 211	Assault 474	Assault 300	Fall 292	Fall 332
	Poisoning 60	Fall 210	Suicide Attempt 281	Fall 187	Assault 258	Assault 167
	Fire and Burn 54	Motor Vehicle 159	Motor Vehicle 228	Suicide Attempt 132	Motor Vehicle 98	Motor Vehicle 85
	Motor Vehicle 44	Assault 106	Fall 219	Motor Vehicle 110	Suicide Attempt 70	Suicide Attempt 33
	ATV 35	ATV 101	ATV 146	Snowmachine 63	Snowmachine 54	Fire and Burn 33

continued -

60 to 69 years	70 + years	Total*
494	937	5,853
Fall 389	Fall 827	Fall 2,502
Motor Vehicle 21	Motor Vehicle 40	Suicide Attempt 1,151
Suicide Attempt 18	ATV 16	Motor Vehicle 521
Snowmachine 12	Struck By or Against 11	Assault 471
Assault 11	Assault 8	ATV 265

** 2 cases missing age of patient.*

continued -

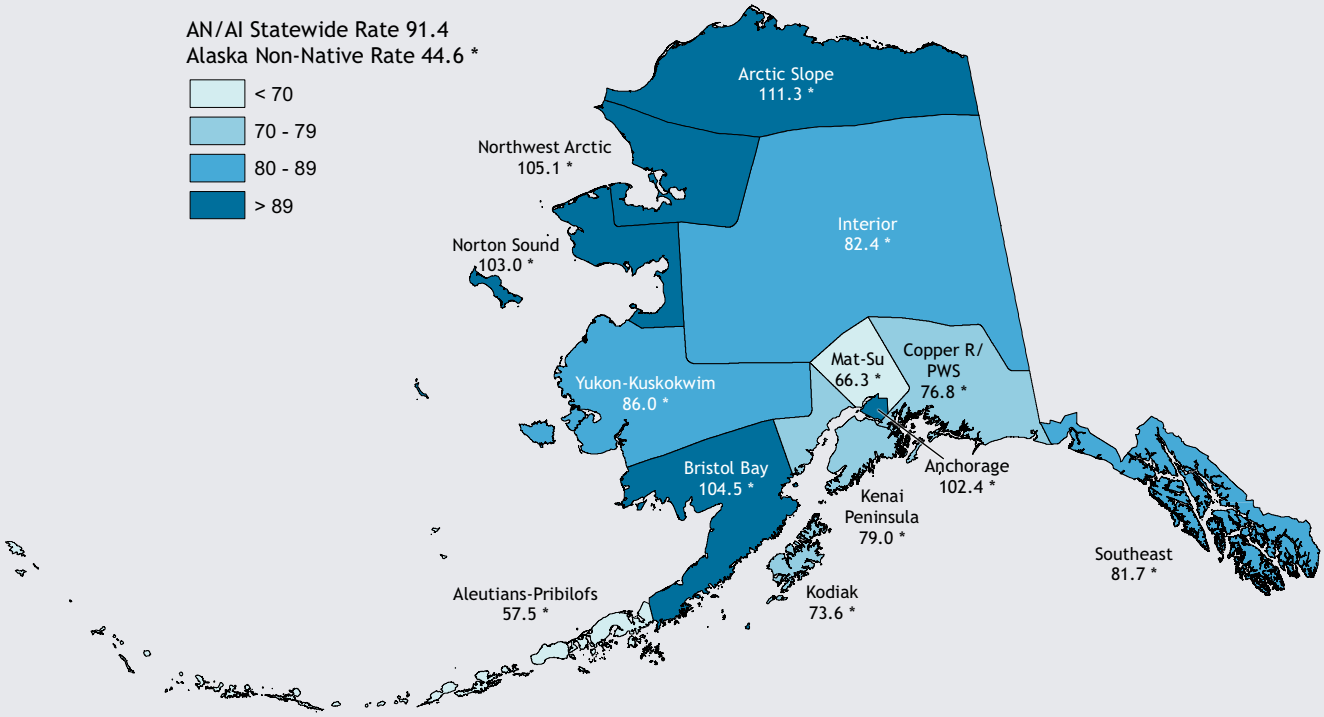
60 to 69 years	70 + years	Total**
406	476	7,671
Fall 212	Fall 338	Fall 2,055
Motor Vehicle 35	Motor Vehicle 29	Assault 1,385
Assault 30	Assault 18	Motor Vehicle 788
Snowmachine 17	ATV 16	Suicide Attempt 744
Exposure to Natural Forces 16	Snowmachine 10	ATV 428
	Struck By or Against 10	

*** 51 cases missing cause of injury.*
1 case missing age of patient.

Unintentional Injury

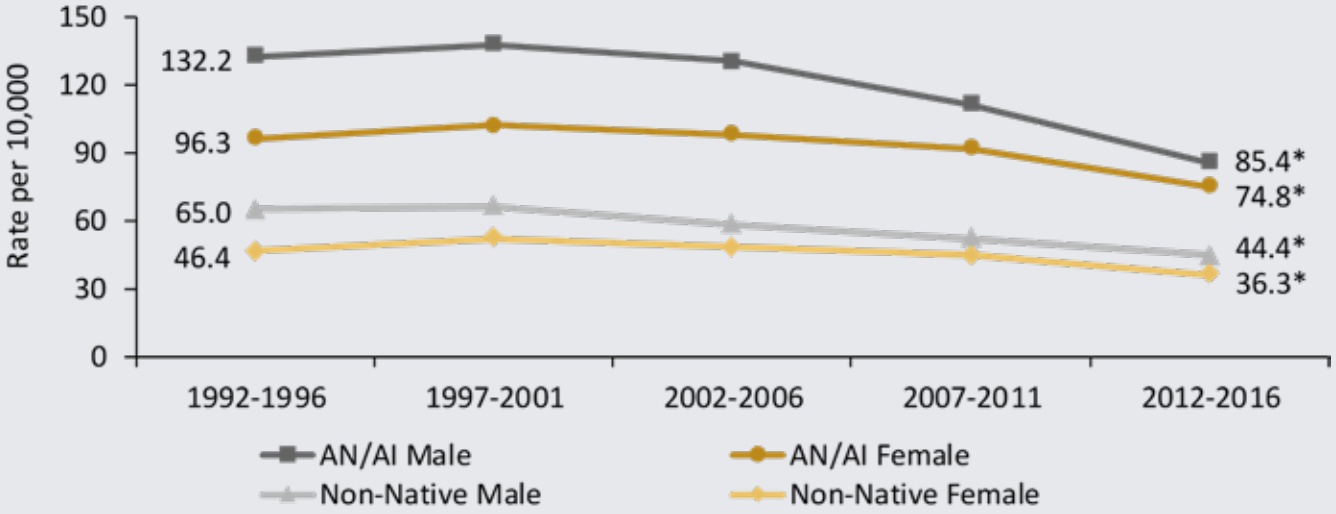
Data Source: Alaska Trauma Registry. Data tables available in Appendix B.

Unintentional Injury Hospitalization Rate by Region, AN/AI People, 2007-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*

Unintentional Injury Hospitalization Rate by Gender, Race, and Year, 1992-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

continued -

Summary

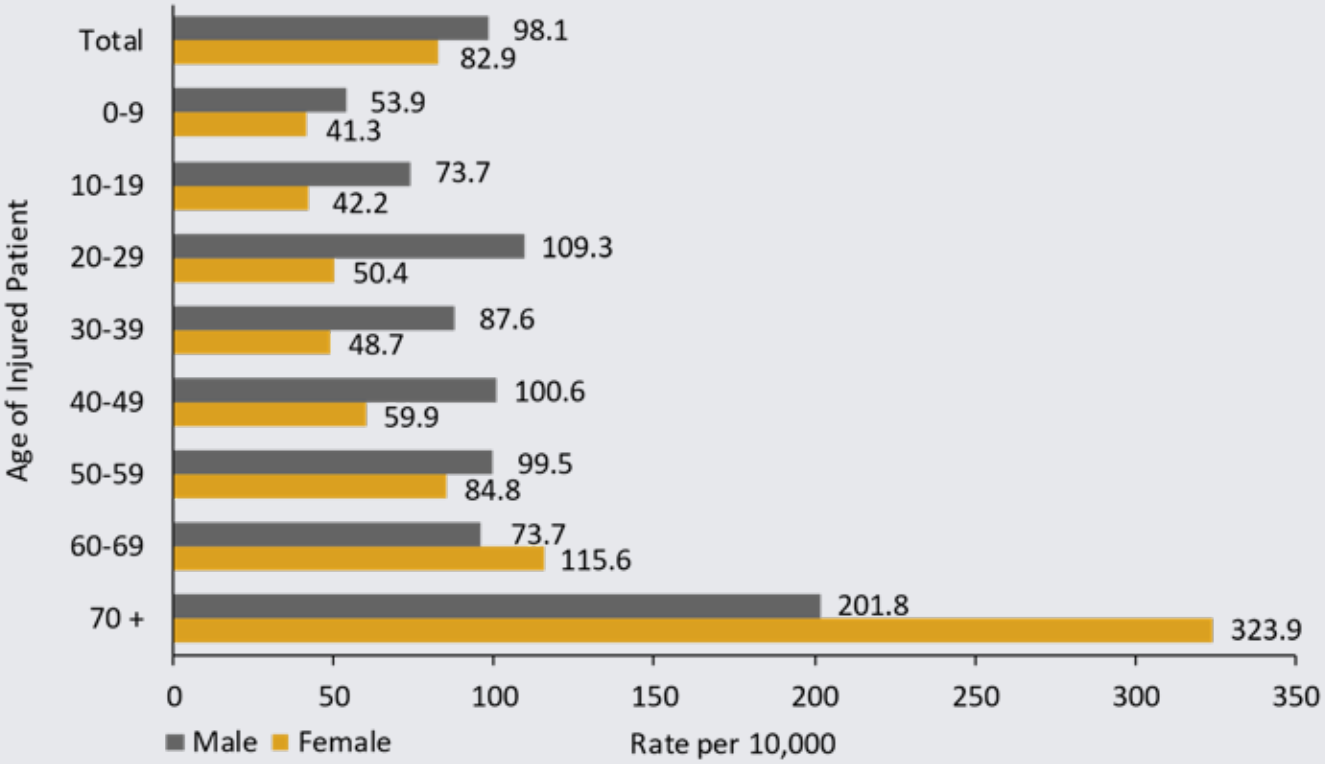
During 2007-2016:

- 9,667 AN/AI people were hospitalized for unintentional injuries. This represented 71.5% of all injury hospitalizations.
- Falling was the mechanism for nearly half of all unintentional injury hospitalizations (47.2%) among AN/AI people, followed by motor vehicle (13.5%), ATV (7.2%) and snowmachine (5.3%).
- AN/AI people aged 70 years and older had the highest unintentional injury hospitalization rate of any age group (270.4 per 10,000). The rate for this age group was 3.0 times the rate for all ages (91.4 per 10,000, $p<0.05$).
- The unintentional injury hospitalization rate of AN/AI males was 1.2 times that of AN/AI females (98.1 and 82.9 per 10,000, respectively, $p<0.05$).
- The unintentional injury hospitalization rate of AN/AI people was 2.0 times that of non-Native people (91.4 and 44.6 per 10,000, respectively, $p<0.05$).
- Just over one out of every four (28.0%) unintentional injury hospitalizations among AN/AI people were confirmed or suspected to be alcohol-related.

Trend Over Time:

- Between 1992-1996 and 2012-2016, the unintentional injury hospitalization rate for both AN/AI genders combined decreased 29.7% (115.0 and 80.9 per 10,000, respectively, $p<0.05$).

Unintentional Injury Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

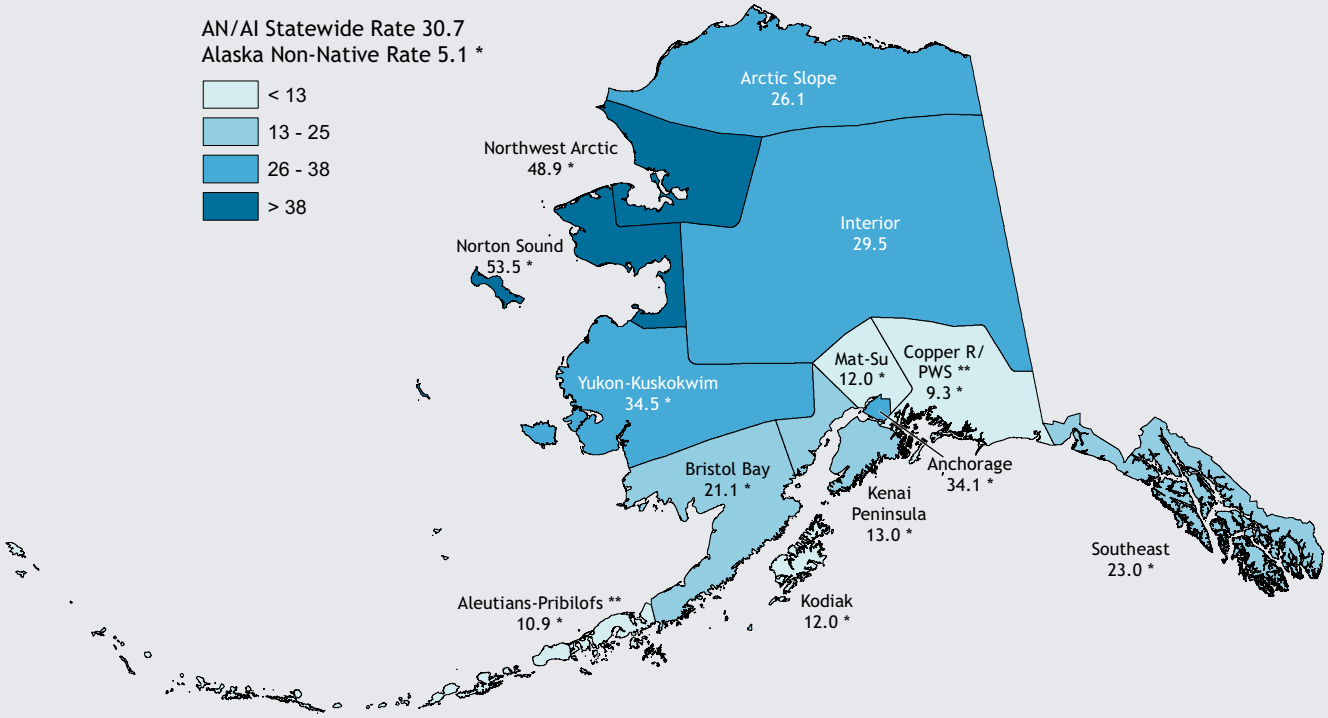


Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

Intentional Injury

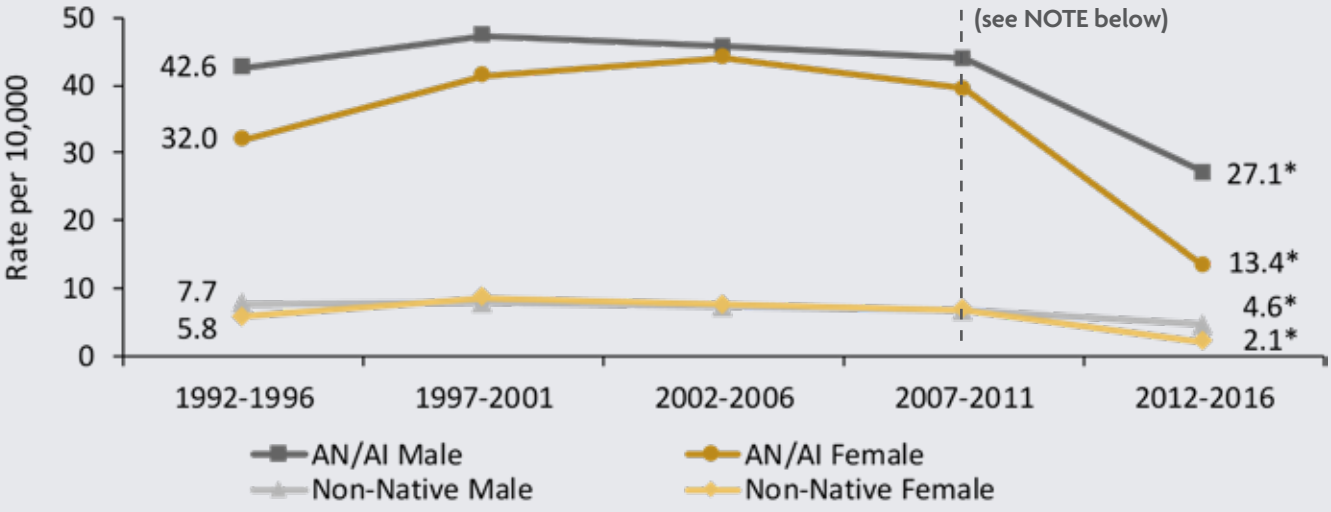
Data Source: Alaska Trauma Registry. Data tables available in Appendix B.

Intentional Injury Hospitalization Rate by Region, AN/AI People, 2007-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Intentional Injury Hospitalization Rate by Gender, Race, and Year, 1992-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

NOTE: Use caution when interpreting these data. Starting January 2011, the Alaska Trauma Registry stopped reporting intentional self-inflicted poisonings for patients aged 18 or older.

continued -

Summary

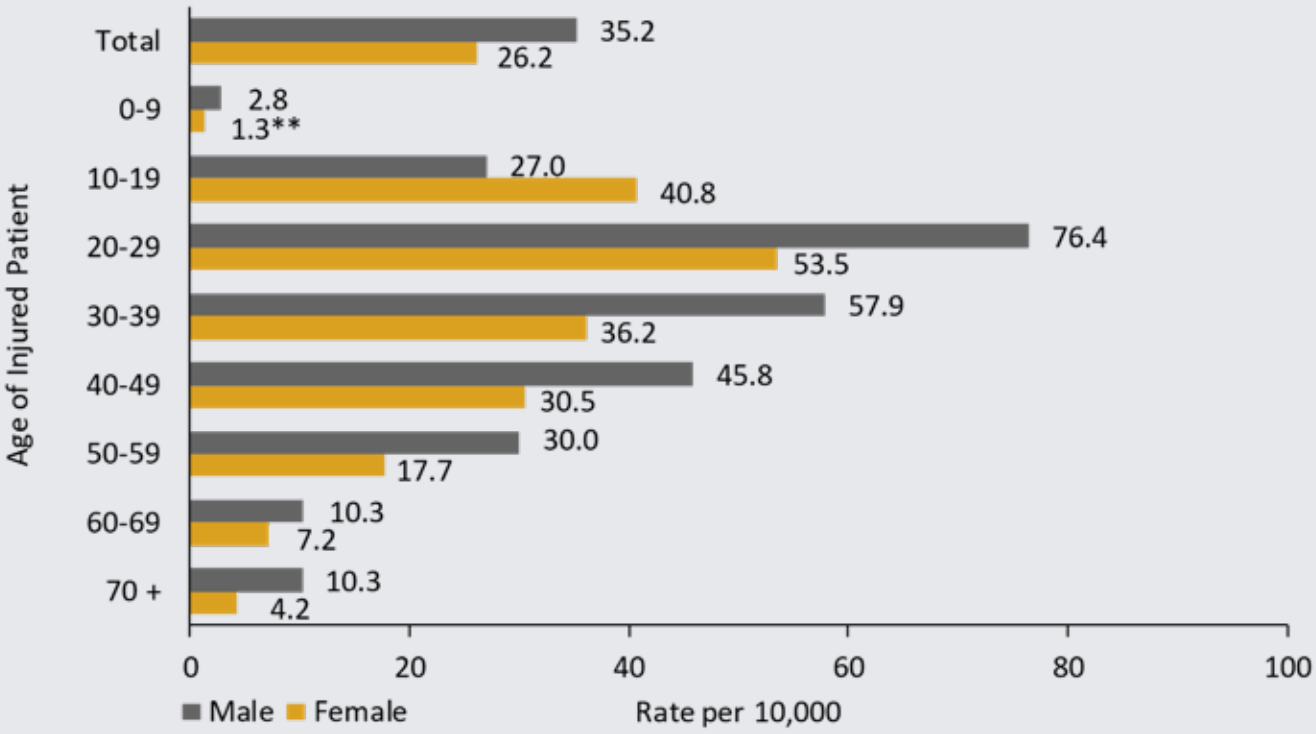
During 2007-2016:

- 3,752 AN/AI people were hospitalized for intentional injuries, representing 27.7% of all injury hospitalizations.
- The frequency of suicide attempt (1,896) was almost identical to assaults (1,856) for AN/AI people.
- AN/AI people aged 20 to 29 years had the highest rate of any age group (65.2 per 10,000); it was 2.1 times the rate for all ages (30.7 per 10,000, p<0.05).
- The intentional injury hospitalization rate of AN/AI males was 1.3 times that of AN/AI females (35.2 and 26.2 per 10,000, respectively, p<0.05).
- The intentional injury hospitalization rate of AN/AI people was 6.0 times that of non-Native people (30.7 and 5.1 per 10,000, respectively, p<0.05).
- Over half (55.9%) of intentional injury hospitalizations among AN/AI people were confirmed or suspected to be alcohol-related.

Trend Over Time:

- Excluding intentional self-poisoning (see NOTE on previous page), between 1992-1996 and 2012-2016, the intentional injury hospitalization rate for both AN/AI genders combined decreased 22.2% (26.0 and 20.3 per 10,000, respectively, p<0.05).

Intentional Injury Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

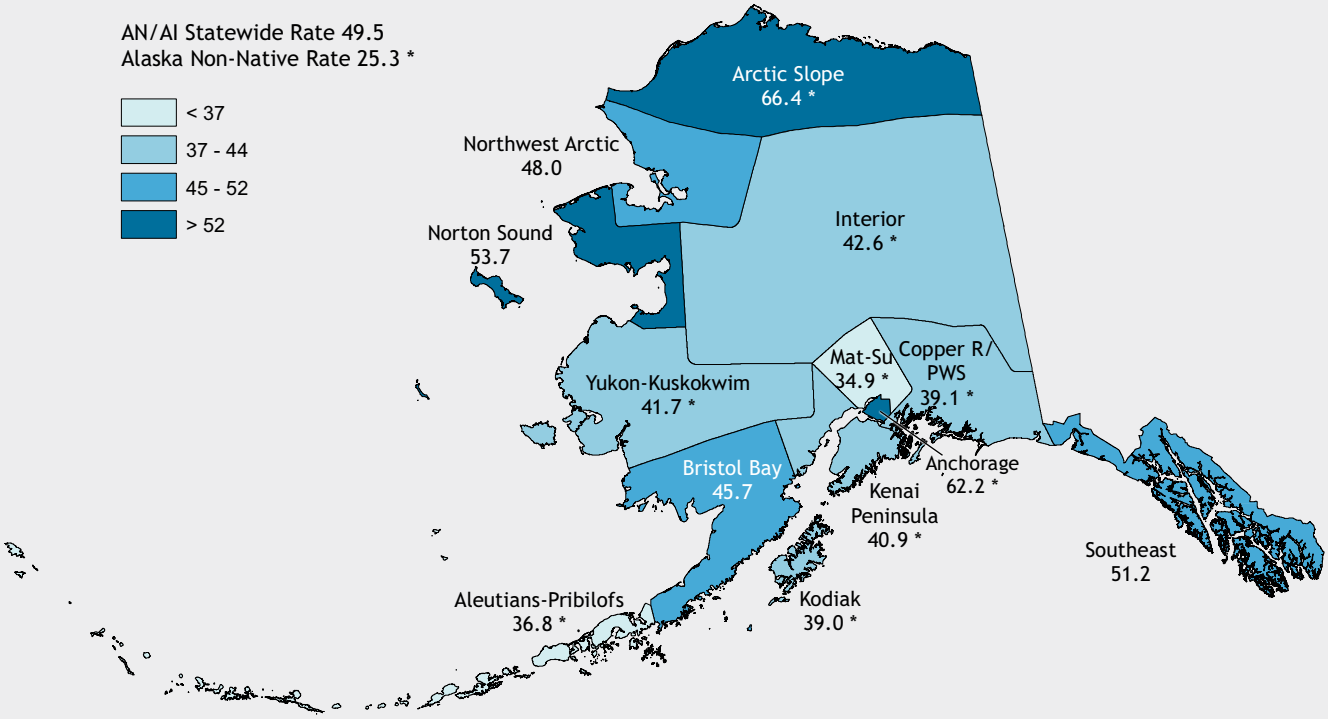


Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Fall

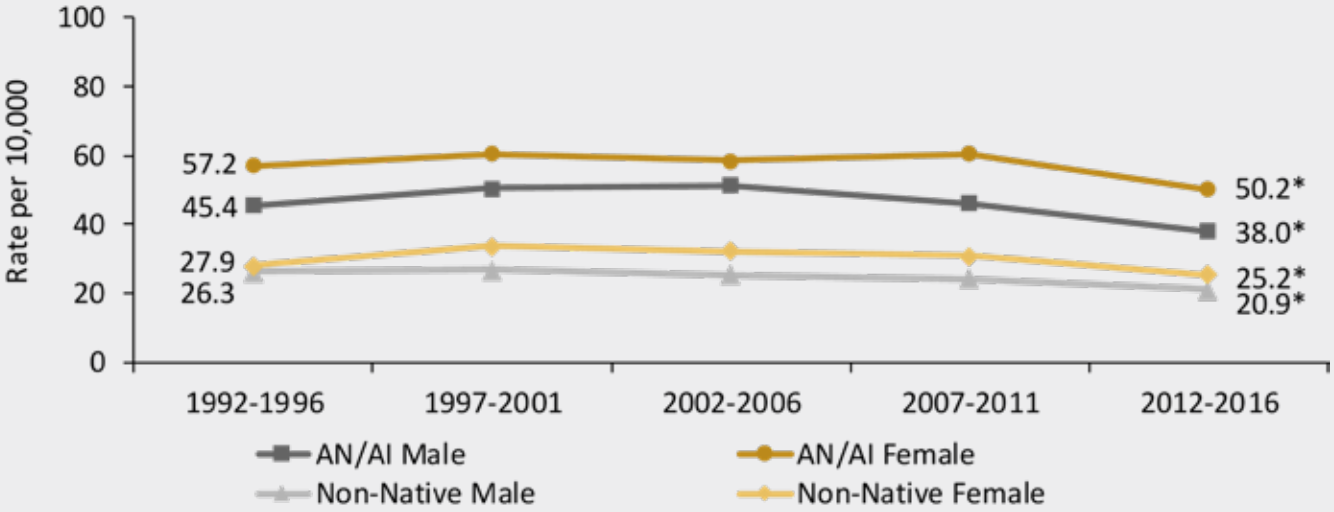
Data Source: Alaska Trauma Registry. Data tables available in Appendix B.

Fall Hospitalization Rate by Region, AN/AI People, 2007-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*

Fall Hospitalization Rate by Gender, Race, and Year, 1992-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

continued -

Summary

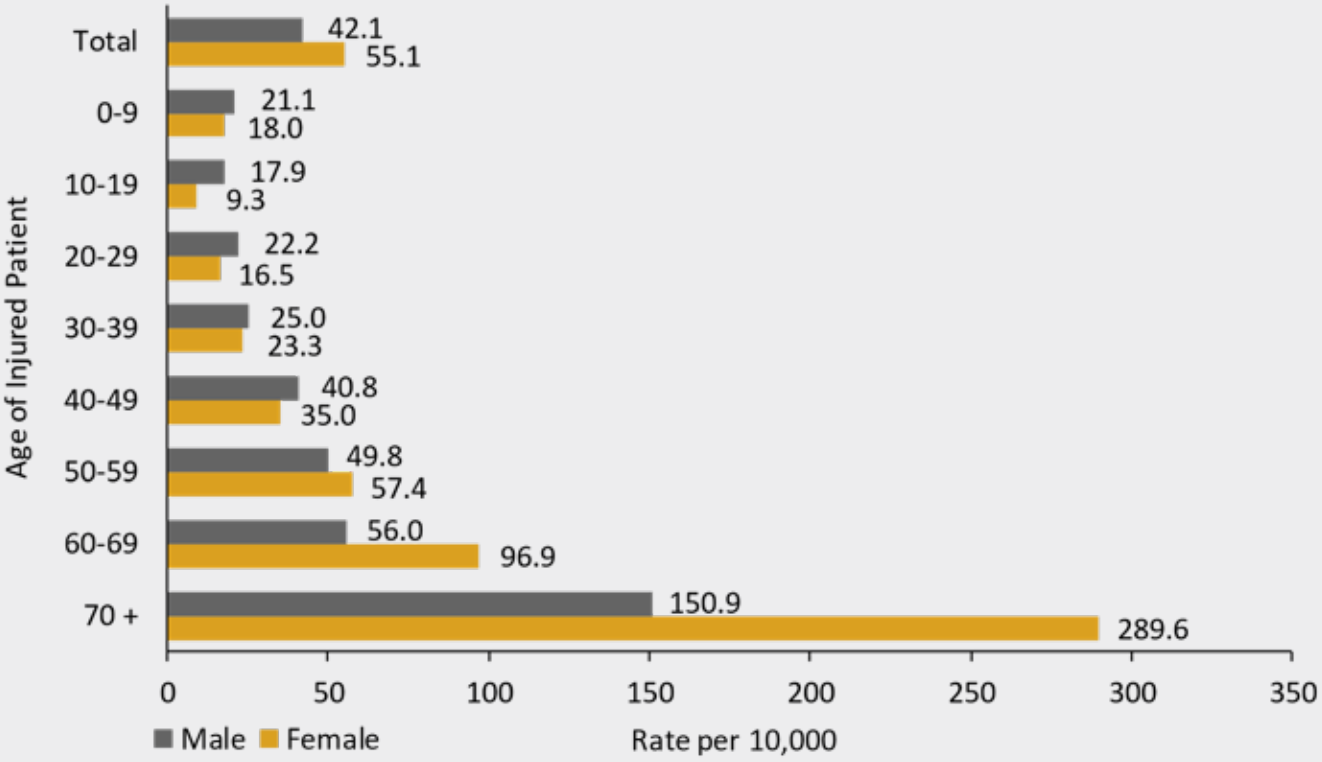
During 2007-2016:

- 4,558 AN/AI people were hospitalized for fall injuries. This represented 33.7% of all injury hospitalizations.
- Slipping/tripping/stumbling was the mechanism for nearly half of fall hospitalizations (47.8%) among AN/AI people, followed by moving from one level to another (17.2%) and stairs or steps (10.5%).
- AN/AI people aged 70 years and older had the highest fall hospitalization rate of any age group (228.8 per 10,000). The rate for this age group was 4.6 times the rate for all ages (49.5 per 10,000, $p<0.05$).
- The fall injury hospitalization rate of AN/AI females was 1.3 times that of AN/AI males (55.1 and 42.1 per 10,000, respectively, $p<0.05$).
- The fall injury hospitalization rate of AN/AI people was 2.0 times that of non-Native people (49.5 and 25.3 per 10,000, respectively, $p<0.05$).
- Nearly one out of every four (22.9%) fall hospitalizations among AN/AI people were confirmed or suspected to be alcohol-related.

Trend Over Time:

- Between 1992-1996 and 2012-2016, the fall injury hospitalization rate for both AN/AI genders combined decreased 13.7% (52.0 and 44.9 per 10,000, respectively, $p<0.05$).

Fall Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

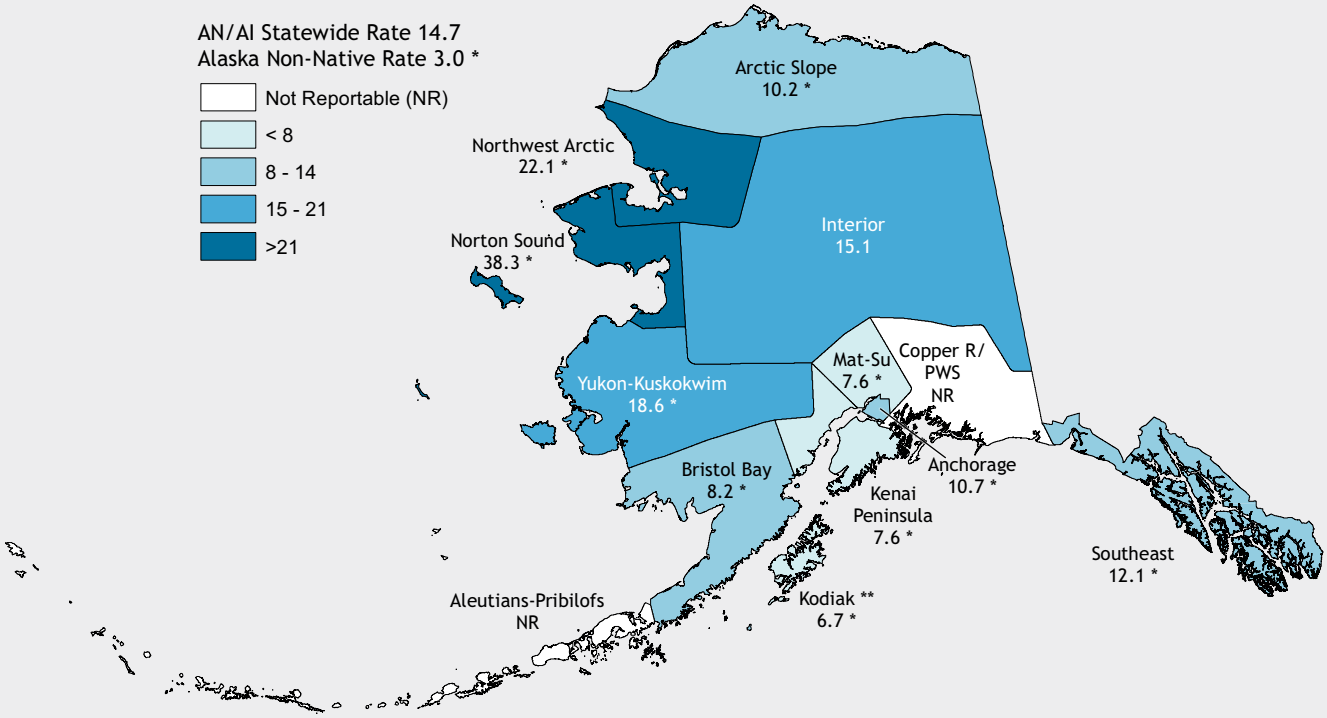


Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

Suicide Attempt

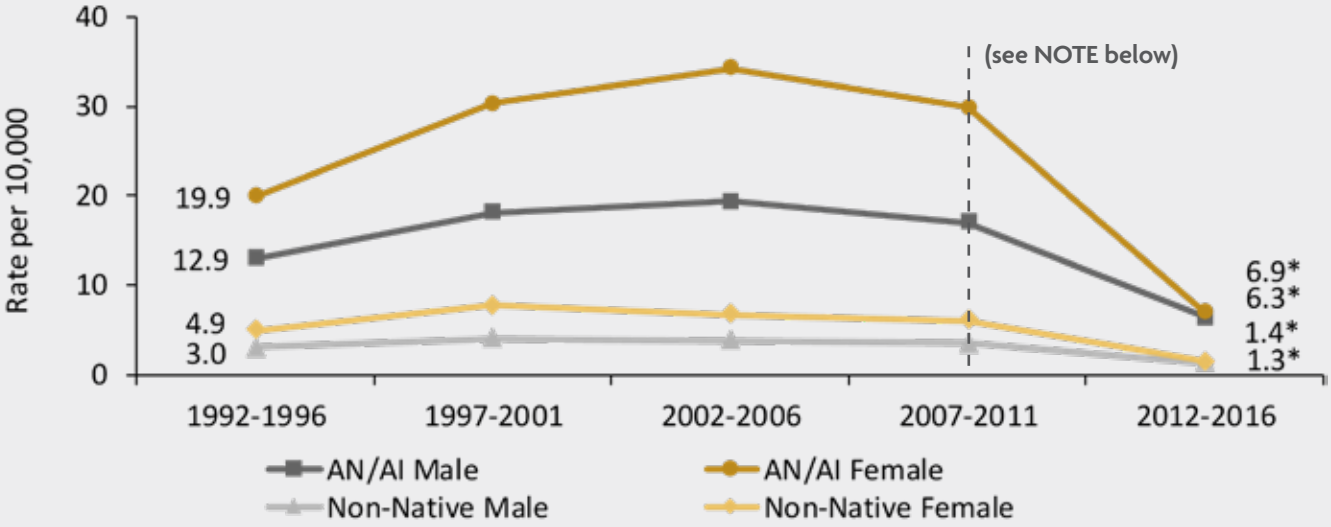
Data Source: Alaska Trauma Registry. Data tables available in Appendix B.

