

Alaska Native Injury Atlas:

An Update



October 2014

ALASKA NATIVE
INJURY
PREVENTION



ALASKA NATIVE
EPIDEMIOLOGY
CENTER

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This report is available on the ANTHC Injury Prevention website at: http://www.anthc.org/chs/wp/injprev/injurydata.cfm

and on the ANTHC Alaska Native Epidemiology Center Website at: http://www.anthctoday.org/epicenter/publications



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ALASKA NATIVE INJURY ATLAS

Notes:

Introduction

"Alaska Natives are the healthiest people in the world." Alaska Native Tribal Health Consortium's Vision

This report provides an overview of injury among Alaska Native and American Indian people in Alaska (AN/AI). It describes the leading causes of injury deaths and injury hospitalizations 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 to identify whether IP efforts are successful. In addition, this surveillance can identify disparities between groups which can help prioritize IP efforts. Information about injuries is important for focusing and evaluating IP efforts and activities.

Intentional injuries are purposeful or deliberate harm caused by someone to themselves or another person, such as homicide, assault, suicide and suicide attempt. Unintentional injuries are those where harm was not caused on purpose or intended, such as poisoning, drowning, or motor vehicle crashes. Intentional and unintentional injuries combined were the leading cause of death for AN/AI during 2002-2011. Unintentional injuries alone were the third leading cause of death during this time period, preceded only by cancer and heart disease.

Summaries of statewide data use the most recent decade of data available, 2002 through 2011, for both deaths and hospitalizations. This report also includes regional information, dividing the state into twelve regions. The regional summaries include data from 1992 through 2011.

We recognize that data and the information gained from the interpretation of the data are only part of the decision-making process. Nevertheless, data can guide advocacy, policy making, strategic and program planning, and program evaluation. This document serves as a useful resource for those interested in Alaska Native injury-related issues and enables them to put data into action.



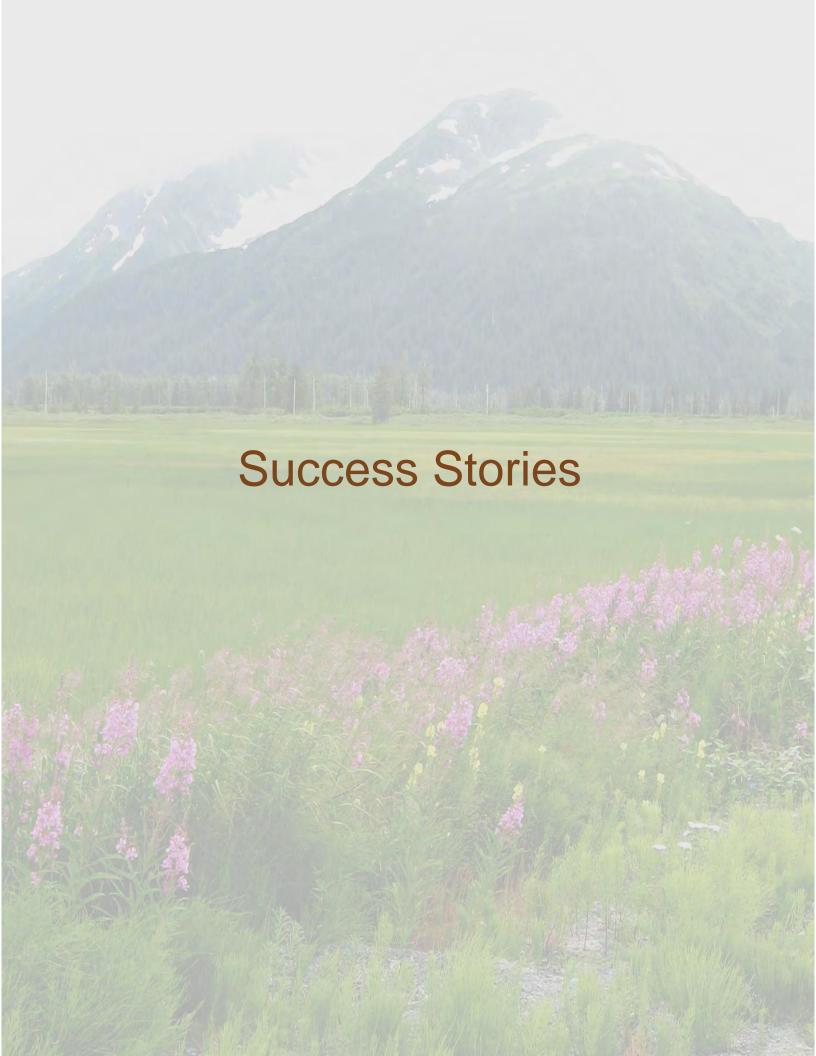
Executive Summary

Injury Deaths 2002-2011

- 1,718 Alaska Native people died from injuries: 1,037 (60.3%) due to unintentional injuries, 603 (35.1%) due to intentional injuries, and 78 (4.5%) of undetermined intent. The three leading causes of injury death among Alaska Native people (AN/AI) were suicide, poisoning, and drowning. These three causes comprised 53.7% of all injury deaths.
- Between 1992-1995 and 2008-2011, there was a significant decrease in the rates of death due to drowning (56.5%), motor vehicle crash (45.6%), homicide (37.9%), and suicide (14.4%) among AN/AI.
- Between 1992-1995 and 2008-2011, there appeared to be a significant increase in the rates of death due to poisoning (360.5%), due in part to international changes in diagnostic coding.
- AN/AI were 3.9 times as likely to die by drowning as non-Natives statewide.
- AN/AI aged 20-29 years had the highest intentional injury death rate of any age group, with suicide
 as the most frequent cause. Those aged 70 and older had the highest unintentional injury death
 rate of any age group, with falls as the most frequent cause.

Injury Hospitalizations 2002-2011

- There were 16,141 hospitalizations for injury among AN/AI: 10,955 (67.9%) due to unintentional injuries, 5,069 (31.4%) due to intentional injuries, and 117 (0.7%) of undetermined intent. The three leading causes of injury hospitalizations among AN/AI were falls, suicide attempts, and assaults. These three caused 60.4% of all injury hospitalizations.
- Between 1992-1995 and 2008-2011, there was a significant decrease in the rates of assault (13.8%), motor vehicle-related (31.3%), and snowmachine-related (24.5%) injury hospitalizations among AN/AI.
- Between 1992-1995 and 2008-2011, there was a significant increase in the rates of suicide attempt (73.7%) and all-terrain vehicle-related (13.8%) injury hospitalizations among AN/AI. One out of three (34.4%) of all-terrain vehicle-related hospitalizations were for youth aged 10-19.
- AN/AI were 7.8 times as likely to be hospitalized for assault injuries and 6.6 times as likely to be hospitalized for snowmachine-related injuries as non-Natives statewide.
- AN/AI aged 20-29 years had the highest intentional injury hospitalization rate of any age group, with suicide as the most frequent cause. Those aged 70 and older had the highest unintentional injury hospitalization rate of any age group, with falls as the most frequent cause.
- Alcohol was documented as being associated with 63.2% of all intentional injury hospitalizations and 32.2% of all unintentional injury hospitalizations among AN/AI, based on blood alcohol and breathalyzer tests and other notes in the patient's medical record.





Increasing Safety Gear Availability in Rural Communities



Accessing safety gear can be a challenge in rural and remote communities. Tribal injury prevention (IP) programs use innovative ways to increase access to safety gear for the communities they serve. Examples of the products provided include car seats, helmets, ice cleats, survival kits, carbon monoxide detectors, and float coats.

Most tribal IP programs have non-profit safety shops where people can purchase safety equipment. IP programs without shops make safety products available for purchase through their offices. They advertise to area residents by word of mouth, by circulating fliers, and by taking samples of safety gear (such as float coats, ice cleats, and helmets) on community visits. Most safety gear is sold at cost to hub community and outlying community residents.



Recently, several tribal IP programs acquired dealer status for selling snow-machine float coats and float pants. This status allows them to purchase gear at costs well below market price. This results in lower prices for the consumer, which may increase the purchase and use of safety equipment in the community. This flotation gear is stylish and warm enough that some residents choose to wear it in place of a parka. This regular use increases the potential safety benefits.



Some safety items may be provided at no cost or as incentives. In 2012, one tribal IP program provided local police with survival kits to be awarded to community members who wore helmets. Several regions give out free ice cleats every year to elders and/or pregnant women to help prevent falls on ice. Reflective tape is distributed by tribal IP programs in the fall, most often in partnership with schools, to improve pedestrian safety during the dark Alaskan winters.

Drowning Prevention Outreach Efforts In Rural Alaska



Drowning caused more deaths for Alaska Native people (AN/AI) than any other unintentional injury over the past 20 years. However, the drowning death rate for AN/AI has decreased by nearly half (18.0 in 1992-1995 to 11.8 in 2008-2011, per 100,000). This decrease has been attributed in part to several local efforts throughout the state. Two are highlighted below.

The White Float Coat Pilot Project

In northern communities in Alaska, bowhead whaling is an annual activity. There is a high risk of injury while whaling as it involves hunting a 25- to 70-ton animal using small boats such as umiaqs (traditional skin boat) or skiffs. Hunters use many safety measures during these hunts but historically did not use life jackets. They wear white during hunts as camouflage and out of respect for the whales and white float coats were not available. Supported by the Alaska Office of Boating Safety and the U.S. Coast Guard, the Alaska Native Tribal Health Consortium's Injury Prevention (IP) Program engaged a manufacturer to make white float coats and led a pilot project to determine if whalers found it acceptable to wear white float coats during their hunts.



Eleven villages in Alaska engage in bowhead whaling. At the 2010 Alaska Eskimo Whaling Commission meeting, the project was endorsed by whaling captains who helped select the most comfortable jacket style for use during whaling activities. From 2010 to 2012, 24 captains representing these villages participated in the pilot test and their crews were outfitted with white float coats. Of those participating, four crews also received float pants to determine if they were also acceptable.



Pilot study results strongly favored the white flotation gear. Subsequently, demand has encouraged a commercial outfitter and two tribally-run safety shops to sell white flotation gear. Two crews that participated in the pilot project liked the white flotation gear so much that they led local efforts to get all whaling crews in their villages outfitted with it.

Drowning Prevention Outreach Efforts In Rural Alaska (continued)

Kids Don't Float Program

The Kids Don't Float program is a statewide drowning prevention effort supported by the State of Alaska. It has two components: 1) life jacket loaner board stations and 2) water safety training for youth.

The loaner board program started in Homer, Alaska in 1995 by a concerned community member with three stations that had youth life jackets hanging on boards that could be borrowed and returned. Because of its immediate success, the Alaska Department of Health and Social Services, Alaska Office of Boating Safety, U.S. Coast Guard District 17, and Safe Kids Alaska Coalition partnered to expand the program statewide. By 2013, there were 634 loaner boards in 216 communities around the state.

Tribal injury prevention (IP) programs are helping to promote and expand the Kids Don't Float programs. The Alaska Native Tribal Health Consortium's IP program and regional IP offices have reached out to communities to connect them with the loaner board program and establish new loaner board sites.

The State of Alaska also leads a Kids Don't Float Peer Educator program which has a curriculum that provides simple, entertaining lessons that can be presented to grade school students and community members to increase their knowledge of water safety. Tribal IP staff have worked with the Alaska Office of Boating Safety staff to coordinate peer training for high school students who then provide lessons to grade school students. In addition, volunteers, including Coast Guard staff and auxiliary, lead this training in rural communities around the state.









Increasing Safe Gun Storage in Rural Alaska

In Alaska, particularly in rural areas, many households use guns for subsistence hunting. Although the number of unintentional injuries with guns is relatively small, intentional injuries with guns are more frequent. From 2002 to 2011, 349 Alaska Native people died from gun-related injuries: 277 (79.3%) were suicide deaths and only 10 (2.9%) were unintentional. Of the 338 gun-related injury hospitalizations over the same period, 143 (42%) were suicide attempt or self harm and 122 (36.1%) were unintentional.

Subsistence is essential to the Alaskan way of life. Tribal injury prevention (IP) programs promote safe storage and education to reduce gun-related injuries. Both a 2003 study by Horn et al. ⁽¹⁾ and community feedback received by tribal IP staff determined that individual gun locks were ineffective because users found them inconvenient. Instead, gun safes or security cabinets were preferred because they could store multiple guns and other harmful items in the home such as medication and knives. A 2012 study by Grossman et al. showed that rural Alaska households had a substantial increase in safe gun storage after gun safes were installed. ⁽²⁾

Since the Grossman study, several tribal IP programs have increased the availability of gun safes. For example, in 2010, IP programs based at the Yukon-Kuskokwim and Bristol Bay Area Health







Corporations' IP programs worked with local housing authorities and the Alaska Native Tribal Health Consortium to install gun safes in 72 newly-built homes in those regions. Since then, the Bristol Bay Area Housing Authority modified home floor plans to allow the installation of fireproof gun safes. During 2011, five regional IP offices had gun safe projects, reaching approximately 300 families.

Since 2011, the Yukon-Kuskokwim Health Corporation (YKHC) safety shop, a non-profit store selling safety gear, has sold gun safes at cost and provided shipping to remote villages. This keeps the price the same for all residents. The YKHC safety shop has sold out of gun safes every year.

- (1) Horn A, et al. Community based program to improve firearm storage practices in rural Alaska. *Injury Prevention* 2003;9:231–234.
- (2) Grossman D, et al. Improving firearm storage in Alaska native villages: a randomized trial of household gun cabinets. *Am J Public Health*. 2012;102 Suppl 2:S291-7.

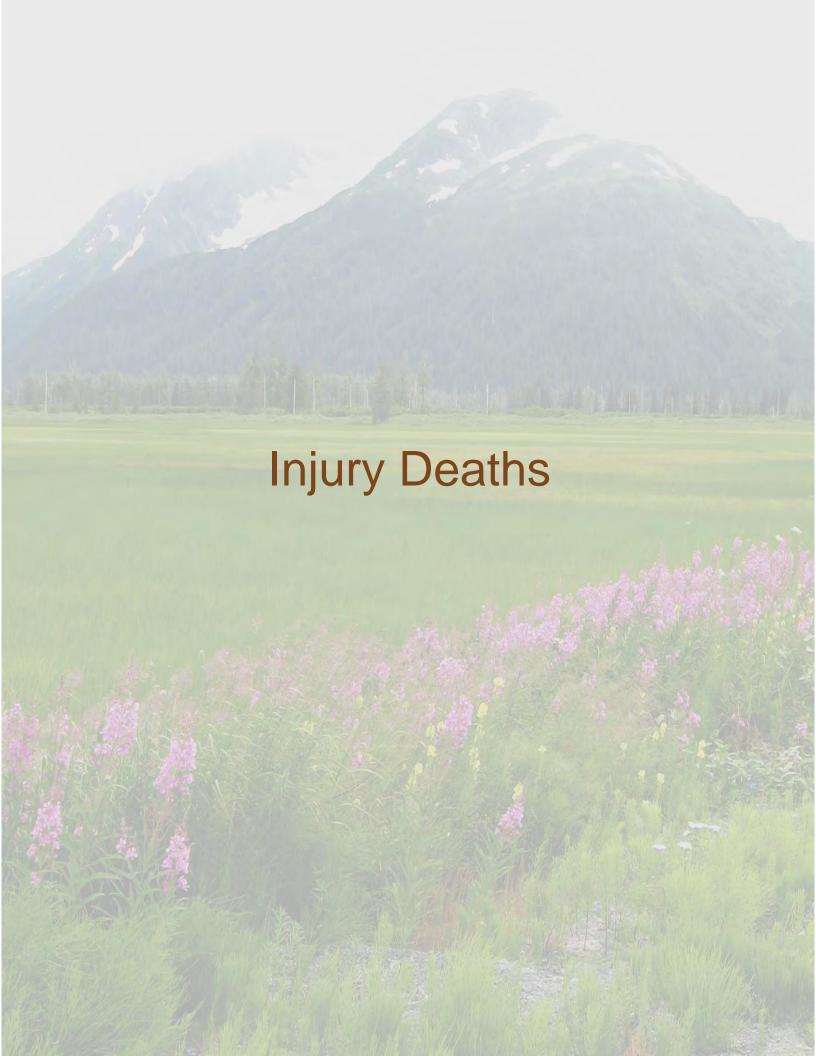




Figure 1. Leading Causes of Death by Age Group, Alaska Native People, 2001-2010

Data Source: National Center for Injury Prevention and Control, WISQARS Database.

Note: Colored blocks indicate causes of death related to injury.

Rank

	1	2	3	4	5
<1 year	Congenital Anomalies 45	SIDS 44	Unintentional Injury 38	Short Gestation 15	Influenza and Pneumonia 13
1-4 years	Unintentional Injury 29	+	30	13	13
5-9 years	Unintentional Injury 25	†			
10-14 years	Unintentional Injury 45	†			
15-24 years	Suicide 216	Unintentional Injury 29	Homicide 33	Heart Disease 15	†
25-34 years	Unintentional Injury 156	Suicide 104	Heart Disease 34	Homicide 27	Malignant Neoplasms 25
35-44 years	Unintentional Injury 200	Suicide 76	Malignant Neoplasms 67	Heart Disease 65	Liver Disease 45
45-54 years	Malignant Neoplasms 213	Unintentional Injury 176	Heart Disease 155	Liver Disease 53	Suicide 45
55-64 years	Malignant Neoplasms 337	Heart Disease 180	Unintentional Injury 71	Chronic Lower Resp. Disease 49	Liver Disease 40
65+ years	Malignant Neoplasms 905	Heart Disease 713	Chronic Lower Resp. Disease 279	Cerebrovascular	Unintentional Injury 123
All Ages	Malignant Neoplasms 1,560	Heart Disease 1,172	Unintentional Injury 1,026	Suicide 469	Cerebrovascular 356

[†] Causes resulting in fewer than 10 deaths are not reported

ALASKA NATIVE INJURY ATLAS

Figure 2. Leading Causes of Injury Death by Region, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	Aleutians & Pribilofs	Anchorage & MatSu	Arctic Slope	Bristol Bay	Copper River/PWS	Interior	Kenai Peninsula	Kodiak	Northwest Arctic	Norton Sound	Southeast	Yukon- Kuskokwim	Total
4	§§	Poisoning	Suicide	Drowning	Suicide	Suicide	Suicide	Suicide	Suicide	Suicide	Suicide	Suicide	Suicide
1		135	28	19	6	54	13	5	48	64	28	130	478
2		Suicide	Off-Road Vehicle	Poisoning	Motor Vehicle	Poisoning	Motor Vehicle	§§	Drowning	Poisoning	Poisoning	Drowning	Poisoning
2		86	9	14	6	32	13		17	14	28	57	276
3		Motor Vehicle	Drowning	Suicide	§§	Motor Vehicle	Poisoning		Off-Road Vehicle	Drowning	Drowning	Off-Road Vehicle	Drowning
3		70	8	12		20	9		11	14	17	28	168 [‡]
4		Homicide	Motor Vehicle	Off-Road Vehicle		Excessive Cold	§§		Excessive Cold	Motor Vehicle	Homicide	Homicide	Motor Vehicle
4		51	5	11		20			10	11	12	26	158
5		Excessive Cold	§§	Excessive Cold		Drowning			Poisoning	Homicide	Motor Vehicle	Poisoning	Homicide
3		21		7		18			10	11	10	25	125
Total	22	491	61	97	25	199	51	20	117	154	134	346	1,718 [‡]

^{§§} Categories with fewer than 5 deaths are not reported

Figure 3. Leading Causes of Injury Death by Age, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	0 to 9 years	10 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years	60 to 69 years	70 years and older	Total
1	Threats to Breathing	Suicide	Suicide	Poisoning	Poisoning	Poisoning	Poisoning	Fall	Suicide
	33	108	195	72	79	46	13	12	478
2	Drowning	Homicide	Poisoning	Suicide	Suicide	Suicide	Motor Vehicle	Excessive Cold	Poisoning
	19	28	48	71	67	25	12	8	276
3	Motor Vehicle	Motor Vehicle	Drowning	Motor Vehicle	Drowning	Motor Vehicle	Drowning	Smoke, Fire or Flames	Drowning
3	12	26	37	34	30	23	9	6	169
	Homicide	Drowning	Off-Road	Drowning	Motor	Excessive	Suicide	Threats to	Motor
4	7	25	Vehicle 29	31	Vehicle 21	Cold 16	8	Breathing 6	Vehicle 158
_	Smoke, Fire	Off-Road	Homicide	Homicide	Excessive	Drowning	Excessive	Poisoning	Homicide
5	or Flames 6	Vehicle 24	27	27	Cold 20	14	Cold 8	5	125
Total	101	259	420	297	289	168	83	101	1,718

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[‡] One case missing the region of occurrence

Figure 4. Leading Causes of Injury Death, Alaska Native Females, All Regions, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	0 to 9 years	10 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years	60 to 69 years	70 years and older	Total
1	Threats to Breathing	Suicide	Suicide 38	Suicide 21	Poisoning 37	Poisoning	Poisoning	§§	Poisoning
	13	31	38	21	3/	19	9		129
_	Drowning	Motor	Poisoning	Poisoning	Suicide	Motor	§§		Suicide
2	7	Vehicle 14	17	39	13	Vehicle 6			111
	§ §	Drowning	Homicide	Motor	Homicide	§§			Motor
3		7	13	Vehicle 9	9				Vehicle 51
		Homicide	Motor	Homicide	Motor				Homicide
4		7	Vehicle 9	5	Vehicle 7				44
_		Off-Road	§ §	§ §	Excessive				Drowning
5		Vehicle 7			Cold 7				24
Total	40	77	89	95	89	46	23	42	501

^{§§} Categories with fewer than five deaths are not reported

Figure 5. Leading Causes of Injury Death Alaska Native Males, All Regions, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

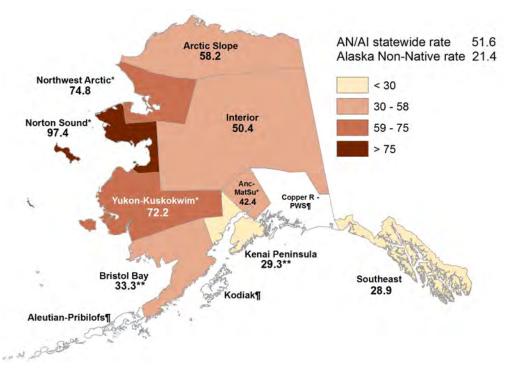
	0 to 9 years	10 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years	60 to 69 years	70 years and older	Total
1	Threats to Breathing	Suicide	Suicide	Suicide	Suicide	Poisoning	Motor Vehicle	Fall	Suicide
	20	77	157	50	54	27	10	8	367
2	Drowning	Homicide	Drowning	Poisoning	Poisoning	Suicide	Excessive Cold	Off-Road Vehicle	Poisoning
	12	21	36	33	42	22	8	5	147
3	Motor Vehicle	Drowning	Poisoning	Drowning	Drowning	Motor Vehicle	Drowning	§ §	Drowning
3	11	18	31	28	27	17	7		145
	§§	Off-Road	Off-Road	Motor	Motor	Drowning	Off-Road		Motor
4		Vehicle 17	Vehicle 26	Vehicle 25	Vehicle 14	13	Vehicle 6		Vehicle 107
5		Motor Vehicle	Motor Vehicle	Homicide	Excessive Cold	Excessive Cold	§ §		Homicide
,		12	16	22	13	13			81
Total	61	182	331	202	200	122	60	59	1,217

^{§§} Categories with fewer than five deaths are not reported

Intentional Injuries

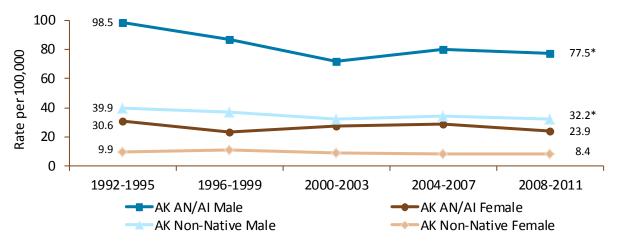
Data Source: Alaska Bureau of Vital Statistics. Additional data available in tables B1-B4 in Appendix B.

Figure 6. Intentional Injury Death Rate ¹¹ by Region, Alaska Native People, 2002-2011



^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Figure 7. Intentional Injury Death Rate ^{††} by Gender, Race and Year, 1992-2011



^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

10 INJURY DEATHS

^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

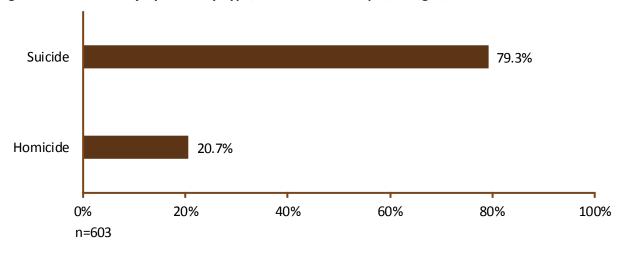
^{**} Rate is based on 10-19 deaths and should be interpreted with caution

[¶] Rate not calculated due to small number of deaths (<10)

^{*} Significantly different from the 1992-1995 rate, p<0.05

Intentional Injuries (continued)

Figure 8. Intentional Injury Death by Type, Alaska Native People, All Ages, 2002-2011

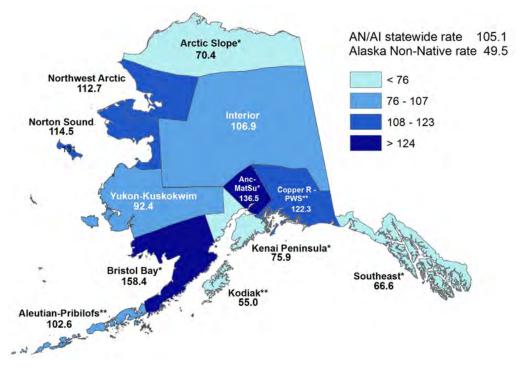


- During 2002-2011, 603 Alaska Native people died as a result of intentional injuries. This represented 35.1% of all injury deaths (1,718).
- Between 1992-1995 and 2008-2011, the intentional injury death rate decreased 21.1% among Alaska Native people (64.6 and 51.0 per 100,000, respectively, p<0.05).
- Suicide was the mechanism for almost four out of every five intentional injury deaths (79.3%).
- Alaska Native people aged 20-29 years had the highest intentional injury death rate of any age group (133.4 per 100,000). The rate for this age group was 2.6 times the age-adjusted rate for all ages (51.6 per 100,000, p<0.05).
- Alaska Native males were 2.9 times more likely than Alaska Native females to die from intentional injuries (2002-2011, 77.0 and 27.0 per 100,000, respectively, p<0.05).
- Alaska Native people statewide were 2.4 times more likely to die from intentional injuries than non-Natives (2002-2011, 51.6 and 21.4 per 100,000, respectively, p<0.05).

Unintentional Injuries

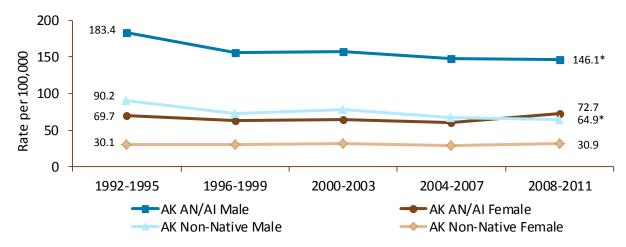
Data Source: Alaska Bureau of Vital Statistics. Additional data available in tables B5-B8 in Appendix B.

Figure 9. Unintentional Injury Death Rate ^{††} by Region, Alaska Native People, 2002-2011



^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Figure 10. Unintentional Injury Death Rate ⁺⁺ by Gender, Race and Year, 1992-2011



 $[\]ensuremath{^{\dagger\dagger}}$ Death rate per 100,000 age-adjusted to 2000 US standard population

12 INJURY DEATHS

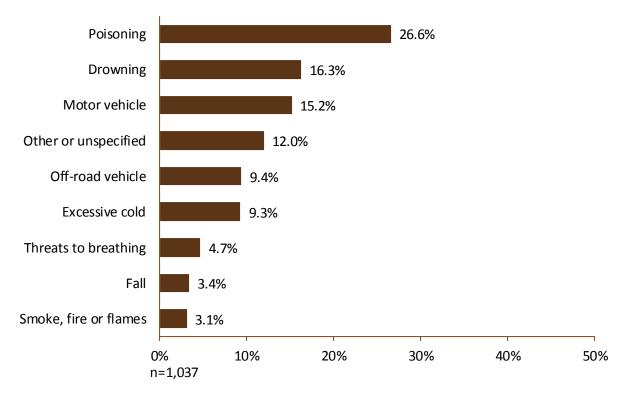
^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

^{*} Significantly different from the 1992-1995 rate, p<0.05

Unintentional Injuries (continued)

Figure 11. Unintentional Injury Death by Type, Alaska Native People, All Ages, 2002-2011

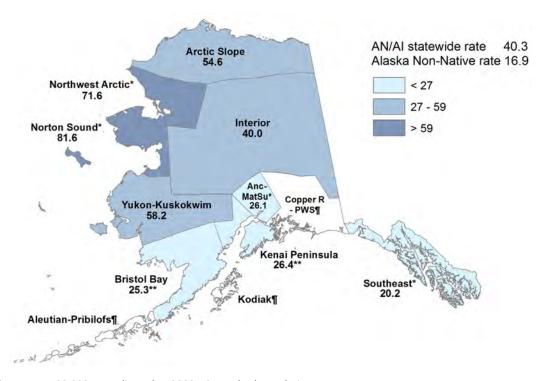


- During 2002-2011, 1,037 Alaska Native people died as a result of unintentional injuries. This represented 60.3% of all injury deaths (1,718).
- Between 1992-1995 and 2008-2011, the unintentional injury death rate decreased 13.2% among Alaska Native people (126.1 and 109.5 per 100,000, respectively, p<0.05).
- Poisoning was the mechanism for more than one out of every four (26.6%) unintentional injury deaths.
- Alaska Native people aged 70 and older had the highest unintentional injury death rate of any age group (200.6 per 100,000). The rate for this age group was 1.9 times the age-adjusted rate for all ages (105.1 per 100,000, p<0.05).
- Alaska Native males were 2.2 times more likely than Alaska Native females to die from unintentional injuries (2002-2011, 123.6 and 55.5 per 100,000, respectively, p<0.05).
- Alaska Native people statewide were 2.1 times more likely to die from unintentional injuries than non-Natives (2002-2011, 105.1 and 49.5 per 100,000, respectively, p<0.05).

Suicide

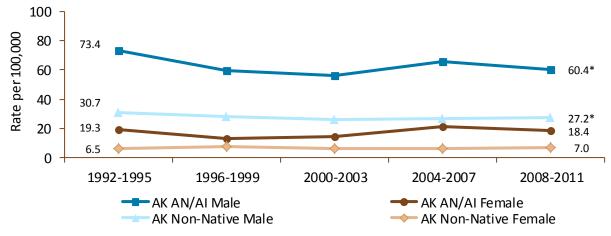
Data Source: Alaska Bureau of Vital Statistics. Additional data available in tables B9-B12 in Appendix B.

Figure 12. Suicide Death Rate ¹¹ by Region, Alaska Native People, 2002-2011



^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Figure 13. Suicide Death Rate ⁺⁺ by Gender, Race and Year, 1992-2011



^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

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^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

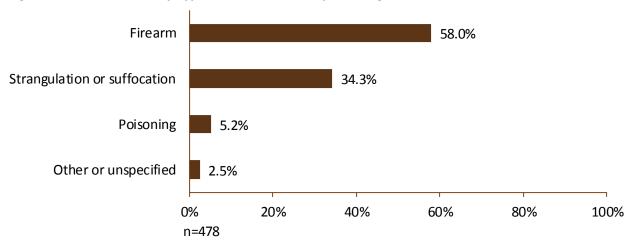
^{**} Rate is based on 10-19 deaths and should be interpreted with caution

 $[\]P$ Rate not calculated due to small number of deaths (<10)

^{*} Significantly different from the 1992-1995 rate, p<0.05

Suicide (continued)

Figure 14. Suicide Death by Type, Alaska Native People, All Ages, 2002-2011

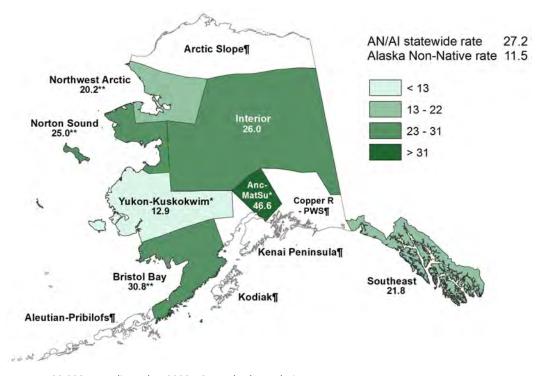


- During 2002-2011, 478 Alaska Native people died as a result of suicide. This represented 27.8% of all injury deaths (1,718).
- Between 1992-1995 and 2008-2011, the suicide death rate decreased 14.4% among Alaska Native people (46.4 and 39.7 per 100,000, respectively, p<0.05).
- Firearms were the mechanism for over half of the suicide deaths (58.0%).
- Alaska Native people aged 20-29 years had the highest suicide death rate of any age group (117.1 per 100,000). The rate for this age group was 2.9 times the age-adjusted rate for all ages (40.3 per 100,000, p<0.05).
- Alaska Native males were 3.3 times more likely than Alaska Native females to die from suicide (2002-2011, 63.1 and 19.4 per 100,000, respectively, p<0.05).
- Alaska Native people statewide were 2.4 times more likely to die from suicide than non-Natives (2002-2011, 40.3 and 16.9 per 100,000, respectively, p<0.05).

Poisoning

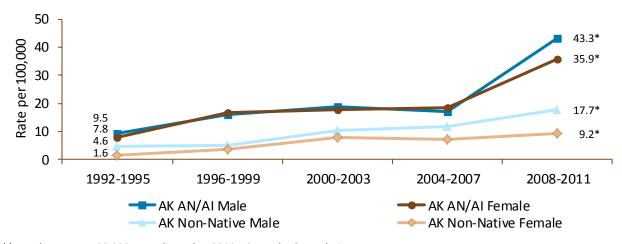
Data Source: Alaska Bureau of Vital Statistics. Additional data available in tables B13-B16 in Appendix B.

Figure 15. Poisoning Death Rate ^{††} by Region, Alaska Native People, 2002-2011



^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Figure 16. Poisoning Death Rate ^{††} by Gender, Race and Year, 1992-2011



 $[\]ensuremath{^{\dagger\dagger}}$ Death rate per 100,000 age-adjusted to 2000 US standard population

16 INJURY DEATHS

^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

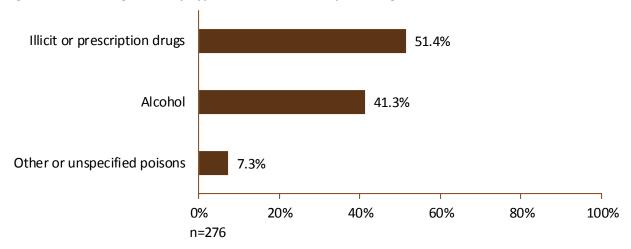
^{**} Rate is based on 10-19 deaths and should be interpreted with caution

[¶] Rate not calculated due to small number of deaths (<10)

^{*} Significantly different from the 1992-1995 rate, p<0.05

Poisoning (continued)

Figure 17. Poisoning Death by Type, Alaska Native People, All Ages, 2002-2011

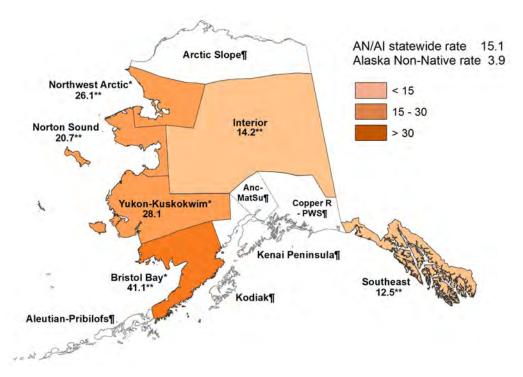


- During 2002-2011, 276 Alaska Native people died as a result of unintentional poisoning. This represented 16.1% of all injury deaths (1,718).
- Between 1992-1995 and 2008-2011, the unintentional poisoning death rate appears to have increased 360.5% among Alaska Native people (8.6 and. 39.6 per 100,000, respectively, p<0.05).
- Illicit and prescription drugs were the mechanism for more than half of the unintentional poisoning deaths (51.4%).
- Alaska Native people aged 40-49 years had the highest unintentional poisoning death rate of any age group (52.0 per 100,000). The rate for this age group was 1.9 times the age-adjusted rate for all ages (27.2 per 100,000, p<0.05).
- Alaska Native males and Alaska Native females had similar unintentional poisoning death rates (2002-2011, 25.3 and 22.5 per 100,000, respectively).
- Alaska Native people statewide were 2.4 times more likely to die from unintentional poisoning than non-Natives (2002-2011, 27.2 and 11.5 per 100,000, respectively, p<0.05).

Drowning

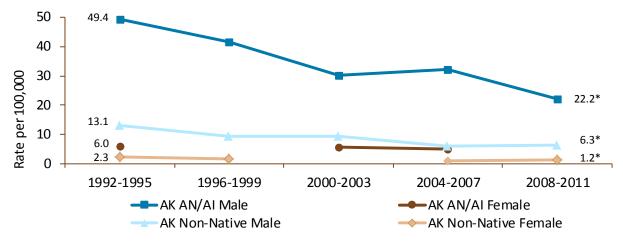
Data Source: Alaska Bureau of Vital Statistics. Additional data available in tables B17-B20 in Appendix B.

Figure 18. Drowning Death Rate ^{††} by Region, Alaska Native People, 2002-2011



^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Figure 19. Drowning Death Rate ^{††} by Gender, Race and Year, 1992-2011



^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Note: No data for time period with less than 10 deaths.

18 INJURY DEATHS

^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

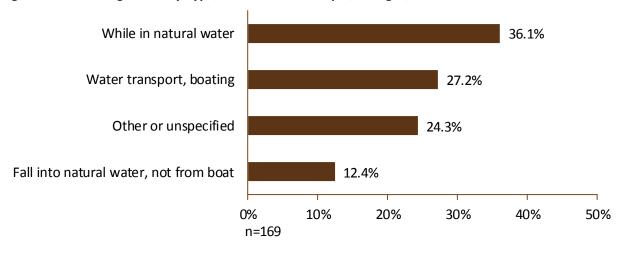
^{**} Rate is based on 10-19 deaths and should be interpreted with caution

[¶] Rate not calculated due to small number of deaths (<10)

^{*} Significantly different from the 1992-1995 rate, p<0.05

Drowning (continued)

Figure 20. Drowning Death by Type, Alaska Native People, All Ages, 2002-2011

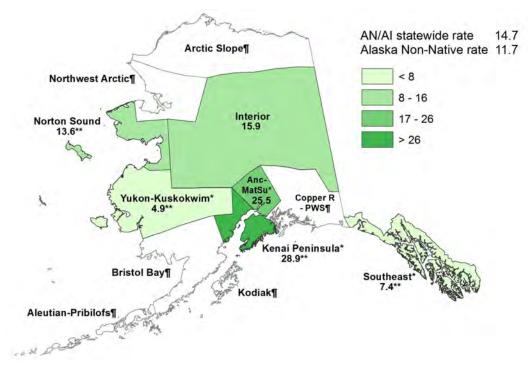


- During 2002-2011, 169 Alaska Native people died as a result of drowning. This represented 9.8% of all injury deaths (1,718).
- Between 1992-1995 and 2008-2011, the drowning death rate decreased 56.5% among Alaska Native people (27.6 and 12.0 per 100,000, respectively, p<0.05).
- Either being in or falling into natural water were the circumstances for almost half of the drowning deaths (48.5%).
- Alaska Native people aged 20-29 years had the highest drowning death rate of any age group (22.2 per 100,000). The rate for this age group was 1.5 times the age-adjusted rate for all ages (15.1 per 100,000, p<0.05).
- Alaska Native males were 6.0 times more likely than Alaska Native females to die from drowning (2002-2011, 24.9 and 4.2 per 100,000, respectively, p<0.05).
- Alaska Native people statewide were 3.9 times more likely to die from drowning than non-Natives (2002-2011, 15.1 and 3.9 per 100,000, respectively, p<0.05).