Suicide Attempt Hospitalization Rate by Region, AN/AI People, 2007-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Suicide Attempt Hospitalization Rate by Gender, Race, and Year, 1992-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

NOTE: Use caution when interpreting these data. Starting January 2011, the Alaska Trauma Registry stopped reporting intentional self-inflicted poisonings for patients aged 18 or older.

continued -

Summary

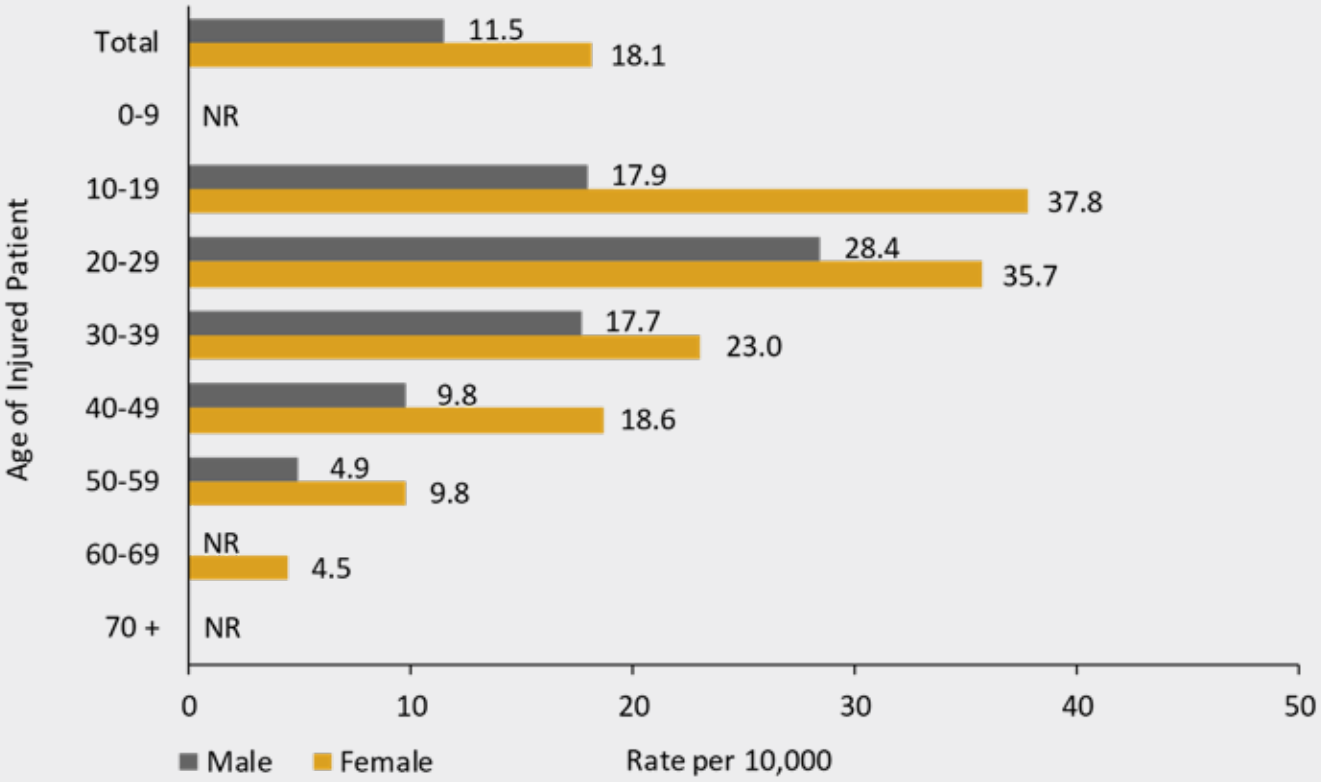
During 2007-2016:

- 1,896 AN/AI people were hospitalized for suicide attempt (which includes intentional self-harm). This represented 14.0% of all injury hospitalizations.
- Poisoning was the mechanism for almost two out of every three suicide attempt hospitalizations (64.0%) among AN/AI people, followed by cutting/piercing (18.7%).
- AN/AI people aged 20 to 29 years had the highest suicide attempt hospitalization rate of any age group (32.1 per 10,000). The rate for this age group was 2.2 times the rate for all ages (14.7 per 10,000, $p<0.05$).
- The suicide attempt hospitalization rate of AN/AI females was 1.6 times that of AN/AI males (18.1 and 11.5 per 10,000, respectively, $p<0.05$).
- The suicide attempt hospitalization rate of AN/AI people was 4.9 times that of non-Native people (14.7 and 3.0 per 10,000, respectively, $p<0.05$).
- Over half (51.7%) of suicide attempt hospitalizations among AN/AI people were confirmed or suspected to be alcohol-related.

Trend Over Time:

- Excluding intentional self-poisoning (see NOTE on previous page), between 1992-1996 and 2012-2016, the suicide attempt injury hospitalization rate for both AN/AI genders combined increased 29.1% (5.1 and 6.6 per 10,000, respectively, $p<0.05$).

Suicide Attempt Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

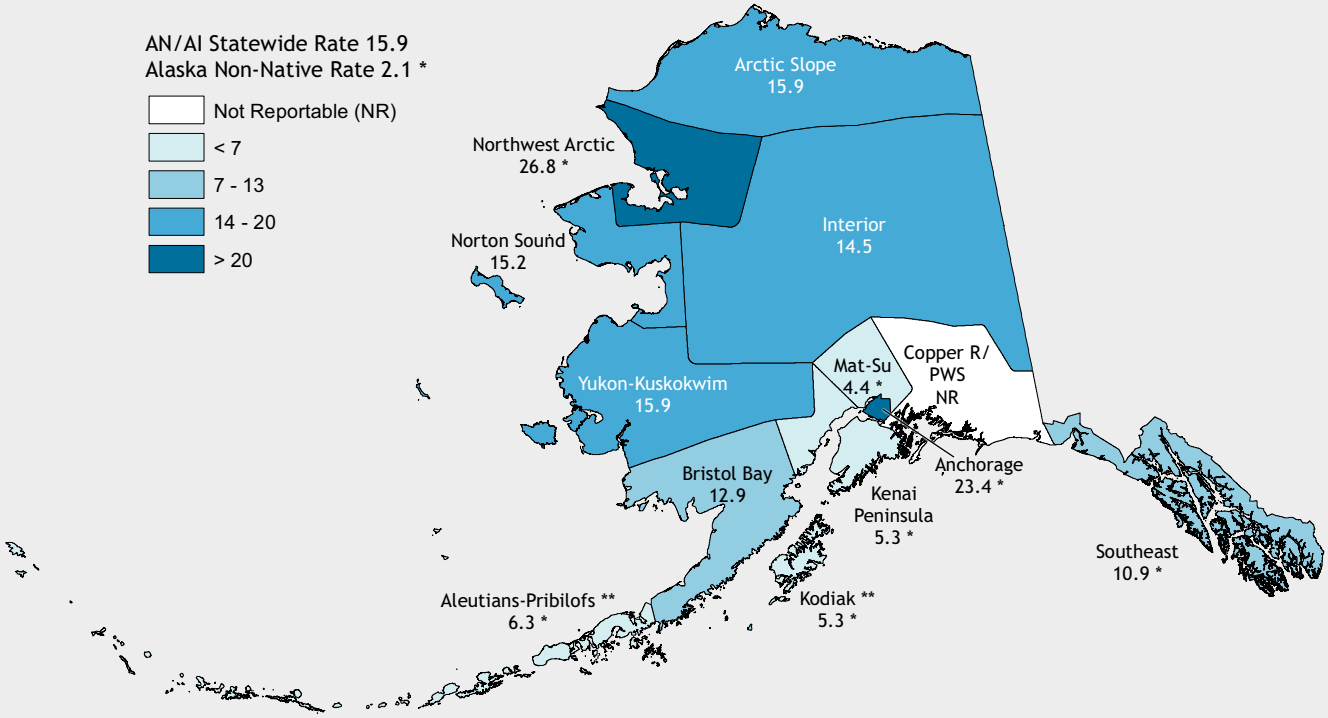


Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Assault

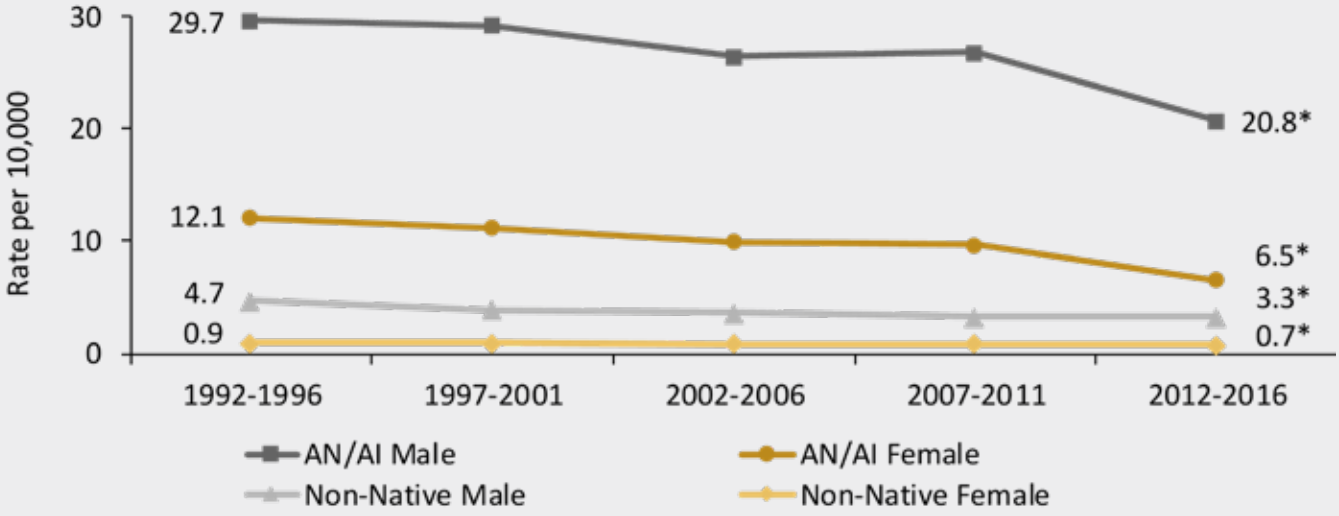
Data Source: Alaska Trauma Registry. Data tables available in Appendix B.

Assault Hospitalization Rate by Region, AN/AI People, 2007-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Assault Hospitalization Rate by Gender, Race, and Year, 1992-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

continued -

Summary

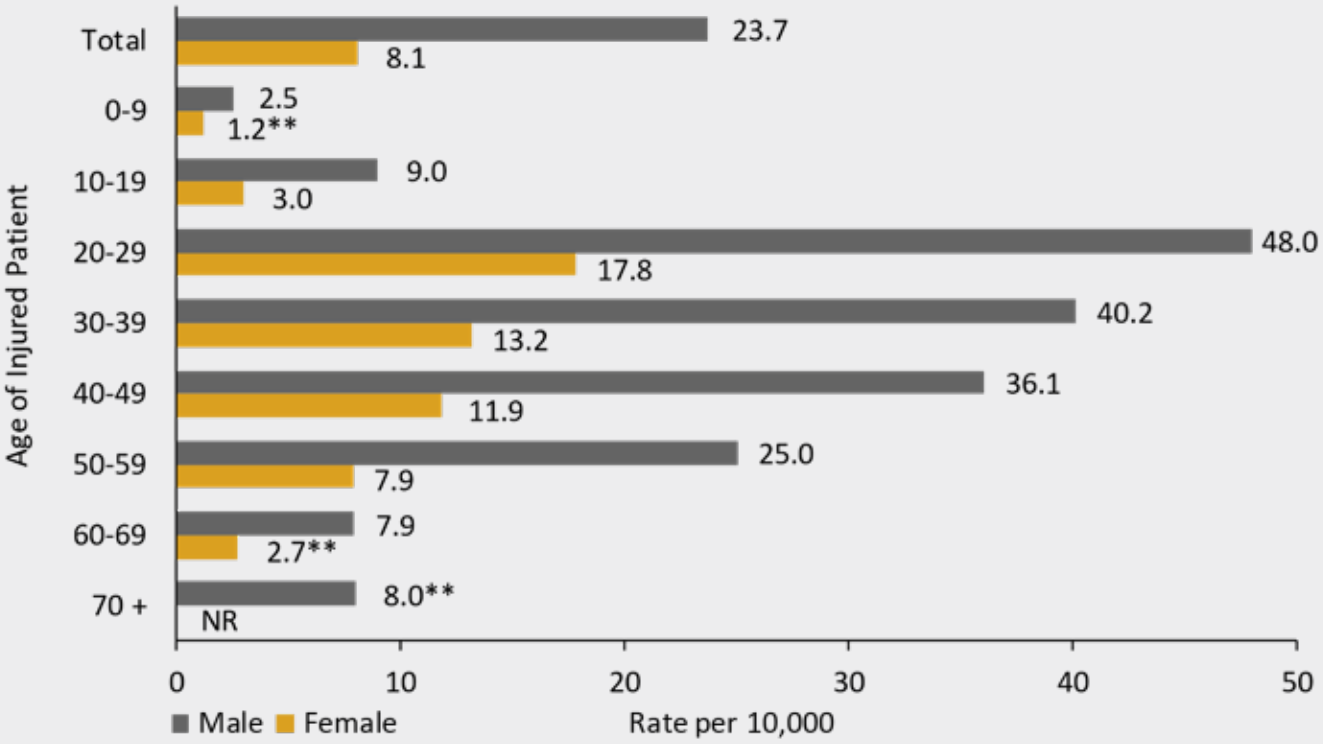
During 2007-2016:

- 1,856 AN/AI people were hospitalized for assault injuries. This represented 13.7% of all injury hospitalizations.
- Fight/brawl was the mechanism for over half of assault hospitalizations (50.7%) among AN/AI people, followed by cut/pierce (14.2%), and struck by/against (10.3%).
- AN/AI people aged 20 to 29 years had the highest assault hospitalization rate of any age group (33.1 per 10,000). The rate for this age group was 2.1 times the rate for all ages (15.9 per 10,000, $p<0.05$).
- The assault hospitalization rate of AN/AI males was 2.9 times that of AN/AI females (23.7 and 8.1 per 10,000, respectively, $p<0.05$).
- The assault hospitalization rate of AN/AI people was 7.6 times that of non-Native people (15.9 and 2.1 per 10,000, respectively, $p<0.05$).
- Three out of every five (60.2%) assault hospitalizations among AN/AI people were confirmed or suspected to be alcohol-related.

Trend Over Time:

- Between 1992-1996 and 2012-2016, the assault injury hospitalization rate for both AN/AI genders combined decreased 34.7% (20.9 and 13.7 per 10,000, respectively, $p<0.05$).

Assault Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

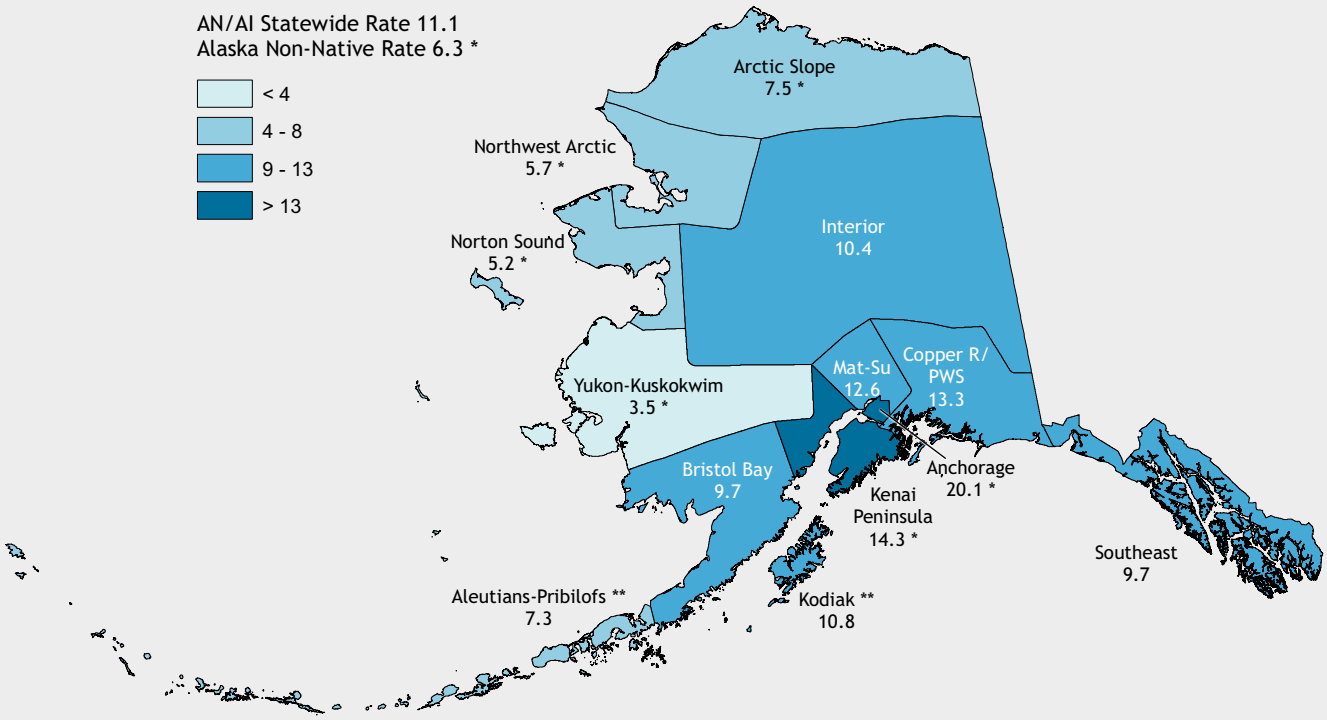


Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Motor Vehicle

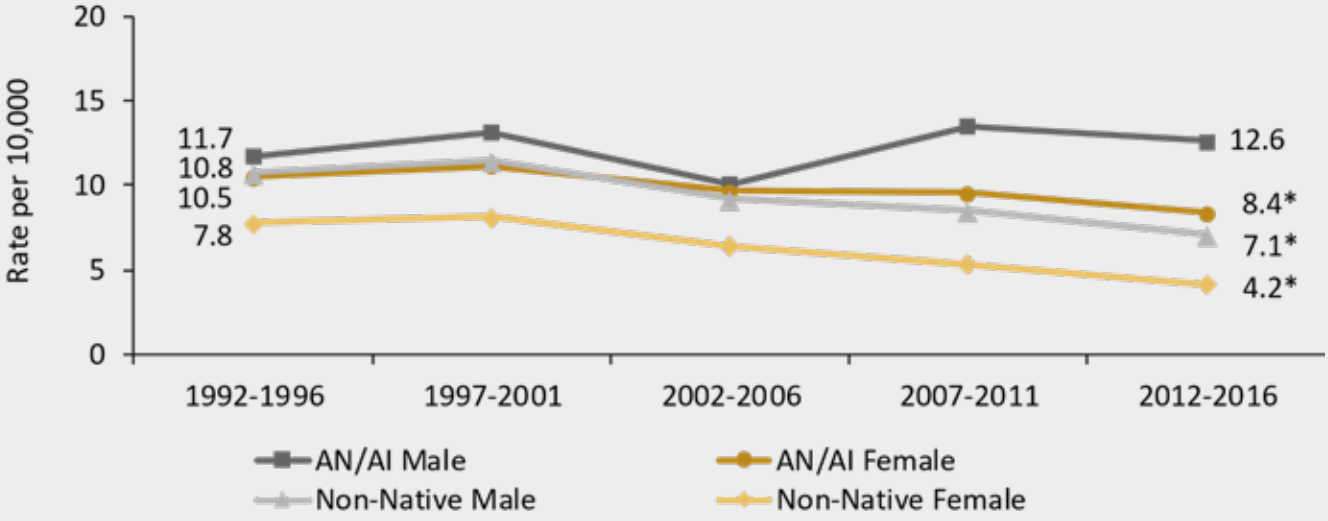
Data Source: Alaska Trauma Registry. Data tables available in Appendix B.

Motor Vehicle Hospitalization Rate by Region, AN/AI People, 2007-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Motor Vehicle Hospitalization Rate by Gender, Race, and Year, 1992-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

continued -

Summary

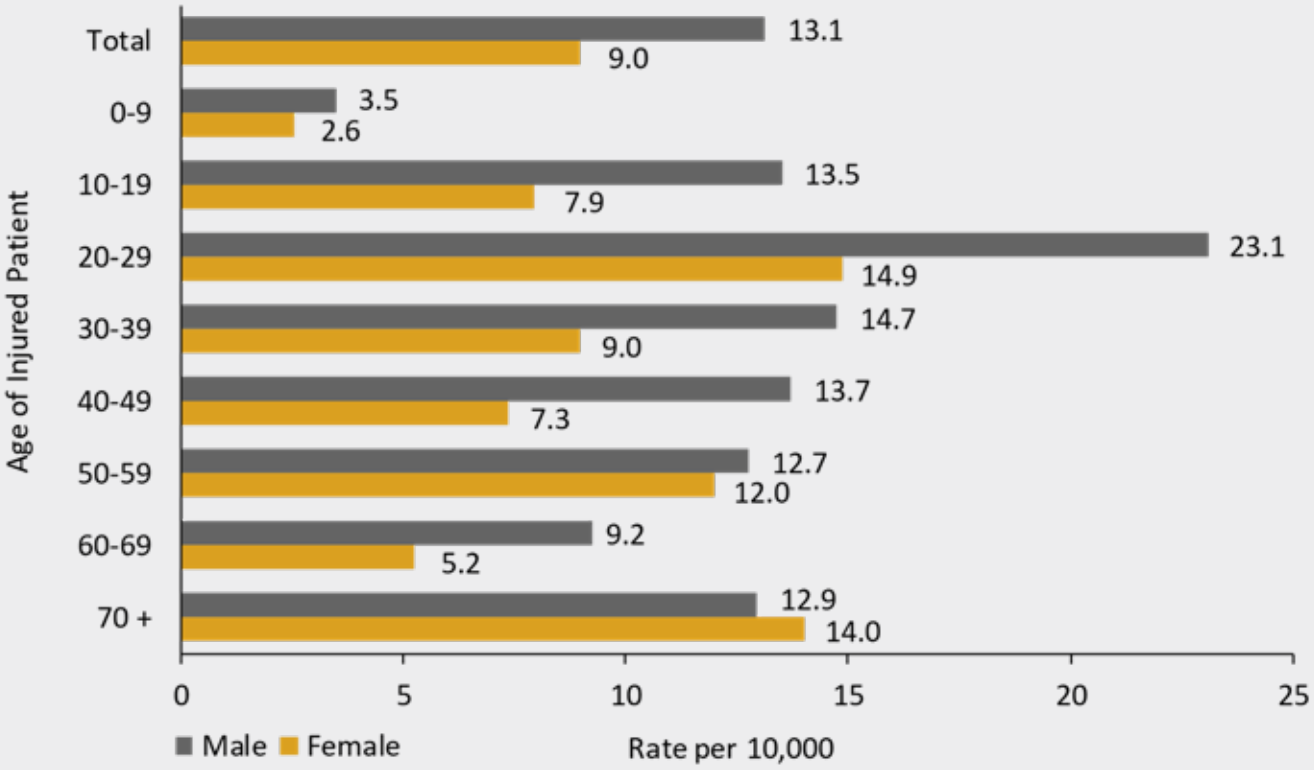
During 2007-2016:

- 1,309 AN/AI people were hospitalized for motor vehicle injuries. This represented 9.7% of all injury hospitalizations.
- Motor vehicle occupants represented over half of motor vehicle hospitalizations (52.3%) among AN/AI people, followed by pedestrians (23.6%), and motorcyclists (9.5%).
- AN/AI people aged 20 to 29 years had the highest motor vehicle hospitalization rate of any age group (19.0 per 10,000). The rate for this age group was 1.7 times the rate for all ages (11.1 per 10,000, $p<0.05$).
- The motor vehicle injury hospitalization rate of AN/AI males was 1.5 times that of AN/AI females (13.1 and 9.0 per 10,000, respectively, $p<0.05$).
- The motor vehicle injury hospitalization rate of AN/AI people was 1.8 times that of non-Native people (11.1 and 6.3 per 10,000, respectively, $p<0.05$).
- Over two out of every five (44.8%) motor vehicle hospitalizations among AN/AI people were confirmed or suspected to be alcohol-related.

Trend Over Time:

- Between 1992-1996 and 2012-2016, the motor vehicle injury hospitalization rate for both AN/AI genders combined did not significantly change (11.1 and 10.5 per 10,000, respectively).

Motor Vehicle Injury Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

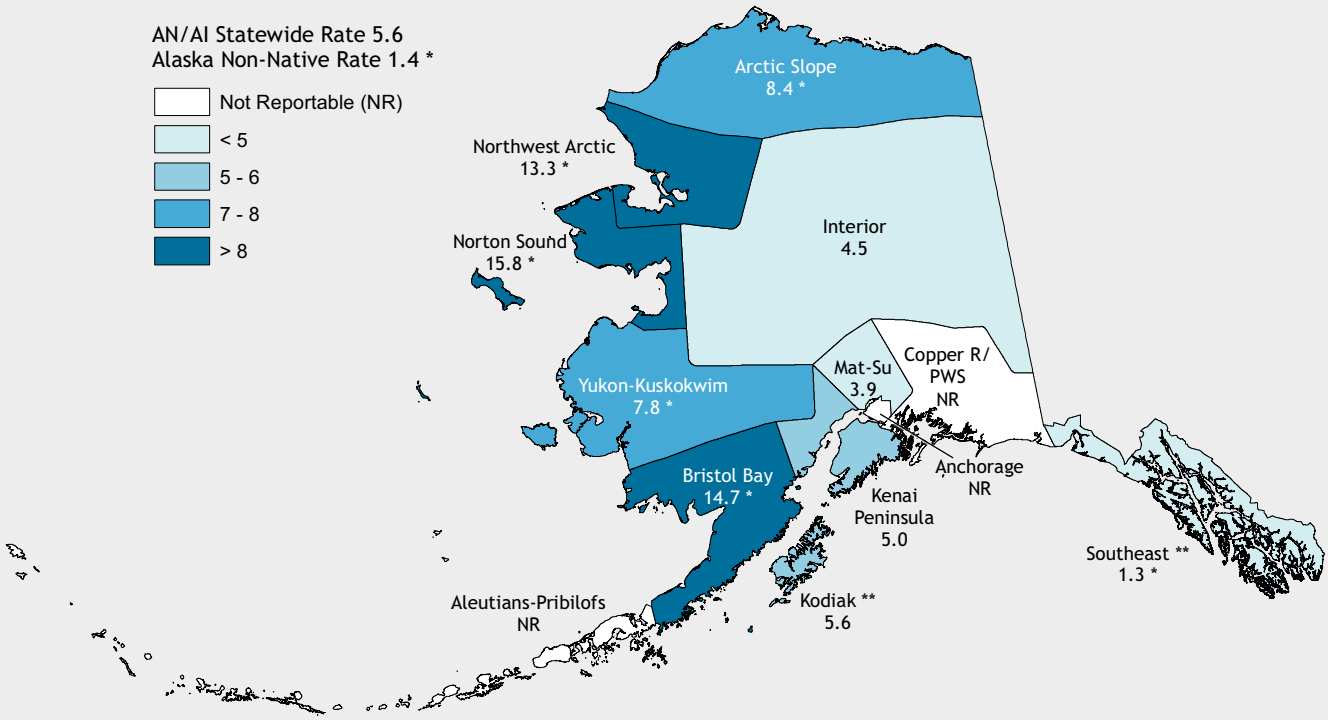


Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

ATV

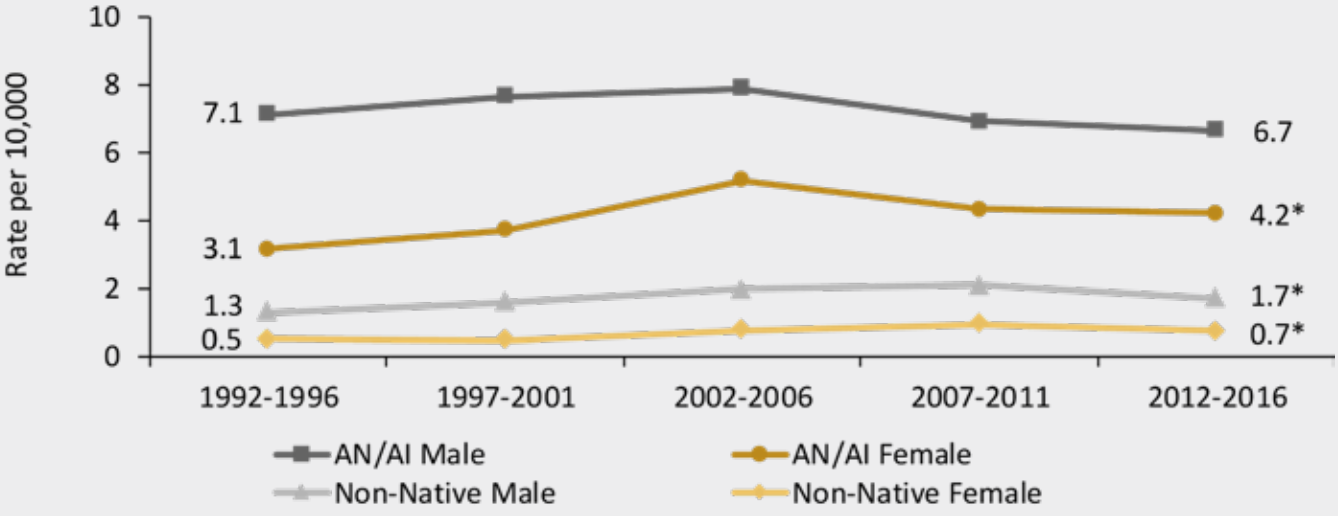
Data Source: Alaska Trauma Registry. Data tables available in Appendix B.

ATV Hospitalization Rate by Region, AN/AI People, 2007-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

ATV Hospitalization Rate by Gender, Race, and Year, 1992-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

continued -

Summary

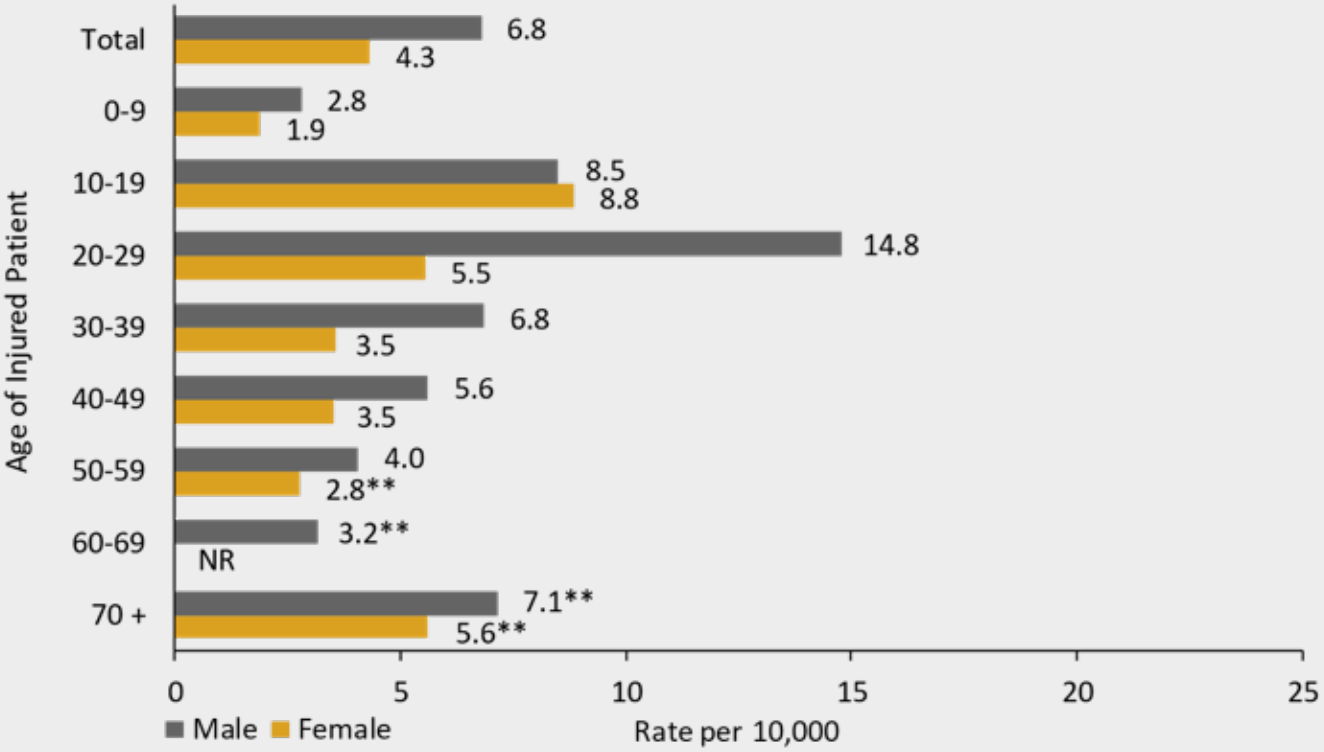
During 2007-2016:

- 693 AN/AI people were hospitalized for ATV injuries. This represented 5.1% of all injury hospitalizations.
- ATV drivers represented nearly two out of every three ATV hospitalizations (62.0%) among AN/AI people, followed by passengers/occupants (27.6%) and pedestrians (7.2%).
- AN/AI people aged 20 to 29 years had the highest ATV hospitalization rate of any age group (10.2 per 10,000). The rate for this age group was 1.8 times the rate for all ages (5.6 per 10,000, $p<0.05$).
- The ATV injury hospitalization rate of AN/AI males was 1.6 times that of AN/AI females (6.8 and 4.3 per 10,000, respectively, $p<0.05$).
- The ATV injury hospitalization rate of AN/AI people was 4.0 times that of non-Native people (5.6 and 1.4 per 10,000, respectively, $p<0.05$).
- Nearly one out of every three (32.8%) ATV hospitalizations among AN/AI people were confirmed or suspected to be alcohol-related.