Motor Vehicle

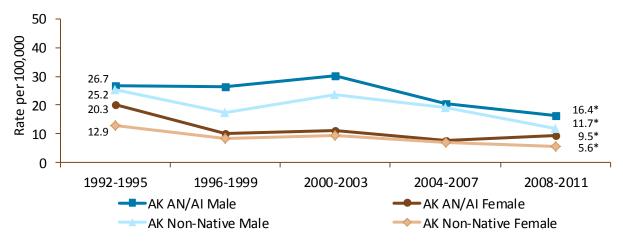
Data Source: Alaska Bureau of Vital Statistics. Additional data available in tables B21-B24 in Appendix B.

Figure 21. Motor Vehicle Death Rate ^{††} by Region, Alaska Native People, 2002-2011



^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Figure 22. Motor Vehicle Death Rate ^{††} by Gender, Race and Year, 1992-2011



^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

20 INJURY DEATHS

^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

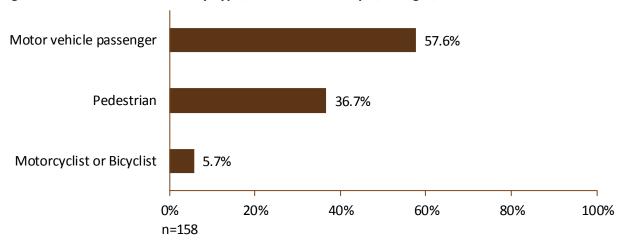
^{**} Rate is based on 10-19 deaths and should be interpreted with caution

[¶] Rate not calculated due to small number of deaths (<10)

^{*} Significantly different from the 1992-1995 rate, p<0.05

Motor Vehicle (continued)

Figure 23. Motor Vehicle Death by Type, Alaska Native People, All Ages, 2002-2011

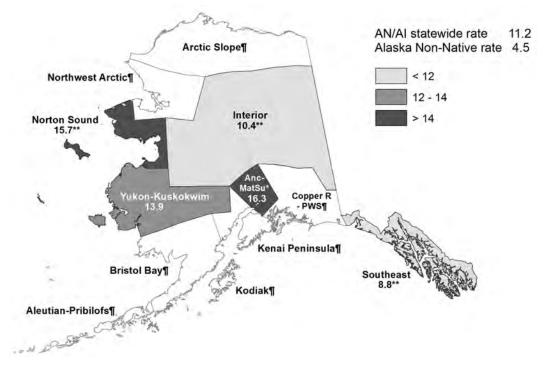


- During 2002-2011, 158 Alaska Native people died as a result of motor vehicle crash. This represented 9.2% of all injury deaths (1,718).
- Between 1992-1995 and 2008-2011, the motor vehicle crash death rate decreased 45.6% among Alaska Native people (23.7 and 12.9 per 100,000, respectively, p<0.05).
- Motor vehicle passengers and pedestrians represented more than nine out of every ten motor vehicle crash injury deaths (94.3%).
- Alaska Native people aged 30-39 years had the highest motor vehicle crash death rate of any age group (23.8 per 100,000). The rate for this age group was 1.6 times greater than the age-adjusted rate for all ages (14.7 per 100,000, p<0.05).
- Alaska Native males were 2.1 times more likely than Alaska Native females to die from a motor vehicle crash (2002-2011, 18.4 and 8.9 per 100,000, respectively, p<0.05).
- Alaska Native people statewide were 1.3 times more likely to die from a motor vehicle crash than non-Natives (2002-2011, 14.7 and 11.7 per 100,000, respectively, p<0.05).

Homicide

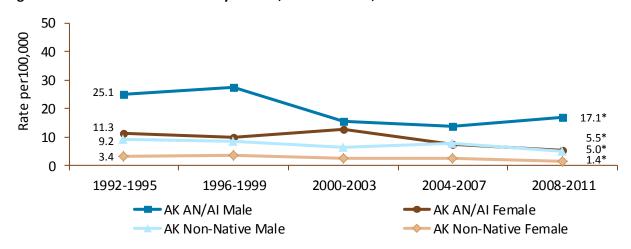
Data Source: Alaska Bureau of Vital Statistics. Additional data available in tables B25-B28 in Appendix B.

Figure 24. Homicide Death Rate ^{††} by Region, Alaska Native People, 2002-2011



^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Figure 25. Homicide Death Rate ⁺⁺ by Gender, Race and Year, 1992-2011



^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

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^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

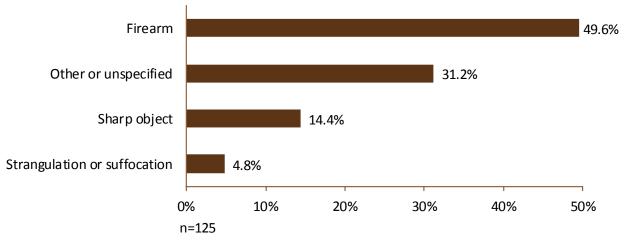
^{**} Rate is based on 10-19 deaths and should be interpreted with caution

[¶] Rate not calculated due to small number of deaths (<10)

^{*} Significantly different from the 1992-1995 rate, p<0.05

Homicide (continued)

Figure 26. Homicide Death by Type, Alaska Native People, All Ages, 2002-2011

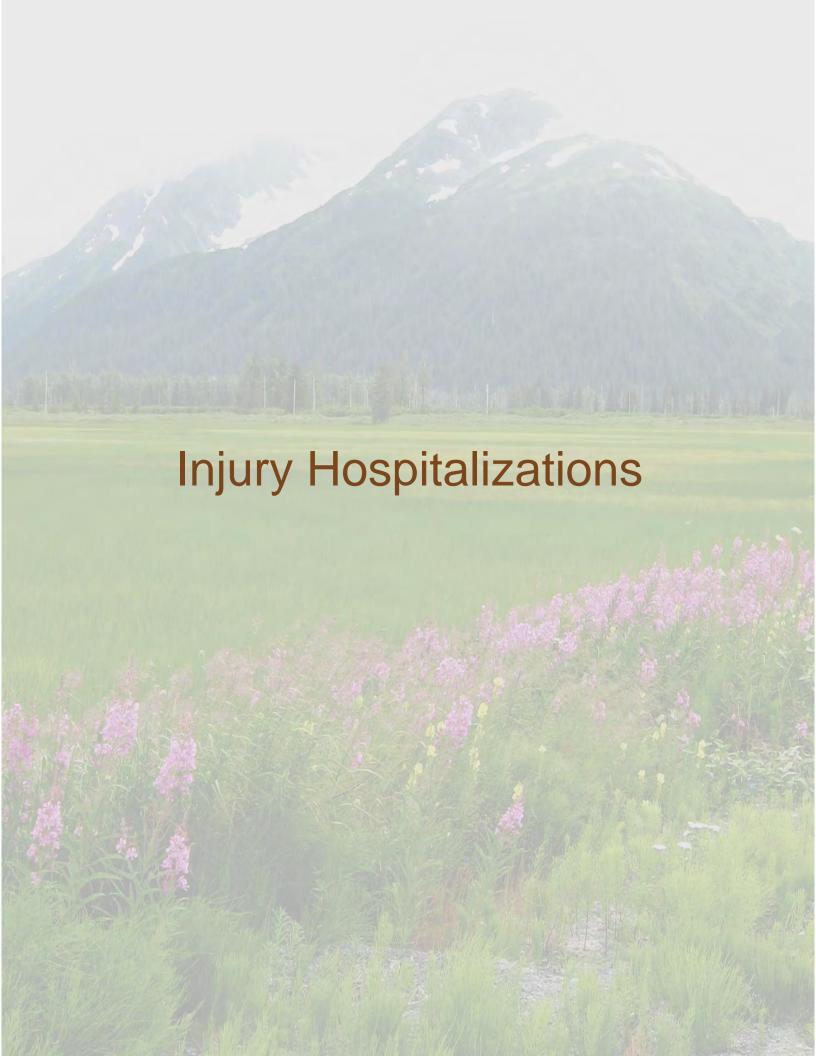


- During 2002-2011, 125 Alaska Native people died as a result of homicide. This represented 7.3% of all injury deaths (1,718).
- Between 1992-1995 and 2008-2011, the homicide death rate decreased 37.9% among Alaska Native people (18.2 and 11.3 per 100,000, respectively, p<0.05).
- Firearms were the mechanism for almost half of the homicide deaths (49.6%).
- Alaska Native people aged 30-39 years had the highest homicide death rate of any age group (18.9 per 100,000). The rate for this age group was 1.7 times the age-adjusted rate for all ages (11.2 per 100,000, p<0.05).
- Alaska Native males were 1.8 times more likely than Alaska Native females to die from homicide (2002-2011, 13.9 and 7.7 per 100,000, respectively, p<0.05).
- Alaska Native people statewide were 2.5 times more likely to die from homicide than non-Natives (2002-2011, 11.2 and 4.5 per 100,000, respectively, p<0.05).

ALASKA NATIVE INJURY ATLAS

Notes

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Injury Hospitalizations

Injury hospitalizations are collected in the Alaska Trauma Registry (ATR). The cases reported in the ATR include patients with injuries admitted to an Alaska hospital, held for observation, transferred to another acute care hospital, or declared dead in the emergency department. The ATR includes other fatal cases as well: some patients admitted for injury might die during their stay at the hospital, from the injury that was the cause of the admission, or some other cause that developed during their stay (e.g. pneumonia). If the patient admitted to the hospital died there from some other cause, the injury would not be listed as the cause of death in the fatality database maintained by Alaska Bureau of Vital Statistics. Injuries in the ATR that were categorized as fatal were retained in all of the analyses of so no injury cases would be lost.

Unlike data for deaths, comprehensive data for all causes of hospitalization in Alaska were not available from either state or national sources. Because of this, no frequency or rate comparison can be provided between injuries and other causes of hospitalization (acute illness, chronic disease).



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ALASKA NATIVE INJURY ATLAS

Figure 27. Leading Causes of Injury Hospitalization by Region, All Alaska Native People, 2002-2011 *

Data Source: Alaska Trauma Registry

	Aleutians & Pribilofs	Anchorage & MatSu	Arctic Slope	Bristol Bay	Copper River/PWS	Interior	Kenai Peninsula	Kodiak	Northwest Arctic	Norton Sound	Southeast	Yukon- Kuskokwim	Total
1	Falls 61	Falls 1,328	Falls 234	Falls 223	Falls 68	Falls 534	Falls 166	Falls 68	Suicide Attempts 301	Suicide Attempts 514	Falls 771	Falls 679	Falls [‡] 4,801
2	Assault 17	Assault 624	Suicide Attempts 109	ATV 98	Motor Vehicle 38	Suicide Attempts 355	Motor Vehicle 92	Suicide Attempts 35	Falls 278	Falls 348	Suicide Attempts 335	Suicide Attempts 647	Suicide Attempts [‡] 3,021
3	ATV 13	Motor Vehicle 615	Assault 80	Suicide Attempts 88	Suicide Attempts 19	Assault 264	Suicide Attempts 63	Motor Vehicle 23	Assault 208	Assault 128	Assault 201	Assault 357	Assault [‡] 2,045
4	Suicide Attempts 7	Suicide Attempts 539	ATV 72	Assault 88	Assault 19	Motor Vehicle 180	Assault 31	ATV 16	Snow- machine 136	ATV 111	Motor Vehicle 169	Snow- machine 259	Motor Vehicle [‡] 1,376
5	Motor Vehicle 7	Other Vehicle 162	Snow- machine 63	Snow- machine 53	Snow- machine 9	Snow- machine 98	ATV 17	Other Vehicle 13	ATV 102	Snow- machine 76	Other Vehicle 79	ATV 193	ATV 774
6	Other Vehicle 6	Cut 93	Motor Vehicle 42	Motor Vehicle 46	Other Vehicle 8	ATV 72	Struck by Object 16	Assault 12	Other Vehicle 40	Motor Vehicle 56	Poisoning 50	Cut 126	Snow- machine [‡] 749
Total	133	3,913	724	810	203	1,895	479	210	1,263	1,513	1,904	2,942	16,141 [‡]

^{‡ 152} cases missing the region of occurrence: 37 Falls, 15 Suicide Attempts, 19 Assaults, 18 Motor Vehicle, 7 ATV, 9 Snowmachine, and 47 Other

Figure 28. Leading Causes of Injury Hospitalization by Age Group, All Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	0 to 9 years	10 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years	60 to 69 years	70 years and older	Total
1	Falls 541	Suicide Attempts 914	Suicide Attempts 997	Suicide Attempts 495	Falls 694	Falls 697	Falls 568	Falls	Falls [‡] 4,807
2	Submersion or Suffocation 109	Falls 417	Assault 709	Falls 430	Assault 420	Assault 176	Motor Vehicle 51	Motor Vehicle 52	Suicide Attempts 3,022
3	Poisoning 109	Motor Vehicle 314	Falls 447	Assault 422	Suicide Attempts 404	Suicide Attempts 155	Suicide Attempts 35	ATV 38	Assault 2,047
4	Other Vehicle 97	ATV 267	Motor Vehicle 344	Motor Vehicle 194	Motor Vehicle 191	Motor Vehicle 136	Snowmachine 31	Snowmachine 24	Motor Vehicle 1,375
5	Motor Vehicle 96	Assault 230	Snowmachine 219	Snowmachine	Snowmachine 91	Other Vehicle 46	Assault 30	Assault 19	ATV 774
6	ATV 75	Poisoning 211	ATV 169	ATV 99	Other Vehicle 88	Snowmachine 45	Natural or Environmental 29	Struck by Object 18	Snowmachine
Total	1,422	3,131	3,430	2,158	2,355	1,520	865	1,257	16,141 [‡]

^{‡ 3} cases are missing age group: 2 Falls and 1 Other

ALASKA NATIVE INJURY ATLAS

Figure 29. Leading Causes of Injury Hospitalization, Alaska Native Males, All Regions, 2002-2011

Data Source: Alaska Trauma Registry

	0 to 9 years	10 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years	60 to 69 years	70 years and older	Total
1	Falls	Falls	Assault	Assault	Falls	Falls	Falls	Falls	Falls
-	295	280	519	307	397	312	195	296	2,290
2	Motor Vehicle 63	Suicide Attempts 276	Suicide Attempts 399	Falls 241	Assault 305	Assault 135	Motor Vehicle 33	Motor Vehicle 19	Assault 1,498
3	Poisoning 61	Motor Vehicle 186	Falls 274	Suicide Attempts 190	Suicide Attempts 144	Motor Vehicle 73	Natural or Environmental 26	Snowmachine	Suicide Attempts 1,084
4	Submersion or Suffocation 60	Assault 177	Motor Vehicle 191	Motor Vehicle 103	Motor Vehicle 105	Suicide Attempts 53	Assault 20	ATV 18	Motor Vehicle 773
5	Other Vehicle 60	Snowmachine	Snowmachine	Snowmachine 85	Other Vehicle 73	Other Vehicle 39	Snowmachine	Assault 11	Snowmachine 569
								Struck by Object 11	
								Natural or Environmental 11	
Total	833	1,752	2,122	1,295	1,429	823	385	429	9,070 [‡]

^{‡ 2} cases missing age group: 1 Falls, 1 Other. 5 cases missing gender

Figure 30. Leading Causes of Injury Hospitalization, Alaska Native Females, All Regions, 2002-2011

Data Source: Alaska Trauma Registry

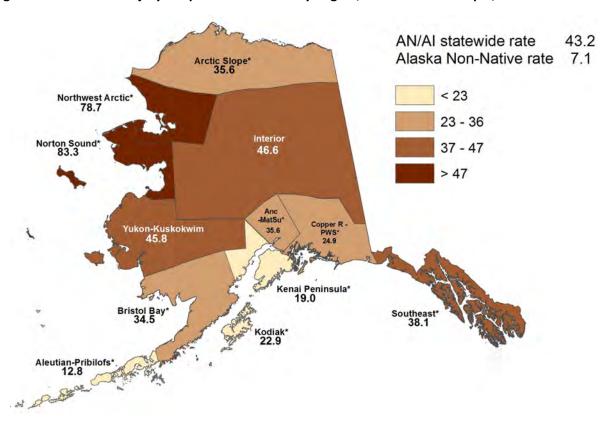
	0 to 9 years	10 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years	60 to 69 years	70 years and older	Total
1	Falls 246	Suicide Attempts 638	Suicide Attempts 597	Suicide Attempts 305	Falls 297	Falls 385	Falls 373	Falls 716	Falls 2,516
2	Submersion or Suffocation 49	Falls 137	Assault 190	Falls 189	Suicide Attempts 260	Suicide Attempts 102	Suicide Attempts 27	Motor Vehicle 33	Suicide Attempts 1,937
3	Poisoning 48	Motor Vehicle 128	Falls 173	Assault 115	Assault 115	Motor Vehicle 63	Motor Vehicle 18	ATV 20	Motor Vehicle 603
4	Other Vehicle 35	ATV 123	Motor Vehicle 153	Motor Vehicle 90	Motor Vehicle 86	Assault 41	Snowmachine 14	Assault 8	Assault 549
5	Motor Vehicle 32	Poisoning 117	ATV 48	ATV 27	ATV 28	ATV 16	Assault 10	Struck by Object 7	ATV 297
Total	588	1,379	1,306	862	926	697	480	827	7,066 [‡]

^{‡ 1} case missing age group: 1 Falls. 5 cases missing gender

Intentional Injuries

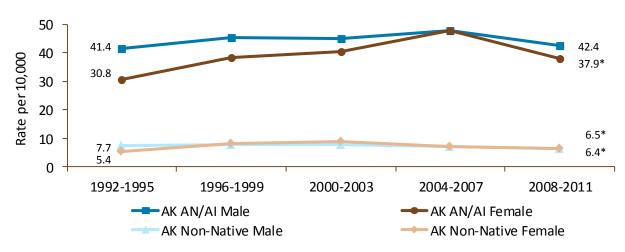
Data Source: Alaska Trauma Registry. Additional data available in tables B29-B32 in Appendix B.