Trend Over Time:

- Between 1992-1996 and 2012-2016, the ATV injury hospitalization rate for both AN/AI genders combined did not significantly change (5.1 and 5.4 per 10,000, respectively).

ATV Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

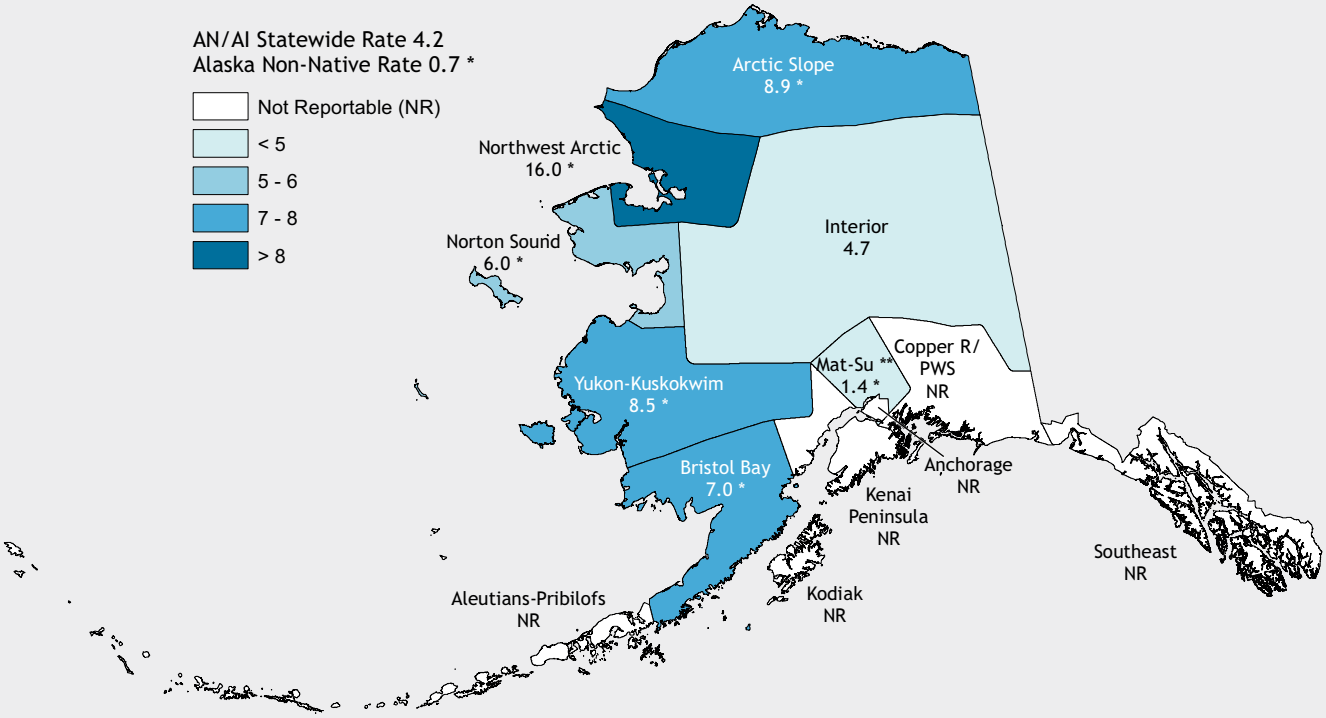


Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Snowmachine

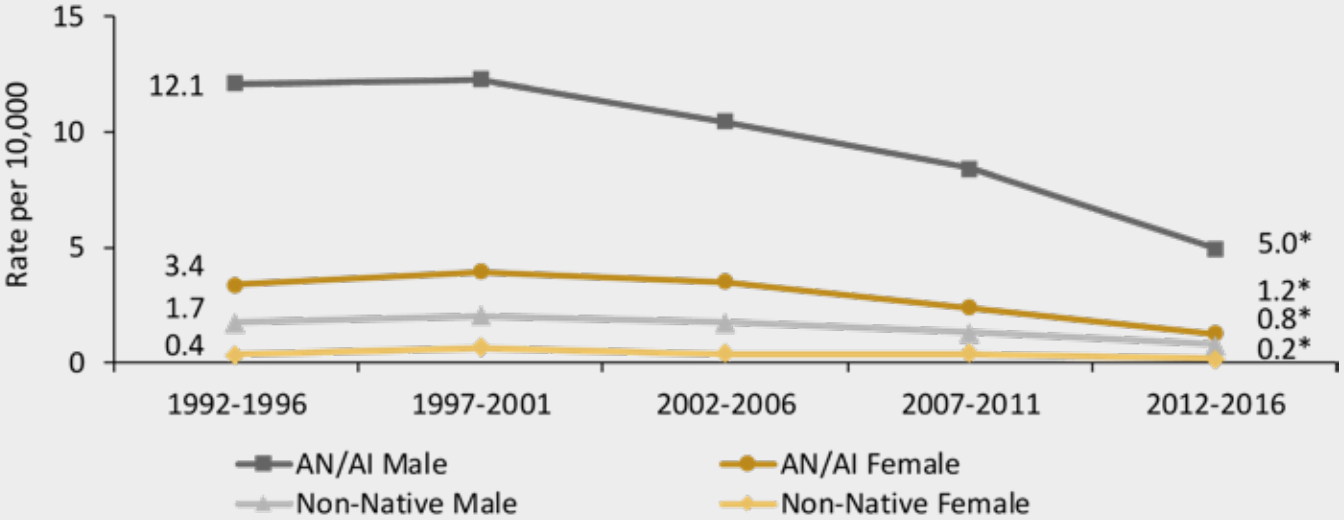
Data Source: Alaska Trauma Registry. Data tables available in Appendix B.

Snowmachine Hospitalization Rate by Region, AN/AI People, 2007-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05 .*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Snowmachine Hospitalization Rate by Gender, Race, and Year, 1992-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

continued -

Summary

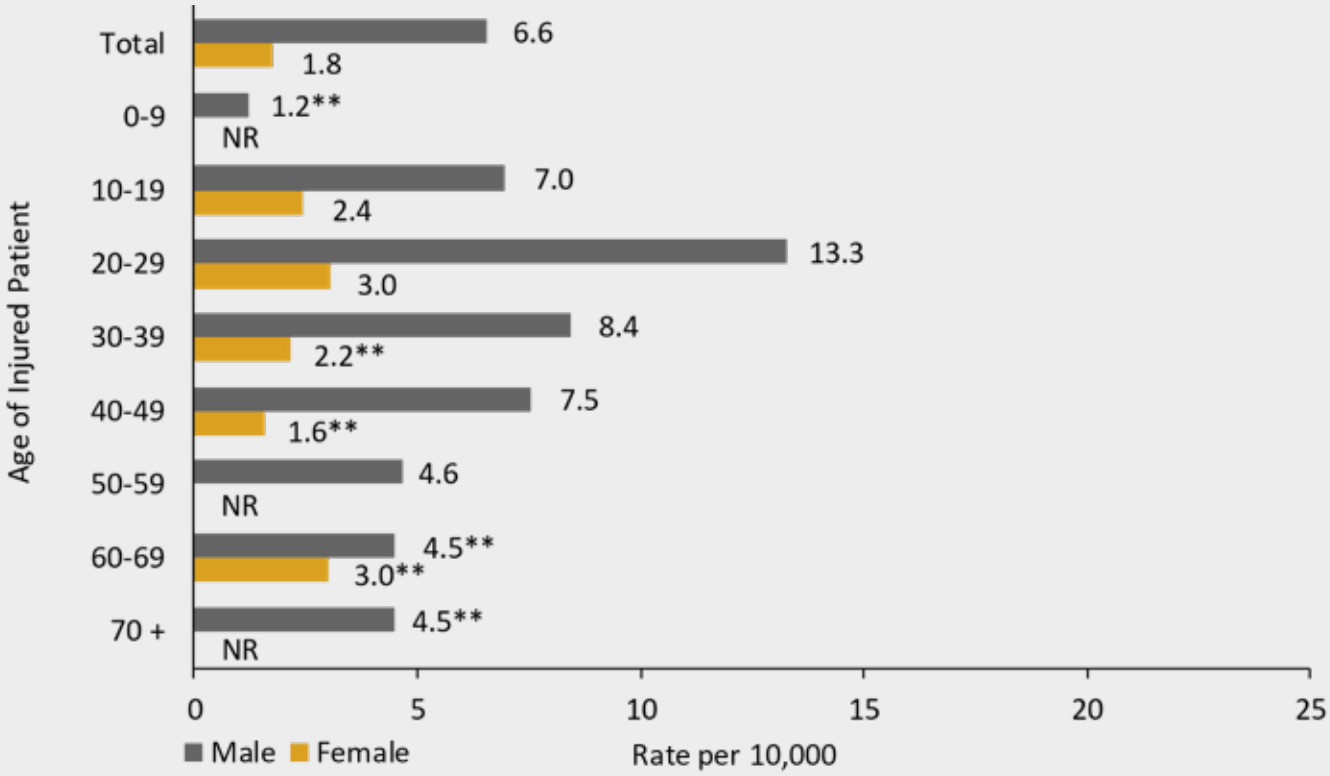
During 2007-2016:

- 510 AN/AI people were hospitalized for snowmachine injuries. This represented 3.8% of all injury hospitalizations.
- Snowmachine drivers represented three out of four snowmachine hospitalizations (74.9%) among AN/AI people, followed by passengers/occupants (17.5%) and pedestrians (3.7%).
- AN/AI people aged 20 to 29 years had the highest snowmachine hospitalization rate of any age group (8.2 per 10,000). The rate for this age group was 2.0 times the rate for all ages (4.2 per 10,000, $p<0.05$).
- The snowmachine injury hospitalization rate of AN/AI males was 3.7 times that of AN/AI females (6.6 and 1.8 per 10,000, respectively, $p<0.05$).
- The snowmachine injury hospitalization rate of AN/AI people was 6.4 times that of non-Native people (4.2 and 0.7 per 10,000, respectively, $p<0.05$).
- Over one out of every three (35.3%) snowmachine hospitalizations among AN/AI people were confirmed or suspected to be alcohol-related.

Trend Over Time:

- Between 1992-1996 and 2012-2016, the snowmachine injury hospitalization rate for both AN/AI genders combined decreased 59.7% (7.7 and 3.1 per 10,000, respectively, $p<0.05$).

Snowmachine Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016



Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Injury Deaths

Leading Causes of Death by Age Group, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records
Note: Blue shaded blocks indicate causes of death related to injury.

Age					
0-9 Years	Unintentional Injuries 66	Perinatal Conditions 52	Congenital Malformations 46	Homicide 15	Influenza and Pneumonia 10
10-19 Years	Suicide 96	Unintentional Injuries 89	Homicide 19	Heart Disease 6	Congenital Malformations 5
20-29 Years	Unintentional Injuries 229	Suicide 219	Homicide 38	Heart Disease 27	Chronic Liver Disease 17
30-39 Years	Unintentional Injuries 210	Suicide 86	Heart Disease 60	Chronic Liver Disease 44	Homicide 37
40-49 Years	Unintentional Injuries 209	Heart Disease 141	Cancer 130	Chronic Liver Disease 82	Suicide 69
50-59 Years	Cancer 378	Heart Disease 276	Unintentional Injuries 177	Chronic Liver Disease 94	Alcohol Abuse 76
60-69 Years	Cancer 462	Heart Disease 276	COPD 102	Unintentional Injuries 72	Cerebrovascular Disease 46
70+ Years	Cancer 821	Heart Disease 704	COPD 291	Cerebrovascular Disease 235	Unintentional Injuries 114
All Ages	Cancer 1,852	Heart Disease 1,495	Unintentional Injuries 1,167	Suicide 518	COPD 460

Leading Causes of Injury Death by Region, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

REGION	Aleutian & Pribilof Islands	Anchorage	Arctic Slope	Bristol Bay	Copper River/PWS	Interior	Kenai Peninsula
Total	19	610	50	98	28	222	52
	Suicide 5	Poisoning 190	Suicide 20	Poisoning 21	Suicide 11	Suicide 57	Poisoning 16
	Motor Vehicle 5	Suicide 109	Drowning 7	Suicide 19	Motor Vehicle 6	Poisoning 42	Suicide 14
		Motor Vehicle 70	Poisoning 5	Drowning 15		Exposure to Natural Forces 25	Motor Vehicle 9
		Homicide 63		Homicide 6		Motor Vehicle 21	
		Fall 36		Off-Road Vehicle 6		Homicide 15	

Leading Causes of Injury Death by Age, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

AGE	0 to 9 years	10 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years
Total	90	212	517	351	317	243
	Threat to Breathing 27	Suicide 96	Suicide 218	Poisoning 105	Poisoning 99	Poisoning 75
	Homicide 15	Motor Vehicle 28	Poisoning 84	Suicide 86	Suicide 69	Suicide 31
	Drowning 13	Homicide 19	Drowning 43	Homicide 37	Drowning 36	Motor Vehicle 23
	Motor Vehicle 7	Drowning 17	Motor Vehicle 40	Drowning 32	Motor Vehicle 22	Exposure to Natural Forces 23
		Poisoning 15	Homicide 38	Motor Vehicle 23	Exposure to Natural Forces 19	Drowning 21

continued -

Kodiak Area	Matanuska-Susitna	Norton Sound	Northwest Arctic	Southeast	Yukon-Kuskokwim	All Regions*
29	68	127	114	134	386	1,966
Poisoning 9	Poisoning 19	Suicide 56	Suicide 43	Poisoning 30	Suicide 139	Suicide 517
Suicide 5	Suicide 13	Poisoning 14	Drowning 15	Suicide 24	Drowning 55	Poisoning 403
	Homicide 13	Drowning 11	Poisoning 13	Drowning 18	Poisoning 34	Drowning 180
	Motor Vehicle 9	Motor Vehicle 10	Off-Road Vehicle 11	Homicide 11	Homicide 33	Motor Vehicle 161
		Homicide 8	Exposure to Natural Forces 9	Motor Vehicle 9	Exposure to Natural Forces 32	Homicide 158

continued -

60 to 69 years	70 + years	Total**
104	131	1,966
Poisoning 17	Fall 30	Suicide 517
Suicide 13	Threat To Breathing 12	Poisoning 403
Exposure to Natural Forces 10	Motor Vehicle 10	Drowning 180
Homicide 9	Exposure to Natural Forces 9	Motor Vehicle 161
Drowning 9	Drowning 8	Homicide 158

Note: Categories with fewer than 5 deaths are not reported.

** 2 cases occurred in Alaska but region was not determined.*
2 cases occurred outside of Alaska to Alaska residents.

*** 1 case missing age of decedent.*

Definitions

Exposure to Natural Forces *includes exposure to extreme weather, climate, earth/snow movements, floods, and other or unspecified forces of nature.*

Threat to Breathing *includes suffocation, strangling, hanging, asphyxia, choking, low-oxygen environments, and other or unspecified threats to breathing.*

Off-Road Vehicle *includes ATV and Snowmachine.*

Leading Causes of Injury Death by Age, AN/AI Females, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

AGE	0 to 9 years	10 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years
Total	30	66	133	96	113	77
	Threat to Breathing 8	Suicide 24	Suicide 42	Poisoning 49	Poisoning 52	Poisoning 30
	Homicide 6	Motor Vehicle 19	Poisoning 30	Suicide 16	Suicide 19	Exposure to Natural Forces 8
	Drowning 6	Poisoning 7	Motor Vehicle 21	Motor Vehicle 7	Homicide 10	Motor Vehicle 6
		Homicide 6	Homicide 12	Homicide 7	Motor Vehicle 9	Drowning 6
			Exposure to Natural Forces 5		Exposure to Natural Forces 6	Fall 6
			Off-Road Vehicle 5			

Leading Causes of Injury Death by Age, AN/AI Males, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

AGE	0 to 9 years	10 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years
Total	60	146	384	255	203	166
	Threat To Breathing 19	Suicide 72	Suicide 176	Suicide 70	Suicide 50	Poisoning 45
	Homicide 9	Drowning 15	Poisoning 54	Poisoning 56	Poisoning 47	Suicide 27
	Drowning 7	Homicide 13	Drowning 39	Homicide 30	Drowning 31	Motor Vehicle 17
		Off-Road Vehicle 9	Homicide 26	Drowning 29	Motor Vehicle 13	Drowning 15
		Motor Vehicle 9	Off-Road Vehicle 23	Motor Vehicle 16	Exposure to Natural Forces 13	Exposure to Natural Forces 15

continued -

60 to 69 years	70 + years	Total
34	65	614
Poisoning 10	Fall 11	Poisoning 183
Suicide 7	Threat to Breathing 6	Suicide 114
	Motor Vehicle 5	Motor Vehicle 72
		Homicide 52
		Exposure to Natural Forces 30

Note:
Categories with fewer than 5 deaths are not reported.

continued -

60 to 69 years	70 + years	Total*
70	66	1,351
Exposure to Natural Forces 8	Fall 19	Suicide 403
Poisoning 7	Drowning 6	Poisoning 220
Drowning 7	Threat to Breathing 6	Drowning 150
Suicide 6	Motor Vehicle 5	Homicide 106
Motor Vehicle 6	Exposure to Natural Forces 5	Motor Vehicle 89
Fall 6		

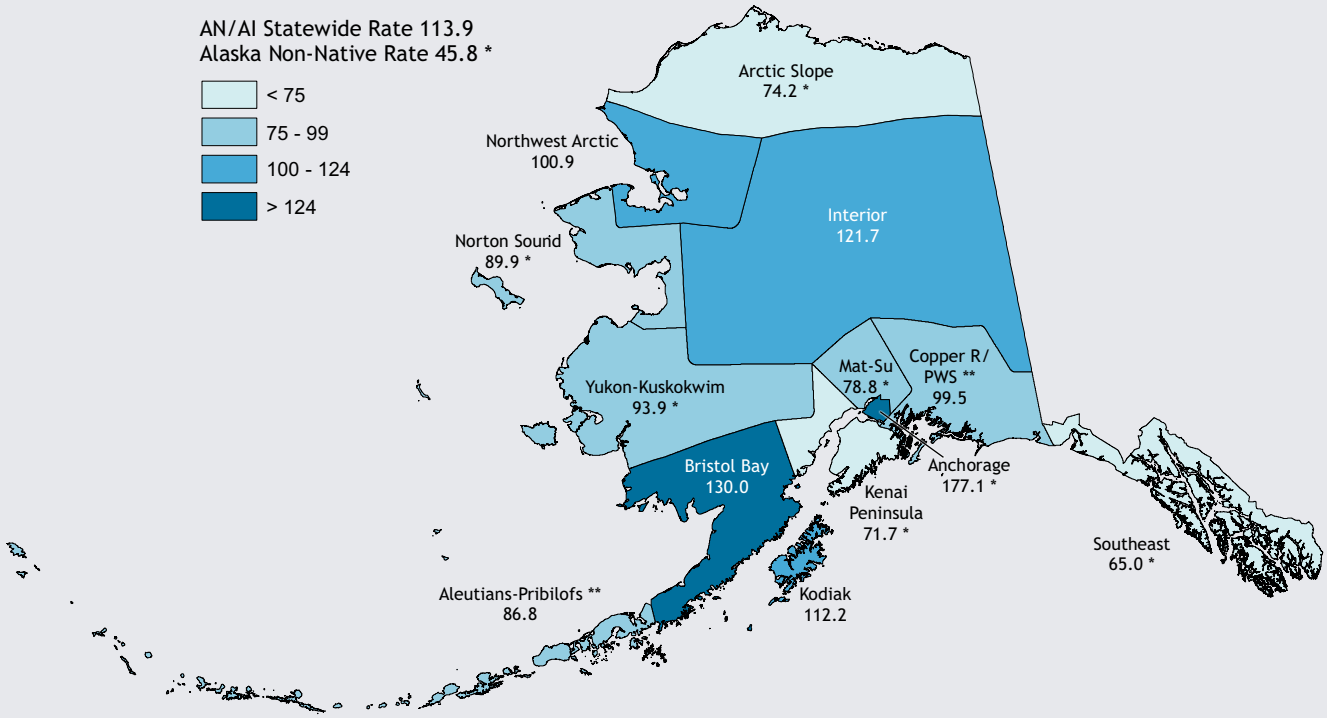
Note:
Categories with fewer than 5 deaths are not reported.

** 1 case missing age of decedent.*

Unintentional Injury

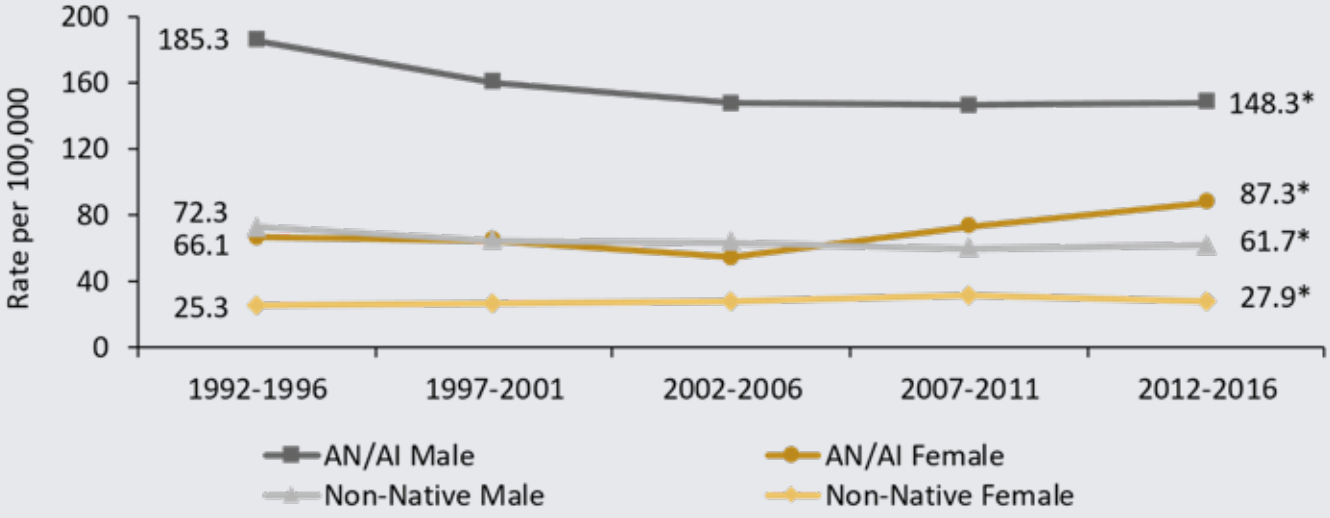
Data Source: Alaska Health Analytics and Vital Records. Data tables available in Appendix B.

Unintentional Injury Death Rate by Region, AN/AI People, 2007-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Unintentional Injury Death Rate by Gender, Race and Year, 1992-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

continued -

Summary

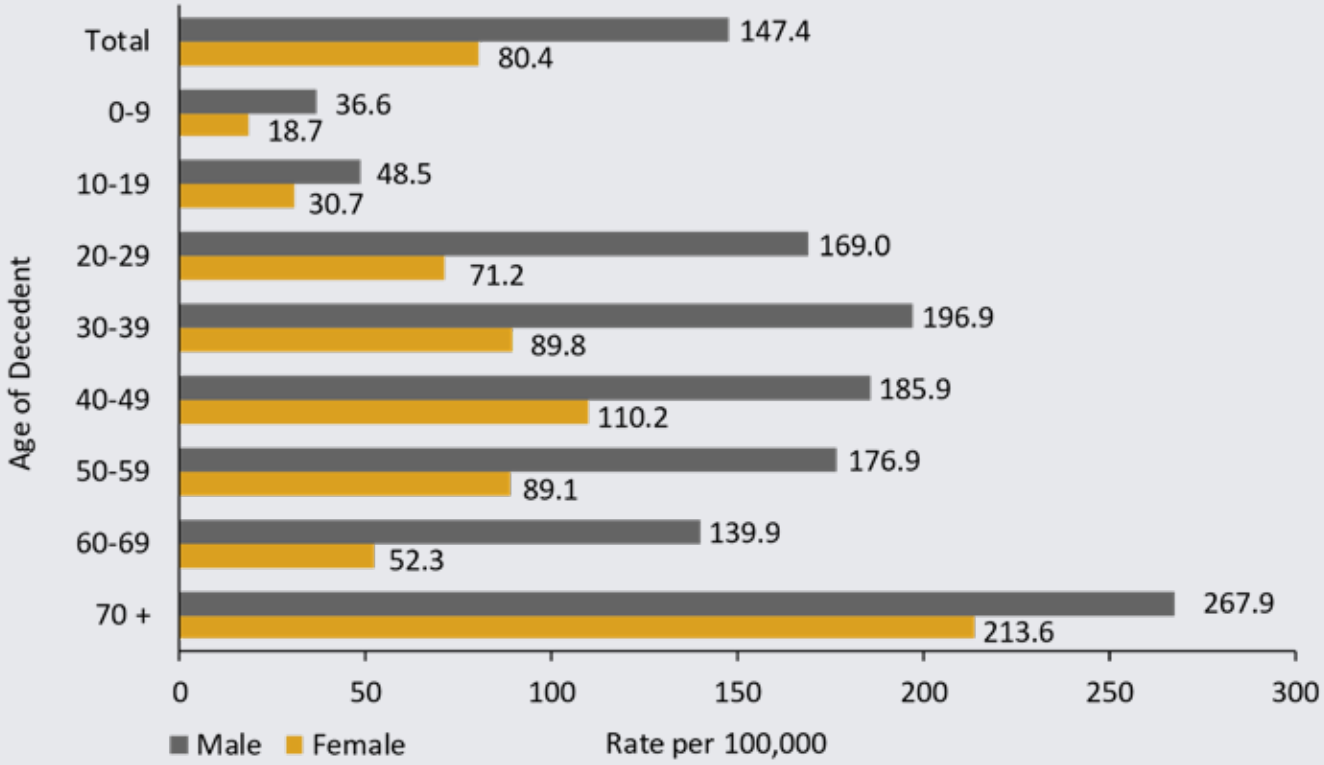
During 2007-2016:

- 1,194 AN/AI people died as a result of unintentional injuries. This represented 60.7% of all injury deaths.
- Poisoning was the mechanism for one out of every three unintentional injury deaths (33.8%) among AN/AI people, followed by drowning (15.1%), and motor vehicles (13.5%).
- AN/AI people aged 70 years and older had the highest unintentional injury death rate of any age group (237.5 per 100,000). The rate for this age group was 2.1 times the rate for all ages (113.9 per 100,000, $p<0.05$).
- The unintentional injury death rate of AN/AI males was 1.8 times that of AN/AI females (147.4 and 80.4 per 100,000, respectively, $p<0.05$).
- The unintentional injury death rate of AN/AI people was 2.5 times that of non-Native people (113.9 and 45.8 per 100,000, respectively, $p<0.05$).

Trend Over Time:

- Between 1992-1996 and 2012-2016, the unintentional injury death rate for both AN/AI genders combined decreased 6.2% (125.5 and 117.7 per 100,000, respectively, $p<0.05$).

Unintentional Injury Death Rate by Gender and Age, AN/AI People, 2007-2016

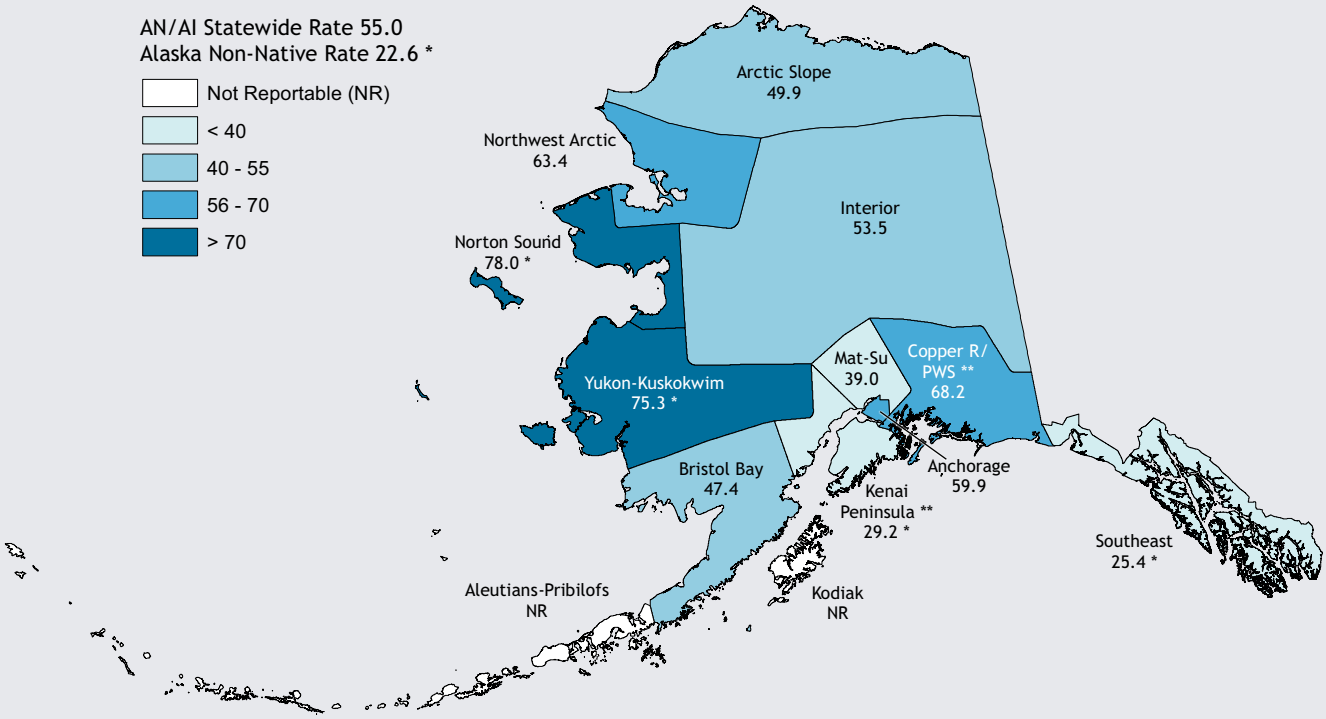


Note: Death rate per 100,000 age-adjusted to 2000 US standard population.

Intentional Injury

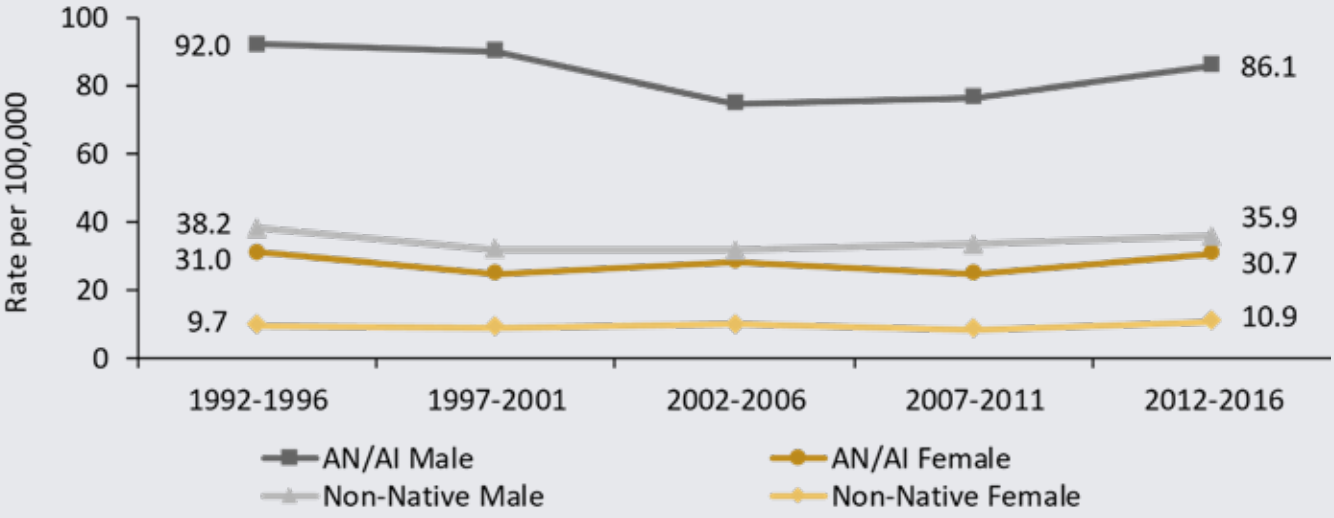
Data Source: Alaska Health Analytics and Vital Records. Data tables available in Appendix B.