Figure 31. Intentional Injury Hospitalization Rate§ by Region, Alaska Native People, 2002-2011



[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Figure 32. Intentional Injury Hospitalization Rate[§] by Gender, Race and Year, 1992-2011



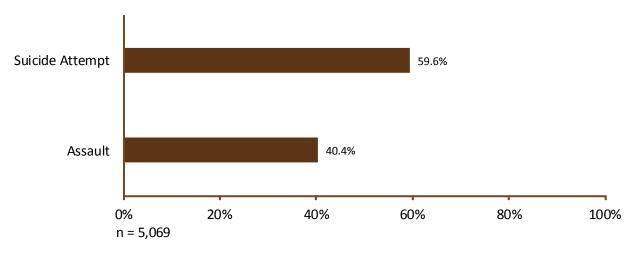
§ Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

^{*} Significantly different from the 1992-1995 rate, p<0.05

Intentional Injuries (continued)

Figure 33. Intentional Injury Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

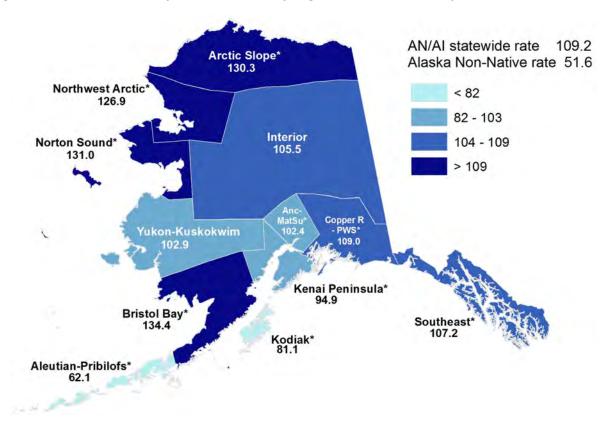


- During 2002-2011, there were 5,069 hospitalizations for intentional injuries among Alaska Native people. This represented 31.4% of all injury hospitalizations (16,141).
- Between 1992-1995 and 2008-2011, the intentional injury hospitalization rate increased 10.9% (36.2 and 40.1 per 10,000, respectively, p<0.05).
- Attempted suicide was the mechanism for almost three out of every five intentional injury hospitalizations (59.6%).
- Alaska Native people aged 20-29 years had the highest intentional injury hospitalization rate of any age group (102.4 per 10,000). The rate for this age group was 2.4 times the age-adjusted rate for all ages (43.2 per 10,000, p<0.05).
- Alaska Native males and Alaska Native females had similar rates of hospitalization from intentional injuries (2002-2011, 43.4 and 4.4 per 10,000, respectively).
- Alaska Native people were 6.1 times more likely to be hospitalized for an intentional injury than non-Natives statewide (2002-2011, 43.2 and 7.1 per 10,000, respectively, p<0.05).
- Almost two out of three (63.2%) of intentional injury hospitalizations among Alaska Native people were reported as alcohol-related.

Unintentional Injuries

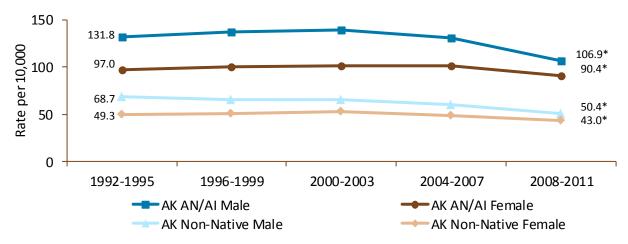
Data Source: Alaska Trauma Registry. Additional data available in tables B33-B36 in Appendix B.

Figure 34. Unintentional Hospitalization Rate§ by Region, Alaska Native People, 2002-2011



[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Figure 35. Unintentional Injury Hospitalization Rate[§] by Gender, Race and Year, 1992-2011



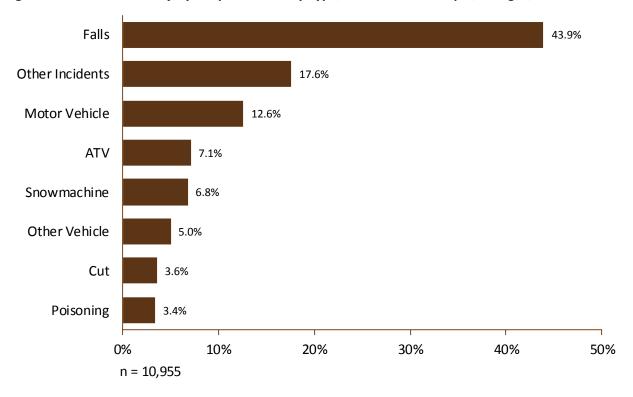
[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

^{*} Significantly different from the 1992-1995 rate, p<0.05

Unintentional Injuries (continued)

Figure 36. Unintentional Injury Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

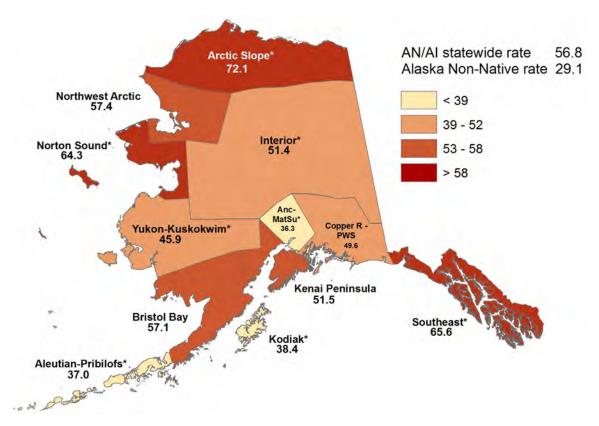


- During 2002-2011, there were 10,955 hospitalizations for unintentional injuries among Alaska Native people. This represented 67.9% of all injury hospitalizations (16,141).
- Between 1992-1995 and 2008-2011, the unintentional injury hospitalization rate decreased 13.2% (115.3 and 100.1 per 10,000, respectively, p<0.05).
- Falls were the mechanism for more than two out of every five unintentional injury hospitalizations (43.9%).
- Alaska Native people aged 70 years and older had the highest unintentional injury hospitalization rate of any age group (272.6 per 10,000). The rate for this age group was 2.5 times the age-adjusted rate for all ages (109.2 per 10,000, p<0.05).
- Alaska Native males were 1.4 times more likely to be hospitalized for unintentional injuries than Alaska Native females (2002-2011, 110.3 and 79.1 per 10,000, respectively, p<0.05).
- Alaska Native people were 2.1 times more likely to be hospitalized for an unintentional injury than non-Natives statewide (2002-2011, 109.2 and 51.6 per 10,000, respectively, p<0.05).
- Almost one out of three (32.5%) unintentional injury hospitalizations among Alaska Native people were reported as alcohol-related.

Falls

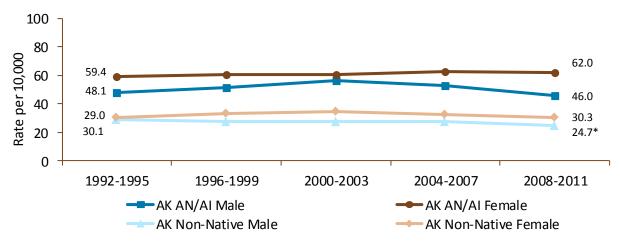
Data Source: Alaska Trauma Registry. Additional data available in tables B37-B40 in Appendix B.

Figure 37. Falls Hospitalization Rate[§] by Region, Alaska Native People, 2002-2011



[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Figure 38. Falls Hospitalization Rate[§] by Gender, Race and Year, 1992-2011



[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

^{*} Significantly different from the 1992-1995 rate, p<0.05

Falls (continued)

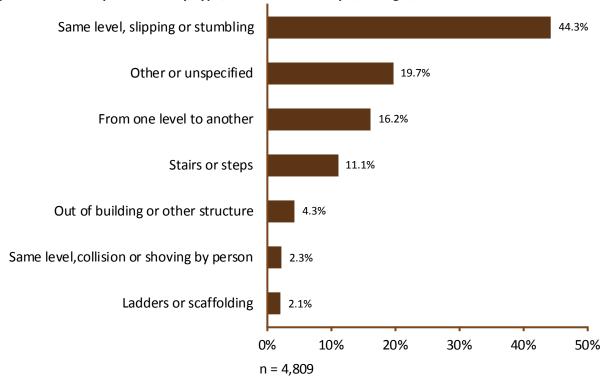


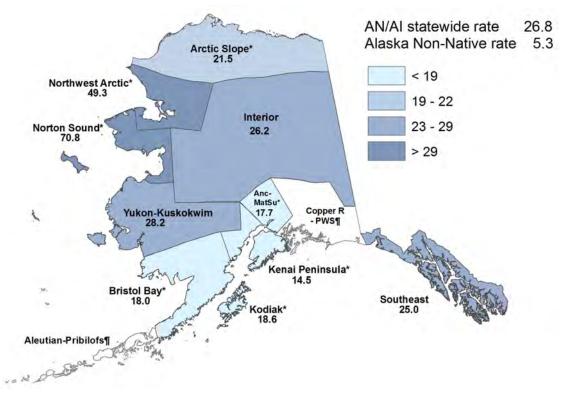
Figure 39. Falls Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

- Falls were the leading cause of injury hospitalizations among Alaska Native people. During 2002-2011, there were 4,809 hospitalizations for fall injuries among Alaska Native people. This represented 29.8% of all injury hospitalizations (16,141).
- Between 1992-1995 and 2008-2011, the fall-related hospitalization rate did not significantly change (54.7 and 55.3 per 10,000, respectively).
- Slipping, tripping or stumbling on the same level were the mechanism for more than two out of every five fall injury hospitalizations (44.3%).
- Alaska Native people aged 70 years and older had the highest falls injury hospitalization rate of any age group (225.6 per 10,000). The rate for this age group was 4.0 times the age-adjusted rate for all ages (56.8 per 10,000, p<0.05).
- Alaska Native females were 1.1 times more likely than Alaska Native males to be hospitalized for fall injuries (2002-2011, 43.9 and 39.4 per 10,000, respectively, p<0.05).
- Alaska Native people were 1.9 times more likely to be hospitalized for a fall injury than non-Natives statewide (2002-2011, 56.8 and 29.1 per 10,000, respectively, p<0.05).
- Almost one out of three (29.4%) fall-related injury hospitalizations among Alaska Native people were reported as alcohol-related.

Suicide Attempt or Self Harm

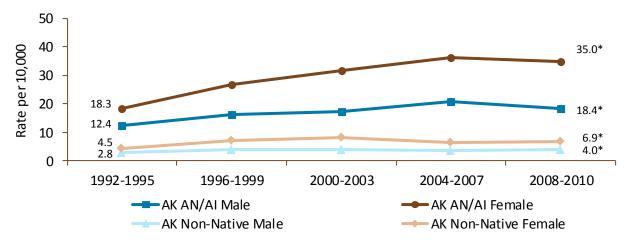
Data Source: Alaska Trauma Registry. Additional data available in tables B41-B44 in Appendix B.

Figure 40. Suicide Attempt or Self Harm Hospitalization Rate[§] by Region, Alaska Native People, 2002-2010



[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Figure 41. Suicide Attempt or Self Harm Hospitalization Rate[§] by Gender, Race and Year, 1992-2010



§ Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

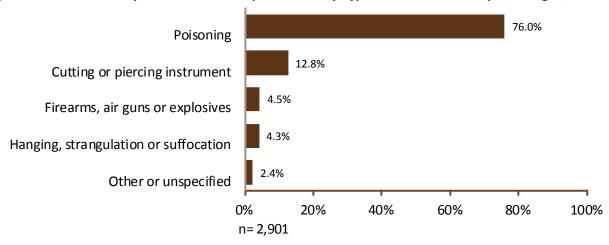
[¶] Rate not calculated due to small number of hospitalizations (<20)

^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05 $\,$

^{*} Significantly different from the 1992-1995 rate, p<0.05

Suicide Attempt or Self Harm (continued)

Figure 42. Suicide Attempt or Self Harm Hospitalization by Type, Alaska Native People, All Ages, 2002-2010

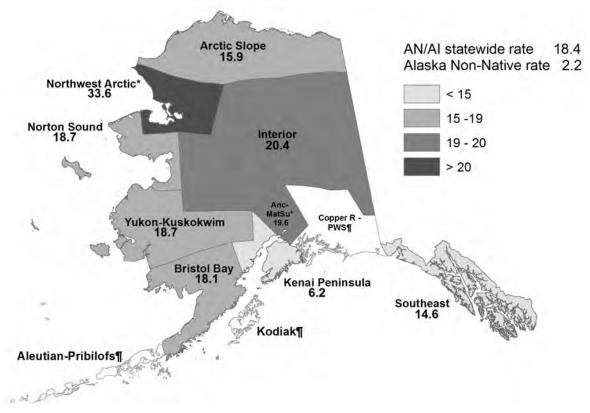


- Complete data on poisoning-related suicide attempts were not available in 2011, so suicide attempt and self harm data are analyzed through 2010.
- During 2002-2010, there were 2,901 hospitalizations for suicide attempt and self-harm among Alaska Native people. This represented 18.0% of all injury hospitalizations (16,141).
- Between 1992-1995 and 2008-2010, the suicide attempt and self-harm hospitalization rate increased 73.7% (15.3 and 26.6 per 10,000, respectively, p<0.05).
- Poisoning was the mechanism for almost three out of every four suicide attempt and self harm hospitalizations (76.0%).
- Alaska Native people aged 20-29 years had the highest suicide attempt and self harm hospitalization rate of any age group (66.5 per 10,000). The rate for this age group was 2.5 times the age-adjusted rate for all ages (26.8 per 10,000, p<0.05).
- Alaska Native females were 1.8 times more likely than Alaska Native males to be hospitalized for suicide attempts and self harm (2002-2010, 34.4 and 19.1 per 10,000, respectively, p<0.05).
- Alaska Native people were 5.1 times more likely to be hospitalized for a suicide attempts and self harm than non-Natives statewide (2002-2010, 26.8 and 5.3 per 10,000, respectively, p<0.05).
- Almost three out of five (57.5%) suicide attempt and self harm hospitalizations among Alaska Native people were reported as alcohol-related.

Assault

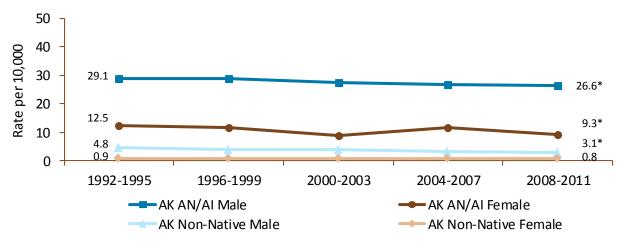
Data Source: Alaska Trauma Registry. Additional data available in tables B45-B48 in Appendix B.

Figure 43. Assault Hospitalization Rate[§] by Region, Alaska Native People, 2002-2011



[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Figure 44. Assault Hospitalization Rate by Gender, Race and Year, 1992-2011



§ Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

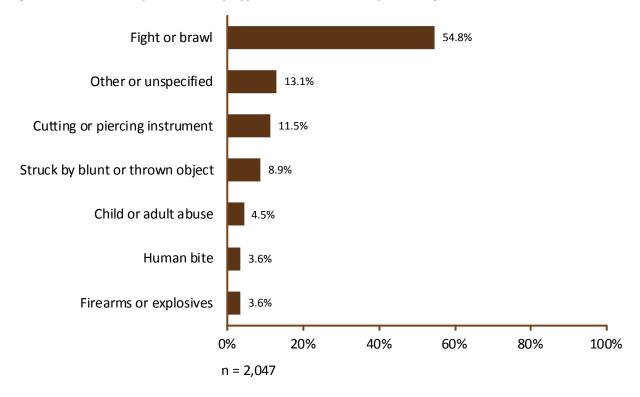
[¶] Rate not calculated due to small number of hospitalizations (<20)

^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

^{*} Significantly different from the 1992-1995 rate, p<0.05

Assault (continued)

Figure 45. Assault Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

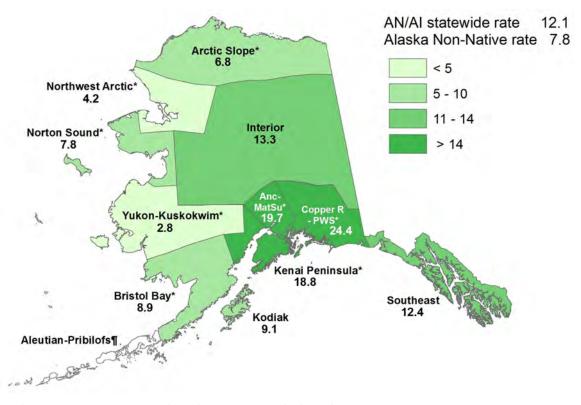


- During 2002-2011, there were 2,047 hospitalizations for assault injuries among Alaska Native people. This represented 12.7% of all injury hospitalizations (16,141).
- Between 1992-1995 and 2008-2011, the assault injury hospitalization rate decreased 13.8% (20.9 and 18.0 per 10,000, respectively, p<0.05).
- Fights and brawls were the mechanism for more than half of assault injury hospitalizations (54.8%).
- Alaska Native people aged 20-29 years had the highest assault injury hospitalization rate of any age group (42.6 per 10,000). The rate for this age group was 2.3 times the age-adjusted rate for all ages (18.4 per 10,000, p<0.05).
- Alaska Native males were 2.7 times more likely than Alaska Native females to be hospitalized for assault injuries (2002-2011, 25.8 and 9.6 per 10,000, respectively, p<0.05).
- Alaska Native people were 7.8 times more likely to be hospitalized for an assault injury than non-Natives statewide (2002-2011, 18.4 and 2.2 per 10,000, respectively, p<0.05).
- Almost three out of four (71.4%) assault injury hospitalizations among Alaska Native people were reported as alcohol-related.

Motor Vehicle

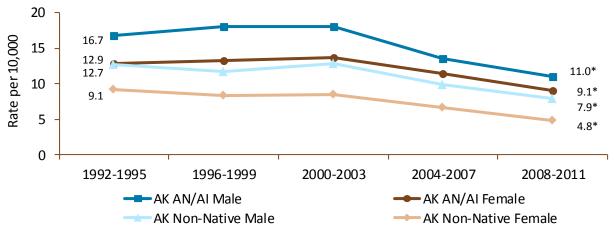
Data Source: Alaska Trauma Registry. Additional data available in tables B49-B52 in Appendix B.

Figure 46. Motor Vehicle Hospitalization Rate§ by Region, Alaska Native People, 2002-2011



§ Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Figure 47. Motor Vehicle Hospitalization Rate[§] by Gender, Race and Year, 1992-2011



§ Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

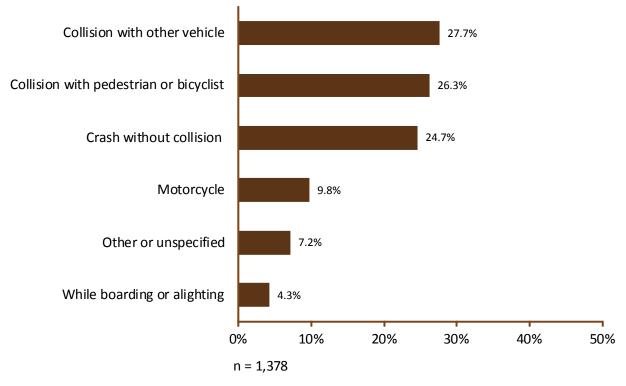
[¶] Rate not calculated due to small number of hospitalizations (<20)

 $^{^{*}}$ Regional rate is significantly different from the AN/AI statewide rate, p<0.05

^{*} Significantly different from the 1992-1995 rate, p<0.05

Motor Vehicle (continued)

Figure 48. Motor Vehicle Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

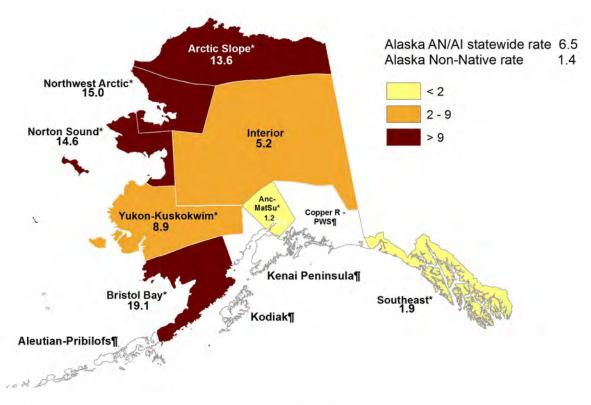


- During 2002-2011, there were 1,378 hospitalizations for motor vehicle-related injuries among Alaska Native people. This represented 8.5% of all injury hospitalizations (16,141).
- Between 1992-1995 and 2008-2011, the motor vehicle-related injury hospitalization rate decreased 31.3% (14.8 and 10.1 per 10,000, respectively, p<0.05).
- Collisions with another vehicle was the circumstance for more than one out of every four motor vehicle-related injury hospitalizations (27.7%).
- Alaska Native people aged 20-29 years had the highest motor vehicle-related injury hospitalization rate of any age group (20.7 per 10,000). The rate for this age group was 1.7 times the age-adjusted rate for all ages (12.1 per 10,000, p<0.05).
- Alaska Native males were 1.3 times more likely than Alaska Native females to be hospitalized for motor vehicle-related injuries (2002-2011, 13.3 and 10.5 per 10,000, respectively, p<0.05).
- Alaska Native people were 1.6 times more likely to be hospitalized for a motor vehiclerelated injury than non-Natives statewide (2002-2011, 12.1 and 7.8 per 10,000, respectively, p<0.05).
- Almost one out of two (45.4%) motor vehicle-related injury hospitalizations among Alaska Native people were reported as alcohol-related.

All-Terrain Vehicle

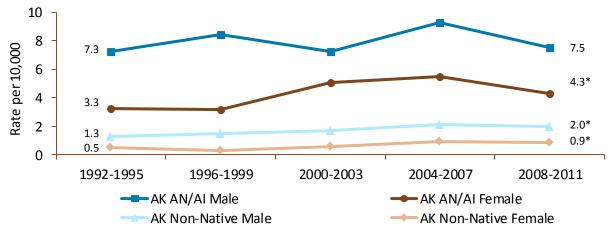
Data Source: Alaska Trauma Registry. Additional data available in tables B53-B56 in Appendix B.

Figure 49. All-Terrain Vehicle Hospitalization Rate[§] by Region, Alaska Native People, 2002-2011



[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Figure 50. All-Terrain Vehicle Hospitalization Rate by Gender, Race and Year, 1992-2011



[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

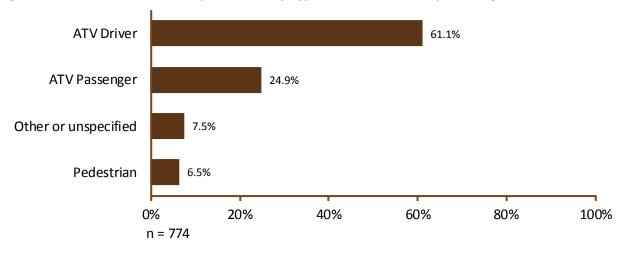
[¶] Rate not calculated due to small number of hospitalizations (<20)

^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

^{*} Significantly different from the 1992-1995 rate, p<0.05

All-Terrain Vehicle (continued)

Figure 51. All-Terrain Vehicle Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

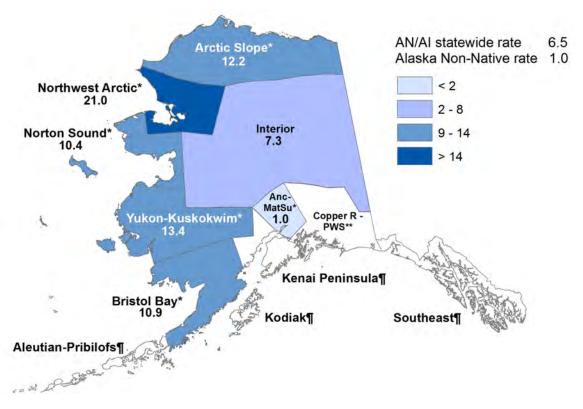


- During 2002-2011, there were 774 hospitalizations for ATV-related injuries among Alaska Native people. This represented 4.8% of all injury hospitalizations (16,141).
- Between 1992-1995 and 2008-2011, the all-terrain vehicle (ATV)-related hospitalization rate increased 13.8% (5.2 and 5.9 per 10,000, respectively, p<0.05).
- ATV drivers represented nearly two out of every three ATV-related hospitalizations (61.1%).
- More than one-third (34.4%) of all Alaska Native ATV-related hospitalizations were among youth aged 10-19. Alaska Native people aged 10-19 years had the highest ATV-related hospitalization rate of any age groups (11.0 per 10,000). The rate for this age group was 1.7 times the age-adjusted rate for all ages (6.5 per 10,000, p<0.05).
- Alaska Native males were 1.6 times more likely than Alaska Native females to be hospitalized for ATV-related injuries (2002-2011, 8.2 and 5.2 per 10,000, respectively, p<0.05).
- Alaska Native people were 4.5 times more likely to be hospitalized for an (ATV)-related injury than non-Natives statewide (2002-2011, 6.5 and 1.4 per 10,000, respectively, p<0.05).
- One out of three (33.6%) ATV-related injury hospitalizations among Alaska Native people were reported as alcohol-related.

Snowmachine

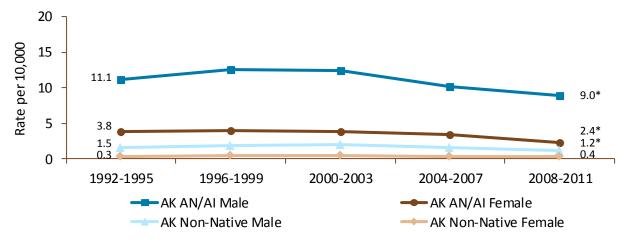
Data Source: Alaska Trauma Registry. Additional data available in tables B57-B60 in Appendix B.

Figure 52. Snowmachine Hospitalization Rate[§] by Region, Alaska Native People, 2002-2011



[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Figure 53. Snowmachine Hospitalization Rate by Gender, Race and Year, 1992-2011



[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

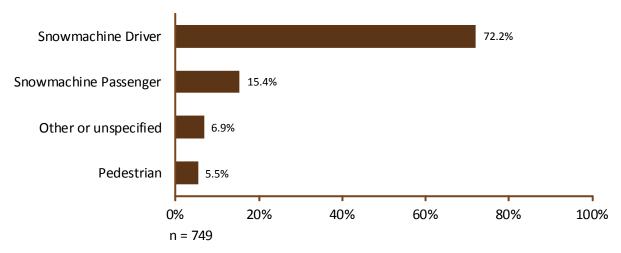
[¶] Rate not calculated due to small number of hospitalizations (<20)

^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

^{*} Significantly different from the 1992-1995 rate, p<0.05

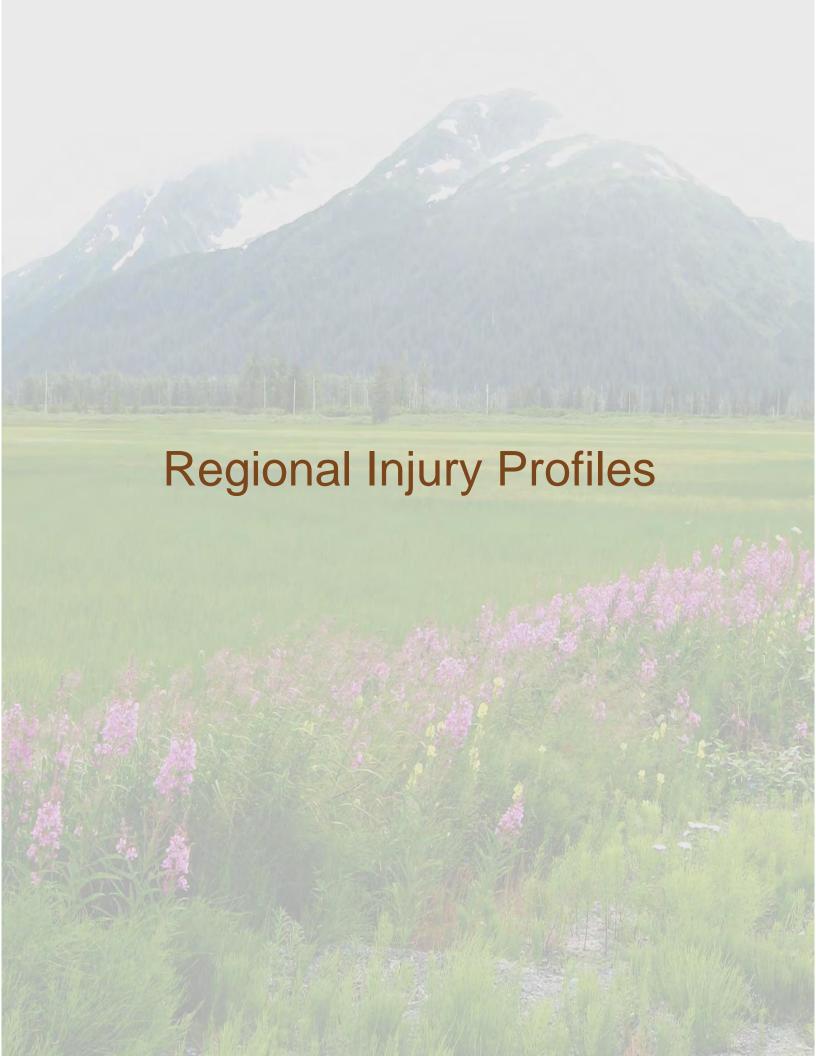
Snowmachine (continued)

Figure 54. Snowmachine Hospitalization by Type, Alaska Native People, All Ages, 2002-2011



- During 2002-2011, there were 749 hospitalizations for snowmachine-related injuries among Alaska Native people. This represented 4.6% of all injury hospitalizations (16,141).
- Between 1992-1995 and 2008-2011, the snowmachine-related hospitalization rate decreased 24.5% (7.5 and 5.6 per 10,000, respectively, p<0.05).
- Drivers represented nearly three out of every four snowmachine-related hospitalizations (72.2%).
- Alaska Native people aged 20-29 years had the highest snowmachine-related hospitalization rate of any age group (13.2 per 10,000). The rate for this age group was 2.0 times the age-adjusted rate for all ages (6.5 per 10,000, p<0.05).
- Alaska Native males were 3.1 times more likely than Alaska Native females to be hospitalized for snowmachine-related injuries (2002-2011, 9.8 and 3.1 per 10,000, respectively, p<0.05).
- Alaska Native people were 6.6 times more likely to be hospitalized for a snowmachinerelated injury than non-Natives statewide (2002-2011, 6.5 and 1.0 per 10,000, respectively, p<0.05).
- Two out of every five (40.2%) snowmachine-related hospitalizations among Alaska Native people were reported as alcohol-related.

Notes





Injury Atlas Regions

In order to have sufficient numbers of injuries to allow rate calculations tribal health organization (THO) service areas were combined into larger regions. Every effort was made to align regions with THO service areas. But because of limitations on what population data were available, a few communities were moved from the region that matches their THO region to their census area/borough region. The villages moved from their THOs are listed as exceptions below.

Table 1. Regions by Tribal Health Organizations and Census Areas

Regions used in this report Census Area/Boroughs included in Region		THOs in Region	Exceptions	
Aleutians and Pribilofs	Aleutians East Borough, Aleutians West Borough	Aleutian Pribilof Islands Assoc., St. George Traditional Council, Eastern Aleutian Tribes		
Anchorage/ Matanuska-Susitna	Anchorage Municipality, Matanuska-Susitna Borough	Southcentral Foundation, Eklutna Native Village, Chickaloon Village, Knik Tribe		
Arctic Slope	North Slope Borough	Artic Slope Native Assoc., North Slope Borough, Ukpeagvik Inupiat Corp.		
Bristol Bay	Dillingham, Lake and Peninsula Borough, Bristol Bay Borough	Bristol Bay Area Health Corp.	Goodnews Bay and Platinum were included in Yukon-Kuskokwim	
Copper River/Prince William Sound	Valdez/Cordova	Chugachmiut (part), Chitna Traditional Village Council, Copper River Native Assoc., Mt. Sanford Tribal Consortium, Valdez Native Tribe	Seward, Port Graham, and Nanwalek, were included in Kenai Peninsula; Cantwell was included in Interior	
Interior	Denali Borough, Fairbanks North Star Borough, SE Fairbanks, Yukon-Koyukuk	Tanana Chiefs Conference, Council of Athabascan Tribal Governments, Fairbanks Native Assoc., Tanana Tribal Council	Anaktuvak Pass was included in Arctic Slope	
Kenai Peninsula	Kenai Peninsula Borough	Chugachmiut (part), Kenaitze Indian Tribe, Ninilchik Traditional Council, Seldovia Village Tribe, Tyonek Native Village	Chenega Bay, Tatitlek, Valdez and Cordova were included in Copper R/Prince William Sound	
Kodiak	Kodiak Island Borough	Kodiak Area Native Assoc., Karluk Tribal Council		
Northwest Arctic	Northwest Arctic Borough	Maniilaq	Point Hope was included in Arctic Slope	
Norton Sound	Nome	Norton Sound Health Corp., Native Village of Diomede		
Southeast	Hoonah-Angoon, Prince of Wales/Hyder, Petersburg; Boroughs of Haines, Juneau, Ketchikan, Skagway, Sitka, Wrangell, and Yakutat	Southeast Alaska Regional Health Consortium, Hoonah Indian Association, Ketchikan Indian Association, Metlakatla Indian Community, Yakutat Tlingit Tribe		
Yukon-Kuskokwim	Bethel, Wade Hampton	Akiachak Native Village, Native Village of Kwinhagak, Yukon-Kuskokwim Health Corporation	Anvik, Grayling, Holy Cross, and Shageluk were included in Interior	



Aleutians and Pribilofs Region Injury Hospitalizations

Summary

- Falls (46.1%), assaults (9.2%), and all-terrain vehicle incidents (7.5%) were the three leading causes of injury hospitalizations during 1992-2011 among Aleutians and Pribilofs (Aleut Prib) Alaska Native people, and represented almost two thirds of all Aleut Prib injury hospitalizations (62.7%).
- The intentional injury hospitalization rate for Aleut Prib Alaska Native people was significantly lower (rate ratio = 0.2) than that for Alaska Native people statewide (8.9 and 42.4 per 10,000, respectively, p<0.05).

Table 2. Leading Causes of Aleutians and Pribilofs Injury Hospitalizations, 1992-2011

Data Source: Alaska Trauma Registry

				Aleut Prib AN/AI
Mechanism of Injury	n	%	Rate §	vs. Alaska AN/Al ¹
Assault	27	9.2%	6.8	0.3*
Suicide Attempt or Self Harm	9	3.1%	¶	n/a
Total Intentional Injuries	36	12.2%	8.9	0.2*
Falls	136	46.1%	42.3	0.7*
All-Terrain Vehicle	22	7.5%	5.5	0.9
Other Vehicle	21	7.1%	4.9	1.0
Motor Vehicle	20	6.8%	4.6	0.3*
Cut	13	4.4%	¶	n/a
Struck By Person/Object	6	2.0%	¶	n/a
Sports	6	2.0%	¶	n/a
Other	35	11.9%	n/a	n/a
Total Unintentional Injuries	258	87.5%	71.5	0.6*
Undetermined Intent	§§	0.3%	n/a	n/a
Total Injuries	295	100.0%	80.7	0.5*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

[¶] Rate not calculated due to small number of hospitalizations (<20)

^{*} Statistically significant difference between rates, p<0.05 n/a Not applicable

^{§§} Categories with fewer than five deaths are not reported

Aleutians and Pribilofs Region Injury Deaths



Summary

- Suicide (17.6%), drowning (15.7%), and unintentional poisoning (13.7%) were the three leading causes of injury death during 1992-2011 among Aleutians and Pribilofs (Aleut Prib) Alaska Native people, and represented about half of all Aleut Prib injury deaths (47.1%).
- The intentional injury death rate for Aleut Prib Alaska Native people was significantly lower (rate ratio = 0.6) than that for Alaska Native people statewide (32.8 and 55.2 per 100,000, respectively, p<0.05).

Table 3. Leading Causes of Aleutians and Pribilofs Injury Deaths, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

				Aleut Prib AN/AI
Mechanism of Injury	n	%	Rate **	vs. Alaska AN/AI ¹
Suicide	9	17.6%	¶	n/a
Homicide	5	9.8%	¶	n/a
Total Intentional Injuries	14	27.4%	32.8**	0.6*
Drowning	8	15.7%	¶	n/a
Poisoning	7	13.7%	¶	n/a
Motor Vehicle	6	11.8%	¶	n/a
Other	15	29.4%	n/a	n/a
Total Unintentional Injuries	36	70.6%	106.9	1.0
Undetermined Intent	§§	2.0%	n/a	n/a
Total	51	100.0%	142.0	0.8*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

 $[\]P$ Rate not calculated due to small number of deaths (<10) n/a Not applicable

^{*} Statistically significant difference between rates, p<0.05

^{**}Rate is based on 10-19 deaths and should be interpreted with caution

^{§§} Categories with fewer than five deaths are not reported



Anchorage and Matanuska-Susitna Region Injury Hospitalizations

Summary

- Falls (31.2%), motor vehicle incidents (17.5%), and assaults (16.9%) were the three leading causes of injury hospitalizations during 1992-2011 among Anchorage and Matanuska-Susitna (Anc/MatSu) Alaska Native people, and represented about two thirds of all Anc/MatSu injury hospitalizations (65.6%).
- The motor vehicle injury hospitalization rate for Anc/MatSu Alaska Native people was significantly higher (rate ratio = 1.8) than that for Alaska Native people statewide (24.0 and 13.7 per 10,000, respectively, p<0.05).

Table 4. Leading Causes of Anchorage and Matanuska-Susitna Injury Hospitalizations, 1992-2011

Data Source: Alaska Trauma Registry

				Anc/MatSu AN/AI
Mechanism of Injury	n	%	Rate [§]	vs. Alaska AN/Al ¹
Assault	1,209	16.9%	22.4	1.1*
Suicide Attempt or Self Harm	951	13.3%	16.4	0.7*
Total Intentional Injuries	2,160	30.2%	38.9	0.9*
Falls	2,230	31.2%	60.5	1.1*
Motor Vehicle	1,252	17.5%	24.0	1.8*
Other Vehicle	269	3.8%	4.4	0.9
Cut	186	2.6%	3.3	0.8*
Natural and Environmental	135	1.9%	2.6	0.8*
Poisoning	128	1.8%	1.9	0.9
Struck By Person/Object	118	1.7%	2.1	0.6*
Other	603	8.4%	n/a	n/a
Total Unintentional Injuries	4,921	68.8%	109.4	1.0*
Undetermined Intent	69	1.0%	n/a	n/a
Total Injuries	7,150	100.0%	149.5	0.9*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

 $[\]S$ Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

 $^{^{*}}$ Statistically significant difference between rates, p<0.05

Anchorage and Matanuska-Susitna Region Injury Deaths



Summary

- Unintentional poisoning (21.0%), suicide (17.8%), and motor vehicle incidents (17.1%) were the three leading causes of injury death during 1992-2011 among Anchorage and Matanuska-Susitna (Anc/MatSu) Alaska Native people, and represented more than half of all Anc/MatSu injury deaths (55.8%).
- The death rates due to threats to breathing/falls for Anc/MatSu Alaska Native people were significantly higher (rate ratio = 2.0) than that for Alaska Native people statewide (11.0/9.5 and 5.5/4.8 per 100,000, respectively, p<0.05).

Table 5. Leading Causes of Anchorage and Matanuska-Susitna Injury Deaths, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

				Anc/MatSu AN/AI
Mechanism of Injury	n	%	Rate **	vs. Alaska AN/Al 1
Suicide	156	17.8%	27.1	0.7*
Homicide	115	13.1%	21.3	1.5*
Total Intentional Injuries	271	30.9%	48.4	0.9*
Poisoning	184	21.0%	37.8	1.8*
Motor Vehicle	150	17.1%	33.0	1.9*
Threats To Breathing	41	4.7%	11.0	2.0*
Fall	29	3.3%	9.5	2.0*
Excessive Cold	27	3.1%	7.1	0.7*
Exposure To Smoke & Fire	23	2.6%	4.6	0.9*
Off-Road Vehicle	21	2.4%	4.4	0.5*
Other	100	11.4%	n/a	n/a
Total Unintentional Injuries	575	65.5%	142.3	1.3*
Undetermined Intent	32	3.6%	n/a	n/a
Total	878	100.0%	196.5	1.1*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05



Arctic Slope Region Injury Hospitalizations

Summary

- Falls (27.7%), suicide attempts (15.3%), and assaults (11.0%) were the three leading causes of injury hospitalizations during 1992-2011 among Arctic Slope Alaska Native people, and represented more than half of all Arctic Slope injury hospitalizations (54.0%).
- Off-road vehicles were a significant cause of injury hospitalizations among Arctic Slope
 Alaska Native people. The all-terrain vehicle/snow machine injury hospitalization rates for
 Arctic Slope Alaska Native people were significantly higher (rate ratio = 2.0 and 1.9,
 respectively) than that for Alaska Native people statewide (12.5/13.7 and 6.1/7.2 per
 10,000, respectively, p<0.05).