Intentional Injury Death Rate by Region, AN/AI People, 2007-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Intentional Injury Death Rate by Gender, Race, and Year, 1992-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.

continued -

Summary

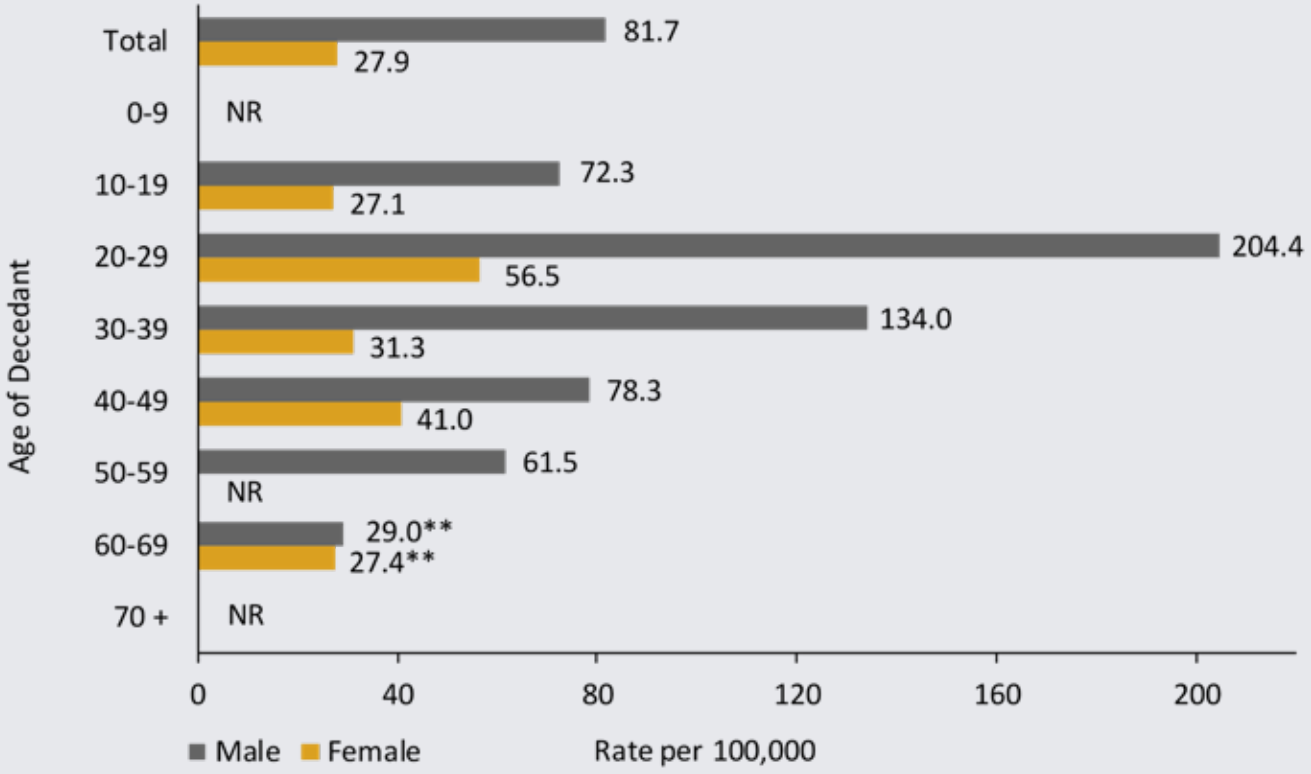
During 2007-2016:

- 675 AN/AI people died as a result of intentional injuries. This represented 34.3% of all injury deaths.
- Suicide was the mechanism for three out of every four intentional injury deaths (76.6%) among AN/AI people.
- AN/AI people aged 20 to 29 years had the highest intentional injury death rate of any age group (131.7 per 100,000). The rate for this age group was 2.4 times the rate for all ages (55.0 per 100,000, p<0.05).
- The intentional injury death rate of AN/AI males was 2.9 times that of AN/AI females (81.7 and 27.9 per 100,000, respectively, p<0.05).
- The intentional injury death rate of AN/AI people was 2.4 times that of non-Native people (55.0 and 22.6 per 100,000, respectively, p<0.05).

Trend Over Time:

- Between 1992-1996 and 2012-2016, the intentional injury death rate for both AN/AI genders combined did not significantly change (61.8 and 58.7 per 100,000, respectively).

Intentional Injury Death Rate by Gender and Age, AN/AI People, 2007-2016

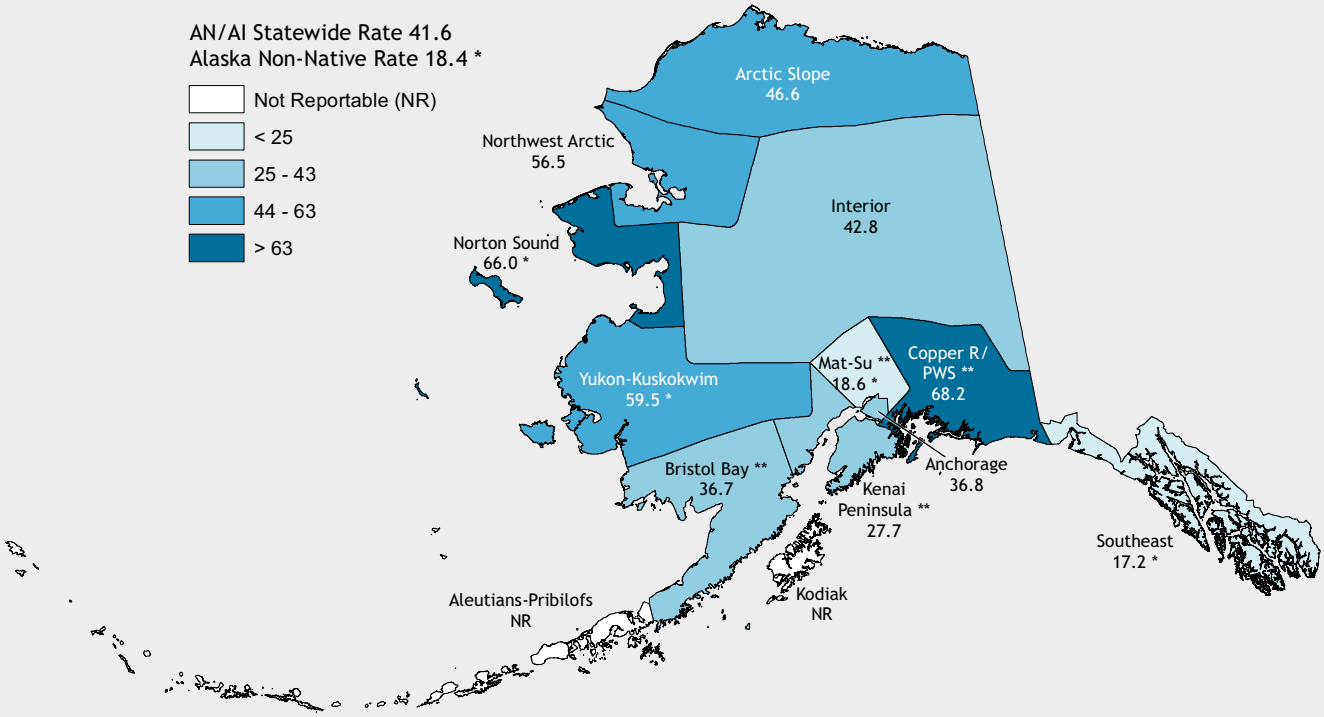


Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR Rate is not reported for fewer than 10 cases.

Suicide

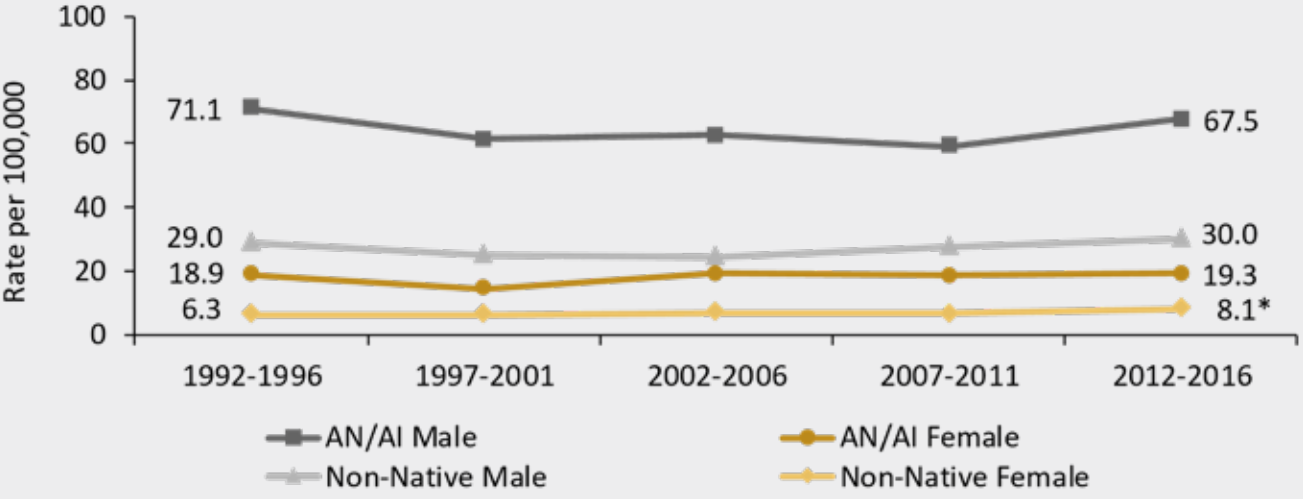
Data Source: Alaska Health Analytics and Vital Records. Data tables available in Appendix B.

Suicide Death Rate by Region, AN/AI People, 2007-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Suicide Death Rate by Gender, Race, and Year, 1992-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

continued -

Summary

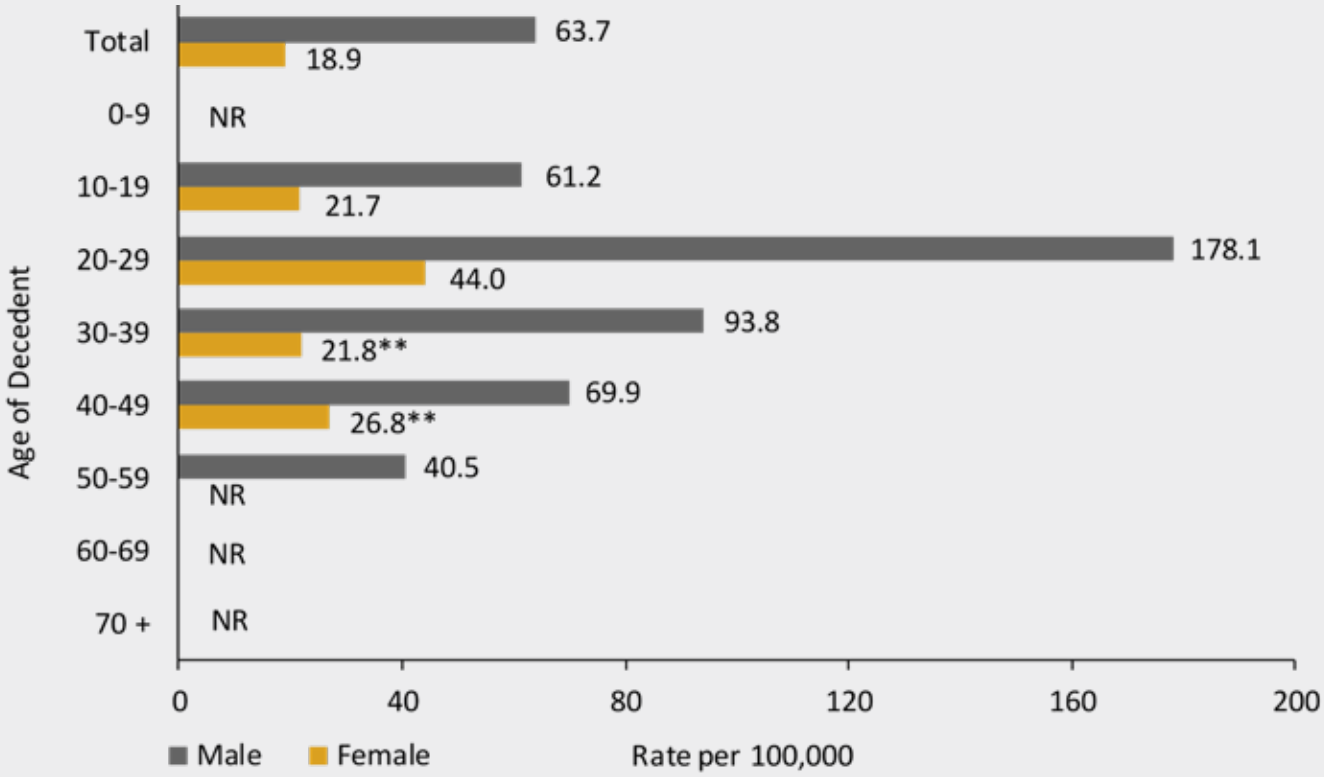
During 2007-2016:

- 517 AN/AI people died as a result of suicide injuries. This represented 26.3% of all injury deaths.
- Firearms were the mechanism for more than half of the suicide deaths (54.5%) among AN/AI people, followed by hanging/strangulation/suffocation (36.9%) and poisoning (5.2%).
- AN/AI people aged 20 to 29 years had the highest suicide death rate of any age group (112.2 per 100,000). The rate for this age group was 2.7 times the rate for all ages (41.6 per 100,000, $p<0.05$).
- The suicide death rate of AN/AI males was 3.4 times that of AN/AI females (63.7 and 18.9 per 100,000, respectively, $p<0.05$).
- The suicide death rate of AN/AI people was 2.3 times that of non-Native people (41.6 and 18.4 per 100,000, respectively, $p<0.05$).

Trend Over Time:

- Between 1992-1996 and 2012-2016, the suicide death rate for both AN/AI genders combined did not significantly change (45.2 and 43.7 per 100,000, respectively).

Suicide Death Rate by Gender and Age, AN/AI People, 2007-2016

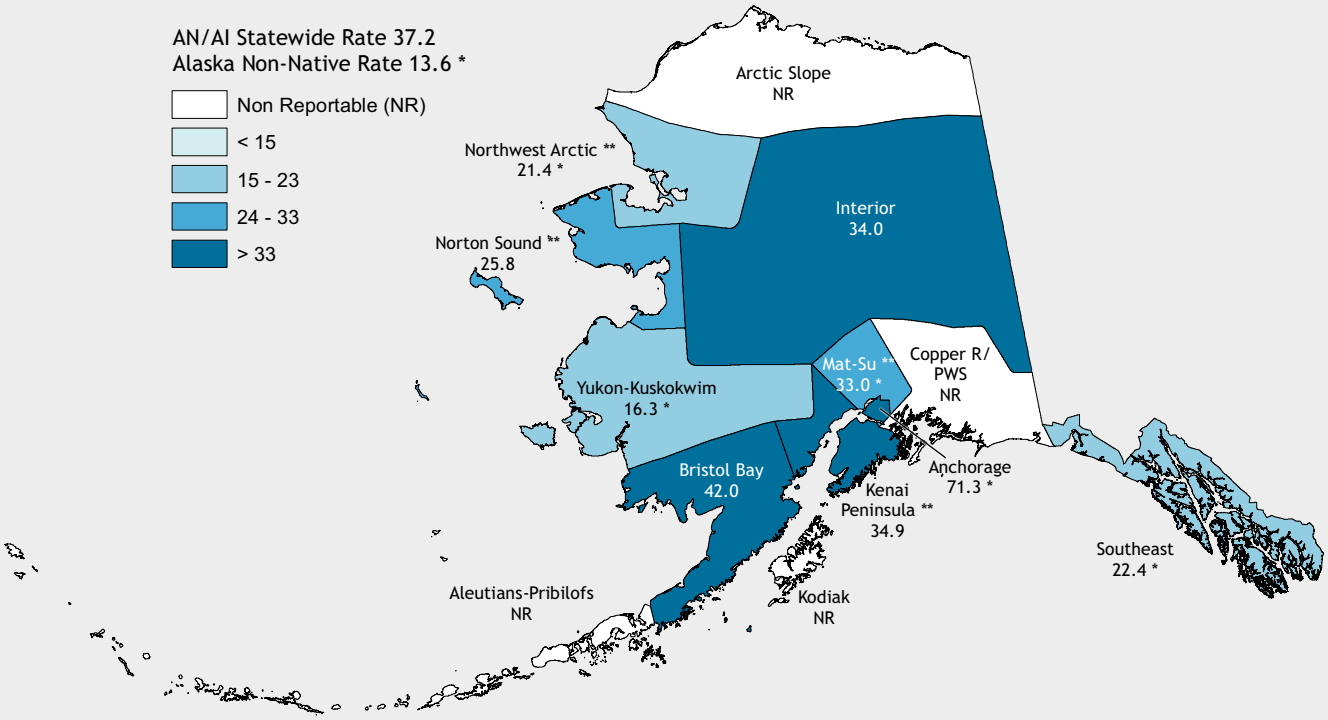


Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Poisoning

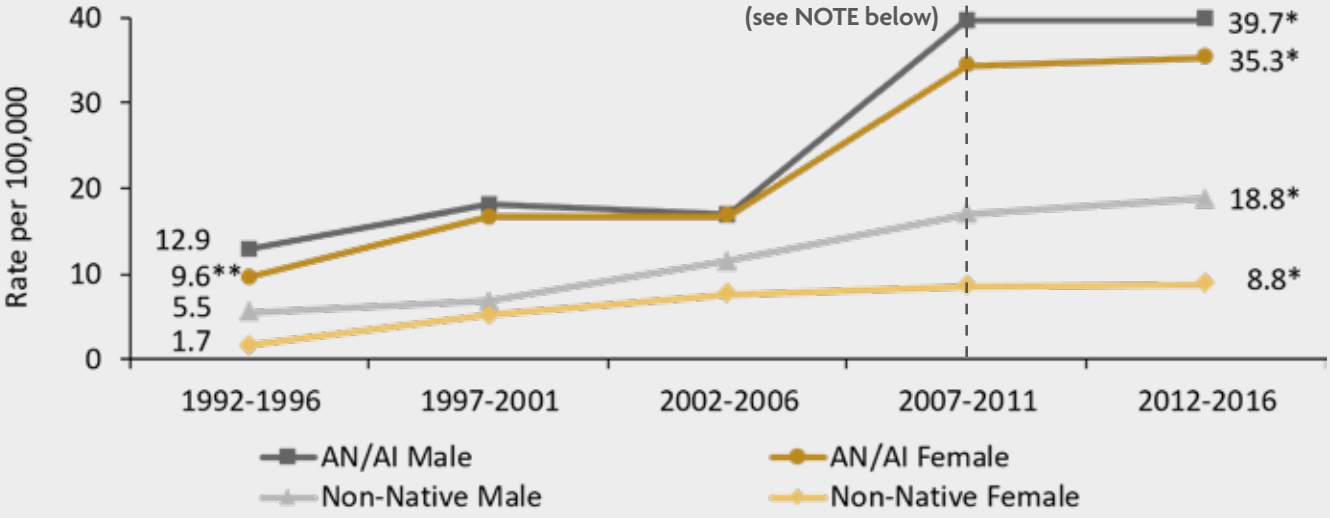
Data Source: Alaska Health Analytics and Vital Records. Data tables available in Appendix B.

Poisoning Death Rate by Region, AN/AI People, 2007-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Poisoning Death Rate by Gender, Race, and Year, 1992-2016



** Statistically significant difference from the 1992-1996 rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
Note: Death rate per 100,000 age-adjusted to 2000 US standard population.

NOTE: Refer to Cause of Injury Categories, Appendix A for cause of rate increase discussion.

continued -

Summary

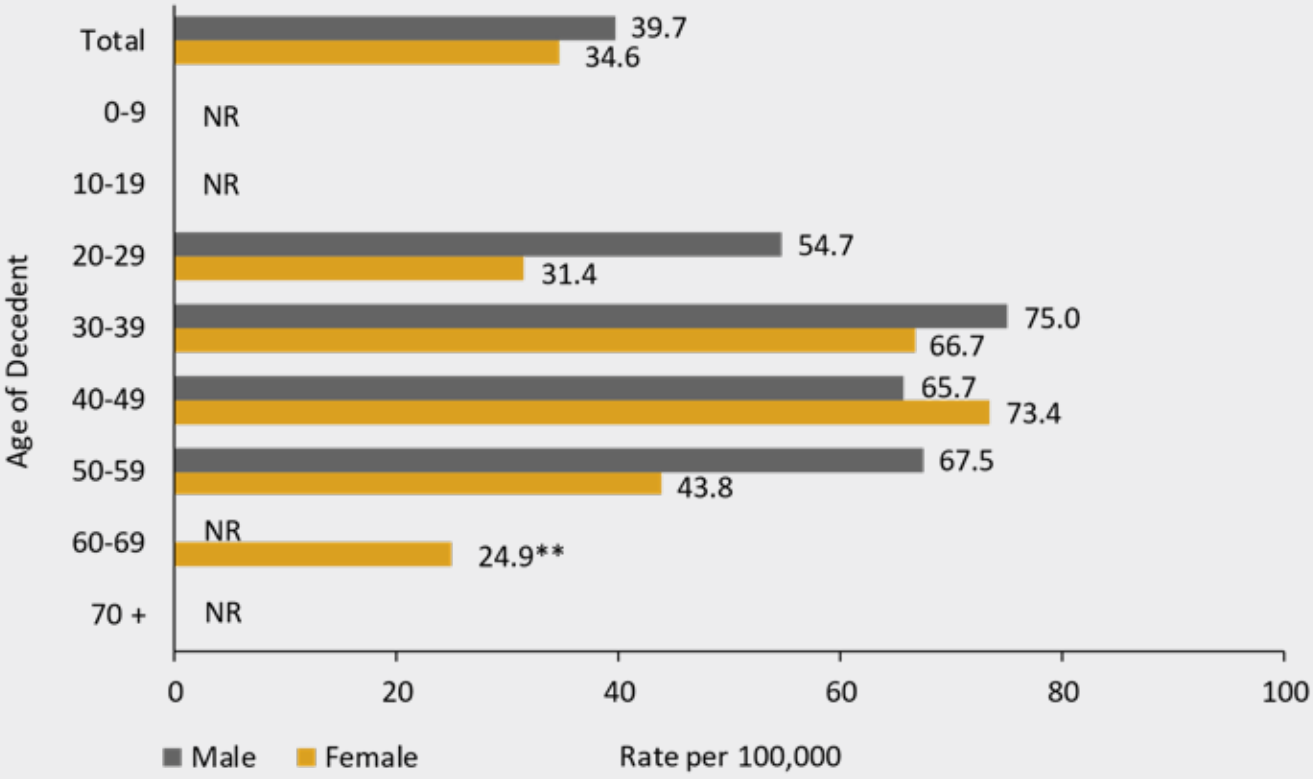
During 2007-2016:

- 403 AN/AI people died as a result of poisoning. This represented 20.5% of all injury deaths.
- Alcohol was the primary mechanism for nearly one half of poisoning deaths among AN/AI people (45.4%), followed by opioids (underlying or contributing cause, 27.8%).
- AN/AI people aged 30 to 39 years had the highest poisoning death rate of any age group (70.2 per 100,000). The rate for this age group was 1.9 times the rate for all ages (37.2 per 100,000, $p<0.05$).
- The unintentional poisoning death rate of AN/AI females was not significantly different from that of AN/AI males (39.7 and 34.6 per 100,000, respectively).
- The unintentional poisoning death rate of AN/AI people was 2.7 times that of non-Native people (37.2 and 13.6 per 100,000, respectively, $p<0.05$).

Trend Over Time:

- Between 1992-1996 and 2012-2016, the unintentional poisoning injury death rate for both AN/AI genders combined increased 233.4% (11.3 and 37.5 per 100,000, respectively, $p<0.05$), in part due to coding changes (see Appendix A for cause of rate increase discussion).

Poisoning Death Rate by Gender and Age, AN/AI People, 2007-2016

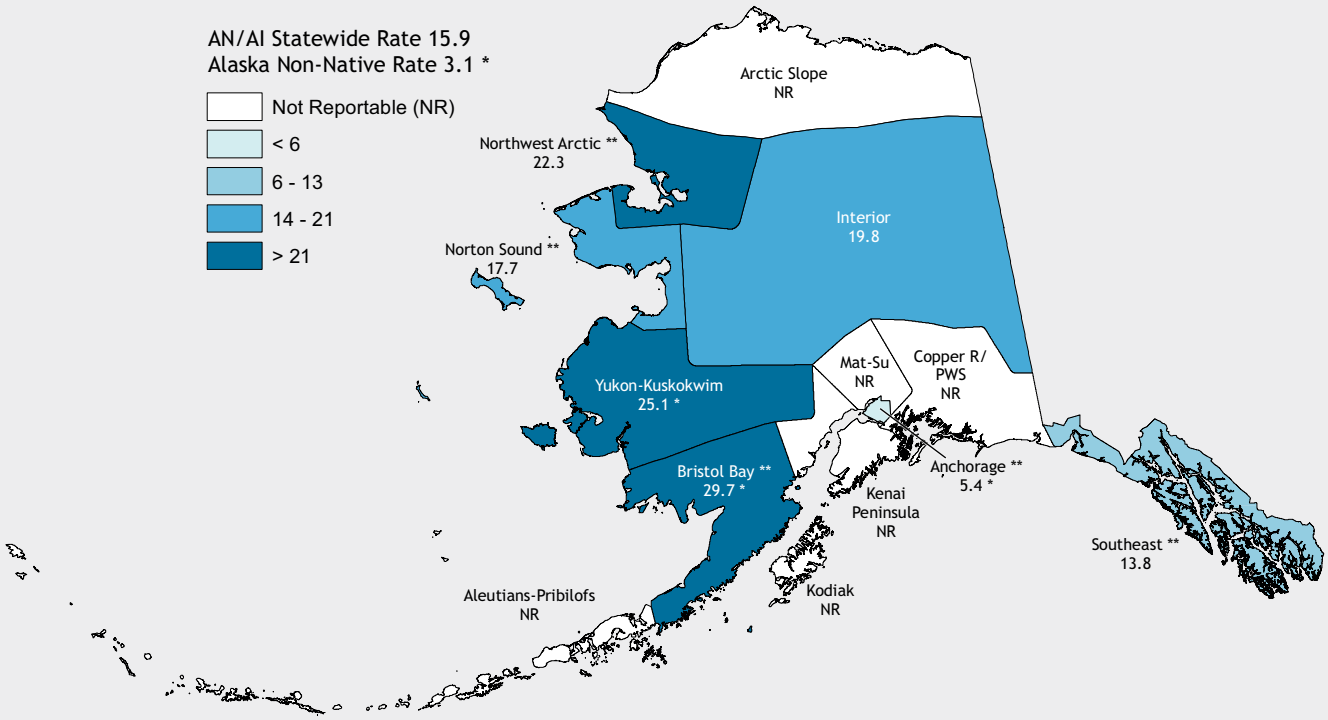


Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Drowning

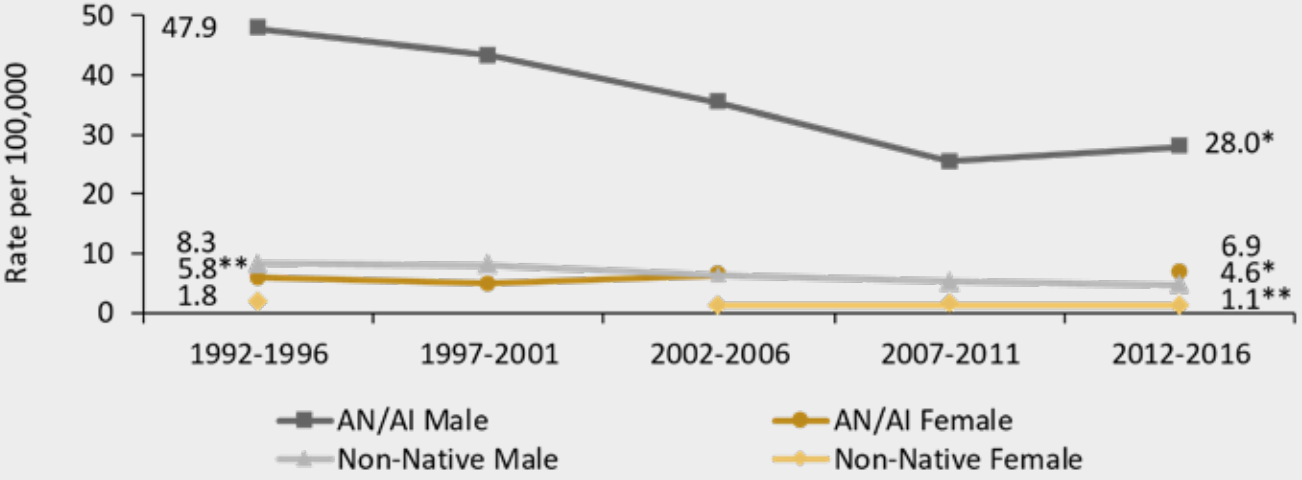
Data Source: Alaska Health Analytics and Vital Records. Data tables available in Appendix B.

Drowning Death Rate by Region, AN/AI People, 2007-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Drowning Death Rate by Gender, Race, and Year, 1992-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
Some data points are not included because rate is not reported for fewer than 10 cases.

continued -

Summary

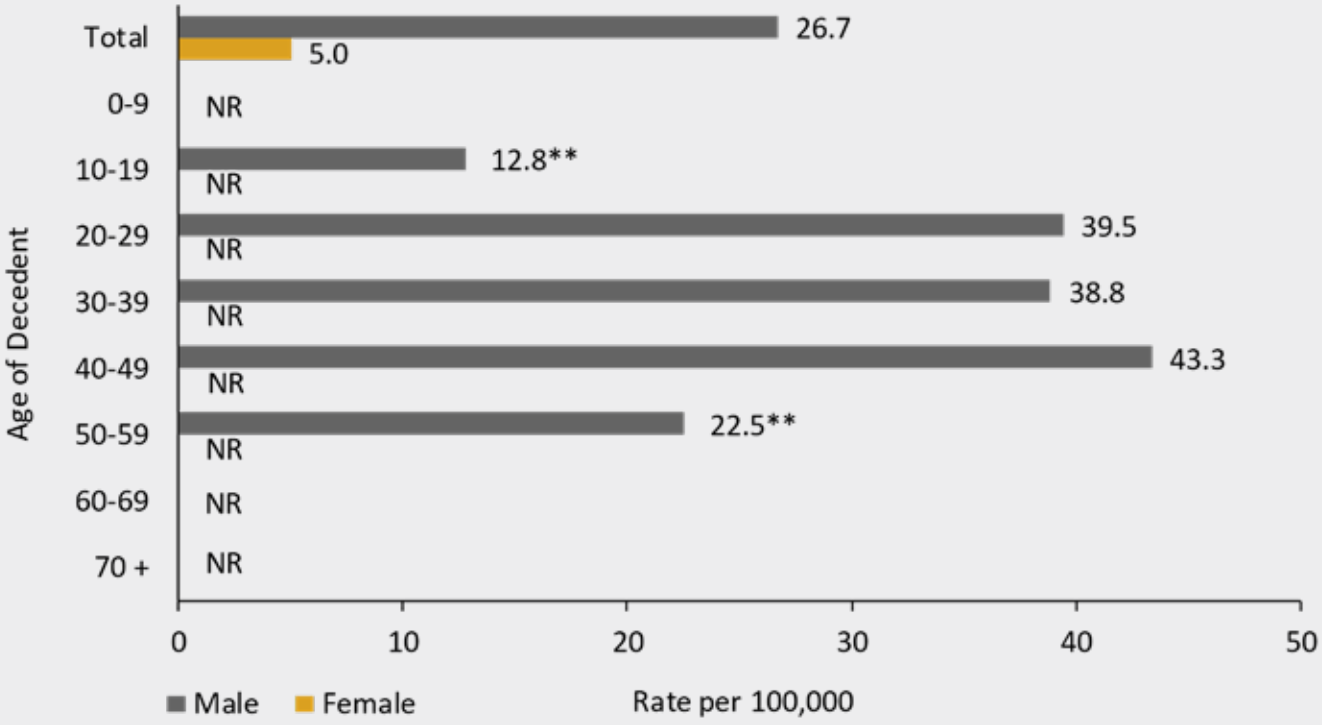
During 2007-2016:

- 180 AN/AI people died as a result of drowning. This represented 9.2% of all injury deaths.
- Immersion in natural water was the mechanism for more than one out of every three drowning deaths among AN/AI people (36.7%), followed by watercraft (26.7%) and off-road vehicle incidents (13.9%).
- AN/AI people aged 40 to 49 years had the highest drowning death rate of any age group (25.3 per 100,000). The rate for this age group was 1.6 times the rate for all ages (15.9 per 100,000, $p<0.05$).
- The drowning death rate of AN/AI males was 5.3 times that of AN/AI females (26.7 and 5.0 per 100,000, respectively, $p<0.05$).
- The drowning death rate of AN/AI people was 5.2 times that of non-Native people (15.9 and 3.1 per 100,000, respectively, $p<0.05$).

Trend Over Time:

- Between 1992-1996 and 2012-2016, the drowning injury death rate for both AN/AI genders combined decreased 34.7% (26.6 and 17.4 per 100,000, respectively, $p<0.05$).

Drowning Death Rate by Gender and Age, AN/AI People, 2007-2016

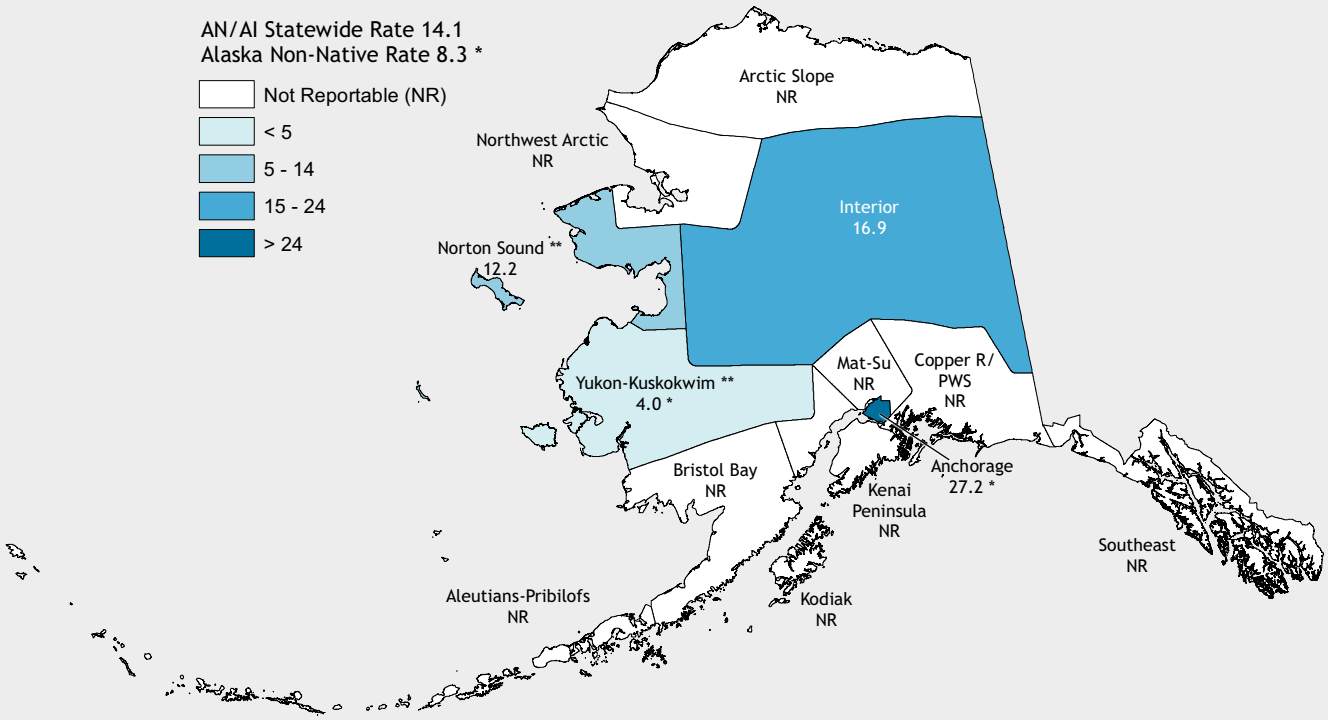


Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Motor Vehicle

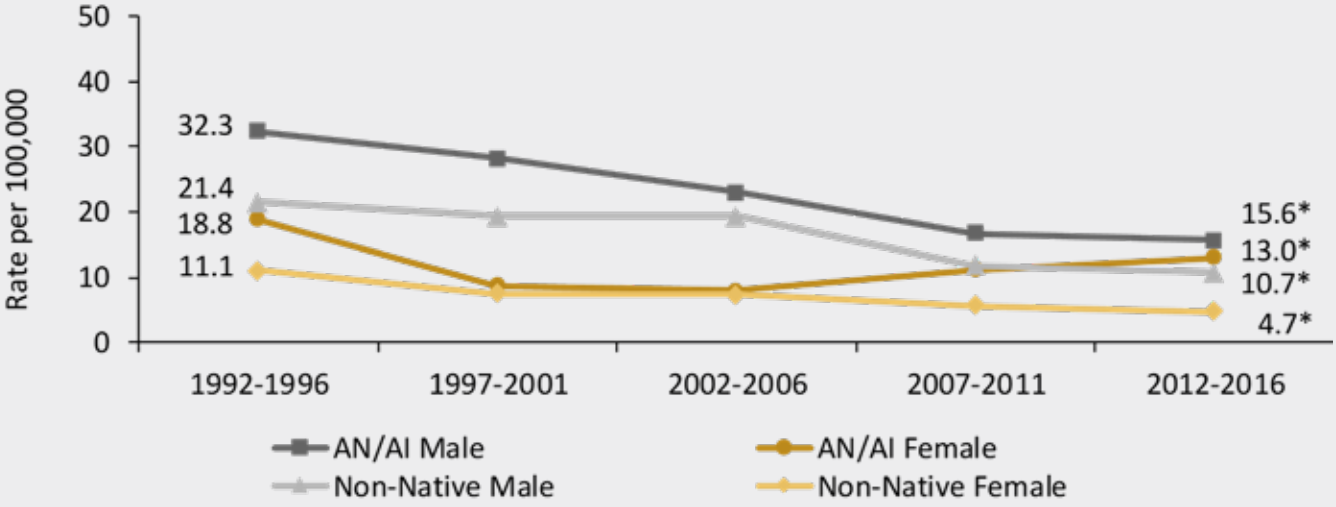
Data Source: Alaska Health Analytics and Vital Records. Data tables available in Appendix B.

Motor Vehicle Death Rate by Region, AN/AI People, 2007-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Motor Vehicle Death Rate by Gender, Race, and Year, 1992-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

continued -

Summary

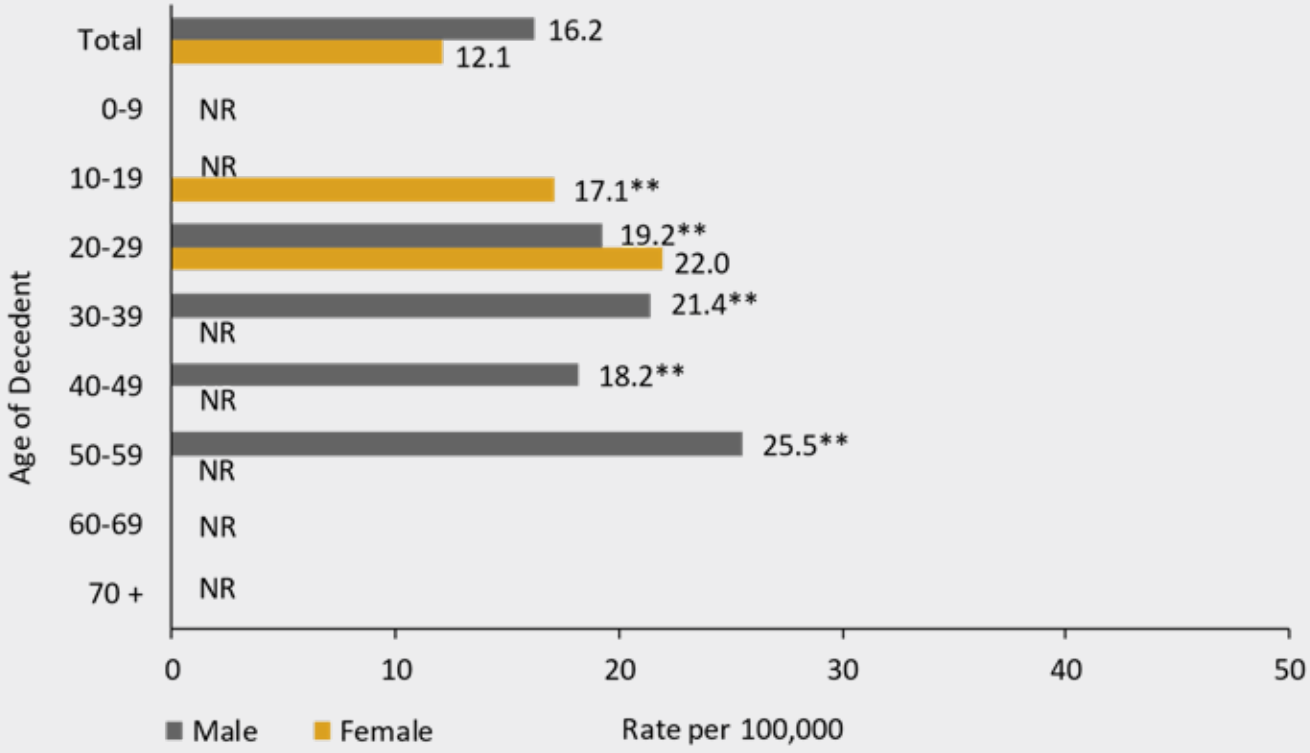
During 2007-2016:

- 161 AN/AI people died as a result of motor vehicle injuries. This represented 8.2% of all injury deaths.
- Pedestrians (37.3%) and motor vehicle occupants (34.8%) each represented more than one out of three motor vehicle deaths among AN/AI people.
- AN/AI people aged 20 to 29 years had the highest motor vehicle death rate of any age group (20.6 per 100,000). The rate for this age group was 1.5 times the rate for all ages (14.1 per 100,000, $p<0.05$).
- The motor vehicle injury death rate of AN/AI males was not significantly different from that of AN/AI females (16.2 and 12.1 per 100,000, respectively).
- The motor vehicle injury death rate of AN/AI people was 1.7 times that of non-Native people (14.1 and 8.3 per 100,000, respectively, $p<0.05$).

Trend Over Time:

- Between 1992-1996 and 2012-2016, the motor vehicle injury death rate for both AN/AI genders combined decreased 44.5% (25.5 and 14.2 per 100,000, respectively, $p<0.05$).

Motor Vehicle Death Rate by Gender and Age, AN/AI People, 2007-2016

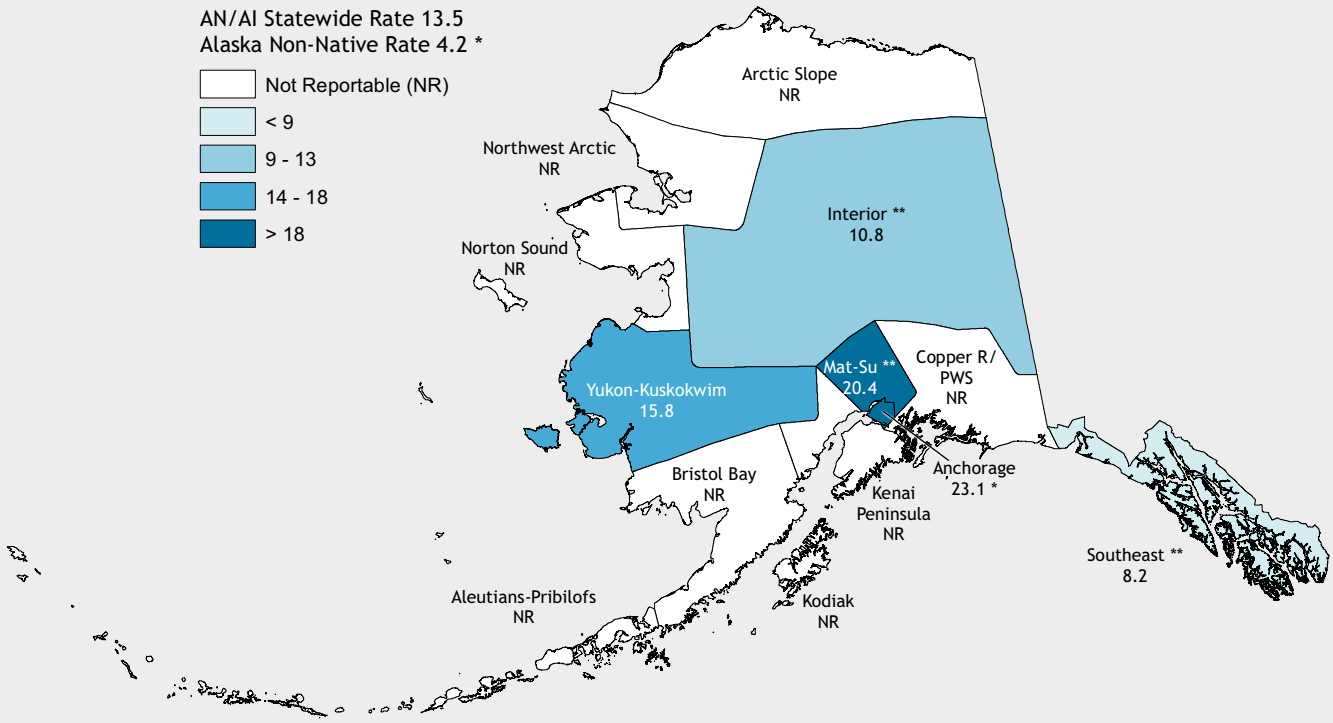


Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Homicide

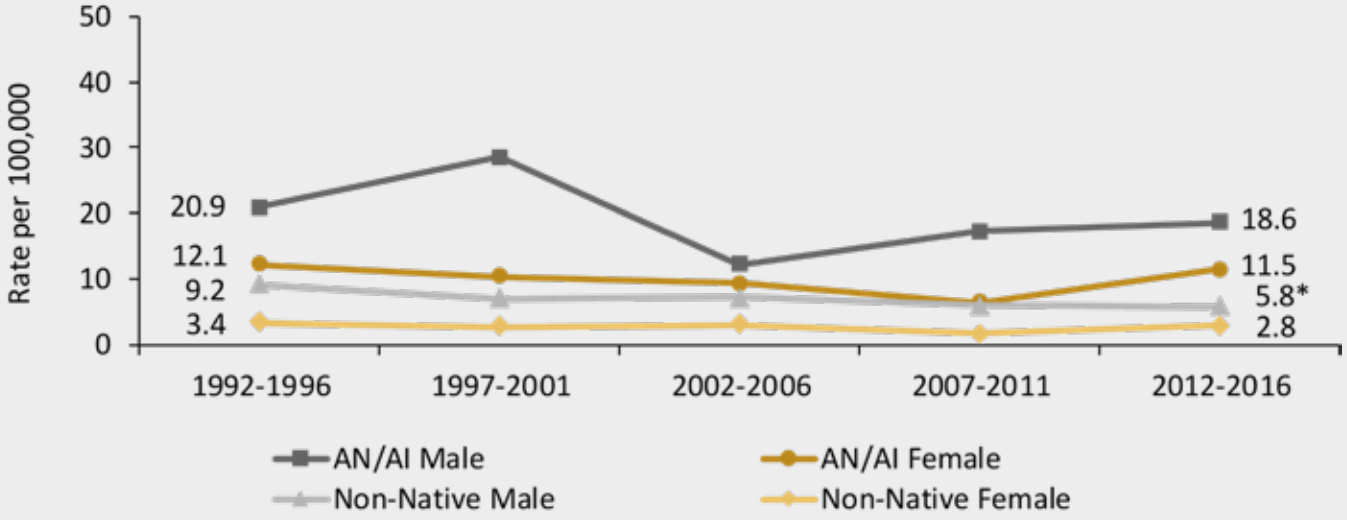
Data Source: Alaska Health Analytics and Vital Records. Data tables available in Appendix B.

Homicide Death Rate by Region, AN/AI People, 2007-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Homicide Death Rate by Gender, Race, and Year, 1992-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
Note: 2007-2011 AN/AI Female rate is based on 10-19 cases. It is not statistically reliable and should be used with caution.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

continued -

Summary

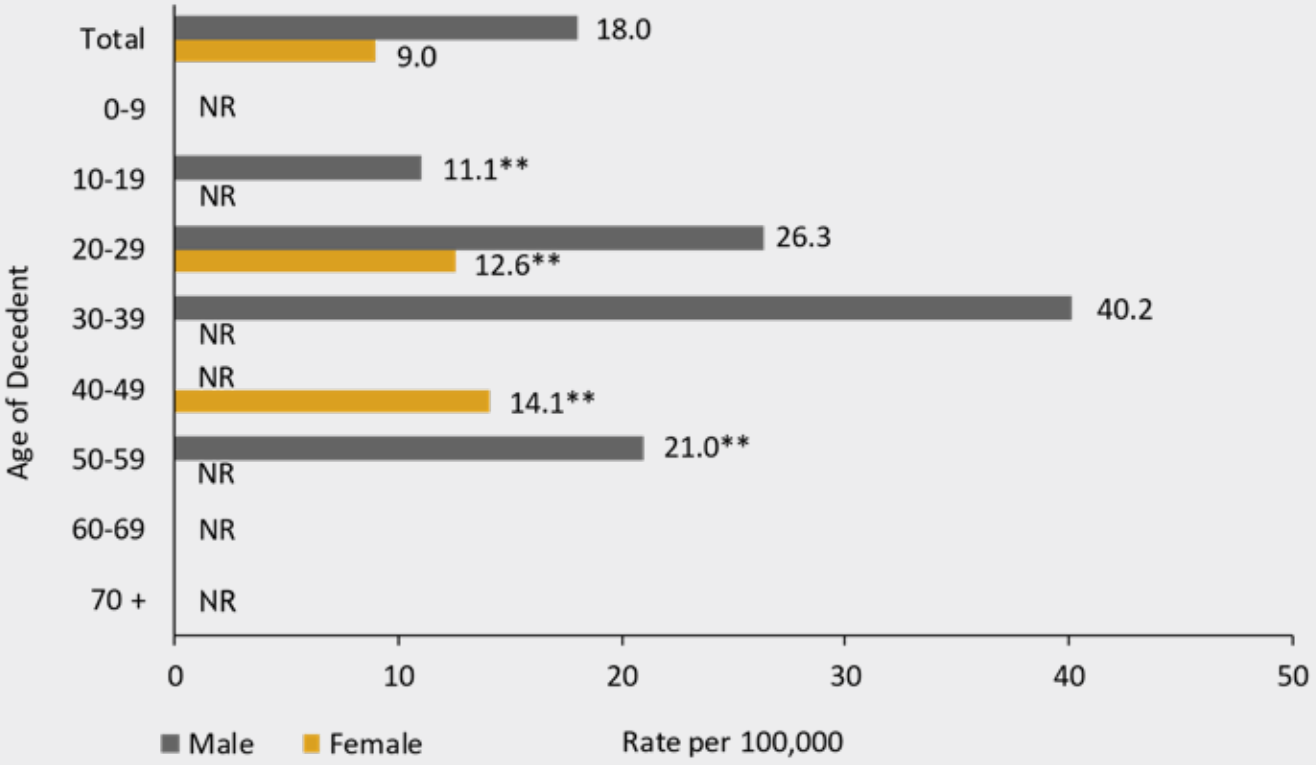
During 2007-2016:

- 158 AN/AI people died as a result of homicide. This represented 8.0% of all injury deaths.
- Firearms were the mechanism for nearly half of all homicide deaths (47.5%) among AN/AI people, followed by sharp objects (16.5%) and hanging/strangulation/suffocation (7.6%).
- AN/AI people aged 30 to 39 years had the highest homicide death rate of any age group (25.0 per 100,000). The rate for this age group was 1.9 times the rate for all ages (13.5 per 100,000, $p<0.05$).
- The homicide death rate of AN/AI males was 2.0 times that of AN/AI females (18.0 and 9.0 per 100,000, respectively, $p<0.05$).
- The homicide death rate of AN/AI people was 3.2 times that of non-Native people (13.5 and 4.2 per 100,000, respectively, $p<0.05$).

Trend Over Time:

- Between 1992-1996 and 2012-2016, the homicide death rate for both AN/AI genders combined did not significantly change (16.6 and 15.0 per 100,000, respectively).

Homicide Death Rate by Gender and Age, AN/AI People, 2007-2016



Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Regional Injury Profiles

Injury Atlas Regions

To have injury frequencies that are sufficiently large for rate calculations, Tribal health organization (THO) service areas are combined into larger regions. Every effort is made to align regions with THO service areas, including moving communities from their Alaska census area/borough region to the region matching their THO region. The villages moved to or from census area/borough regions to align with THO regions are listed as added or removed below.

Regions by Tribal Health Organizations and Census Areas

Regions in This Report	Census Area/Boroughs Included in Region	THOs in Region	Villages Added	Villages Removed
Aleutians and Pribilofs	Aleutians East Borough, Aleutians West Census Area	Aleutian Pribilof Islands Association, St. George Traditional Council, Eastern Aleutian Tribes, Southcentral Foundation		
Anchorage	Anchorage Municipality	Southcentral Foundation		
Arctic Slope	North Slope Borough	Arctic Slope Native Association, North Slope Borough, Ukpeagvik Inupiat Corporation		Point Hope, Anaktuvuk Pass
Bristol Bay	Dillingham Census Area, Lake and Peninsula Borough, Bristol Bay Borough	Bristol Bay Area Health Corporation, Southcentral Foundation	Goodnews Bay, Platinum	
Copper River/Prince William Sound	Valdez-Cordova Census Area	Chugachmiut (part), Chitina Traditional Village Council, Copper River Native Association, 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 Association, Tanana Tribal Council, Southcentral Foundation	Anaktuvuk Pass	Cantwell, Anvik, Grayling, Holy Cross, Shageluk
Kenai Peninsula	Kenai Peninsula Borough	Chugachmiut (part), Kenaitze Indian Tribe, Ninilchik Traditional Council, Seldovia Village Tribe, Tyonek Native Village		
Kodiak Island	Kodiak Island Borough	Kodiak Area Native Association, Karluk Tribal Council		
Matanuska-Susitna	Matanuska-Susitna Borough	Southcentral Foundation, Eklutna Native Village, Chickaloon Village, Knik Tribe		
Northwest Arctic	Northwest Arctic Borough	Maniilaq Association	Point Hope	
Norton Sound	Nome Census Area	Norton Sound Health Corporation, Native Village of Diomede		
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, 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, Shageluk	Goodnews Bay, Platinum

Aleutian and Pribilof Islands Region
Injury Hospitalizations 1997-2016

Summary

- Fall (48.1%), assault (9.8%) and motor vehicles (8.6%) were the three leading causes of injury hospitalization during 1997-2016 among Aleutian and Pribilof Islands AN/AI people, and represented two out of every three injury hospitalizations (66.5%).
- The watercraft-related injury hospitalization rate for Aleutian and Pribilof Islands AN/AI people was significantly higher than that for AN/AI people statewide (3.2 and 1.3 per 10,000, respectively, $p<0.05$).

Leading Causes of Injury Hospitalization, Aleutian and Pribilof Islands, AN/AI People, 1997-2016

Data Source: Alaska Trauma Registry

Mechanism	Number	%	Region Rate	Statewide Rate
Assault	26	9.8%	7.3	17.6*
Suicide Attempt	10	3.8%	2.5**	19.8*
Total Intentional Injuries	**36**	**13.5%**	**9.8**	**37.4***
Fall	128	48.1%	40.9	52.5*
Motor Vehicle	23	8.6%	6.9	11.1*
All-Terrain Vehicle	19	7.1%	5.1**	5.8
Watercraft	11	4.1%	3.2**	1.3*
Cut or Pierce	8	3.0%	NR	3.4
Struck By or Against	7	2.6%	NR	3.8
Machinery	6	2.3%	NR	0.7
Other and Unspecified	27	10.2%	6.9	25.1*
Total Unintentional Injuries	**229**	**86.1%**	**68.8**	**103.7***
Undetermined Intent	<5	NR	NR	1.1
Total Injuries	**266**	**100.0%**	**78.9**	**142.1***

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

** Statistically significant difference between the regional and AN/AI people statewide rate, $p<0.05$.*

*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Refer to Appendix A for description of Suicide Attempt data limitations.

Aleutian and Pribilof Islands Region

Injury Deaths 1997-2016

Summary

- Suicide (25.0%) and unintentional poisoning (20.5%) were the two leading causes of injury death during 1997-2016 among Aleutian and Pribilof Islands AN/AI people, and represented slightly less than half of injury deaths (45.5%).
- The total injury death rate for Aleutian and Pribilof Islands AN/AI people was significantly lower than that for AN/AI people statewide (122.3 and 171.4 per 100,000, respectively, p<0.05).

Leading Causes of Injury Death, Aleutian and Pribilof Islands, AN/AI People, 1997-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	11	25.0%	28.9**	40.6
Total Intentional Injuries	**13**	**29.5%**	**34.4****	**54.7**
Poisoning	9	20.5%	NR	27.8
Drowning	6	13.6%	NR	18.7
Motor Vehicle	6	13.6%	NR	15.2
Other and Unspecified	9	20.5%	NR	48.0
Total Unintentional Injuries	**30**	**68.2%**	**85.2**	**109.8**
Undetermined Intent	<5	NR	NR	6.9
Total Deaths	**44**	**100.0%**	**122.3**	**171.4***

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Anchorage Region
Injury Hospitalizations 2007-2016

Summary

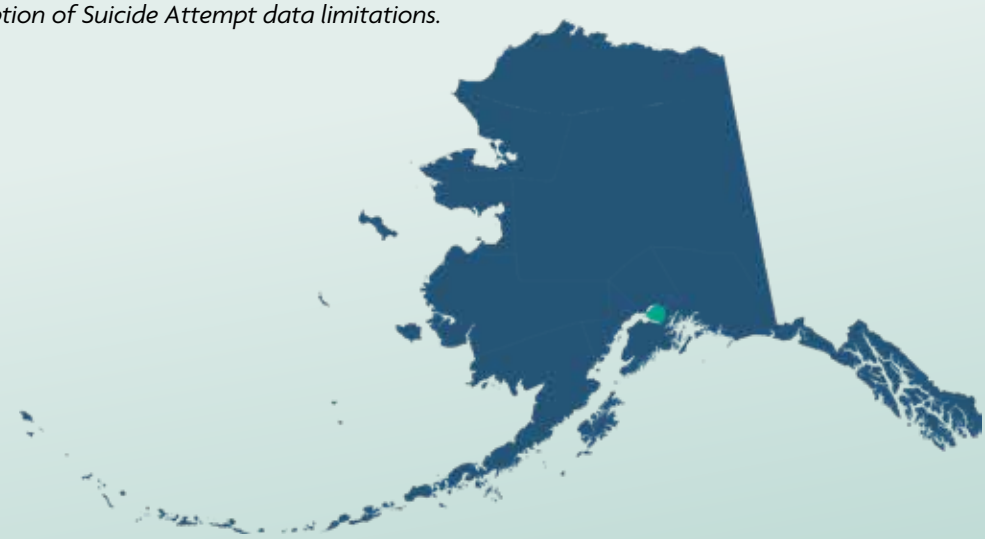
- Fall (37.3%), assault (19.1%), and motor vehicle (16.0%) were the three leading causes of injury hospitalization during 2007-2016 among Anchorage AN/AI people, and represented almost three out of every four injury hospitalizations (72.5%).
- The motor vehicle injury hospitalization rate for Anchorage AN/AI people was significantly higher than that for AN/AI people statewide (20.1 and 11.1 per 10,000, respectively, p<0.05).

Leading Causes of Injury Hospitalization, Anchorage, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

Mechanism	Number	%	Region Rate	Statewide Rate
Assault	656	19.1%	23.4	15.9*
Suicide Attempt	322	9.4%	10.7	14.7*
Total Intentional Injuries	**978**	**28.5%**	**34.1**	**30.7***
Fall	1,279	37.3%	62.2	49.5*
Motor Vehicle	549	16.0%	20.1	11.1*
Pedal Cycle	96	2.8%	3.3	2.0*
Struck By or Against	72	2.1%	2.5	2.9
Poisoning	58	1.7%	1.5	1.5
Exposure to Forces of Nature	58	1.7%	2.2	2.4
Fire or Burn	54	1.6%	1.9	2.3
Other and Unspecified	255	7.4%	8.6	17.6*
Total Unintentional Injuries	**2,421**	**70.7%**	**102.4**	**91.4***
Undetermined Intent	27	0.8%	0.8	0.8
Total Injuries	**3,426**	**100.0%**	**137.3**	**122.9***

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
Refer to Appendix A for description of Suicide Attempt data limitations.



Anchorage Region
Injury Deaths 2007-2016

Summary

- Poisoning (31.1%), suicide (17.9%) and motor vehicle (11.5%) were the three leading causes of injury death during 2007-2016 among Anchorage AN/AI people, and represented more than half of injury deaths (60.5%).
- The drowning death rate for Anchorage AN/AI people was significantly lower than that for AN/AI people statewide (5.4 and 15.9 per 100,000, respectively, p<0.05).

Leading Causes of Injury Death, Anchorage, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	109	17.9%	36.8	41.6
Homicide	63	10.3%	23.1	13.5*
Total Intentional Injuries	**172**	**28.2%**	**59.9**	**55.0**
Poisoning	190	31.1%	71.3	37.2*
Motor Vehicle	70	11.5%	27.2	14.1*
Fall	36	5.9%	20.3	8.9*
Threat to Breathing	24	3.9%	11.4	5.2*
Exposure to Forces of Nature	18	3.0%	7.2**	9.9
Drowning	16	2.6%	5.4**	15.9*
Off-Road Vehicle	13	2.1%	5.3**	6.8
Other and Unspecified	45	7.4%	29.0	15.9*
Total Unintentional Injuries	**412**	**67.5%**	**177.1**	**113.9***
Undetermined Intent	26	4.3%	8.9	8.3
Total Deaths	**610**	**100.0%**	**245.9**	**177.2***

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Arctic Slope Region
Injury Hospitalizations 1997-2016

Summary

- Fall (30.5%), suicide attempt or self-harm (13.1%) and assault (11.3%) were the three leading causes of injury hospitalization during 1997-2016 among Arctic Slope AN/AI people, and represented more than half of injury hospitalizations (54.9%).
- The snowmachine injury hospitalization rate for Arctic Slope AN/AI people was significantly higher than that for AN/AI people statewide (13.6 and 5.7 per 10,000, respectively, p<0.05).

Leading Causes of Injury Hospitalization, Arctic Slope AN/AI People, 1997-2016

Data Source: Alaska Trauma Registry

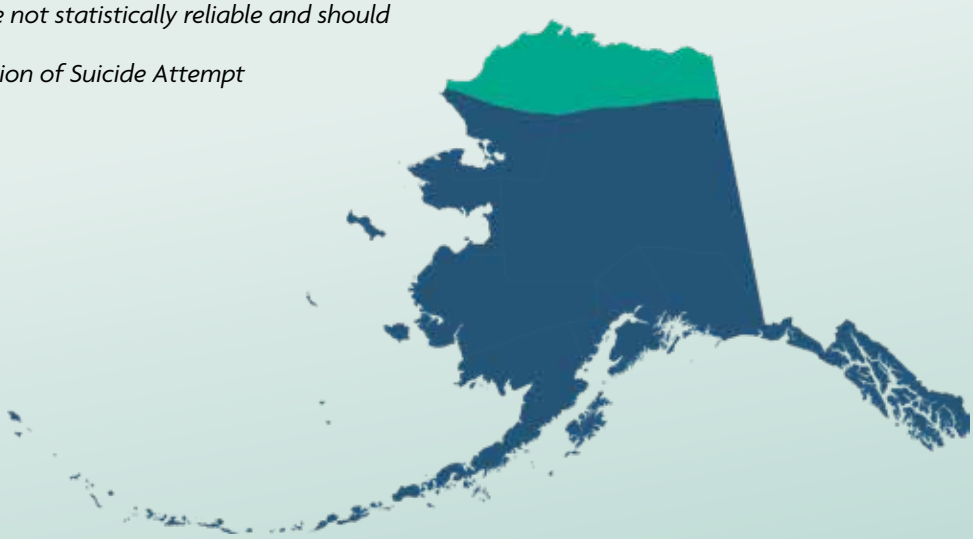
Mechanism	Number	%	Region Rate	Statewide Rate
Suicide Attempt	162	13.1%	18.3	19.8
Assault	139	11.3%	17.2	17.6
Total Intentional Injuries	**301**	**24.4%**	**35.4**	**37.4**
Fall	377	30.5%	67.6	52.5*
Snowmachine	114	9.2%	13.6	5.7*
All-Terrain Vehicle	88	7.1%	8.9	5.8*
Motor Vehicle	64	5.2%	6.5	11.1*
Struck By or Against	34	2.8%	4.4	3.8
Exposure to Forces of Nature	33	2.7%	3.8	2.8
Cut or Pierce	29	2.3%	3.9	3.4
Other and Unspecified	178	14.4%	21.5	18.5*
Total Unintentional Injuries	**917**	**74.3%**	**130.3**	**103.7***
Undetermined Intent	17	1.4%	2.4**	1.1*
Total Injuries	**1,235**	**100.0%**	**168.1**	**142.1***

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*

*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Refer to Appendix A for description of Suicide Attempt data limitations.



Arctic Slope Region
Injury Deaths 1997-2016

Summary

- Suicide (38.5%), drowning (11.0%) and off-road vehicles (10.1%) were the three leading causes of injury death during 1997-2016 among Arctic Slope AN/AI people, and represented more than half of injury deaths (59.6%).
- The air transport death rate for Arctic Slope AN/AI people was significantly higher than that for AN/AI people statewide (11.4 and 2.4 per 100,000, respectively, $p<0.05$).

Leading Causes of Injury Death, Arctic Slope, AN/AI People, 1997-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	42	38.5%	50.0	40.6
Homicide	5	4.6%	NR	14.1
Total Intentional Deaths	**47**	**43.1%**	**56.8**	**54.7**
Drowning	12	11.0%	18.7**	18.7
Off-Road Vehicle	11	10.1%	12.0**	7.6
Air Transport	10	9.2%	11.4**	2.4*
Poisoning	7	6.4%	NR	27.8
Motor Vehicle	5	4.6%	NR	15.2
Other and Unspecified	13	11.9%	21.9**	27.2
Total Unintentional Deaths	**58**	**53.2%**	**81.1**	**109.8***
Undetermined Intent	<5	NR	NR	6.9
Total Deaths	**109**	**100.0%**	**142.8**	**171.4***

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, $p<0.05$.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Bristol Bay Region
Injury Hospitalizations 1997-2016

Summary

- Fall (29.5%), all-terrain vehicle (12.3%), suicide attempt (9.4%), and assault (9.3%) were the four leading causes of injury hospitalization during 1997-2016 among Bristol Bay AN/AI people, and represented more than half of injury hospitalizations (60.5%).
- The all-terrain vehicle injury hospitalization rate for Bristol Bay AN/AI people was significantly higher than that for AN/AI people statewide (17.3 and 5.8 per 10,000, respectively, p<0.05).

Leading Causes of Injury Hospitalization, Bristol Bay, AN/AI People, 1997-2016

Data Source: Alaska Trauma Registry

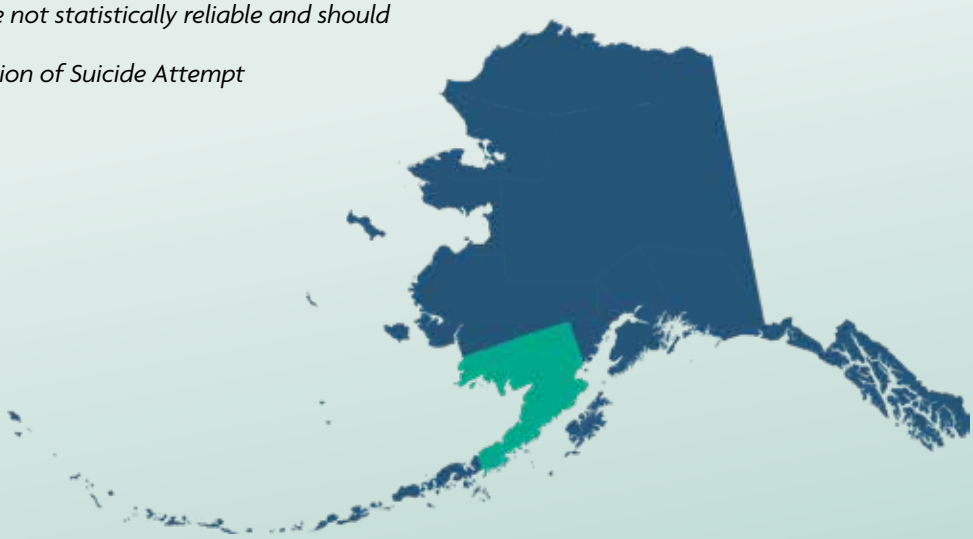
Mechanism	Number	%	Region Rate	Statewide Rate
Suicide Attempt	147	9.4%	13.0	19.8*
Assault	146	9.3%	14.5	17.6*
Total Intentional Injuries	**293**	**18.7%**	**27.5**	**37.4***
Fall	461	29.5%	52.8	52.5
All-Terrain Vehicle	192	12.3%	17.3	5.8*
Snowmachine	95	6.1%	9.1	5.7*
Motor Vehicle	94	6.0%	8.1	11.1*
Struck By or Against	54	3.5%	4.6	3.8
Poisoning	44	2.8%	3.3	2.0*
Cut or Pierce	42	2.7%	3.9	3.4
Other and Unspecified	276	17.6%	25.4	19.4*
Total Unintentional Injuries	**1,258**	**80.4%**	**124.5**	**103.7***
Undetermined Intent	13	0.8%	1.2**	1.1
Total Injuries	**1,564**	**100.0%**	**153.3**	**142.1***

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*

*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Refer to Appendix A for description of Suicide Attempt data limitations.



Bristol Bay Region
Injury Deaths 1997-2016

Summary

- Drowning (22.0%), suicide (15.6%) and unintentional poisoning (12.4%) were the three leading causes of injury death during 1997-2016 among Bristol Bay AN/AI people, and represented half of injury deaths (50.0%).
- The air transport death rate for Bristol Bay AN/AI people was significantly higher than that for AN/AI people statewide (17.9 and 2.4 per 100,000, respectively, p<0.05).

Leading Causes of Injury Death, Bristol Bay, AN/AI People, 1997-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	34	15.6%	32.8	40.6
Homicide	13	6.0%	11.6**	14.1
Total Intentional Injuries	**47**	**21.6%**	**44.5**	**54.7**
Drowning	48	22.0%	45.9	18.7*
Poisoning	27	12.4%	27.1	27.8
Off-Road Vehicle	20	9.2%	18.5	7.6*
Air Transport	17	7.8%	17.9**	2.4*
Exposure to Forces of Nature	13	6.0%	13.1**	9.7
Motor Vehicle	8	3.7%	NR	15.2
Threat to Breathing	6	2.8%	NR	5.3
Other and Unspecified	21	9.6%	24.5	23.1
Total Unintentional Injuries	**160**	**73.4%**	**160.1**	**109.8***
Undetermined Intent	11	5.0%	12.6**	6.9*
Total Deaths	**218**	**100.0%**	**217.2**	**171.4***

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Copper River/Prince William Sound Region
Injury Hospitalizations 1997-2016

Summary

- Fall (35.4%), motor vehicle (18.9%), and assault (8.3%) were the three leading causes of injury hospitalization during 1997-2016 among Copper River/Prince William Sound AN/AI people, and represented almost two out of every three injury hospitalizations (62.5%).
- The suicide attempt hospitalization rate for Copper River/Prince William Sound AN/AI people was significantly lower than that for AN/AI people statewide (8.6 and 19.8 per 10,000, respectively, $p<0.05$).