Table 6. Leading Causes of Arctic Slope Injury Hospitalizations, 1992-2011

Data Source: Alaska Trauma Registry

				Arctic Slope AN/AI
Mechanism of Injury	n	%	Rate §	vs. Alaska AN/AI 1
Suicide Attempt or Self Harm	231	15.3%	20.9	0.9
Assault	167	11.0%	16.8	0.9*
Total Intentional Injuries	398	26.3%	37.7	0.9*
Falls	420	27.7%	62.6	1.1*
All-Terrain Vehicle	142	9.4%	12.5	2.0*
Snowmachine	141	9.3%	13.7	1.9*
Motor Vehicle	91	6.0%	8.1	0.6*
Other Vehicle	42	2.8%	4.2	0.8
Cut	41	2.7%	4.3	1.0
Natural and Environmental	34	2.2%	3.4	1.0
Other	193	12.7%	n/a	n/a
Total Unintentional Injuries	1,104	72.9%	128.0	1.1*
Undetermined Intent	12	0.8%	n/a	n/a
Total Injuries	1,514	100.0%	167.1	1.1*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

st Statistically significant difference between rates, p<0.05

Arctic Slope Region Injury Deaths



Summary

- Suicide (36.1%), off-road vehicle incidents (11.1%), and drowning (10.4%) were the three leading causes of injury death during 1992-2011 among Arctic Slope Alaska Native people, and represented more than half of all Arctic Slope injury deaths (57.6%).
- The off-road vehicle crash death rate for Arctic Slope Alaska Native people was significantly higher (rate ratio = 2.0) than that for Alaska Native people statewide (17.7 and 8.9 per 100,000, respectively, p<0.05).

Table 7. Leading Causes of Arctic Slope Injury Deaths, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

				Arctic Slope AN/AI
Mechanism of Injury	n	%	Rate **	vs. Alaska AN/AI ¹
Suicide	52	36.1%	50.9	1.2*
Homicide	12	8.3%	12.9	0.9
Total Intentional Injuries	64	44.4%	63.8	1.2*
Off-Road Vehicle	16	11.1%	17.7**	2.0*
Drowning	15	10.4%	16.2**	0.8*
Motor Vehicle	11	7.6%	11.8**	0.7*
Poisoning	7	4.9%	¶	n/a
Excessive Cold	7	4.9%	¶	n/a
Threats To Breathing	5	3.5%	¶	n/a
Other	15	10.4%	n/a	n/a
Total Unintentional Injuries	76	52.8%	86.7	0.8*
Undetermined Intent	§§	n/a	n/a	n/a
Total	144	100.0%	153.8	0.9*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

n/a Not applicable

§§ Categories with fewer than five deaths are not reported

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

[¶] Rate not calculated due to small number of deaths (<10)



Bristol Bay Region Injury Hospitalizations

Summary

- Falls (28.2%), all-terrain vehicle incidents (12.4%), and suicide attempts (10.0%) were the three leading causes of injury hospitalizations during 1992-2011 among Bristol Bay Alaska Native people, and represented about half of all Bristol Bay injury hospitalizations (50.6%).
- Off-road vehicles were a significant cause of injury hospitalizations among Bristol Bay Alaska Native people. The all-terrain vehicle and snow machine injury hospitalization rates for Bristol Bay Alaska Native people were significantly higher (rate ratio = 3.0 and 1.7, respectively) than that for Alaska Native people statewide (18.4/12.0 and 6.1/7.2 per 10,000, respectively, p<0.05).

Table 8. Leading Causes of Bristol Bay Injury Hospitalizations, 1992-2011

Data Source: Alaska Trauma Registry

				Bristol Bay AN/AI
Mechanism of Injury	n	%	Rate [§]	vs. Alaska AN/AI ¹
Suicide Attempt or Self Harm	157	10.0%	15.1	0.7*
Assault	149	9.5%	15.8	0.8*
Total Intentional Injuries	306	19.5%	30.9	0.7*
Falls	443	28.2%	57.1	1.0
All-Terrain Vehicle	194	12.4%	18.4	3.0*
Snowmachine	118	7.5%	12.0	1.7*
Motor Vehicle	87	5.5%	8.1	0.6*
Other Vehicle	69	4.4%	6.9	1.4*
Struck By Person/Object	48	3.1%	4.7	1.4*
Natural and Environmental	44	2.8%	4.8	1.4*
Other	248	15.8%	n/a	n/a
Total Unintentional Injuries	1,251	79.7%	134.8	1.2*
Undetermined Intent	12	0.8%	n/a	n/a
Total Injuries	1,569	100.0%	167.0	1.1*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide § Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

Injury Deaths



Summary

- Drowning (20.1%), suicide (13.1%), and off-road vehicle incidents (12.1%) were the three leading causes of injury death during 1992-2011 among Bristol Bay Alaska Native people, and represented almost half of all Bristol Bay injury deaths (45.1%).
- The off-road vehicle crash death rate for Bristol Bay Alaska Native people was significantly higher (rate ratio = 2.5) than that for Alaska Native people statewide (22.4 and 8.9 per 100,000, respectively, p<0.05).

Table 9. Leading Causes of Bristol Bay Injury Deaths, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

				Bristol Bay AN/AI
Mechanism of Injury	n	%	Rate **	vs. Alaska AN/AI 1
Suicide	26	13.1	27.3	0.7*
Homicide	13	6.5	12.9**	0.9
Total Intentional Injuries	39	19.6	40.2	0.7*
Drowning	40	20.1	39.7	2.1*
Off-Road Vehicle	24	12.1	22.4	2.5*
Poisoning	19	9.5	20.8**	1.0
Excessive Cold	14	7.0	16.1**	1.7*
Motor Vehicle	10	5.0	10.9**	0.6*
Exposure To Smoke & Fire	6	3.0	¶	n/a
Threats To Breathing	5	2.5	¶	n/a
Other	32	16.1	n/a	n/a
Total Unintentional Injuries	150	75.4	159.7	1.4*
Undetermined Intent	10	5.0	n/a	n/a
Total	199	100.0	212.7	1.2*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

 $[\]P$ Rate not calculated due to small number of deaths (<10)



Copper River/Prince William Sound Region Injury Hospitalizations

- Falls (32.3%), motor vehicle incidents (19.5%), and assaults (10.5%) were the three leading causes of injury hospitalizations during 1992-2011 among Copper River/Prince William Sound (CR/PWS) Alaska Native people, and represented about two thirds of all CR/PWS injury hospitalizations (62.3%).
- The motor vehicle hospitalization rate for CR/PWS Alaska Native people was significantly higher (rate ratio = 1.9) than that for Alaska Native people statewide (26.4 and 13.7 per 10,000, respectively, p<0.05).

Table 10. Leading Causes of Copper River/Prince William Sound Injury Hospitalizations, 1992-2011

Data Source: Alaska Trauma Registry

				CR/PWS AN/AI
Mechanism of Injury	n	%	Rate §	vs. Alaska AN/Al 1
Assault	42	10.5%	15.3	0.8
Suicide Attempt or Self Harm	30	7.5%	10.0	0.4*
Total Intentional Injuries	72	18.0%	25.4	0.6*
Falls	129	32.3%	52.2	0.9
Motor Vehicle	78	19.5%	26.4	1.9*
Other Vehicle	18	4.5%	¶	n/a
Cut	15	3.8%	¶	n/a
All-Terrain Vehicle	14	3.5%	¶	n/a
Struck By Person/Object	13	3.3%	¶	n/a
Snowmachine	10	2.5%	¶	n/a
Other	50	12.5%	n/a	n/a
Total Unintentional Injuries	327	81.8%	116.9	1.0
Undetermined Intent	§§	0.3%	n/a	n/a
Total Injuries	400	100.0%	142.6	0.9*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

[¶] Rate not calculated due to small number of hospitalizations (<20)

n/a Not applicable

^{§§} Categories with fewer than five deaths are not reported

Copper River/Prince William Sound Region Injury Deaths



Summary

- Motor vehicle incidents (34.7%), suicide (16.3%), and homicide (10.2%) were the three leading causes of injury death during 1992-2011 among Copper River/Prince William Sound (CR/PWS) Alaska Native people, and represented about two thirds of all CR/PWS injury deaths (61.2%).
- The motor vehicle incident death rate for CR/PWS Alaska Native people was significantly higher (rate ratio = 3.2) than that for Alaska Native people statewide (56.6 and 17.6 per 100,000, respectively, p<0.05).

Table 11. Leading Causes of Copper River/Prince William Sound Injury Deaths, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

				CR/PWS AN/AI
Mechanism of Injury	n	%	Rate **	vs. Alaska AN/AI 1
Suicide	8	16.3%	¶	n/a
Homicide	5	10.2%	¶	n/a
Total Intentional Injuries	13	26.5%	47.9	0.9
Motor Vehicle	17	34.7%	56.6**	3.2*
Other	19	38.8%	n/a	n/a
Total Unintentional Injuries	36	73.5%	127.1	1.1*
Total	49	100.0%	175.0	1.0

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

[¶] Rate not calculated due to small number of deaths (<10)

^{*} Statistically significant difference between rates, p<0.05

^{**}Rate is based on 10-19 deaths and should be interpreted with caution



Interior Region Injury Hospitalizations

Summary

- Falls (27.1%), suicide attempts (19.6%), and assaults (14.9%) were the three leading causes of injury hospitalizations during 1992-2011 among Interior Alaska Native people, and represented about two thirds of all Interior injury hospitalizations (61.6%).
- The suicide attempt or self harm/snowmachine injury hospitalization rates for Interior Alaska Native people were significantly higher (both rate ratios = 1.3) than that for Alaska Native people statewide (28.7/9.3 and 9.3/7.2 per 10,000, respectively, p<0.05).

Table 12. Leading Causes of Interior Injury Hospitalization, 1992-2011

Data Source: Alaska Trauma Registry

				Interior AN/AI
Mechanism of Injury	n	%	Rate §	vs. Alaska AN/Al ¹
Suicide Attempt or Self Harm	751	19.6%	28.7	1.3*
Assault	571	14.9%	23.7	1.2*
Total Intentional Injuries	1,322	34.5%	52.4	1.2*
Falls	1,040	27.1%	55.4	1.0
Motor Vehicle	369	9.6%	14.8	1.1
Snowmachine	234	6.1%	9.3	1.3*
All-Terrain Vehicle	122	3.2%	4.6	0.8*
Cut	102	2.7%	4.0	0.9
Other Vehicle	96	2.5%	3.7	0.7*
Struck By Person/Object	78	2.0%	3.2	0.9
Other	444	11.6%	n/a	n/a
Total Unintentional Injuries	2,485	64.8%	112.7	1.0
Undetermined Intent	30	0.8%	n/a	n/a
Total Injuries	3,837	100.0%	166.2	1.1*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

Interior Region Injury Deaths



Summary

- Suicide (28.6%), drowning (12.3%), and unintentional poisoning (10.8%) were the three leading causes of injury death during 1992-2011 among Interior Alaska Native people, and represented more than half of all Interior injury deaths (51.7%).
- The death rate due to exposure to smoke and fire for Interior Alaska Native people was significantly higher (rate ratio = 2.0) than that for Alaska Native people statewide (10.8 and 5.3 per 100,000, respectively, p<0.05).

Table 13. Leading Causes of Interior Injury Deaths, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

				Interior AN/AI
Mechanism of Injury	n	%	Rate **	vs. Alaska AN/AI ¹
Suicide	132	28.6%	51.8	1.3*
Homicide	46	10.0%	20.0	1.4*
Total Intentional Injuries	178	38.5%	71.8	1.3*
Drowning	57	12.3%	24.7	1.3*
Poisoning	50	10.8%	21.8	1.0
Motor Vehicle	44	9.5%	18.3	1.0
Excessive Cold	37	8.0%	16.4	1.7*
Exposure To Smoke & Fire	22	4.8%	10.8	2.0*
Off-Road Vehicle	20	4.3%	8.2	0.9
Threats To Breathing	11	2.4%	3.5**	0.6*
Other	32	6.9%	n/a	n/a
Total Unintentional Injuries	273	59.1%	120.7	1.1*
Undetermined Intent	11	2.4%	n/a	n/a
Total	462	100.0%	197.4	1.1*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

 $[\]ensuremath{^{**}}$ Rate is based on 10-19 deaths and should be interpreted with caution. n/a Not applicable



Kenai Peninsula Region Injury Hospitalizations

Summary

- Falls (32.9%), motor vehicle incidents (20.0%), and suicide attempts (12.5%) were the three leading causes of injury hospitalizations during 1992-2011 among Kenai Peninsula (Kenai) Alaska Native people, and represented about two thirds of all Kenai injury hospitalizations (65.5%).
- The assault injury hospitalization rate for Kenai Alaska Native people was significantly lower (rate ratio = 0.4) than that for Alaska Native people statewide (7.4 and 19.5 per 10,000, respectively, p<0.05).

Table 14. Leading Causes of Kenai Peninsula Injury Hospitalization, 1992-2011

Data Source: Alaska Trauma Registry

				Kenai AN/AI
Mechanism of Injury	n	%	Rate §	vs. Alaska AN/Al ¹
Suicide Attempt or Self Harm	107	12.5%	12.3	0.5*
Assault	59	6.9%	7.4	0.4*
Total Intentional Injuries	166	19.5%	19.6	0.5*
Falls	281	32.9%	47.5	0.8*
Motor Vehicle	171	20.0%	20.0	1.5*
All-Terrain Vehicle	31	3.6%	3.5	0.6*
Struck By Person/Object	27	3.2%	3.0	0.9
Cut	26	3.0%	2.8	0.7*
Other Vehicle	26	3.0%	2.9	0.6*
Sports	17	2.0%	¶	n/a
Other	101	11.8%	n/a	n/a
Total Unintentional Injuries	680	79.7%	93.1	0.8*
Undetermined Intent	7	0.8%	n/a	n/a
Total Injuries	853	100.0%	113.5	0.7*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

 $[\]$ Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

 $[\]P$ Rate not calculated due to small number of hospitalizations (<20)

n/a Not applicable

Kenai Peninsula Region Injury Deaths



Summary

- Motor vehicle incidents (32.2%), suicide (21.1%), unintentional poisoning (10.0%), and drowning (10.0%) were the four leading causes of injury death during 1992-2011 among Kenai Peninsula (Kenai) Alaska Native people, and represented about three quarters of all Kenai injury deaths (73.3%).
- The motor vehicle crash death rate for Kenai Alaska Native people was significantly higher (rate ratio = 1.9) than that for Alaska Native people statewide (33.6 and 17.6 per 100,000, respectively, p<0.05).

Table 15. Leading Causes of Kenai Peninsula Injury Deaths, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

				Kenai AN/AI
Mechanism of Injury	n	%	Rate **	vs. Alaska AN/AI ¹
Suicide	19	21.1%	22.0**	0.5*
Total Intentional Injuries	23	25.6%	25.8	0.5*
Motor Vehicle	29	32.2%	33.6	1.9*
Poisoning	9	10.0%	¶	n/a
Drowning	9	10.0%	¶	n/a
Other	15	16.7%	n/a	n/a
Total Unintentional Injuries	62	68.9%	77.0	0.7*
Undetermined Intent	5	5.6%	n/a	n/a
Total	90	100.0%	109.4	0.6*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

n/a Not applicable

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{**}Rate is based on 10-19 deaths and should be interpreted with caution

^{*} Statistically significant difference between rates, p<0.05

[¶] Rate not calculated due to small number of deaths (<10)



Kodiak Region Injury Hospitalizations

Summary

- Falls (32.7%), suicide attempts (15.5%), and assaults (9.5%) were the three leading causes of injury hospitalizations during 1992-2011 among Kodiak Alaska Native people, and represented over half of all Kodiak injury hospitalizations (57.6%).
- The all-terrain vehicle injury hospitalization rate for Kodiak Alaska Native people was significantly higher (rate ratio = 1.3) than that for Alaska Native people statewide (7.9 and 6.1 per 10,000, respectively, p<0.05).

Table 16. Leading Causes of Kodiak Injury Hospitalization, 1992-2011

Data Source: Alaska Trauma Registry

				Kodiak AN/AI
Mechanism of Injury	n	%	Rate §	vs. Alaska AN/Al 1
Suicide Attempt or Self Harm	70	15.5%	15.9	0.7*
Assault	43	9.5%	9.9	0.5*
Total Intentional Injuries	113	24.9%	25.8	0.6*
Falls	148	32.7%	40.8	0.7*
Motor Vehicle	41	9.1%	9.0	0.7*
All-Terrain Vehicle	38	8.4%	7.9	1.3
Other Vehicle	32	7.1%	8.1	1.6*
Poisoning	13	2.9%	¶	n/a
Cut	11	2.4%	¶	n/a
Sports	8	1.8%	¶	n/a
Other	47	10.4%	n/a	n/a
Total Unintentional Injuries	338	74.6%	83.5	0.7*
Undetermined Intent	§§	0.4%	n/a	n/a
Total Injuries	453	100.0%	109.9	0.7*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

 $[\]P$ Rate not calculated due to small number of hospitalizations (<20) n/a Not applicable

^{§§} Categories with fewer than five hospitalizations are not reported

Kodiak Region Injury Deaths



Summary

- Suicide (22.7%), unintentional poisoning (18.2%), and drowning (18.2%) were the three leading causes of injury death during 1992-2011 among Kodiak Alaska Native people, and represented more than half of all Kodiak injury deaths (59.1%).
- The suicide death rate for Kodiak Alaska Native people was significantly lower (rate ratio = 0.6) than that for Alaska Native people statewide (25.3 and 40.9 per 100,000, respectively, p<0.05).

Table 17. Leading Causes of Kodiak Injury Deaths, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

Mechanism of Injury	n	%	Rate **	Kodiak AN/AI vs. Alaska AN/AI ¹
Suicide	10	22.7%	25.3**	0.6*
Total Intentional Injuries	12	27.3%	30.4**	0.6*
Poisoning	8	18.2%	¶	n/a
Drowning	8	18.2%	¶	n/a
Motor Vehicle	5	11.4%	¶	n/a
Other	8	18.2%	n/a	n/a
Total Unintentional Injuries	29	65.9%	69.0	0.6*
Undetermined Intent	§§	6.8%	n/a	n/a
Total	44	100.0%	106.9	0.6*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

§§ Categories with fewer than five deaths are not reported

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{**}Rate is based on 10-19 deaths and should be interpreted with caution

^{*} Statistically significant difference between rates, p<0.05

[¶] Rate not calculated due to small number of deaths (<10) n/a Not applicable



Northwest Arctic Region Injury Hospitalizations

Summary

- Suicide attempts (22.4%), falls (20.4%), and assaults (14.5%) were the three leading causes of injury hospitalizations during 1992-2011 among Northwest Arctic (NW Arctic) Alaska Native people, and represented over half of all NW Arctic injury hospitalizations (57.3%).
- Off-road vehicles were a significant cause of injury hospitalizations among NW Arctic Alaska Native people. The snow machine/all-terrain vehicle injury hospitalization rates for NW Arctic Alaska Native people were significantly higher (rate ratio = 3.1 and 2.4, respectively) than those for Alaska Native people statewide (22.7/14.4 and 7.2/6.1 per 10,000, respectively, p<0.05).