Leading Causes of Injury Hospitalization, Copper River/Prince William Sound, AN/AI People, 1997-2016

Data Source: Alaska Trauma Registry

Mechanism	Number	%	Region Rate	Statewide Rate
Assault	32	8.3%	10.3	17.6*
Suicide Attempt	30	7.8%	8.6	19.8*
Total Intentional Injuries	**62**	**16.0%**	**18.9**	**37.4***
Fall	137	35.4%	43.5	52.5*
Motor Vehicle	73	18.9%	22.0	11.1*
All-Terrain Vehicle	12	3.1%	3.4**	5.8
Snowmachine	12	3.1%	3.0**	5.7*
Cut or Pierce	12	3.1%	3.5**	3.4
Struck By or Against	10	2.6%	2.8**	3.8
Overexertion, Strain	8	2.1%	NR	1.4
Other and Unspecified	60	15.5%	15.8	20.0
Total Unintentional Injuries	**324**	**83.7%**	**96.2**	**103.7**
Undetermined Intent	<5	NR	NR	1.1
Total Injuries	**387**	**100.0%**	**115.4**	**142.1***

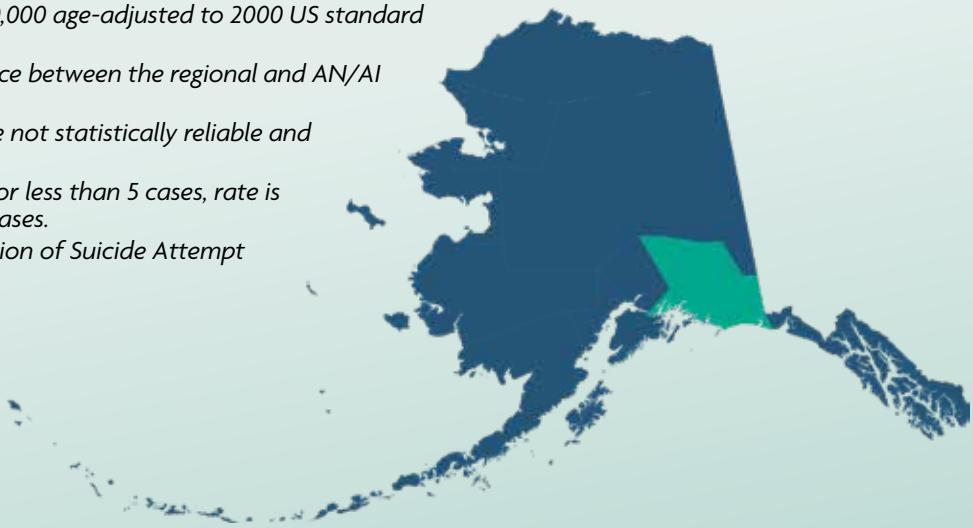
Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

** Statistically significant difference between the regional and AN/AI people statewide rate, $p<0.05$.*

*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Refer to Appendix A for description of Suicide Attempt data limitations.



Copper River/Prince William Sound Region
Injury Deaths 1997-2016

Summary

- Suicide (31.7%), motor vehicle (20.0%) and drowning (11.7%) were the three leading causes of injury death during 1997-2016 among Copper River/Prince William Sound AN/AI people, and represented almost two out of every three injury deaths (63.3%).
- The motor vehicle death rate for Copper River/Prince William Sound AN/AI people was significantly higher than that for AN/AI people statewide (35.0 and 15.2 per 100,000, respectively, p<0.05).

Leading Causes of Injury Death, Copper River/Prince William Sound, AN/AI People, 1997-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	19	31.7%	54.5**	40.6
Total Intentional Injuries	**21**	**35.0%**	**60.9**	**54.7**
Motor Vehicle	12	20.0%	35.0**	15.2*
Drowning	7	11.7%	NR	18.7
Off-Road Vehicle	6	10.0%	NR	7.6
Other and Unspecified	13	21.7%	43.4**	68.3
Total Unintentional Injuries	**38**	**63.3%**	**116.7**	**109.8**
Undetermined Intent	<5	NR	NR	6.9
Total Deaths	**60**	**100.0%**	**182.4**	**171.4**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Interior Region
Injury Hospitalizations 2007-2016

Summary

- Fall (32.9%), assault (14.8%), and suicide attempt (14.1%) were the three leading causes of injury hospitalization during 2007-2016 among Interior AN/AI people, and represented more than half of injury hospitalizations (61.8%).
- The fall hospitalization rate for Interior AN/AI people was significantly lower than that for AN/AI people statewide (42.6 and 49.5 per 10,000, respectively, p<0.05).

Leading Causes of Injury Hospitalization, Interior, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

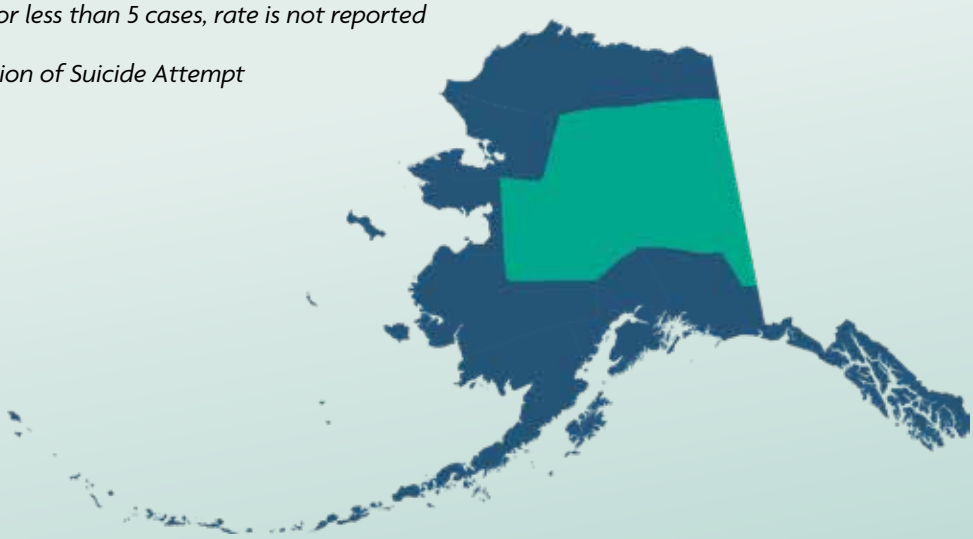
Mechanism	Number	%	Region Rate	Statewide Rate
Assault	205	14.8%	15.1	15.9
Suicide Attempt	196	14.1%	14.5	14.7
Total Intentional Injuries	**401**	**28.9%**	**29.5**	**30.7**
Fall	457	32.9%	42.6	49.5*
Motor Vehicle	141	10.2%	10.4	11.1
Snowmachine	62	4.5%	4.7	4.2
All-Terrain Vehicle	58	4.2%	4.5	5.6
Exposure to Forces of Nature	32	2.3%	2.5	2.4
Struck By or Against	29	2.1%	2.3	2.9
Fire or Burn	29	2.1%	2.3	2.3
Other and Unspecified	174	12.5%	13.1	11.5
Total Unintentional Injuries	**982**	**70.7%**	**82.4**	**91.4***
Undetermined Intent	6	0.4%	NR	0.8
Total Injuries	**1,389**	**100.0%**	**112.4**	**122.9***

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*

NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Refer to Appendix A for description of Suicide Attempt data limitations.



Interior Region
Injury Deaths 2007-2016

Summary

- Suicide (25.7%), unintentional poisoning (18.9%) and exposure to forces of nature (11.3%) were the three leading causes of injury death during 2007-2016 among Interior AN/AI people, and represented more than half of injury deaths (55.9%).
- The exposure to forces of nature death rate for Interior AN/AI people was significantly higher than that for AN/AI people statewide (22.9 and 9.9 per 100,000, respectively, p<0.05).

Leading Causes of Injury Death, Interior, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	57	25.7%	42.8	41.6
Homicide	15	6.8%	10.8**	13.5
Total Intentional Injuries	**72**	**32.4%**	**53.5**	**55.0**
Poisoning	42	18.9%	34.0	37.2
Exposure to Forces of Nature	25	11.3%	22.9	9.9*
Drowning	24	10.8%	19.8	15.9
Motor Vehicle	21	9.5%	16.9	14.1
Smoke, Fire and Flames	9	4.1%	NR	3.8
Fall	6	2.7%	NR	8.9
Threat to Breathing	6	2.7%	NR	5.2
Other and Unspecified	12	5.4%	10.0**	19.0*
Total Unintentional Injuries	**145**	**65.3%**	**121.7**	**113.9**
Undetermined Intent	5	2.3%	NR	8.3
Total Deaths	**222**	**100.0%**	**179.5**	**177.2**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Kenai Peninsula Region

Injury Hospitalizations 1997-2016

Summary

- Fall (33.6%), motor vehicle (18.1%), and suicide attempt (12.5%) were the three leading causes of injury hospitalization during 1997-2016 among Kenai Peninsula AN/AI people, and represented almost two out of every three injury hospitalizations (64.3%).
- The snowmachine hospitalization rate for Kenai Peninsula AN/AI people was significantly lower than that for AN/AI people statewide (1.5 and 5.7 per 10,000, respectively, p<0.05).

Leading Causes of Injury Hospitalization, Kenai Peninsula, AN/AI People, 1997-2016

Data Source: Alaska Trauma Registry

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide Attempt	108	12.5%	10.9	19.8*
Assault	60	7.0%	6.2	17.6*
Total Intentional Injuries	**168**	**19.5%**	**17.1**	**37.4***
Fall	290	33.6%	41.5	52.5*
Motor Vehicle	156	18.1%	16.3	11.1*
All-Terrain Vehicle	39	4.5%	4.0	5.8*
Struck By or Against	37	4.3%	3.5	3.8
Fire or Burn	23	2.7%	2.8	2.6
Cut or Pierce	19	2.2%	1.9**	3.4*
Snowmachine	16	1.9%	1.5**	5.7*
Other and Unspecified	108	12.5%	10.7	18.8*
Total Unintentional Injuries	**688**	**79.8%**	**82.3**	**103.7***
Undetermined Intent	6	0.7%	NR	1.1
Total Injuries	**862**	**100.0%**	**99.9**	**142.1***

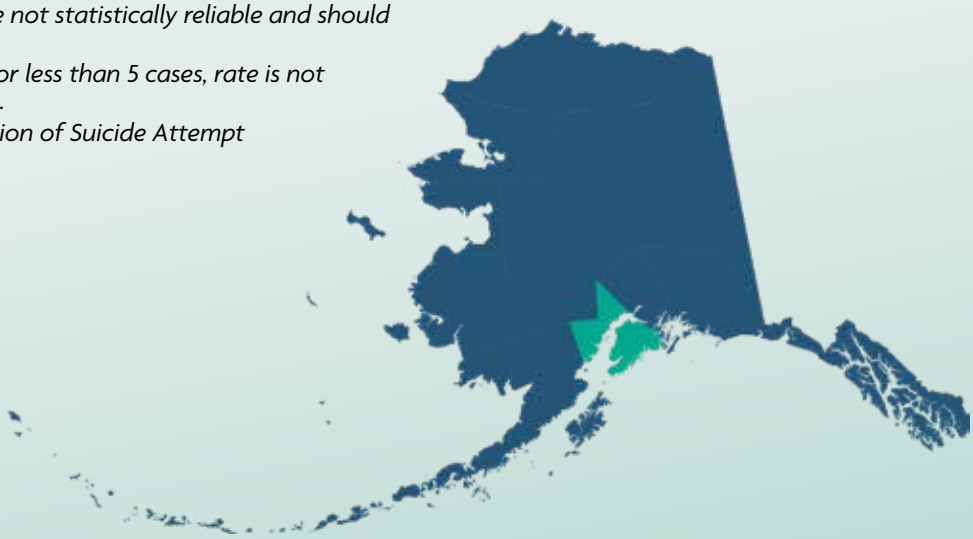
Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*

*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Refer to Appendix A for description of Suicide Attempt data limitations.



Kenai Peninsula Region
Injury Deaths 1997-2016

Summary

- Motor vehicle (26.3%), suicide (24.2%) and unintentional poisoning (18.9%) were the three leading causes of injury death during 1997-2016 among Kenai Peninsula AN/AI people, and represented more than two out of every three injury deaths (69.5%).
- The suicide death rate for Kenai Peninsula AN/AI people was significantly lower than that for AN/AI people statewide (23.9 and 40.6 per 100,000, respectively, p<0.05).

Leading Causes of Injury Death, Kenai Peninsula, AN/AI People, 1997-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	23	24.2%	23.9	40.6*
Total Intentional Injuries	**26**	**27.4%**	**26.3**	**54.7***
Motor Vehicle	25	26.3%	25.8	15.2*
Poisoning	18	18.9%	20.1**	27.8
Drowning	6	6.3%	NR	18.7
Threat to Breathing	5	5.3%	NR	5.3
Other and Unspecified	9	9.5%	NR	42.7
Total Unintentional Injuries	**63**	**66.3%**	**69.3**	**109.8***
Undetermined Intent	6	6.3%	NR	6.9
Total Deaths	**95**	**100.0%**	**102.2**	**171.4***

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Kodiak Island Region

Injury Hospitalizations 1997-2016

Summary

- Fall (34.8%), suicide attempt (12.8%), and motor vehicle (9.5%) were the three leading causes of injury hospitalization during 1997-2016 among Kodiak Island AN/AI people, and represented more than half of injury hospitalizations (57.1%).
- The watercraft-related injury hospitalization rate for Kodiak Island AN/AI people was significantly higher than that for AN/AI people statewide (4.3 and 1.3 per 10,000, respectively, p<0.05).

Leading Causes of Injury Hospitalization, Kodiak Island, AN/AI People, 1997-2016

Data Source: Alaska Trauma Registry

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide Attempt	54	12.8%	12.3	19.8*
Assault	30	7.1%	7.2	17.6*
Total Intentional Injuries	**84**	**19.9%**	**19.5**	**37.4***
Fall	147	34.8%	39.4	52.5*
Motor Vehicle	40	9.5%	9.0	11.1
All-Terrain Vehicle	37	8.8%	8.2	5.8*
Watercraft	16	3.8%	4.3**	1.3*
Struck By or Against	13	3.1%	3.0**	3.8
Cut or Pierce	12	2.8%	2.8**	3.4
Other and Unspecified	72	17.1%	16.4	18.8
Total Unintentional Injuries	**337**	**79.9%**	**83.1**	**103.7***
Undetermined Intent	<5	NR	NR	1.1
Total Injuries	**422**	**100.0%**	**103.0**	**142.1***

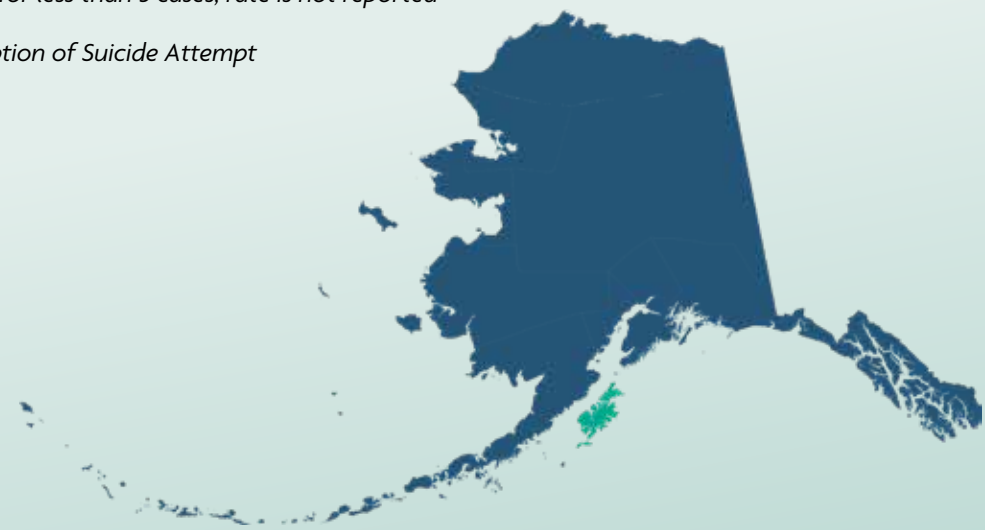
Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*

*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Refer to Appendix A for description of Suicide Attempt data limitations.



Kodiak Island Region
Injury Deaths 1997-2016

Summary

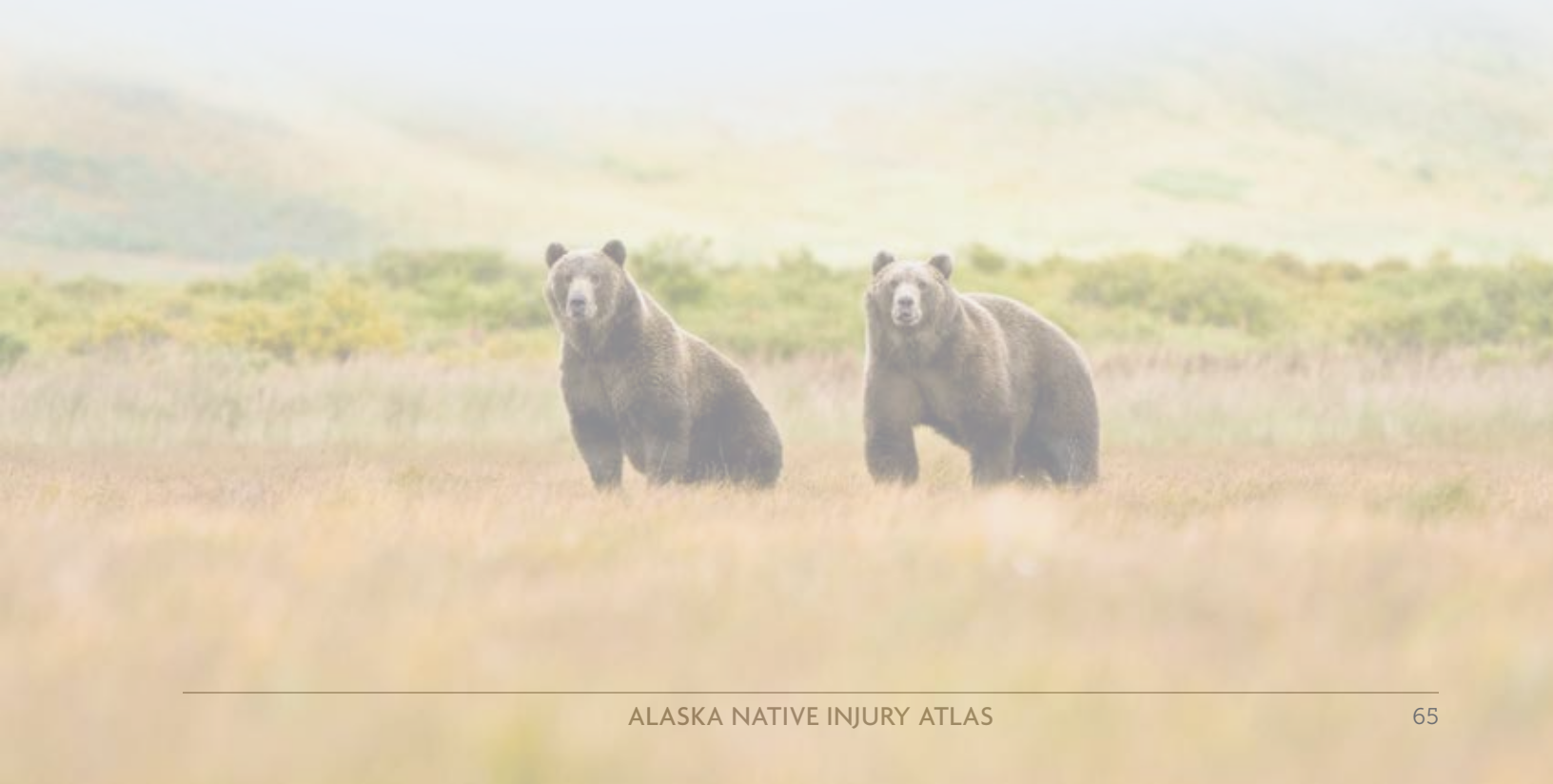
- Unintentional poisoning (26.7%), suicide (22.2%) and drowning (15.6%) were the three leading causes of injury death during 1997-2016 among Kodiak Island AN/AI people, and represented almost two out of every three injury deaths (64.4%).
- The unintentional poisoning death rate for Kodiak Island AN/AI people was significantly higher than that for AN/AI people statewide (31.3 and 27.8 per 100,000, respectively, $p<0.05$).

Leading Causes of Injury Death, Kodiak Island, AN/AI People, 1997-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	10	22.2%	25.8**	40.6
Total Intentional Injuries	**11**	**24.4%**	**28.2****	**54.7***
Poisoning	12	26.7%	31.3**	27.8
Drowning	7	15.6%	NR	18.7
Other and Unspecified	10	22.2%	30.1**	63.2*
Total Unintentional Injuries	**29**	**64.4%**	**79.4**	**109.8**
Undetermined Intent	5	11.1%	NR	6.9
Total Deaths	**45**	**100.0%**	**120.1**	**171.4***

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, $p<0.05$.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.



Matanuska-Susitna Region

Injury Hospitalizations 1997-2016

Summary

- Fall (30.0%), motor vehicle (19.3%), and suicide attempt (12.7%) were the three leading causes of injury hospitalization during 1997-2016 among Matanuska-Susitna AN/AI people, and represented more than half of injury hospitalizations (62.0%).
- The assault hospitalization rate for Matanuska-Susitna AN/AI people was significantly lower than that for AN/AI people statewide (4.6 and 17.6 per 10,000, respectively, p<0.05).

Leading Causes of Injury Hospitalization, Matanuska-Susitna, AN/AI People, 1997-2016

Data Source: Alaska Trauma Registry

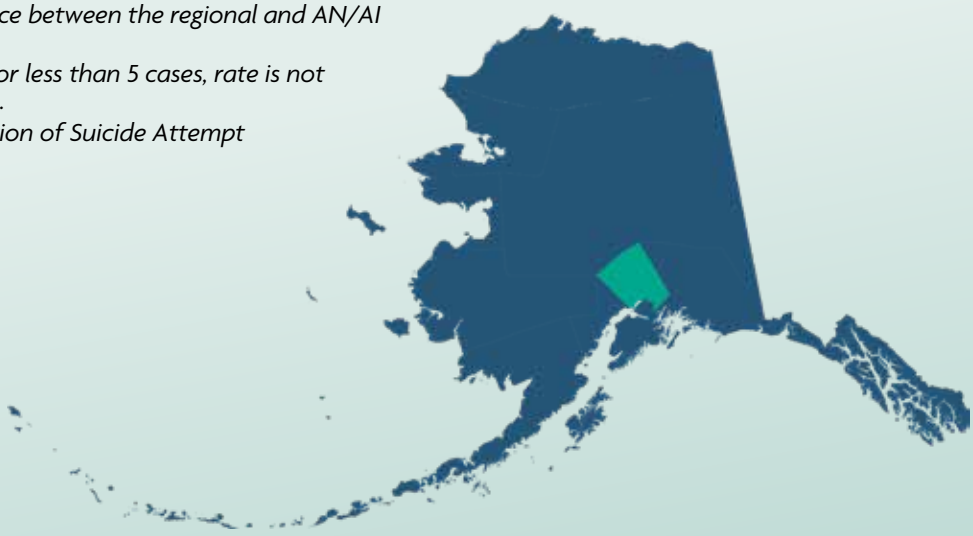
Mechanism	Number	%	Region Rate	Statewide Rate
Suicide Attempt	121	12.7%	10.0	19.8*
Assault	52	5.5%	4.6	17.6*
Total Intentional Injuries	**173**	**18.2%**	**14.6**	**37.4***
Fall	285	30.0%	41.1	52.5*
Motor Vehicle	184	19.3%	16.4	11.1*
All-Terrain Vehicle	60	6.3%	4.7	5.8
Snowmachine	36	3.8%	2.9	5.7*
Struck By or Against	29	3.0%	2.3	3.8*
Cut or Pierce	24	2.5%	2.2	3.4*
Exposure to Forces of Nature	24	2.5%	1.9	2.8
Other and Unspecified	129	13.6%	10.7	20.0*
Total Unintentional Injuries	**771**	**81.1%**	**82.2**	**103.7***
Undetermined Intent	7	0.7%	NR	1.1
Total Injuries	**951**	**100.0%**	**97.4**	**142.1***

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*

NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Refer to Appendix A for description of Suicide Attempt data limitations.



Matanuska-Susitna Region
Injury Deaths 1997-2016

Summary

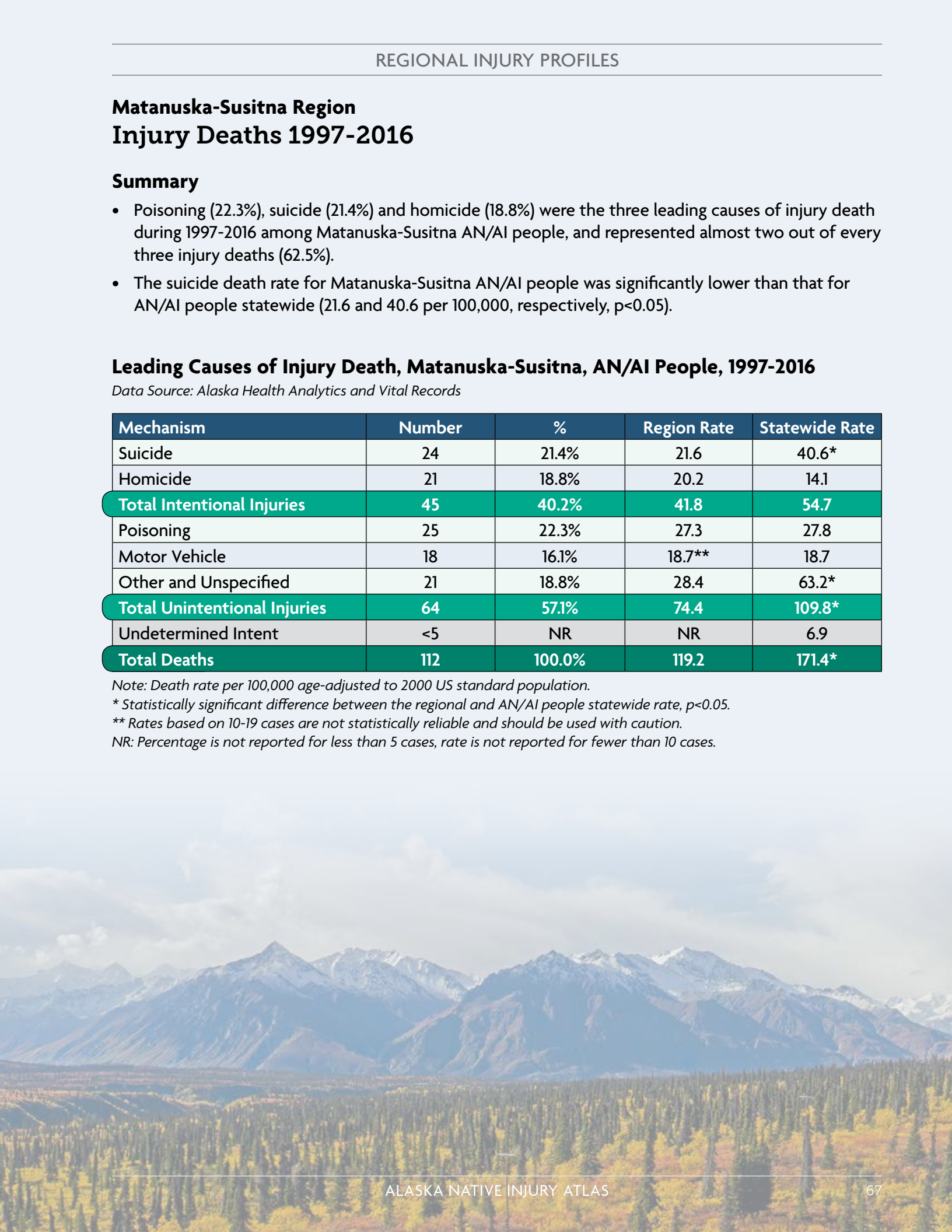
- Poisoning (22.3%), suicide (21.4%) and homicide (18.8%) were the three leading causes of injury death during 1997-2016 among Matanuska-Susitna AN/AI people, and represented almost two out of every three injury deaths (62.5%).
- The suicide death rate for Matanuska-Susitna AN/AI people was significantly lower than that for AN/AI people statewide (21.6 and 40.6 per 100,000, respectively, p<0.05).

Leading Causes of Injury Death, Matanuska-Susitna, AN/AI People, 1997-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	24	21.4%	21.6	40.6*
Homicide	21	18.8%	20.2	14.1
Total Intentional Injuries	**45**	**40.2%**	**41.8**	**54.7**
Poisoning	25	22.3%	27.3	27.8
Motor Vehicle	18	16.1%	18.7**	18.7
Other and Unspecified	21	18.8%	28.4	63.2*
Total Unintentional Injuries	**64**	**57.1%**	**74.4**	**109.8***
Undetermined Intent	<5	NR	NR	6.9
Total Deaths	**112**	**100.0%**	**119.2**	**171.4***

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.



Northwest Arctic Region
Injury Hospitalizations 2007-2016

Summary

- Fall (25.0%), assault (17.4%), and suicide attempt (15.5%) were the three leading causes of injury hospitalization during 2007-2016 among Northwest Arctic AN/AI people, and represented more than half of injury hospitalizations (58.0%).
- The snowmachine injury hospitalization rate for Northwest Arctic AN/AI people was significantly higher than that for AN/AI people statewide (16.0 and 4.2 per 10,000, respectively, p<0.05).

Leading Causes of Injury Hospitalization, Northwest Arctic, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

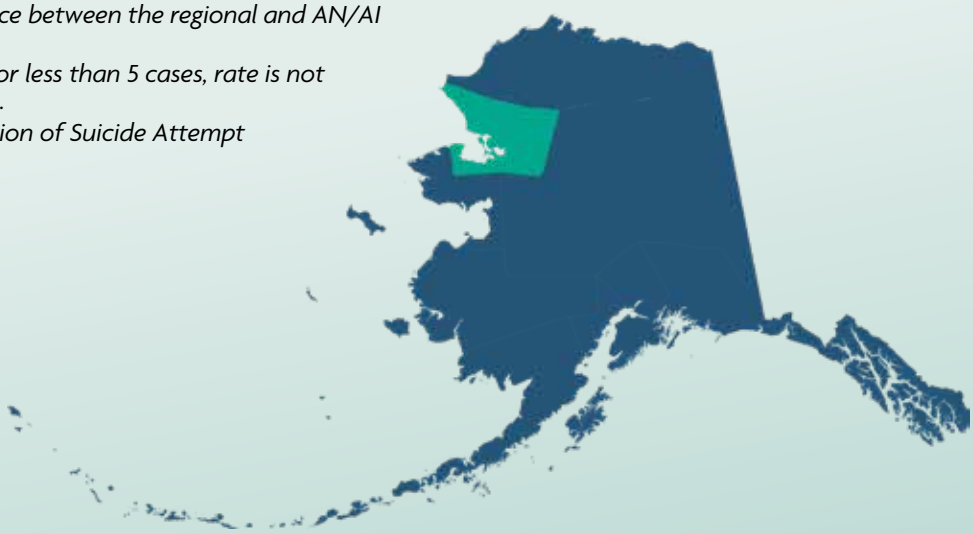
Mechanism	Number	%	Region Rate	Statewide Rate
Assault	184	17.4%	26.8	15.9*
Suicide Attempt	164	15.5%	22.1	14.7*
Total Intentional Injuries	**348**	**33.0%**	**48.9**	**30.7***
Fall	264	25.0%	48.0	49.5
Snowmachine	115	10.9%	16.0	4.2*
All-Terrain Vehicle	106	10.0%	13.3	5.6*
Motor Vehicle	40	3.8%	5.7	11.1*
Struck By or Against	33	3.1%	4.7	2.9*
Pedal Cycle	29	2.7%	2.9	2.0
Exposure to Forces of Nature	20	1.9%	3.1	2.4
Other and Unspecified	93	8.8%	11.4	11.6
Total Unintentional Injuries	**700**	**66.4%**	**105.1**	**91.4***
Undetermined Intent	7	0.7%	NR	0.8
Total Injuries	**1,055**	**100.0%**	**154.9**	**122.9***

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*

NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Refer to Appendix A for description of Suicide Attempt data limitations.



Northwest Arctic Region
Injury Deaths 2007-2016

Summary

- Suicide (37.7%), drowning (13.2%), and unintentional poisoning (11.4%) were the three leading causes of injury death during 2007-2016 among Northwest Arctic AN/AI people, and represented almost two out of every three injury deaths (62.3%).
- The off-road vehicle death rate for Northwest Arctic AN/AI people was significantly higher than that for AN/AI people statewide (17.7 and 6.8 per 100,000, respectively, p<0.05).

Leading Causes of Injury Death, Northwest Arctic, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	43	37.7%	56.5	41.6*
Homicide	6	5.3%	NR	13.5
Total Intentional Injuries	**49**	**43.0%**	**63.4**	**55.0**
Drowning	15	13.2%	22.3**	15.9
Poisoning	13	11.4%	21.4**	37.2*
Off-Road Vehicle	11	9.6%	17.7**	6.8*
Exposure to Forces of Nature	9	7.9%	NR	9.9
Threat to Breathing	6	5.3%	NR	5.2
Other and Unspecified	8	7.0%	NR	38.9
Total Unintentional Injuries	**62**	**54.4%**	**100.9**	**113.9**
Undetermined Intent	<5	NR	NR	8.3
Total Deaths	**114**	**100.0%**	**168.3**	**177.2**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Norton Sound Region
Injury Hospitalizations 2007-2016

Summary

- Suicide attempt (28.8%), fall (27.2%), and all-terrain vehicles (10.1%) were the three leading causes of injury hospitalization during 2007-2016 among Norton Sound AN/AI people, and represented almost two out of every three injury hospitalizations (66.1%).
- The all-terrain vehicle injury hospitalization rate for Norton Sound AN/AI people was significantly higher than that for AN/AI people statewide (15.8 and 5.6 per 10,000, respectively, p<0.05).

Leading Causes of Injury Hospitalization, Norton Sound, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide Attempt	311	28.8%	38.3	14.7*
Assault	107	9.9%	15.2	15.9
Total Intentional Injuries	**418**	**38.7%**	**53.5**	**30.7***
Fall	293	27.2%	53.7	49.5
All-Terrain Vehicle	109	10.1%	15.8	5.6*
Snowmachine	47	4.4%	6.0	4.2*
Motor Vehicle	38	3.5%	5.2	11.1*
Exposure to Forces of Nature	31	2.9%	4.5	2.4*
Struck By or Against	20	1.9%	2.7	2.9
Fire or Burn	19	1.8%	3.0**	2.3
Other and Unspecified	100	9.3%	12.2	12.0
Total Unintentional Injuries	**657**	**60.9%**	**103.0**	**91.4***
Undetermined Intent	<5	NR	NR	0.8
Total Injuries	**1,079**	**100.0%**	**157.0**	**122.9***

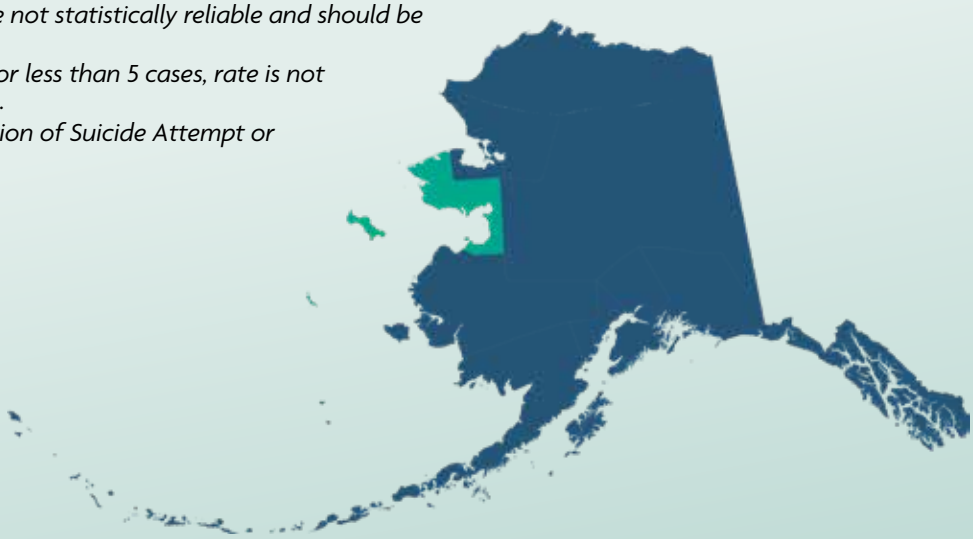
Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*

*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Refer to Appendix A for description of Suicide Attempt or data limitations.



Norton Sound Region
Injury Deaths 2007-2016

Summary

- Suicide (44.1%), unintentional poisoning (11.0%) and drowning (8.7%) were the three leading causes of injury death during 2007-2016 among Norton Sound AN/AI people, and represented almost two out of every three injury deaths (63.8%).
- The total unintentional death rate for Norton Sound AN/AI people was significantly lower than that for AN/AI people statewide (89.9 and 113.9 per 100,000, respectively, p<0.05).

Leading Causes of Injury Death, Norton Sound, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	56	44.1%	66.0	41.6*
Homicide	8	6.3%	NR	13.5
Total Intentional Injuries	**64**	**50.4%**	**78.0**	**55.0***
Poisoning	14	11.0%	25.8**	37.2
Drowning	11	8.7%	17.7**	15.9
Motor Vehicle	10	7.9%	12.2**	14.1
Exposure to Forces of Nature	7	5.5%	NR	9.9
Off-Road Vehicle	6	4.7%	NR	6.8
Threat to Breathing	5	3.9%	NR	5.2
Other and Unspecified	6	4.7%	NR	24.8
Total Unintentional Injuries	**59**	**46.5%**	**89.9**	**113.9***
Undetermined Intent	<5	NR	NR	8.3
Total Deaths	**127**	**100.0%**	**172.8**	**177.2**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Southeast Region
Injury Hospitalizations 2007-2016

Summary

- Fall (46.1%), suicide attempt (12.3%), and assault (10.4%) were the three leading causes of injury hospitalization during 2007-2016 among Southeast AN/AI people, and represented more than two out of every three injury hospitalizations (68.8%).
- The assault hospitalization rate for Southeast AN/AI people was significantly lower than that for AN/AI people statewide (10.9 and 15.9 per 10,000, respectively, p<0.05).

Leading Causes of Injury Hospitalization, Southeast Alaska, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide Attempt	175	12.3%	12.1	14.7*
Assault	149	10.4%	10.9	15.9*
Total Intentional Injuries	**324**	**22.7%**	**23.0**	**30.7***
Fall	658	46.1%	51.2	49.5
Motor Vehicle	136	9.5%	9.7	11.1
Struck By or Against	46	3.2%	3.3	2.9
Cut or Pierce	31	2.2%	2.4	2.2
Poisoning	30	2.1%	1.8	1.5
Pedal Cycle	25	1.8%	1.8	2.0
Watercraft	21	1.5%	1.5	1.1
Other and Unspecified	143	10.0%	10.0	18.9*
Total Unintentional Injuries	**1,090**	**76.3%**	**81.7**	**91.4***
Undetermined Intent	14	1.0%	1.0**	0.8
Total Injuries	**1,428**	**100.0%**	**105.6**	**122.9***

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*

*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Refer to Appendix A for description of Suicide Attempt data limitations.

Southeast Region
Injury Deaths 2007-2016

Summary

- Poisoning (22.4%), suicide (17.9%) and drowning (13.4%) were the three leading causes of injury death during 2007-2016 among Southeast AN/AI people, and represented more than half of injury deaths (53.7%).
- The homicide death rate for Southeast AN/AI people was significantly lower than that for AN/AI people statewide (8.2 and 41.6 per 100,000, respectively, p<0.05).

Leading Causes of Injury Death, Southeast Alaska, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	24	17.9%	17.2	13.5
Homicide	11	8.2%	8.2**	41.6*
Total Intentional Injuries	**35**	**26.1%**	**25.4**	**55.0***
Poisoning	30	22.4%	22.4	37.2*
Drowning	18	13.4%	13.8**	15.9
Motor Vehicle	9	6.7%	NR	14.1
Fall	6	4.5%	NR	8.9
Other and Unspecified	22	16.4%	16.6	37.8*
Total Unintentional Injuries	**85**	**63.4%**	**65.0**	**113.9***
Undetermined Intent	14	10.4%	10.1**	8.3
Total Deaths	**134**	**100.0%**	**100.5**	**177.2***

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Yukon-Kuskokwim Region

Injury Hospitalizations 2007-2016

Summary

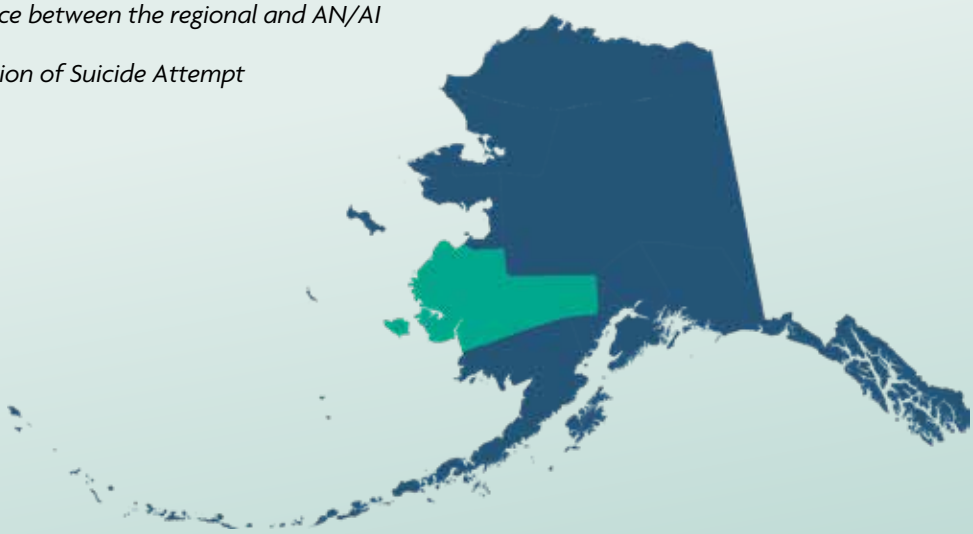
- Fall (26.7%), suicide attempt (19.2%) and assault (12.9%) were the three leading causes of injury hospitalization during 2007-2016 among Yukon-Kuskokwim AN/AI people, and represented more than half of injury hospitalizations (58.8%).
- The motor vehicle hospitalization rate for Yukon-Kuskokwim AN/AI people was significantly lower than that for AN/AI people statewide (3.5 and 11.1 per 10,000, respectively, p<0.05).

Leading Causes of Injury Hospitalization, Yukon-Kuskokwim, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide Attempt	483	19.2%	18.6	14.7*
Assault	323	12.9%	15.9	15.9
Total Intentional Injuries	**806**	**32.1%**	**34.5**	**30.7***
Fall	671	26.7%	41.7	49.5*
All-Terrain Vehicle	184	7.3%	7.8	5.6*
Snowmachine	177	7.0%	8.5	4.2*
Fire or Burn	80	3.2%	3.6	2.3*
Motor Vehicle	80	3.2%	3.5	11.1*
Struck By or Against	71	2.8%	3.5	2.9
Exposure to Forces of Nature	68	2.7%	3.3	2.4*
Other and Unspecified	349	13.9%	14.0	11.3*
Total Unintentional Injuries	**1,680**	**66.9%**	**86.0**	**91.4***
Undetermined Intent	26	1.0%	0.9	0.8
Total Injuries	**2,512**	**100.0%**	**121.4**	**122.9**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
Refer to Appendix A for description of Suicide Attempt data limitations.



Yukon-Kuskokwim Region
Injury Deaths 2007-2016

Summary

- Suicide (36.0%), drowning (14.2%) and unintentional poisoning (8.8%) were the three leading causes of injury death during 2007-2016 among Yukon-Kuskokwim AN/AI people, and represented more than half of injury deaths (59.1%).
- The off-road vehicle death rate for Yukon-Kuskokwim AN/AI people was significantly higher than that for AN/AI people statewide (14.9 and 6.8 per 100,000, respectively, p<0.05).

Leading Causes of Injury Death, Yukon-Kuskokwim, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

Mechanism	Number	%	Region Rate	Statewide Rate
Suicide	139	36.0%	59.5	41.6*
Homicide	33	8.5%	15.8	13.5
Total Intentional Injuries	**172**	**44.6%**	**75.3**	**55.0***
Drowning	55	14.2%	25.1	15.9*
Poisoning	34	8.8%	16.3	37.2*
Exposure to Forces of Nature	32	8.3%	17.0	9.9*
Off-Road Vehicle	31	8.0%	14.9	6.8*
Motor Vehicle	10	2.6%	4.0**	14.1*
Air Transport	7	1.8%	NR	1.2
Other and Unspecified	22	5.7%	12.8	28.8*
Total Unintentional Injuries	**191**	**49.5%**	**93.9**	**113.9***
Undetermined Intent	23	6.0%	10.8	8.3
Total Deaths	**386**	**100.0%**	**179.9**	**177.2**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Percentage is not reported for less than 5 cases, rate is not reported for fewer than 10 cases.

Special Topic

Alaska Native Risk for Traumatic Brain Injuries

The Centers for Disease Control and Prevention describes a traumatic brain injury (TBI) as a disruption in the normal function of the brain that can be caused by a bump, blow, or jolt to the head, or penetrating head injury[1]. Per the Mayo Clinic, these injuries can range from mild to severe[2], causing a variety of symptoms:

Mild TBI

Physical symptoms

- Feeling dazed, confused or disoriented
- Headache
- Nausea or vomiting
- Fatigue or drowsiness
- Sleeping too little or too much
- Problems with speech
- Dizziness or loss of balance

Cognitive or mental symptoms

- Memory or concentration problems
- Mood changes or mood swings
- Feeling depressed or anxious

Sensory symptoms

- Changes in hearing sight, smell, taste
- Sensitivity to light or sound

Moderate to Severe TBI

Physical symptoms

- Weak or numb in fingers and toes
- Persistent or increasing headache
- Repeated vomiting or nausea
- Convulsions or seizures
- Inability to awaken from sleep
- Pupil dilation in one or both eyes
- Loss of coordination

Cognitive or mental symptoms

- Profound confusion
- Agitation, combativeness
- Slurred speech
- Coma and consciousness disorders

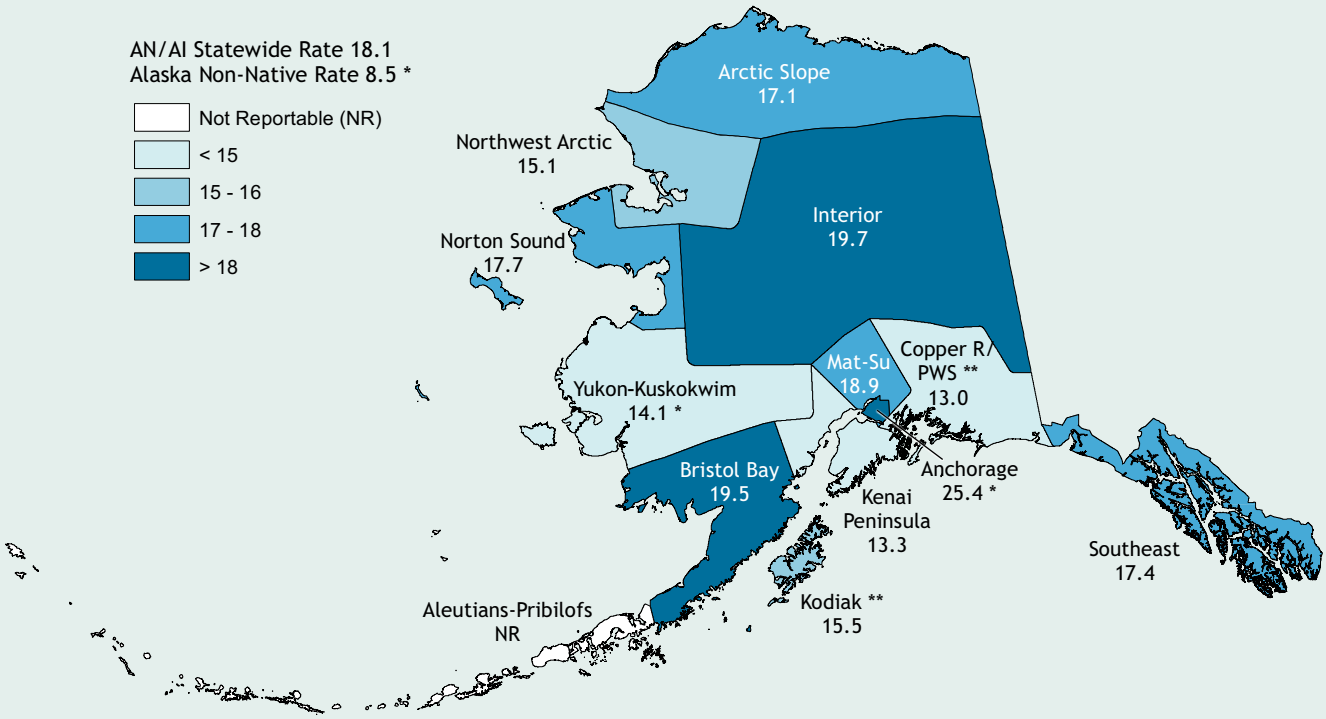
For patients who experience any of these symptoms, especially symptoms resulting from moderate to severe TBI, the injury may lead to life-long developmental difficulties and challenges with educational, occupational, and social endeavors. Patients whose TBI causes more severe physical and mental disabilities may need long-term or lifetime care and treatment.

The statewide 2012-2016 Alaska Native rate for TBI is nearly twice that of the 2014 national population[1] (18.1 and 8.5 per 10,000, respectively). Within Alaska, regional Alaska Native TBI rates range from the lowest in the Kenai Peninsula (13.3 per 10,000) to nearly twice that in the Anchorage Municipality (25.4 per 10,000). The map illustrates the regional variation in TBI rates.

[1] *Centers for Disease Control and Prevention. (2019). Traumatic Brain Injury and Concussion. Retrieved from www.cdc.gov/traumaticbraininjury/index.html.*

[2] *Mayo Clinic (2019). Traumatic brain injury, Symptoms and causes. Retrieved from www.mayoclinic.org/diseases-conditions/traumatic-brain-injury/symptoms-causes/syc-20378557.*

TBI Injury Hospitalization Rate by Region, AN/AI People, 2012-2016



Note: Hospitalization rates per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Summary, 2012-2016

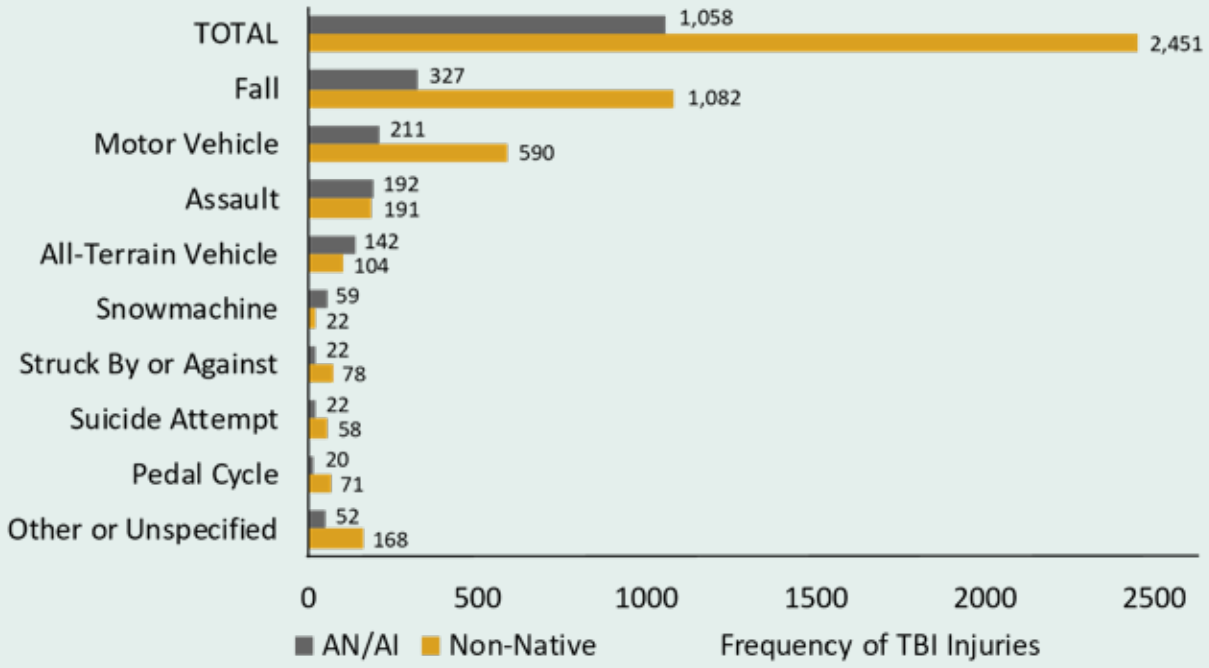
- 18,636 injuries were reported in the Alaska Trauma Registry (ATR), with 3,573 (19.2%) involving brain injuries.
- For Alaska Native (AN/AI) people, 18.6% of all injury hospitalizations involved TBI, similar to non-Native patients (19.4%).
- Patients aged 70 years and older had the highest rate of TBI among AN/AI people (29.4 per 10,000), followed by 20 to 29 year olds (26.0 per 10,000), and 40 to 59 year olds (20.9 per 10,000).
- The TBI hospitalization rate of AN/AI males was 1.9 times that of AN/AI females (23.9 and 12.3 per 10,000, respectively, p<0.05).
- The TBI hospitalization rate of AN/AI people was 2.1 times that of non-Native Alaskans (18.1 and 8.5 per 10,000, respectively).
- Just under one half (48.6%) of TBI-related injury hospitalizations among AN/AI people were confirmed or suspected to be alcohol-related.
- When released from the hospital, 24.5% (259) of AN/AI TBI patients had no change in function, 29.6% (313) had a temporary change in abilities, and expected to return to normal in time, and 2.1% (22) were severely disabled or in a vegetative state.
- For all races in Alaska, fall (39.9%) and motor vehicle incidents (22.9%) were most frequently associated with TBI. AN/AI people had a substantially higher proportion of TBI caused by assault, all-terrain vehicle (ATV) and snowmachine incidents.

Summary: Trend Over Time

- Between 1992-1996 and 2012-2016, the TBI injury hospitalization rate decreased 6.1% among Alaska Native people (19.2 and 18.1 per 10,000, respectively, p<0.05).

Causes of Traumatic Brain Injuries in Alaska, 2012-2016

Data Source: Alaska Division of Public Health, Alaska Trauma Registry



TBI Prevention Efforts

The decrease in rates of TBI was in part due to the work done by Tribal Health Organization Injury Prevention programs around the state. These programs have provided training, resources and outreach events to encourage local residents to improve child passenger safety, increase the use of helmets on ATVs and snowmachines, and reduce the risk of falls at home, especially for the Elder population.

One effort worth noting involves collaboration between Alaska Native Medical Center staff, a regional Tribal health organization, and their local school district. Concerns were raised over a recent surge of ATV-related TBI occurring for youth. The collaborators are developing a curriculum to get local youth engaged in ATV safety and reduce the rate of injuries.

The Alaska Native Tribal Health Consortium (ANTHC) Injury Prevention (IP) program has developed several fall prevention trainings to reduce injuries from falls, including TBI. In 2014, the IP program designed three in-person trainings, targeted to medical staff, caregivers, and community members and Elders. ANTHC IP held 23 of these trainings around the state, presenting to 340 staff and community members. These materials were further developed into an online training that Community Health Aides around the state can take to earn continuing education credits without having to travel to a training center. Currently, in collaboration with the State of Alaska and University of Alaska Anchorage, the online training is being adapted for assisted living staff, to allow them to earn continuing education credits and help prevent falls at their facilities.

Appendices

Data Sources

Hospitalization Data: Alaska Trauma Registry

Injury hospitalization data were obtained from the State of Alaska Trauma Registry (ATR), with the exception of one summary chart, "Leading Causes of Hospitalization by Age Group". The ATR collects data on seriously injured patients in Alaska and the treatment they received. The ATR compiles data from all 24 of Alaska's acute care hospitals. The criteria for inclusion in the registry are patients with injuries who are admitted to an Alaska hospital, held for observation, transferred to another acute care hospital, or declared dead in the emergency department, and for whom contact with the health care system occurred within 30 days of injury.

This report uses all data for Alaska Native and American Indian people (AN/AI) included in the ATR from 1992 to 2016. During that period, the ATR underwent three major changes. In 2010, the ATR changed the database system used to report data, with an increased number of fields for race and diagnoses, expanded reporting of alcohol and drug involvement, and other changes. In October, 2015, in compliance with national regulations, data coding for non-fatal injuries shifted from using the International Classification of Diseases (ICD) version 9 coding system (ICD-9) to ICD-10, with substantial differences in coding methods. The data before and after these changes were categorized as consistently as possible by two separate analysts. Differences were examined and resolved.

Beginning in January 2011, the Alaska Trauma Registry discontinued reporting intentional self-inflicted poisonings for patients aged 18 or older (e.g. adult suicide attempts using poison). The exclusion of these data affects the intentional and suicide attempt count and rate summaries for the 2007-2016 time period, as these data are under-reported from 2011 forward.

More information about the Alaska Trauma Registry may be found at:
dhss.alaska.gov/dph/Emergency/Pages/trauma

Hospitalization Data: Alaska Health Facilities Data Reporting Program

The table titled "Leading Causes of Hospitalization by Age Group" describing all leading causes of Alaska Native hospitalizations used data from 2015 to 2016 from the Alaska Health Facilities Data Reporting Program (HFDR). HFDR includes discharge data from facilities licensed by the Alaska Division of Health Care Services as General Acute Care Hospitals, Long Term Acute Care Hospitals, Critical Access Hospitals, Specialized Psychiatric Hospitals, Alaska Native Tribal Hospitals, and Ambulatory Surgical Centers. Facility ownership in HFDR includes: Tribal, church non-profit, private non-profit, private for-profit, and local, state, and federal government-owned facilities. HFDR discharges do not include the two military owned hospitals at Elmendorf and Fort Wainwright. In this report, HFDR data from hospital facilities, not ambulatory care, are included to align with ATR facility sources as closely as possible.

More information about the Alaska Health Facilities Data Reporting System may be found at:
dhss.alaska.gov/dph/VitalStats/Pages/HFDR/

Death Data: Alaska Health Analytics and Vital Records

The State of Alaska Health Analytics and Vital Records provided fatal injury data from certified copies of death certificates for Alaska from 1992 to 2016. All data for AN/AI people from this time period were used for analysis.

More information about the Alaska Health Analysis and Vital Records may be obtained at:
dhss.alaska.gov/dph/VitalStats/

continued -

Population Data: Alaska Department of Labor and Workforce Development

The Alaska Department of Labor and Workforce Development (AKDOL) produces population summary tables including the Alaska population estimates used to calculate rates for this report. AKDOL estimates population characteristics (age, race, gender, region of residence) for each year using population counts from the decennial census data at the beginning and end of each decade and then making adjustments for all boroughs, census areas and cities in the state. AKDOL adjusts the census numbers using administrative records including birth certificates, death certificates, income tax returns, Permanent Fund applications, school enrollment and driver's licenses, to more accurately estimate the population of each year between censuses.

More information about the AKDOL's population statistics may be found at: *live.laborstats.alaska.gov/pop/*

Cause of Injury Categories

The categories used to classify the external causes of injuries for this report were primarily identified by 1) the injury frequency and 2) the International Classification of Diseases (ICD) version used by the source. As frequencies of causes of injury death differed from those of injury hospitalization, different categories were selected for hospitalizations and deaths.

Hospitalization Data

The Alaska Trauma Registry used both ICD-9 and ICD-10 codes for data received for this report, changing coding systems in October, 2015. The ICD External Cause of Injury matrix developed for this report to categorize injuries by cause is in Appendix C.

For transportation-related injuries, cases were categorized by the larger vehicle involved in the incident (as the likely cause of the injury) rather than the mode of transport of the injured person. Due to the uniqueness of modes of travel in Alaska as well as unique environmental conditions, specific modes of transportation were highlighted, such as "Snowmachine" and "ATV" (all-terrain vehicle).

Upon review of the Alaska Trauma Registry data, it was noted that many snowmachine and ATV-related injuries were coded as motor vehicle incidents, even when it was clear that the largest vehicle involved in the incident was a snowmachine or ATV. To improve the accuracy of the data analysis, the narrative fields of all transportation cases in the ATR data, especially those with a mechanism classification of "Other", were reviewed to determine the specific cause of injury. State of Alaska staff managing the ATR indicated that the ICD code and narrative fields in the database had the same level of accuracy. For cases where the ICD code and narrative fields disagreed, the narrative was used to determine the mechanism for this report, since for most cases it had a higher level of detail than the ICD code. If it was not clear from the narrative what mode of transport the patient had been using, the ICD code was the determinant of the cause of injury.

The review of the data from 2007 to 2016, all races, led to 474 out of 7,602 total ATV, snowmachine, and motor vehicle cases (6.2%) being added to these categories although they had an ICD code that identified a different mechanism or cause. This type of reassignment was not done for mortality data set because a detailed narrative field was not available.

The ATR reports all poisoning hospitalizations for patients under age 18. Prior to 2011, the ATR also reported intentional, occupational, and inhalational poisonings for adults. Starting January 1, 2011, the ATR stopped reporting intentional self-inflicted poisoning hospitalizations for patients aged 18 and

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older. Using historical proportions for suicide attempts by poisoning, we estimate that 1,284 AN/AI adults were hospitalized for intentional self-inflicted poisonings (suicide attempts) from 2011 through 2016. The exclusion of these data affects the frequency and rate summaries included in this report for both suicide attempts and total intentional injury hospitalizations. Since historically intentional self-inflicted poisoning has been a substantial proportion of the means used for suicide attempts for Alaska Native people (75%), the data in this report are under-reported for 2011 forward and should be used with caution.

Death Data

The Alaska Health Analytics and Vital Records used both ICD-9 and ICD-10 for data received for this report, changing between the coding editions in January, 1999. The ICD External Cause of Injury matrix developed for this report to categorize injuries by cause is in Appendix C.

Priorities for injury prevention in Alaska are based on injury frequencies. As a result, certain activities were separated into their own categories to better describe Alaskan injury death. These included the following:

- "Off-Road Vehicle" was separated into its own category from "Other Transport": E820.0-821.9 and V86.0-86.9.
- Due to ICD-9 and ICD-10 coding differences and a limited number of cases, snowmachine and ATV injury deaths are reported in the combined "Off- Road Vehicle" category.
- Transport-related drowning deaths (V90, V92) were moved from the "Other Transport" category and added to the "Drowning" category. (See Appendix C for all codes assigned to drowning.)

Poisoning deaths for all patients are included in the Vital Records mortality data. The dramatic increase in poisoning rates for the 2007-2011 time period is largely explained by changes in international classification codes. Between 2007 and 2009, ICD-10 codes for drug and alcohol intoxication associated with behavioral health (F10.0, F11.0, etc.) were discontinued. The Centers for Disease Control and Prevention (personal communication, 2013) indicated that cases historically assigned to one of the discontinued codes would mostly be assigned unintentional poisoning codes (X45, X60-X65) going forward, increasing that injury category. This change must be taken into consideration for poisoning injuries when comparing data before and after the 2007 to 2009 period.

Calculation of Rates

All rates in this report were age-adjusted unless the data were annotated or stratified by age. The regional maps in the Injury Hospitalization and Injury Death sections and the data tabled in the Regional Injury Profiles section have footnotes that indicate whether there is a statistically significant difference between each regional rate and the statewide rate for AN/AI people.

"Bridged" population estimates from the Alaska Department of Labor were used as the denominator to calculate rates. For the time trends, five years of population (denominator) and occurrence (numerator) data were summed for each time period to calculate the aggregate rates for the corresponding time period.

Unadjusted rates are calculated by dividing the number of observations by the appropriate population, then multiplying by 100,000 (or other appropriate multiplier). This provides an estimate of the proportion of a population that experiences the event of interest (e.g. assault hospitalization rate) during a specified period. These rates can be affected by differences in population structures between

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areas. For example, if an area had a high concentration of older people, this alone would result in higher unadjusted death rates for many causes (falls, cancer).

Age-adjustment of rates is a statistical process applied to rates which allows communities or groups with different age distributions to be compared. Differences in observed rates may result from age differences in population composition. For example, a population with a high proportion of children might have increased rates of playground injuries. To eliminate the differences caused by different age distributions, age-specific rates in a population of interest are applied to a standardized age distribution.

To calculate age-adjusted rates, the unadjusted rate is calculated for each ten-year age group (from 0-9 to 70+ years). These unadjusted rates are multiplied by the proportion that age group makes up of the 2000 U.S. standard population. The individual age-group products are then summed to get the combined age-adjusted rate.

Regional Classification

Maps within this report provide injury death and hospitalization rates by Tribal health region. Many Tribal health organization (THO) service areas are geographically small, with corresponding low numbers for population, injury deaths and hospitalizations. To obtain injury frequencies large enough to allow rate calculations (a minimum of 10 cases is required), some THO service areas were combined to create some of the Tribal health regions used in this report. Where possible, communities were aligned with the THOs included in the region. Because the population data obtained are segregated by state-defined census areas and boroughs, those populations were adjusted by that of several villages to better represent the service areas of the THOs. The 13 regions used and the village populations adjustments are defined at the start of the Regional Injury Profile section of this report.

The community where each injury occurred (rather than the village of residence) was used to define the regional assignment for each case. For example, an injury involving a resident of Bethel that was injured in a motor vehicle crash in Fairbanks would be categorized as an Interior Region injury. For cases where the community was not clear, first the zip code and then the defined census area or borough listed where the injury happened were used to identify the region.

Rate Format

Injury rates are listed as “NR” (not reportable) for injury frequencies lower than 10. Injury rates based on 10 to 19 deaths are flagged (**) to indicate they may be unstable and should be interpreted with caution.

Injury death rates are reported using rates per 100,000 population. Injury hospitalization rates were calculated per 10,000 population.

Other Notes

Alaska Native People and American Indian People

Throughout this document, the term “Alaska Native” and the abbreviation “AN/AI” are used to refer to all Alaska Native and American Indian people who are included in the Alaska state data sets.

Alcohol-related and Drug-related Injury Hospitalizations

This report presents information on alcohol-related injury hospitalizations. If a patient arrives at a hospital within six hours (the time limit set for accurate alcohol testing), the hospital can perform a

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valid blood alcohol or breathalyzer test. If the test is positive, the ATR classifies that case as having confirmed alcohol involvement. If the patient arrives at the hospital more than six hours after being injured and admits to drinking or had a positive alcohol test within six hours at the originating health facility (not the receiving hospital), they are classified as "suspected alcohol involvement". Cases that the ATR classifies as confirmed or suspected alcohol involvement are categorized as alcohol-related in this report.

If someone under the influence of alcohol caused an injury for someone else, the injury case would not be classified as alcohol-involved in the ATR. This may lead to an underestimate of the number of alcohol-related injury hospitalizations.

Frequency Variations

Small differences in frequency totals sometimes occur on tables within the same injury category. This occurs when a case is missing a parameter included the table (e.g. gender, age, or region). These cases are still included to provide as comprehensive a picture of injuries among Alaska Native people as possible.

Percentages

Calculations for percentages are rounded to one decimal place. The percentage total for a table may not add up to 100.0% due to rounding.

Statistical Significance

Differences between rates are considered statistically significantly different if the z-value is greater than 1.96, the critical value at the 0.05 significance level. If compared values are significantly different, they are annotated in the report as "$p<0.05$". Compared rates where the z-value is less than or equal to 1.96 are described as "not significantly different".

Suicide Attempt

In this report, to combine the terms used by ICD-9 and ICD-10 for this injury category, we use the term "Suicide Attempt" (which includes intentional self-harm) to identify all purposely self-inflicted injuries or poisonings and attempted suicide.