Table 18. Leading Causes of Northwest Arctic Injury Hospitalization, 1992-2011

Data Source: Alaska Trauma Registry

				NW Arctic AN/AI
Mechanism of Injury	n	%	Rate [§]	vs. Alaska AN/Al ¹
Suicide Attempt or Self Harm	515	22.4%	41.0	1.8*
Assault	333	14.5%	29.6	1.5*
Total Intentional Injuries	848	36.9%	70.6	1.7*
Falls	468	20.4%	53.9	0.9
Snowmachine	268	11.7%	22.7	3.1*
All-Terrain Vehicle	183	8.0%	14.4	2.4*
Natural and Environmental	81	81 3.5% 6.7		2.0*
Other Vehicle	75	3.3%	5.2	1.1
Cut	59	2.6%	4.7	1.1
Motor Vehicle	57	2.5%	4.3	0.3*
Other	240	10.4%	n/a	n/a
Total Unintentional Injuries	1,431	62.3%	130.2	1.1*
Undetermined Intent	17	0.7%	n/a	n/a
Total Injuries	2,296	100.0%	202.4	1.3*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

n/a Not applicable

 $[\]S$ Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

Northwest Arctic Region Injury Deaths



Summary

- Suicide (38.4%), drowning (16.4%), and off-road vehicle incidents (9.1%) were the three leading causes of injury death during 1992-2011 among Northwest Arctic (NW Arctic) Alaska Native people, and represented about two thirds of all NW Arctic injury deaths (63.8%).
- The off-road vehicle crash death rate for NW Arctic Alaska Native people was significantly higher (rate ratio = 2.6) than that for Alaska Native people statewide (22.7 and 8.9 per 100,000, respectively, p<0.05).

Table 19. Leading Causes of Northwest Arctic Injury Deaths, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

				NW Arctic AN/AI
Mechanism of Injury	n	%	Rate **	vs. Alaska AN/AI 1
Suicide	89	38.4%	72.4	1.8*
Homicide	8	3.4%	¶	n/a
Total Intentional Injuries	97	41.8%	80.3	1.5*
Drowning	38	16.4%	31.1	1.6*
Off-Road Vehicle	21	9.1%	22.7	2.6*
Poisoning	13	5.6%	13.5**	0.6*
Excessive Cold	13	5.6%	12.0**	1.3*
Exposure To Smoke & Fire	11	4.7%	8.4**	1.6*
Threats To Breathing	9	3.9%	¶	n/a
Motor Vehicle	5	2.2%	¶	n/a
Other	17	7.3%	n/a	n/a
Total Unintentional Injuries	127	54.7%	116.8	1.0
Undetermined Intent	8	3.4%	n/a	n/a
Total	232	100.0%	203.3	1.2*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

 $[\]ensuremath{^{\dag \dag}}$ Death rate per 100,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

^{**}Rate is based on 10-19 deaths and should be interpreted with caution

 $[\]P$ Rate not calculated due to small number of deaths (<10) n/a Not applicable



Norton Sound Region Injury Hospitalizations

Summary

- Suicide attempts (28.3%), falls (23.3%), and assaults (9.1%) were the three leading causes of injury hospitalizations during 1992-2011 among Norton Sound Alaska Native people, and represented over half of all Norton Sound injury hospitalizations (60.7%).
- Off-road vehicles were a significant cause of injury hospitalizations among Norton Sound Alaska Native people. The all-terrain vehicle/snow machine injury hospitalization rates for Norton Sound Alaska Native people were significantly higher (rate ratio = 2.3 and 1.6, respectively) than those for Alaska Native people statewide (14.2/11.4 and 6.1/7.2 per 10,000, respectively, p<0.05).

Table 20. Leading Causes of Norton Sound Injury Hospitalization, 1992-2011

Data Source: Alaska Trauma Registry

				Norton Sound AN/AI
Mechanism of Injury	n	%	Rate §	vs. Alaska AN/AI 1
Suicide Attempt or Self Harm	727	28.3%	46.9	2.0*
Assault	234	9.1%	17.8	0.9
Total Intentional Injuries	961	37.4%	64.7	1.5*
Falls	599	23.3%	56.1	1.0
All-Terrain Vehicle	209	8.1%	14.2	2.3*
Snowmachine	159	6.2%	11.4	1.6*
Motor Vehicle	118	4.6%	0.6*	
Natural and Environmental	71	2.8%	5.6	1.7*
Other Vehicle	65	2.5%	4.4	0.9
Poisoning	63	2.5%	3.6	1.7*
Other	298	11.6%	n/a	n/a
Total Unintentional Injuries	1,582	61.6%	123.6	1.1*
Undetermined Intent	27	1.1%	n/a	n/a
Total Injuries	2,570	100.0%	190.1	1.2*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

n/a Not applicable

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

Norton Sound Region Injury Deaths



Summary

- Suicide (40.2%), motor vehicle incidents (8.2%), and drowning (8.2%) were the three leading causes of injury death during 1992-2011 among Norton Sound Alaska Native people, and represented more than half of all Norton Sound injury deaths (56.5%).
- The off-road vehicle crash death rate for Norton Sound Alaska Native people was significantly higher (rate ratio = 2.0) than that for Alaska Native people statewide (17.7 and 8.9 per 100,000, respectively, p<0.05).

Table 21. Leading Causes of Norton Sound Injury Deaths, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

				Norton Sound AN/AI
Mechanism of Injury	n	%	Rate **	vs. Alaska AN/Al ¹
Suicide	123	40.2%	79.4	1.9*
Homicide	16	5.2%	12.2**	0.9*
Total Intentional Injuries	139	45.4%	91.7	1.7*
Drowning	25	8.2%	18.0	0.9
Motor Vehicle	25	8.2%	18.1	1.0
Poisoning	24	7.8%	21.7	1.0
Off-Road Vehicle	23	7.5%	17.7	2.0*
Excessive Cold	16	5.2%	15.7**	1.6*
Threats To Breathing	10	3.3%	6.8**	1.2*
Exposure To Smoke & Fire	8	2.6%	¶	n/a
Other	27	8.8%	n/a	n/a
Total Unintentional Injuries	158	51.6%	126.8	1.1*
Undetermined Intent	9	2.9%	n/a	n/a
Total	306	100.0%	223.5	1.3*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

n/a Not applicable

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

^{**}Rate is based on 10-19 deaths and should be interpreted with caution

[¶] Rate not calculated due to small number of deaths (<10)



Southeast Region Injury Hospitalizations

Summary

- Falls (36.6%), suicide attempts (15.5%), and assaults (11.8%) were the three leading causes of injury hospitalizations during 1992-2011 among Southeast Alaska Native people, and represented about two thirds of all Southeast injury hospitalizations (63.9%).
- The sports injury hospitalization rate for Southeast Alaska Native people was significantly higher (rate ratio = 2.1) than that for Alaska Native people statewide (3.3 and 1.5 per 10,000, respectively, p<0.05).

Table 22. Leading Causes of Southeast Injury Hospitalization, 1992-2011

Data Source: Alaska Trauma Registry

				Southeast AN/AI
Mechanism of Injury	n	%	Rate §	vs. Alaska AN/AI ¹
Suicide Attempt or Self Harm	667	15.5%	23.7	1.0
Assault	508	11.8%	18.6	1.0
Total Intentional Injuries	1,175	27.3%	42.3	1.0
Falls	1,573	36.6%	69.8	1.2*
Motor Vehicle	428	10.0%	15.5	1.1*
Other Vehicle	207	4.8%	7.3	1.5*
Struck By Person/Object	137	3.2%	5.0	1.5*
Cut	136	3.2%	5.1	1.2*
Sports	102	2.4%	3.3	2.1*
Poisoning	85	2.0%	2.4	1.1
Other	421	9.8%	n/a	n/a
Total Unintentional Injuries	3,089	71.9%	123.4	1.1*
Undetermined Intent	35	0.8%	n/a	n/a
Total Injuries	4,299	100.0%	167.0	1.1*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide § Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05 n/a Not applicable

Southeast Region Injury Deaths



Summary

- Suicide (22.0%), drowning (20.1%), and unintentional poisoning (12.1%) were the three leading causes of injury death during 1992-2011 among Southeast Alaska Native people, and represented more than half of all Southeast injury deaths (54.2%).
- The intentional injury death rate for Southeast Alaska Native people was significantly lower (rate ratio = 0.5) than that for Alaska Native people statewide (28.7 and 55.2 per 100,000, respectively, p<0.05).

Table 23. Leading Causes of Southeast Injury Deaths, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

				Southeast AN/AI
Mechanism of Injury	n	%	Rate **	vs. Alaska AN/AI 1
Suicide	60	22.0%	22.1	0.5*
Homicide	17	6.2%	6.5	0.5*
Total Intentional Injuries	77	28.2%	28.7	0.5*
Drowning	55	20.1%	21.6	1.1*
Poisoning	33	12.1%	13.2	0.6*
Motor Vehicle	32	11.7%	11.5	0.7*
Threats To Breathing	10	3.7%	4.5**	0.8*
Fall	10	3.7%	5.5**	1.1
Other	37	13.6%	n/a	n/a
Total Unintentional Injuries	177	64.8%	73.5	0.7*
Undetermined Intent	19	7.0%	n/a	n/a
Total	273	100.0%	109.6	0.6*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

^{**}Rate is based on 10-19 deaths and should be interpreted with caution n/a Not applicable



Yukon-Kuskokwim Region Injury Hospitalizations

Summary

- Falls (23.9%), suicide attempts (18.0%), and assaults (12.1%) were the three leading causes of injury hospitalizations during 1992-2011 among Yukon-Kuskokwim (Y-K) Alaska Native people, and represented over half of all Y-K injury hospitalizations (54.0%).
- Off-road vehicles were a significant cause of injury hospitalizations among Y-K Alaska Native people. The snow machine and all-terrain vehicle injury hospitalization rates for Y-K Alaska Native people were significantly higher (rate ratio = 1.9 and 1.2, respectively) than those for Alaska Native people statewide (14.1/7.2 and 7.2/6.1 per 10,000, respectively, p<0.05).

Table 24. Leading Causes of Yukon-Kuskokwim Injury Hospitalization, 1992-2011

Data Source: Alaska Trauma Registry

				Y-K AN/AI
Mechanism of Injury	n	%	Rate §	vs. Alaska AN/AI ¹
Suicide Attempt or Self Harm	973	18.0%	21.5	0.9
Assault	653	12.1%	18.0	0.9*
Total Intentional Injuries	1,626	30.1%	39.4	0.9*
Falls	1,292	23.9%	46.9	0.8*
Snowmachine	530	9.8%	14.1	1.9*
All-Terrain Vehicle	306	5.7%	7.2	1.2*
Cut	243	4.5%	5.9	1.4*
Other Vehicle	182	3.4%	4.4	0.9*
Natural and Environmental	155	2.9%	3.9	1.2
Struck By Person/Object	148	2.7%	4.1	1.2*
Other	868	16.1%	n/a	n/a
Total Unintentional Injuries	3,724	69.0%	106.0	0.9*
Undetermined Intent	49	0.9%	n/a	n/a
Total Injuries	5,399	100.0%	146.6	0.9*

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

n/a Not applicable

Yukon-Kuskokwim Region Injury Deaths



Summary

- Suicide (33.6%), drowning (18.4%), and off-road vehicle incidents (7.9%) were the three leading causes of injury death during 1992-2011 among Yukon-Kuskokwim (Y-K) Alaska Native people, and represented more than half of all Y-K injury deaths (59.9%).
- The drowning death rate for Y-K Alaska Native people was significantly higher (rate ratio = 1.6) than that for Alaska Native people statewide (31.0 and 19.2 per 100,000, respectively, p<0.05).

Table 25. Leading Causes of Yukon-Kuskokwim Injury Deaths, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

				Y-K AN/AI
Mechanism of Injury	n	%	Rate **	vs. Alaska AN/AI ¹
Suicide	221	33.6%	52.5	1.3*
Homicide	49	7.4%	13.3	0.9
Total Intentional Injuries	270	41.0%	65.8	1.2*
Drowning	121	18.4%	31.0	1.6*
Off-Road Vehicle	52	7.9%	13.3	1.5*
Excessive Cold	47	7.1%	14.5	1.5*
Poisoning	42	6.4%	12.2	0.6*
Motor Vehicle	19	2.9%	4.5**	0.3*
Exposure To Smoke & Fire	19	2.9%	5.2**	1.0
Threats To Breathing	11	1.7%	2.0**	0.4*
Other	61	9.2%	n/a	n/a
Total Unintentional Injuries	372	56.5%	102.1	0.9*
Undetermined Intent	16	2.4%	n/a	n/a
Total	658	100.0%	171.9	1.0

¹ Rate Ratio indicates if the injury risk is greater (>1) or less (<1) than the risk for AN/AI statewide

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{*} Statistically significant difference between rates, p<0.05

^{**}Rate is based on 10-19 deaths and should be interpreted with caution n/a Not applicable

Notes





Special Topics

In response to inquiries received from communities three special topics are covered in this section: drug and alcohol poisonings, injuries associated with drug and alcohol use, and access to care. Additional data are available in tables B61-65 in Appendix B.

I. Drug and Alcohol Poisonings

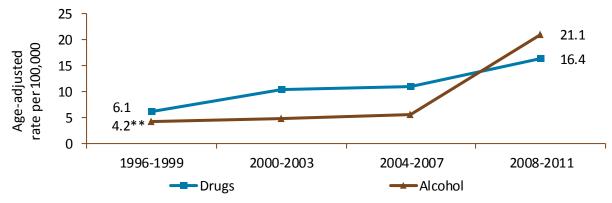
Data on drug and alcohol poisoning are reported as unintentional or intentional injuries. *Unintentional poisonings* result from unplanned overconsumption of alcohol or drugs. *Intentional poisoning* is the deliberate overconsumption of alcohol or drugs and is typically categorized as a suicide, suicide attempt, homicide, or assault.

A. Unintentional Poisoning Deaths

During 2002–2011, alcohol and drug poisoning combined were the mechanisms for 15.8% of all unintentional injury deaths for people of all ages in Alaska and 14.4% of all AN/AI injury deaths. Among the 276 AN/AI unintentional poisoning deaths, 142 (51.4%) were caused by drugs, 114 (41.3%) by alcohol, and 20 (7.2%) by solvents, gases, vapors and other poisons. In contrast, in 2010 nationwide, 90.8% of unintentional poisoning deaths involved drugs per the Centers for Disease Control and Prevention WISQARSTM. The age-adjusted rate of unintentional alcohol and drug poisoning deaths for AN/AI (25.3 per 100,000) was 2.3 times that of non-Natives (10.9 per 100,000) in Alaska.

Figure 55. Alaska Native Unintentional Poisoning Death Rate, Type and Year, 1996-2011

Data Source: Alaska Bureau of Vital Statistics



^{**} Rate is based on 10-19 deaths and should be interpreted with caution.

The rate of unintentional drug and alcohol poisoning deaths for AN/AI increased significantly during 1996–2011, most of this increase since 2007. The drug death rate increased 2.7 times from 1996-1999 to 2008-2011 (6.1 and 16.4 per 100,000, respectively, Figure 55). The alcohol death rate increased 5.0 times from 1996-1999 to the 2008-2011 (4.2 and 21.1 per 100,000, respectively, Figure 55).

The observed increase may be largely explained by changes in classification. Between 2007 and 2009 acute drug or alcohol intoxication codes associated with behavioral health were discontinued. The Centers for Disease Control and Prevention (personal communication, 2013) indicated that most acute intoxications that historically would have been assigned one of the discontinued codes were subsequently assigned to unintentional poisoning. The acute intoxication by drugs or alcohol codes were not previously counted as poisoning injuries because they were classified under behavioral

Drug and Alcohol Poisonings (continued)

health codes. This change must be taken into consideration for both deaths and hospitalization injuries when comparing poisoning data before and after 2007.

B. Unintentional Poisoning Hospitalizations Among Children

The Alaska Trauma Registry reports all classes of poisoning hospitalizations for patients aged 17 and younger. During 2002–2011, 549 Alaskan children aged 17 and younger were hospitalized for an unintentional poisoning; 291 (53.0%) were Alaska Native/American Indian (AN/AI) children (Table 26). Alcohol and prescription or illicit drugs were the most frequently reported poisons involved. Other poisons reported included non-potable alcohols and petroleum products.

Table 26. Frequency of Unintentional Poisoning Hospitalization among Alaska Native Children by Poison Type (N = 549) - Alaska, 2002-2011

Data Source: Alaska Trauma Registry

	Ages 0–9 Years						Ages 10–17 Years						Total
	Al	cohol		rugs	Other Poisons		Alcohol		Drugs		Other Poisons		
	n	%	n	%	n	%	n	%	n	%	n	%	n
AN/AI	<5	(<2%)	86	(78.9%)	23	(21.1%)	132	(72.5%)	27	(14.8%)	23	(12.6%)	291
Non-Native	<5	(<2%)	136	(77.7%)	37	(21.1%)	22	(26.5%)	45	(54.2%)	16	(19.3%)	258

Among all Alaskan children aged 0–9 years, drugs were the cause of three out of four unintentional poisoning hospitalizations (78.7%). Among AN/AI children aged 10–17 years, alcohol caused three out of four unintentional poisoning hospitalizations (72.5%, Table 26). This proportion of unintentional poisoning hospitalizations caused by alcohol was 2.7 times that of non-Natives of the same age. For unintentional alcohol poisoning, AN/AI females aged 0 to 17 years had a hospitalization frequency (84) 1.8 times greater than AN/AI males of the same age (48). Frequencies of unintentional drug poisoning hospitalizations for AN/AI children ages 0 to 17 years were similar for males (60) and females (53).

C. Intentional Poisonings

During 2002–2011 among all AN/AI people in Alaska, there were comparatively few intentional alcohol and drug poisoning deaths (24) and self-inflicted alcohol poisoning hospitalizations (70). The majority of intentional poisonings were hospitalizations from self-inflicted drug use (2,121). The Alaska Trauma Registry did not collect self-inflicted poisoning hospitalizations after January 1, 2011.

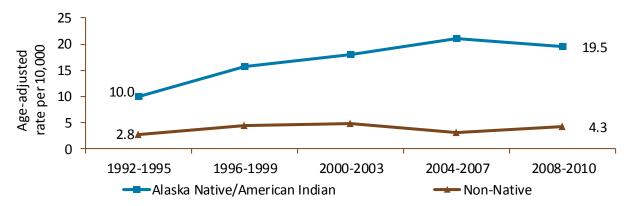
During 2002-2010, 2,121 of the 14,914 total injury hospitalizations among AN/AI people (14.2%) resulted from self-inflicted drug poisoning, compared with 2,296 of the 26,415 total injuries among non-Natives (8.7%). These injuries made up the majority of the suicide attempt hospitalizations for both AN/AI people (73.1%) and non-Natives (82.4%). Two drug types, (1) analgesics, antipyretics, and antirheumatics (e.g., Ibuprofen, Vicodin, Prednisone) and (2) tranquilizers and psychotropic agents (e.g., Ativan, Thorazine) caused about half of the suicide attempt hospitalizations for AN/AI people (48.3%) and non-Natives (53.8%).

AN/AI 20-29 year olds had a self-inflicted drug poisoning hospitalization rate (40.7 per 10,000) 1.6 times that of AN/AI 10-19 and 30-39 year olds (both 25.2 per 10,000). AN/AI people aged 10-29 years represented nearly two thirds (61.0%) of all AN/AI hospitalizations for self-inflicted drug poisoning.

Drug and Alcohol Poisonings (continued)

Figure 56. Self-Inflicted Drug Poisoning Hospitalization Rate by Race and Year, 1992-2010

Data Source: Alaska Trauma Registry



A significant increase in self-inflicted drug poisoning hospitalizations rates over time was exhibited for all Alaskans (Figure 56, p<0.05).