Unintentional Injury Hospitalization Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	Rate
Arctic Slope*	371	111.3
Northwest Arctic*	700	105.1
Bristol Bay*	541	104.5
Norton Sound*	657	103.0
Anchorage*	2,421	102.4
Yukon-Kuskokwim*	1,680	86.0
Interior*	982	82.4
Southeast*	1,090	81.7
Kenai Peninsula*	355	79.0
Copper River/Prince William Sound*	134	76.8
Kodiak Area*	148	73.6
Matanuska-Susitna*	387	66.3
Aleutian and Pribilof Islands*	88	57.5
Statewide Non-Native People*	**23,812**	**44.6**
Statewide AN/AI People	**9,667**	**91.4**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*

Unintentional Injury Hospitalization by Type, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	% of total
Fall	4,558	47.2%
Motor Vehicle	1,309	13.5%
ATV	693	7.2%
Snowmachine	510	5.3%
Struck By or Against	346	3.6%
Other or Unspecified	2,251	23.3%
Total	**9,667**	**100.0%**

Unintentional Injury Hospitalization Rate by Gender, Race, and Year, 2007-2016

Data Source: Alaska Trauma Registry

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	1,857	96.3	2,997	132.2	4,854	115.0
1997-2001	2,177	101.9	3,355	137.6	5,532	120.4
2002-2006	2,282	97.9	3,379	130.0	5,661	114.6
2007-2011	2,253	91.6	3,053	111.1	5,306	102.3
2012-2016	1,935	74.8*	2,424	85.4*	4,359	80.9*

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	3,996	46.4	7,622	65.0	11,618	56.7
1997-2001	4,913	52.0	7,957	66.1	12,870	60.0
2002-2006	5,043	48.1	7,430	58.2	12,473	53.9
2007-2011	5,107	44.5	7,158	52.2	12,265	49.0
2012-2016	4,874	36.3*	6,672	44.4*	11,546	40.8*

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

Unintentional Injury Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	485	41.3	677	53.9	1,162	47.8
10-19	468	42.2	867	73.7	1,335	58.4
20-29	481	50.4	1,080	109.3	1,562	80.4
30-39	358	48.7	654	87.6	1,012	68.3
40-49	424	59.9	720	100.6	1,144	80.4
50-59	581	84.8	664	99.5	1,245	92.1
60-69	464	115.6	362	95.6	826	105.9
70 +	925	323.9	452	201.8	1,378	270.4
Total	**4,188**	**82.9**	**5,477**	**98.1**	**9,667**	**91.4**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

Intentional Injury Hospitalization Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	Rate
Norton Sound*	418	53.5
Northwest Arctic*	348	48.9
Yukon-Kuskokwim*	806	34.5
Anchorage*	978	34.1
Interior	401	29.5
Arctic Slope	110	26.1
Southeast*	324	23.0
Bristol Bay*	116	21.1
Kenai Peninsula*	71	13.0
Kodiak Area*	26	12.0
Matanuska-Susitna*	85	12.0
Aleutian and Pribilof Islands	18	10.9**
Copper River/Prince William Sound*	17	9.3**
Statewide Non-Native People*	**3,067**	**5.1**
Statewide AN/AI People	**3,752**	**30.7**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05 .*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Intentional Injury Hospitalization by Type, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	% of total
Assault	1,856	49.5%
Suicide Attempt	1,896	50.5%
Total	**3,752**	**100.0%**

Intentional Injury Hospitalization Rate by Gender, Race, and Year, 2007-2016

Data Source: Alaska Trauma Registry

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	771	32.0	1,012	42.6	1,783	37.3
1997-2001	1,127	41.5	1,236	47.3	2,363	44.4
2002-2006	1,287	44.1	1,285	45.8	2,572	44.9
2007-2011	1,188	39.5	1,290	43.9	2,478	41.6
2012-2016	434	13.4*	839	27.1*	1,273	20.3*

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	768	5.8	1,128	7.7	1,896	6.8
1997-2001	1,142	8.6	1,136	7.9	2,278	8.2
2002-2006	1,042	7.6	1,108	7.3	2,150	7.5
2007-2011	972	6.9	1,052	6.7	2,024	6.8
2012-2016	299	2.1*	744	4.6*	1,043	3.4*

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

Intentional Injury Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	15	1.3**	35	2.8	50	2.1
10-19	452	40.8	317	27.0	769	33.7
20-29	511	53.5	755	76.4	1,267	65.2
30-39	266	36.2	432	57.9	698	47.1
40-49	216	30.5	328	45.8	544	38.2
50-59	121	17.7	200	30.0	321	23.7
60-69	29	7.2	39	10.3	68	8.7
70 +	12	4.2**	23	10.3	35	6.9
Total	**1,622**	**26.2**	**2,129**	**35.2**	**3,752**	**30.7**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Fall Injury Hospitalization Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	Rate
Arctic Slope*	176	66.4
Anchorage*	1,279	62.2
Norton Sound	293	53.7
Southeast	658	51.2
Northwest Arctic	264	48.0
Bristol Bay	208	45.7
Interior*	457	42.6
Yukon-Kuskokwim*	671	41.7
Kenai Peninsula*	156	40.9
Copper River/Prince William Sound*	67	39.1
Kodiak Area*	72	39.0
Aleutian and Pribilof Islands*	55	36.8
Matanuska-Susitna*	161	34.9
Statewide Non-Native People*	**12,456**	**25.3**
Statewide AN/AI People	**4,558**	**49.5**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05 .*

Fall Injury Hospitalization by Cause, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	% of total
Slipping, Tripping, or Stumbling	2,178	47.8%
From One Level to Another	782	17.2%
Stairs or Steps	477	10.5%
From or Out of Building	174	3.8%
Other or Unspecified	947	20.8%
Total	**4,558**	**100.0%**

Fall Injury Hospitalization Rate by Gender, Race, and Year, 2007-2016

Data Source: Alaska Trauma Registry

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	917	57.2	873	45.4	1,790	52.0
1997-2001	1,113	60.4	1,055	50.5	2,168	56.2
2002-2006	1,170	58.6	1,152	51.3	2,322	55.8
2007-2011	1,319	60.5	1,106	46.2	2,425	54.3
2012-2016	1,183	50.2*	949	38.0*	2,132	44.9*

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	2,011	27.9	2,485	26.3	4,496	27.5
1997-2001	2,780	33.5	2,750	26.8	5,530	30.7
2002-2006	3,036	32.1	2,811	25.3	5,847	29.1
2007-2011	3,267	30.7	2,959	24.3	6,226	27.8
2012-2016	3,296	25.2*	2,933	20.9*	6,229	23.2*

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

Fall Injury Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	211	18.0	265	21.1	476	19.6
10-19	103	9.3	210	17.9	313	13.7
20-29	158	16.5	219	22.2	377	19.4
30-39	171	23.3	187	25.0	358	24.2
40-49	248	35.0	292	40.8	540	37.9
50-59	393	57.4	332	49.8	725	53.6
60-69	389	96.9	212	56.0	601	77.0
70 +	827	289.6	338	150.9	1,166	228.8
Total	**2,502**	**55.1**	**2,055**	**42.1**	**4,558**	**49.5**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

Suicide Attempt Hospitalization Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	Rate
Norton Sound*	311	38.3
Northwest Arctic*	164	22.1
Yukon-Kuskokwim*	483	18.6
Interior	205	15.1
Southeast*	175	12.1
Anchorage*	322	10.7
Arctic Slope*	44	10.2
Bristol Bay*	48	8.2
Kenai Peninsula*	43	7.6
Matanuska-Susitna*	54	7.6
Kodiak Area*	15	6.7**
Aleutian and Pribilof Islands	8	NR
Copper River/Prince William Sound	8	NR
Statewide Non-Native People*	**1,784**	**3.0**
Statewide AN/AI People	**1,896**	**14.7**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Suicide Attempt Hospitalization by Cause, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	% of total
Poisoning	1,213	64.0%
Cut or Pierce	354	18.7%
Hanging, Strangulation, or Suffocation	133	7.0%
Firearms	129	6.8%
Other or Unspecified	67	3.5%
Total	**1,896**	**100.0%**

Suicide Attempt Hospitalization Rate by Gender, Race, and Year, 2007-2016

Data Source: Alaska Trauma Registry

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	505	19.9	327	12.9	832	16.4
1997-2001	847	30.3	497	18.1	1,344	24.2
2002-2006	1,022	34.2	560	19.3	1,582	26.6
2007-2011	913	29.8	524	17.0	1,437	23.3
2012-2016	238	6.9*	220	6.3*	458	6.6*

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	644	4.9	440	3.0	1,084	3.9
1997-2001	1,028	7.7	575	4.0	1,603	5.7
2002-2006	927	6.7	565	3.8	1,492	5.2
2007-2011	854	6.0	536	3.4	1,390	4.7
2012-2016	190	1.4*	204	1.3*	394	1.4*

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

Suicide Attempt Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	<5	NR	<5	NR	<5	NR
10-19	419	37.8	211	17.9	630	27.6
20-29	341	35.7	281	28.4	623	32.1
30-39	169	23.0	132	17.7	301	20.3
40-49	132	18.6	70	9.8	202	14.2
50-59	67	9.8	33	4.9	100	7.4
60-69	18	4.5	9	NR	27	3.5
70 +	<5	NR	5	NR	9	NR
Total	**1,151**	**18.1**	**744**	**11.5**	**1,896**	**14.7**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Assault Hospitalization Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	Rate
Northwest Arctic*	184	26.8
Anchorage*	656	23.4
Yukon-Kuskokwim	323	15.9
Arctic Slope	66	15.9
Norton Sound	107	15.2
Interior	196	14.5
Bristol Bay	68	12.9
Southeast*	149	10.9
Aleutian and Pribilof Islands*	10	6.3**
Kenai Peninsula*	28	5.3
Kodiak Area*	11	5.3**
Matanuska-Susitna*	31	4.4
Copper River/Prince William Sound	9	NR
Statewide Non-Native People*	**1,283**	**2.1**
Statewide AN/AI People	**1,856**	**15.9**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
**Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Assault Hospitalization by Cause, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	% of total
Fight or Brawl	941	50.7%
Cut or Pierce	264	14.2%
Struck By or Against	192	10.3%
Firearms	92	5.0%
Perpetrator of Child or Adult Abuse	92	5.0%
Other or Unspecified	275	14.8%
Total	**1,856**	**100.0%**

Assault Hospitalization Rate by Gender, Race, and Year, 2007-2016

Data Source: Alaska Trauma Registry

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	266	12.1	685	29.7	951	20.9
1997-2001	280	11.2	739	29.2	1,019	20.2
2002-2006	265	10.0	725	26.5	990	18.2
2007-2011	275	9.7	766	26.9	1,041	18.3
2012-2016	196	6.5*	619	20.8*	815	13.7*

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	124	0.9	688	4.7	812	2.9
1997-2001	114	0.9	561	3.9	675	2.5
2002-2006	115	0.8	543	3.6	658	2.3
2007-2011	118	0.9	516	3.2	634	2.1
2012-2016	109	0.7*	540	3.3*	649	2.1*

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

Assault Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	14	1.2**	32	2.5	46	1.9
10-19	33	3.0	106	9.0	139	6.1
20-29	170	17.8	474	48.0	644	33.1
30-39	97	13.2	300	40.2	397	26.8
40-49	84	11.9	258	36.1	342	24.0
50-59	54	7.9	167	25.0	221	16.3
60-69	11	2.7**	30	7.9	41	5.3
70 +	8	NR	18	8.0**	26	5.1
Total	**471**	**8.1**	**1,385**	**23.7**	**1,856**	**15.9**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Motor Vehicle Injury Hospitalization Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	Rate
Anchorage*	549	20.1
Kenai Peninsula*	76	14.3
Copper River/Prince William Sound	22	13.3
Matanuska-Susitna	86	12.6
Kodiak Area	25	10.8
Interior	141	10.4
Southeast	136	9.7
Bristol Bay	54	9.7
Arctic Slope*	36	7.5
Aleutian and Pribilof Islands	11	7.3**
Northwest Arctic*	40	5.7
Norton Sound*	38	5.2
Yukon-Kuskokwim*	80	3.5
Statewide Non-Native People*	**3,725**	**6.3**
Statewide AN/AI People	**1,309**	**11.1**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Motor Vehicle Injury Hospitalization by Person Injured, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	% of total
Driver	346	26.4%
Passenger	339	25.9%
Pedestrian	309	23.6%
Motorcyclist	124	9.5%
Pedal Cyclist	84	6.4%
Other or Unspecified Person	107	8.2%
Total	**1,309**	**100.0%**

Motor Vehicle Injury Hospitalization Rate by Gender, Race, and Year, 2007-2016

Data Source: Alaska Trauma Registry

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	234	10.5	275	11.7	509	11.1
1997-2001	269	11.1	340	13.1	609	12.2
2002-2006	259	9.7	282	10.1	541	9.9
2007-2011	275	9.5	409	13.5	684	11.6
2012-2016	246	8.4*	379	12.6	625	10.5

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	818	7.8	1,370	10.8	2,188	9.3
1997-2001	948	8.1	1,467	11.4	2,415	9.8
2002-2006	811	6.4	1,259	9.2	2,070	7.8
2007-2011	729	5.4	1,258	8.5	1,987	7.0
2012-2016	598	4.2*	1,140	7.1*	1,738	5.7*

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

Motor Vehicle Injury Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	30	2.6	44	3.5	74	3.0
10-19	88	7.9	159	13.5	247	10.8
20-29	142	14.9	228	23.1	370	19.0
30-39	66	9.0	110	14.7	176	11.9
40-49	52	7.3	98	13.7	150	10.5
50-59	82	12.0	85	12.7	167	12.4
60-69	21	5.2	35	9.2	56	7.2
70 +	40	14.0	29	12.9	69	13.5
Total	**521**	**9.0**	**788**	**13.1**	**1,309**	**11.1**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.

ATV Injury Hospitalization Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	Rate
Norton Sound*	109	15.8
Bristol Bay*	85	14.7
Northwest Arctic*	106	13.3
Arctic Slope*	40	8.4
Yukon-Kuskokwim*	184	7.8
Kodiak Area	11	5.6**
Kenai Peninsula	25	5.0
Interior	59	4.5
Matanuska-Susitna	30	3.9
Southeast*	19	1.3**
Aleutian and Pribilof Islands	8	NR
Anchorage*	7	NR
Copper River/Prince William Sound	6	NR
Statewide Non-Native People*	**830**	**1.4**
Statewide AN/AI People	**693**	**5.6**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

ATV Injury Hospitalization by Person Injured, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	% of total
Driver	429	62.0%
Passenger	163	23.6%
Pedestrian	50	7.2%
Unspecified ATV Occupant	28	4.0%
Other or Unspecified Person	22	3.2%
Total	**692**	**100.0%**

ATV Injury Hospitalization Rate by Gender, Race, and Year, 2007-2016

Data Source: Alaska Trauma Registry

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	76	3.1	174	7.1	250	5.1
1997-2001	109	3.7	216	7.7	325	5.7
2002-2006	147	5.2	224	7.9	371	6.5
2007-2011	136	4.3	213	6.9	349	5.6
2012-2016	129	4.2*	214	6.7	343	5.4

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	58	0.5	172	1.3	230	0.9
1997-2001	58	0.5	220	1.6	278	1.1
2002-2006	106	0.8	291	2.0	397	1.4
2007-2011	130	0.9	317	2.1	447	1.5
2012-2016	108	0.7*	275	1.7*	383	1.2*

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

ATV Injury Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	22	1.9	35	2.8	57	2.3
10-19	98	8.8	100	8.5	199	8.7
20-29	53	5.5	146	14.8	199	10.2
30-39	26	3.5	51	6.8	77	5.2
40-49	25	3.5	40	5.6	65	4.6
50-59	19	2.8**	27	4.0	46	3.4
60-69	6	NR	12	3.2**	18	2.3**
70 +	16	5.6**	16	7.1**	32	6.3
Total	**265**	**4.3**	**427**	**6.8**	**693**	**5.6**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Snowmachine Injury Hospitalization Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	Rate
Northwest Arctic*	115	16.0
Arctic Slope*	36	8.9
Yukon-Kuskokwim*	177	8.5
Bristol Bay*	36	7.0
Norton Sound*	47	6.0
Interior	62	4.7
Matanuska-Susitna*	11	1.4**
Aleutian and Pribilof Islands	<5	NR
Anchorage	9	NR
Copper River/Prince William Sound	7	NR
Kenai Peninsula	8	NR
Kodiak Area	<5	NR
Southeast	<5	NR
Statewide Non-Native People	**401**	**0.7**
Statewide AN/AI People	**510**	**4.2**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
**Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Snowmachine Injury Hospitalization by Person Injured, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	n	% of total
Driver	382	74.9%
Passenger	81	15.9%
Pedestrian	19	3.7%
Other or Unspecified Person	28	5.5%
Total	**510**	**100.0%**

Snowmachine Injury Hospitalization Rate by Gender, Race, and Year, 2007-2016

Data Source: Alaska Trauma Registry

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	80	3.4	279	12.1	359	7.7
1997-2001	101	3.9	311	12.3	412	8.0
2002-2006	96	3.5	290	10.4	386	7.0
2007-2011	71	2.4	243	8.4	314	5.4
2012-2016	36	1.2*	160	5.0*	196	3.1*

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	48	0.4	243	1.7	291	1.1
1997-2001	83	0.6	288	2.0	371	1.4
2002-2006	54	0.4	264	1.7	318	1.1
2007-2011	55	0.4	203	1.3	258	0.9
2012-2016	25	0.2*	118	0.8*	143	0.5*

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

Snowmachine Injury Hospitalization Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	<5	NR	15	1.2**	19	0.8**
10-19	27	2.4	82	7.0	109	4.8
20-29	29	3.0	131	13.3	160	8.2
30-39	16	2.2**	63	8.4	79	5.3
40-49	11	1.6**	54	7.5	65	4.6
50-59	<5	NR	31	4.6	34	2.5
60-69	12	3.0**	17	4.5**	29	3.7
70 +	5	NR	10	4.5**	15	2.9**
Total	**107**	**1.8**	**403**	**6.6**	**510**	**4.2**

Note: Hospitalization rate per 10,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Unintentional Injury Death Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	Rate
Anchorage*	412	177.1
Bristol Bay	66	130.0
Interior	145	121.7
Kodiak Area	20	112.2
Northwest Arctic	62	100.9
Copper River/Prince William Sound	17	99.5**
Yukon-Kuskokwim*	191	93.9
Norton Sound*	59	89.9
Aleutian and Pribilof Islands	14	86.8**
Matanuska-Susitna*	41	78.8
Arctic Slope*	25	74.2
Kenai Peninsula*	33	71.7
Southeast*	85	65.0
Statewide Non-Native People*	**2,565**	**45.8**
Statewide AN/AI People	**1,194**	**113.9**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Unintentional Injury Death by Type, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	% of total
Poisoning	403	33.8%
Drowning	180	15.1%
Motor Vehicle	161	13.5%
Exposure to Forces of Nature	103	8.6%
Off-Road Vehicle (ATV, Snowmachine)	80	6.7%
Fall	70	5.9%
Threat to Breathing	55	4.6%
Smoke, Fire, or Flames	37	3.1%
Other or Unspecified	104	8.8%
Total	**1,194**	**100.0%**

Unintentional Injury Death Rate by Gender, Race and Year, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	138	66.1	403	185.3	541	125.5
1997-2001	147	64.5	348	160.0	495	111.0
2002-2006	132	54.6	347	147.4	479	99.9
2007-2011	182	73.2	380	146.5	562	109.6
2012-2016	229	87.3*	402	148.3*	631	117.7

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	243	25.3	864	72.3	1,107	49.7
1997-2001	268	26.5	762	64.4	1,030	45.9
2002-2006	325	28.0	823	63.3	1,148	46.1
2007-2011	378	31.2	859	59.6	1,237	46.1
2012-2016	384	27.9*	942	61.7*	1,326	45.3*

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*

Unintentional Injury Death Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	22	18.7	46	36.6	68	28.0
10-19	34	30.7	57	48.5	91	39.8
20-29	68	71.2	167	169.0	235	120.9
30-39	66	89.8	147	196.9	213	143.8
40-49	78	110.2	133	185.9	212	148.9
50-59	61	89.1	118	176.9	179	132.4
60-69	21	52.3	53	139.9	74	94.9
70 +	61	213.6	60	267.9	121	237.5
Total	**411**	**80.4**	**782**	**147.4**	**1,194**	**113.9**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.

Intentional Injury Death Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	Rate
Norton Sound*	64	78.0
Yukon-Kuskokwim*	172	75.3
Copper River/Prince William Sound	11	68.2**
Northwest Arctic	49	63.4
Anchorage	172	59.9
Interior	72	53.5
Arctic Slope	21	49.9
Bristol Bay	25	47.4
Matanuska-Susitna	26	39.0
Kenai Peninsula*	15	29.2**
Southeast*	35	25.4
Kodiak Area	6	NR
Aleutian and Pribilof Islands	5	NR
Statewide Non-Native People*	**1,385**	**22.6**
Statewide AN/AI People	**675**	**55.0**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people tatewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Intentional Injury Death by Type, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	% of total
Suicide	517	76.6%
Homicide	158	23.4%
Total	**675**	**100.0%**

Intentional Injury Death Rate by Gender, Race and Year, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	71	31.0	226	92.0	297	61.8
1997-2001	66	24.9	233	89.9	299	57.2
2002-2006	83	28.5	211	74.8	294	51.7
2007-2011	73	25.0	231	76.5	304	50.9
2012-2016	93	30.7	278	86.1	371	58.7

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	115	9.7	507	38.2	622	24.7
1997-2001	114	9.1	412	32.0	526	20.8
2002-2006	136	9.9	438	31.7	574	21.0
2007-2011	125	8.4	512	33.4	637	21.3
2012-2016	165	10.9	583	35.9	748	23.9

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.

Intentional Injury Death Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	6	NR	9	NR	15	6.2**
10-19	30	27.1	85	72.3	115	50.3
20-29	54	56.5	202	204.4	256	131.7
30-39	23	31.3	100	134.0	123	83.0
40-49	29	41.0	56	78.3	85	59.7
50-59	9	NR	41	61.5	50	37.0
60-69	11	27.4**	11	29.0**	22	28.2
70 +	<5	NR	5	NR	9	NR
Total	166	27.9	509	81.7	675	55.0

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Suicide Death Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	Rate
Copper River/Prince William Sound	11	68.2**
Norton Sound*	56	66.0
Yukon-Kuskokwim*	139	59.5
Northwest Arctic	43	56.5
Arctic Slope	20	46.6
Interior	57	42.8
Anchorage	109	36.8
Bristol Bay	19	36.7**
Kenai Peninsula	14	27.7**
Matanuska-Susitna*	13	18.6**
Southeast*	24	17.2
Aleutian and Pribilof Islands	5	NR
Kodiak Area	5	NR
Statewide Non-Native People*	**1,128**	**18.4**
Statewide AN/AI People	**517**	**41.6**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Suicide Death by Cause, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	% of total
Hanging, Strangulation, or Suffocation	191	36.9%
Rifle, Shotgun, or Larger Firearm	139	26.9%
Handgun	72	13.9%
Other or Unspecified Firearm	71	13.7%
Poisoning	27	5.2%
Other or Unspecified	17	3.3%
Total	**517**	**100.0%**

Suicide Death Rate by Gender, Race and Year, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	45	18.9	179	71.1	224	45.2
1997-2001	41	14.5	166	61.3	207	37.9
2002-2006	57	19.2	179	62.7	236	41.1
2007-2011	55	18.7	183	59.3	238	39.1
2012-2016	59	19.3	220	67.5	279	43.7

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	72	6.3	372	29.0	444	18.2
1997-2001	79	6.3	310	25.0	389	15.8
2002-2006	96	6.8	329	24.6	425	15.8
2007-2011	101	6.7	419	27.6	520	17.4
2012-2016	124	8.1*	484	30.0	608	19.5

** Statistically significant difference from the 1992-1996 rate, p<0.05.*
Note: Death rate per 100,000 age-adjusted to 2000 US standard population.

Suicide Death Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	<5	NR	<5	NR	<5	NR
10-19	24	21.7	72	61.2	96	42.0
20-29	42	44.0	176	178.1	218	112.2
30-39	16	21.8**	70	93.8	86	58.0
40-49	19	26.8**	50	69.9	69	48.5
50-59	<5	NR	27	40.5	31	22.9
60-69	7	NR	6	NR	13	16.7**
70 +	<5	NR	<5	NR	<5	NR
Total	**114**	**18.9**	**403**	**63.7**	**517**	**41.6**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Poisoning Death Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	Rate
Anchorage*	190	71.3**
Bristol Bay	21	42.0
Kenai Peninsula	16	34.9**
Interior	42	34.0
Matanuska-Susitna*	19	33.0**
Norton Sound	14	25.8**
Southeast	30	22.4
Northwest Arctic*	13	21.4**
Yukon-Kuskokwim*	34	16.3
Kodiak Area	9	NR
Arctic Slope	5	NR
Aleutian and Pribilof Islands	<5	NR
Copper River/Prince William Sound	<5	NR
Statewide Non-Native People*	**851**	**13.6****
Statewide AN/AI People	**403**	**37.2****

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Poisoning Death by Poison Type, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	% of total
Alcohol	183	45.4%
Opioids (primary or contributing cause)	112	27.8%
Other Drugs	90	22.3%
Other or Unspecified Poisons	18	4.5%
Total	**403**	**100.0%**

Poisoning Death Rate by Gender, Race and Year, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	19	9.6**	25	12.9	44	11.3
1997-2001	41	16.7	40	18.0	81	17.4
2002-2006	40	16.8	43	16.9	83	16.9
2007-2011	88	34.3	105	39.6	193	37.0
2012-2016	95	35.3*	115	39.7*	210	37.5*

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	21	1.7	75	5.5	96	3.7
1997-2001	60	5.2	101	6.8	161	6.1
2002-2006	105	7.6	174	11.5	279	9.6
2007-2011	124	8.5	279	17.0	403	13.0
2012-2016	134	8.8*	312	18.8*	446	14.0*

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Poisoning Death Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	<5	NR	<5	NR	<5	NR
10-19	7	NR	8	NR	15	6.6**
20-29	30	31.4	54	54.7	84	43.2
30-39	49	66.7	56	75.0	105	70.9
40-49	52	73.4	47	65.7	99	69.5
50-59	30	43.8	45	67.5	75	55.5
60-69	10	24.9**	7	NR	17	21.8**
70 +	<5	NR	<5	NR	7	NR
Total	**183**	**34.6**	**220**	**39.7**	**403**	**37.2**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Drowning Death Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	Rate
Bristol Bay*	15	29.7**
Yukon-Kuskokwim*	55	25.1
Northwest Arctic	15	22.3**
Interior	24	19.8
Norton Sound	11	17.7**
Southeast	18	13.8**
Anchorage*	16	5.4**
Arctic Slope	7	NR
Aleutian and Pribilof Islands	<5	NR
Copper River/Prince William Sound	<5	NR
Kenai Peninsula	<5	NR
Kodiak Area	<5	NR
Matanuska-Susitna	<5	NR
Statewide Non-Native People*	**190**	**3.1**
Statewide AN/AI People	**180**	**15.9**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Drowning Death by Type, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	% of total
In Natural Water	66	36.7%
Involving Watercraft	48	26.7%
On Off-Road Vehicle	25	13.9%
Other or Unspecified	41	22.8%
Total	**180**	**100.0%**

Drowning Death Rate by Gender, Race and Year, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	16	5.8**	107	47.9	123	26.6
1997-2001	13	4.8**	102	43.2	115	23.6
2002-2006	21	6.4	90	35.4	111	20.7
2007-2011	9	NR	73	25.4	82	14.1
2012-2016	20	6.9	77	28.0*	97	17.4*

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	21	1.8	115	8.3	136	5.2
1997-2001	9	NR	101	8.0	110	4.4
2002-2006	15	1.1**	90	6.4	105	3.8
2007-2011	18	1.3**	78	5.1	96	3.3
2012-2016	16	1.1**	78	4.6*	94	2.9*

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Drowning Death Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	6	NR	7	NR	13	5.3**
10-19	<5	NR	15	12.8**	17	7.4**
20-29	<5	NR	39	39.5	43	22.1
30-39	<5	NR	29	38.8	32	21.6
40-49	<5	NR	31	43.3	36	25.3
50-59	6	NR	15	22.5**	21	15.5
60-69	<5	NR	7	NR	9	NR
70 +	<5	NR	6	NR	8	NR
Total	**29**	**5.0**	**150**	**26.7**	**180**	**15.9**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Motor Vehicle Death Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	Rate
Anchorage*	70	27.2
Interior	21	16.9
Norton Sound	10	12.2**
Yukon-Kuskokwim*	10	4.0**
Kenai Peninsula	9	NR
Matanuska-Susitna	9	NR
Southeast	9	NR
Copper River/Prince William Sound	6	NR
Aleutian and Pribilof Islands	5	NR
Bristol Bay	<5	NR
Kodiak Area	<5	NR
Arctic Slope	<5	NR
Northwest Arctic	<5	NR
Statewide Non-Native People*	**499**	**8.3**
Statewide AN/AI People	**161**	**14.1**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Motor Vehicle Death by Person Injured, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	% of total
Pedestrian	60	37.3%
Motor Vehicle Occupant	56	34.8%
Motor or Pedal Cyclist	9	5.6%
Other or Unspecified Person	36	22.4%
Total	**161**	**100.0%**

Motor Vehicle Death Rate by Gender, Race and Year, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	43	18.8	70	32.3	113	25.6
1997-2001	22	8.8	63	28.2	85	18.1
2002-2006	19	7.9**	59	22.9	78	15.5
2007-2011	33	11.2	44	16.7	77	13.9
2012-2016	39	13.0*	45	15.6*	84	14.2*

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	114	11.1	254	21.4	368	16.4
1997-2001	90	7.5	232	19.3	322	13.4
2002-2006	93	7.4	254	19.3	347	13.4
2007-2011	77	5.6	177	11.7	254	8.8
2012-2016	68	4.7*	177	10.7*	245	7.8*

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Motor Vehicle Death Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	<5	NR	<5	NR	7	NR
10-19	19	17.1**	9	NR	28	12.3
20-29	21	22.0	19	19.2**	40	20.6
30-39	7	NR	16	21.4**	23	15.5
40-49	9	NR	13	18.2**	22	15.5
50-59	6	NR	17	25.5**	23	17.0
60-69	<5	NR	6	NR	8	NR
70 +	5	NR	5	NR	10	19.6**
Total	**72**	**12.1**	**89**	**16.2**	**161**	**14.1**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Homicide Death Rate by Region, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	Rate
Anchorage*	63	23.1
Matanuska-Susitna	13	20.4**
Yukon-Kuskokwim	33	15.8
Interior	15	10.8**
Southeast	11	8.2**
Norton Sound	8	NR
Bristol Bay	6	NR
Northwest Arctic	6	NR
Aleutian and Pribilof Islands	<5	NR
Arctic Slope	<5	NR
Copper River/Prince William Sound	<5	NR
Kenai Peninsula	<5	NR
Kodiak Area	<5	NR
Statewide Non-Native People*	**257**	**4.2**
Statewide AN/AI People	**158**	**13.5**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference between the regional and AN/AI people statewide rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Homicide Death by Cause, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	n	% of total
Firearm	75	47.5%
Sharp Object	26	16.5%
Hanging, Strangulation, or Suffocation	12	7.6%
Other or Unspecified	45	28.5%
Total	**158**	**100.0%**

Homicide Death Rate by Gender, Race and Year, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Alaska AN/AI People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	26	12.1	47	20.9	73	16.6
1997-2001	25	10.4	67	28.6	92	19.3
2002-2006	26	9.2	32	12.2	58	10.6
2007-2011	18	6.3**	48	17.2	66	11.7
2012-2016	34	11.5	58	18.6	92	15.0

	Alaska Non-Native People					
	Female		Male		Total	
	n	Rate	n	Rate	n	Rate
1992-1996	43	3.4	135	9.2	178	6.5
1997-2001	35	2.8	102	7.0	137	5.0
2002-2006	40	3.0	109	7.2	149	5.2
2007-2011	24	1.7	93	5.9	117	3.9
2012-2016	41	2.8	99	5.8*	140	4.4*

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
** Statistically significant difference from the 1992-1996 rate, p<0.05.*
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*

Homicide Death Rate by Gender and Age, AN/AI People, 2007-2016

Data Source: Alaska Health Analytics and Vital Records

	Female		Male		Total	
Age	n	Rate	n	Rate	n	Rate
0-9	6	NR	9	NR	15	6.2**
10-19	6	NR	13	11.1**	19	8.3**
20-29	12	12.6**	26	26.3	38	19.6
30-39	7	NR	30	40.2	37	25.0
40-49	10	14.1**	6	NR	16	11.2**
50-59	5	NR	14	21.0**	19	14.1**
60-69	<5	NR	5	NR	9	NR
70 +	<5	NR	<5	NR	5	NR
Total	**52**	**9.0**	**106**	**18.0**	**158**	**13.5**

Note: Death rate per 100,000 age-adjusted to 2000 US standard population.
*** Rates based on 10-19 cases are not statistically reliable and should be used with caution.*
NR: Rate is not reported for fewer than 10 cases.

Appendix C. Injury Mechanisms with Corresponding ICD-9 and ICD-10 Codes

This table identifies the primary groups of ICD-9 and -10 codes assigned to each injury mechanism as used in this Atlas.

Mechanism	Primary ICD-9 codes assigned	Primary ICD-10 codes assigned
Air Transport	E840.1-E844.9	V95-V97
Assault, Homicide	E960-E969	T36-T65 with a 6th character of 3, X85.0-X99.9, Y00.0-Y09.9, Y87.1
All-Terrain Vehicle (ATV)	E821	V86
Cut, Pierce	E920	W25-W29, W45-W46
Drowning	E830, E832, E910	V90.0-V90.9, V92.0-V92.9, W65.0-W74.9
Exposure to Natural Forces (including Hypothermia)	E900-E909	T33-T35, T68-T69, W53-W56, W94, X20-X39
Fall	E880-E888	W00.0-W19.9
Fire and Burn	E890-E899, E924	X00-X19
Foreign Body	E914-E915	T15-T19
Machinery	E919	W24, W28-W31
Motor Vehicle	E810-E819, E822-E825	V02-V04, V09, V12-14, V19-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V85, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2, Y85.0
Off-Road Vehicle		V86
Overexertion, Strain	E927	X50
Pedal Cycle	E826	V01, V10-V11, V16-V19
Poisoning	E850-E869	T36-T65 with a 6th character of 1 (Except: T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, and T49.9 with a 5th character of 1, 2, 3, or 4); T51-T65; X40-X49
Snowmachine	E820	V86
Struck By or Against	E916-E917	W20-W22, W50-W51
Suicide Attempt	E950-E959	T36-T65 with a 6th character of 2, T71 with a 6th character of 2, X60.0-X84.9, Y87.0
Threat to Breathing	E911-E913	T17, T71, W75-W84
Watercraft	E831, E833-838	V91, V93, V94
Undetermined Intent	E980-E989	T36-T65 with a 6th character of 4, Y10-Y34, Y87.2
Other or Unspecified	All Codes Not Listed in Other Categories	All Codes Not Listed in Other Categories

Appendix D: Glossary

Acronyms

AKDOL	Alaska Department of Labor and Workforce Development
AN/AI	Alaska Native and American Indian
ANTHC	Alaska Native Tribal Health Consortium
ATR	Alaska Trauma Registry
ATV	All-Terrain Vehicle
BBAHC	Bristol Bay Area Health Corporation
CHA	Community Health Aide
COPD	Chronic Obstructive Pulmonary Disease
HAVRS	Health Analytics and Vital Records
HFDR	Health Facility Discharge Reporting System
ICD	International Classification of Diseases
IP	Injury Prevention Program
NR	Not Reportable
TBI	Traumatic Brain Injury
THO	Tribal Health Organization
VPSO	Village Public Safety Officer
YKHC	Yukon-Kuskokwim Health Corporation

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Injury Prevention Program
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