Females had higher rates of self-inflicted drug poisoning hospitalizations than males. The rate for AN/AI women (28.1 per 10,000) was 2.5 times that of AN/AI men (11.4 per 10,000). The Norton Sound region (35.6 per 10,000) had the highest rate of self-inflicted drug poisoning hospitalization. The Copper River/Prince William Sound region (8.2 per 10,000) had the lowest rates (Table 27).

Table 27. Alaska Native Self-Inflicted Drug Poisoning Hospitalization Rates, 2002-2010

Data Source: Alaska Trauma Registry

Region of Occurrence	n	Rate [§]
Norton Sound	526	35.6
Northwest Arctic	353	30.0
Interior	533	21.8
Southeast	478	18.0
Arctic Slope	171	16.5
Yukon-Kuskokwim	601	14.2
Anchorage and Matanuska-Susitna	730	13.6
Kodiak Area	54	12.7
Bristol Bay	103	10.5
Kenai Peninsula	72	8.7
Copper River/Prince William Sound	23	8.2
Aleutians and Pribilofs	7	¶
Total	3,657	18.0

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

[¶] Rate not calculated due to small number of hospitalizations (<20)

II. Alcohol or Drug Use-related Injuries

The Alaska Trauma Registry (ATR) reports whether alcohol or drugs were known or suspected to be involved with the injury. The criteria for known involvement is "having a positive alcohol or drug blood test or breathalyzer result within 6 hours of injury" (ATR Field Data Dictionary, 2006). Cases with suspected association are those with "any documentation in the medical record that alcohol or Illicit drugs were involved" (ATR Field Data Dictionary, 2006). These data focus on the patient and do not reflect cases where someone other than the patient involved with causing the injury was under the influence.

Not all injury hospitalization patients could be tested for alcohol or drugs. Among 6,799 Alaska Native (AN/AI) injury hospitalizations reported as having an association with alcohol in the ATR during 2002–2011, 3,790 (55.7%) included a positive blood alcohol test result. From 2002-2011, 1,679 (66.4%) of the 2,259 AN/AI injury hospitalizations coded as having drug involvement had a positive blood test for drugs.

During 2002–2011, the number of injury hospitalizations for AN/AI people with known or suspected alcohol and/or drug association was 7,483, 46.4% of the total injury hospitalizations. Of the 16,141 injury hospitalizations among AN/AI people, 6,799 (42.1%) were recorded as having alcohol involvement and 2,529 (15.7%) had drug involvement. However, many hospitalizations involved both alcohol and drugs: for those hospitalizations involved with drugs, three out of four (73.0%) also indicated alcohol involvement.

Table 28. Alaska Native Hospitalizations with Known or Suspected Alcohol or Drug Involvement by Mechanism, 2002-2011

Data Source: Alaska Trauma Registry

Mechanism	Total Injury Hospitalizations for	Known or Suspected Alcohol Involvement		Known or Suspected Drug Involvement	
	Mechanism	n	%	n	%
Suicide Attempt or Self Harm	3,022	1,741	57.6%	1,126	37.3%
Assault	2,047	1,461	71.4%	380	18.6%
Total Intentional Injuries	5,069	3,202	63.2%	1,506	29.7%
Falls	4,809	1,412	29.4%	241	5.0%
Motor Vehicle	1,375	624	45.4%	268	19.4%
All-terrain Vehicle	776	261	33.6%	91	11.8%
Snowmachine	749	301	40.2%	123	16.4%
Other Injury Incidents	3,363	999	29.7%	300	8.9%
Total Unintentional Injuries	11,072	3,597	32.5%	1,023	9.2%
Total Injuries	16,141	6,799	42.1%	2,529	15.7%

Among AN/AI people, the three injury mechanisms with the highest proportion of association with alcohol or drugs were assault, suicide attempt and self harm, and motor vehicle crashes.

Comparing regions, alcohol association ranged from a high of 48.0% of all AN/AI injury hospitalizations in the Interior Region to a low of 32.4% in the Kenai Peninsula Region. Injury hospitalizations suspected of having drug involvement ranged from 29.4% of all injury hospitalizations in the Copper River/Prince William Sound Region to 1.9% in the Northwest Arctic Region.

Alcohol or Drug Use-related Injuries (continued)

Table 29. Alaska Native Hospitalizations with Alcohol or Drug Involvement by Region, 2002-2011

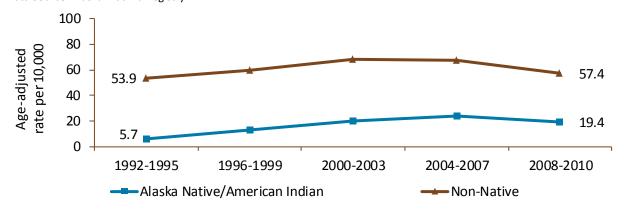
Data Source: Alaska Trauma Registry

Region of Occurrence	Total Injury Hospitalizations	Known or Suspected Alcohol Involvement		Known or Suspected Drug Involvement	
	for Region	n	%	n	%
Anchorage and Matanuska-Susitna	3,913	1,787	45.7%	587	15.0%
Yukon-Kuskokwim	2,942	1,135	38.6%	407	13.8%
Southeast	1,904	736	38.7%	374	19.6%
Interior	1,895	910	48.0%	308	16.3%
Norton Sound	1,513	646	42.7%	222	14.7%
Northwest Arctic	1,263	541	42.8%	277	21.9%
Bristol Bay	810	376	46.4%	113	14.0%
Arctic Slope	724	239	33.0%	103	14.2%
Kenai Peninsula	479	155	32.4%	65	13.6%
Kodiak Area	210	85	40.5%	27	12.9%
Copper River/Prince William Sound	203	90	44.3%	19	9.4%
Aleutians and Pribilofs	133	54	40.6%	8	6.0%

The proportion of injury hospitalizations with alcohol association was similar for males (43.6%) and females (40.3%). This was also true for drug involvement (males 15.5% and females 15.8%). AN/AI people aged 20–29 had the highest rates of suspected association with drugs (51.4 per 10,000) or alcohol (119.1 per 10,000). AN/AI injury hospitalization rates with alcohol involvement increased significantly (p<0.05) from 53.9 per 10,000 to 57.4 per 10,000 during 1992–2011. During that time rates for AN/AI hospitalizations with suspected drug involvement increased 3.4 times from 5.7 to 19.4 per 10,000.

Figure 57. Rate of Hospitalizations Associated with Drugs or Alcohol by Race, Alaska, 1992-2011

Data Source: Alaska Trauma Registry



III. Access to Care

Because of Alaska's unique geography, access to care differs by community. Recovery from an injury may depend on how soon an injured person reaches a healthcare facility. In Alaska, healthcare facilities range from small clinics staffed by Community Health Aides/Practitioners in remote villages to referral hospitals in Anchorage with the most advanced care capabilities. Remote Alaskan villages may have additional transportation challenges due to lack of road access and weather conditions that may prevent air or water transport. This section of the report compares injuries that occur in communities with different levels of access to care.

The "Alaska Rural Primary Care Facility Needs Assessment Project" report prepared by the Alaska Native Tribal Health Consortium, the Alaska Department of Health and Social Services, and the Indian Health Service, was given to the Denali Commission in October, 2000. It gave an "Isolation Score" for each community in Alaska, rating the level of access to medical services. It took into consideration distance to the nearest hospital, emergency medical services available, and primary mode of travel to next level of care. The table of community isolation scores from the Denali Commission report was used as the basis for the five access categories in this report. The list of how each community in Alaska was rated can be found in Appendix D.

Table 30. Distribution of Population in Alaska by Access to Care Category and Race, 2010

Location of Occurrence	Estimated Proportion of Statewide Population *		
	AN/AI	Non-Native	
In community with highest level of hospital care in Alaska (Anchorage)	26.6%	46.1%	
In community with a hospital with more limited services (e.g. Sitka)	24.5%	18.3%	
On the road system within 100 miles of a hospital (e.g. Nenana)	14.0%	30.3%	
Within 100 air/water miles of a hospital, or more than 100 miles by road (e.g. King Salmon)	5.6%	2.9%	
More than 100 air/water miles from a hospital (e.g. Atqasuk)	29.3%	2.4%	

^{*} Estimated from the 2010 census population counts for individual communities

A higher proportion of Alaska Native/American Indian (AN/AI) people live in the most remote communities ("more than 100 air/water miles from a hospital") than non-Natives (29.3% and 2.4%, respectively, Table 30). Nearly one out of every three AN/AI injury hospitalizations (30.9%) and two of every five AN/AI injury deaths (42.6%) occurred in the most remote communities. Among non-Natives, less than one out of twenty injury hospitalizations or deaths (4.7%) involved events in the most remote communities. Thus, a smaller proportion of AN/AI people than non-Natives have immediate access to the level of care needed after being injured.

The rates of AN/AI injury hospitalizations are significantly lower for those injured in the most remote communities when compared to those injured in communities with a hospital (121.9 and 134.7, unadjusted rate per 10,000, respectively, p<0.05). There was no significant difference between these two community types for non-Natives (58.1 and 60.0, unadjusted rate per 10,000, respectively).

Access to Care (continued)

In contrast, the rates of injury deaths are significantly higher for both races for injuries occurring in the most remote communities (AN/AI people 164.7, non-Natives 141.9, unadjusted rate per 100,000) compared to those that happened in communities with hospitals (AN/AI people 138.9, non-Natives 86.4, unadjusted rate per 100,000, p<0.05).

Mechanisms of injury showed differences by remoteness of injury occurrence for AN/AI injury deaths and hospitalizations. The mechanisms with the greatest difference between the highest and lowest levels of access to care for hospitalizations were transportation and intentional injuries (Table 31).

Hospitalizations for assaults made up a higher proportion of AN/AI injuries occurring in Anchorage than in the most remote areas, while suicide attempts and self harm made up a higher portion of hospitalizations for injuries that occurred in the most isolated settings (Table 31).

Table 31. Alaska Native Injury Hospitalizations, Access to Care by Mechanism, 2002-2011

	Access C		
Mechanism	Least Remote (Anchorage)	Most Remote	Difference
All-Terrain Vehicle	0.2%	10.4%	10.2%
Motor Vehicle	15.0%	2.8%	12.2%
Snowmachine	0.2%	9.1%	8.9%
Assault	18.1%	10.0%	8.1%
Suicide Attempt or Self Harm	13.7%	20.3%	6.6%

For injury deaths, the mechanisms with the greatest difference between the highest and lowest levels of access to care included drowning, motor vehicles, poisoning, and suicide (Table 32).

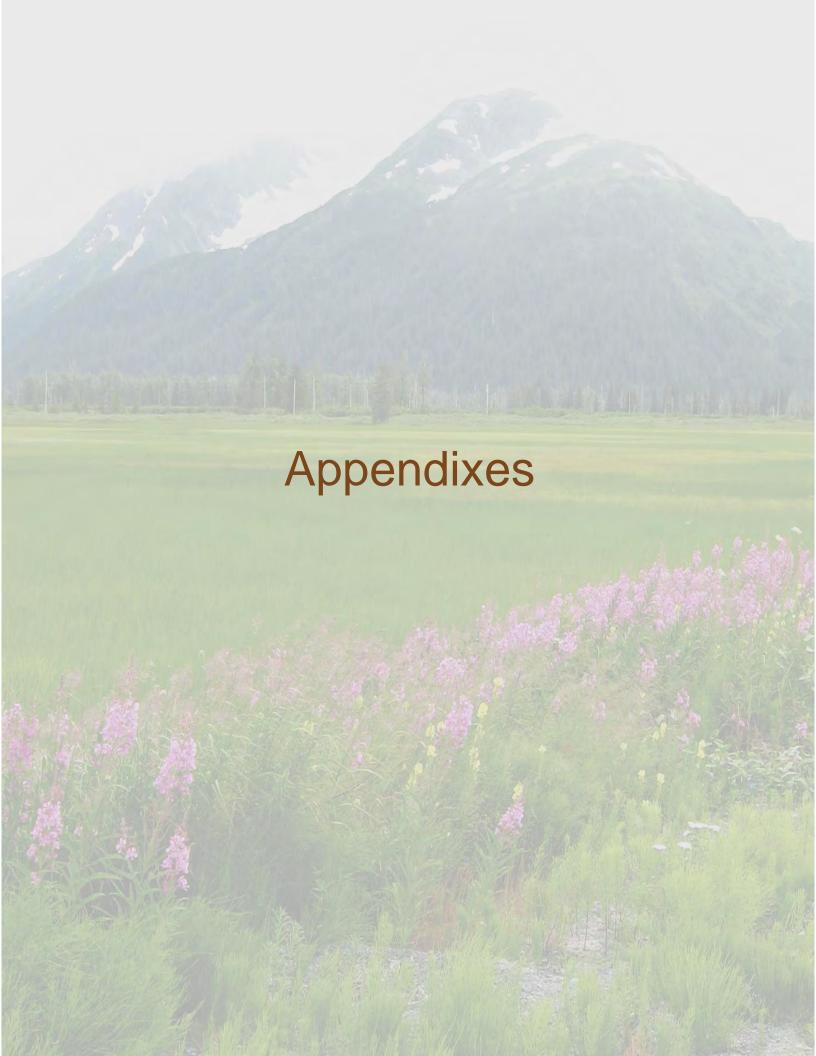
Table 32. Alaska Native Injury Deaths, Access to Care by Mechanism, 2002-2011

	Access Ca		
Mechanism	Least Remote (Anchorage)	Most Remote	Difference
Drowning	1.2%	16.7%	15.5%
Motor Vehicle	12.7%	4.4%	8.3%
Poisoning	27.8%	6.2%	21.6%
Suicide	17.7%	39.9%	22.2%

The highest proportion of motor vehicle injuries for both hospitalizations and deaths for AN/AI people occurred in communities "on the road system within 100 miles of a hospital" (21.4%).

ALASKA NATIVE INJURY ATLAS

Notes





Appendix A. Description of Data Sources and Methods

Data Sources

Morbidity (Hospitalization) Data

Injury hospitalization data were obtained from the State of Alaska Trauma Registry (ATR). The ATR collects data on the most seriously injured patients in Alaska and the treatment they received. The ATR collects 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.

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

Mortality (Death) Data

The State of Alaska Bureau of Vital Statistics provided data from death certificates for Alaska Native people statewide from 1992 to 2011. Only injury deaths that occurred in Alaska were included. If someone was injured in Alaska and then transported to Seattle where they subsequently died, the fatality data were not included in this report. As a result, this report may underestimate injury death frequencies and rates, but not to a level of significant impact. The Alaska Bureau of Vital Statistics was informed of only 16 injury deaths occurring from 2002-2011 outside of Alaska for Alaska Native people residing in Alaska.

More information about the Alaska Bureau of Vital Statistics may be obtained at: http://dhss.alaska.gov/dph/VitalStats/Pages/default.aspx.

Population Data

The Alaska Department of Labor and Workforce Development (AKDOL) produces statistics about Alaska's population including the annual population estimates used to calculate rates for this report. AKDOL estimates population characteristics (age, race, gender, region of residence) for each year throughout a decade by using population counts from the decennial census data before and after each decade and then making adjustments. 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: http://labor.alaska.gov/research/pop/popest.htm.

Determination of the Cause of Injury Categories

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

Morbidity (Hospitalization) Data

The Alaska Trauma Registry used ICD-9 codes for all of the data received for this report. The ICD-9 External Cause of Injury matrix developed by ANTHC to categorize injury hospitalizations by cause for this report is in Appendix C of this document. Due to the uniqueness of modes of travel in Alaska as well as unique environmental conditions, two modifications were made to the matrix to better fit Alaskan injury hospitalizations. Below is a description of the modifications.

- "Snowmachine" injuries (E820) were separated into their own category from "Other Transport".
- "ATV" injuries (E821) were separated into their own category from "Other Transport".

To improve the accuracy of the data analysis, the narrative fields and International Classification of Diseases (ICD) codes of all cases with a mechanism classification of "OTHER" in the ATR database were reviewed to determine if the cause or mechanism could be more specifically classified. State of Alaska staff overseeing the ATR indicated that the ICD code and narrative fields in the database had the same level of accuracy. 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 more detail than the ICD code.

The narratives of all transportation categories were also reviewed to re-categorize them by the larger vehicle (if more than one transportation mode was involved) rather than the transportation mode of the patient at the time of the incident. The order of transportation modes used (from largest to smallest) was: motor vehicle (automobile, bus, truck), snowmachine, all-terrain vehicle, bicycle, and pedestrian.

The review of the data from 1992 to 2011, all races, led to 665 cases (0.75% of the total) that were grouped under a different mechanism or cause than identified by their ICD-9 code in the ATR data. The same reassignment was not done for the mortality data because a detailed narrative field was not included.

Mortality (Death) Data

The Bureau of Vital Statistics used ICD-9 codes through December, 1998, and then changed to ICD-10 codes in January, 1999. ANTHC developed ICD-9 and ICD-10 External Cause of Injury matrices to categorize injury deaths by cause for this report, described in Appendix E.

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:

- "Excessive cold" was separated into its own cause of death category from "Natural/Environmental": X30-X31.
- "Off-road Vehicle" was separated into its own category from "Other Transport": E820.0-821.9 and V86.0-86.9.
- Transport-related drowning deaths (V90, V92) were moved from the "Other Transport" category and added to the "Drowning" category. (See Appendix E for all codes assigned to drowning.)

Between 2007 and 2009 the World Health Organization discontinued the ICD-10 codes titled "Mental

and behavioral disorders due to use of" alcohol or specific drug class, "acute intoxication". Subsequently, "acute intoxication" cases were predominantly coded as X45 ("Accidental Poisoning") or X60-X65 ("Intentional self poisoning using alcohol or drugs"). Prior to the discontinuation, "acute intoxication" cases were considered behavioral health cases and not included in injury surveillance. Injury data may show a substantial increase in unintentional poisonings and suicide attempts and self harm, so comparing data before and after the period of the coding change (2007-2009) should be done with caution.

Poisoning Data

All poisoning deaths, for both adults and children, are included in the Bureau of Vital Statistics data. The Alaska Trauma Registry reports all poisoning hospitalizations for patients under age 18. Until January, 2011, the ATR also reported intentional, occupational, and inhalational poisonings for adults. On January 1, 2011, the ATR discontinued reporting intentional poisoning hospitalizations for adults.

Because poisoning is a substantial proportion (75%) of the means used for suicide attempts and self harm for Alaska Native people, the sections on suicide attempts and self harm hospitalizations, pages 34 to 35, included data through 2010 only to ensure rate accuracy.

Calculation of Rates

All rates in this report were age-adjusted unless the data were annotated or stratified by age. Rates were age-adjusted to the 2000 U.S. standard population obtained from the U.S. Census. The regional maps in the Injury Hospitalization and Injury Death sections indicate whether there is a statistically significant difference between each regional rate for 2002-2011 data and the statewide AN/AI rate. Rates in the Access to Care section, pages 76 to 77, could not be age-adjusted because that level of population data segmentation was not available.

The rate ratio indicates whether the injury risk of the population of interest is greater (>1) or less (<1) than the statewide AN/AI population. In the regional profile section of this report, the regional AN/AI rates were compared to statewide AN/AI rates for calculating rate ratios. Regional non-Native rates were not used for comparison because the injury frequencies for non-Natives in several regions over this time period were below the rate-calculation threshold (10 for deaths and 20 for hospitalizations).

Population Data

"Bridged" population estimates from the Alaska Department of Labor were used as the denominator to calculate the mortality rates. To compare data over time, bridged estimates were necessary to adjust for the option added in the 2000 Census which allowed selection of multiple races rather than one. For the time trends, four years of population (denominator) and occurrence (numerator) data were summed for each time period to calculate the aggregate rates for each time period.

To calculate age-adjusted rates, the number of deaths for each ten-year age group (from 0-9 to 70+ years) was divided by the total population for that age group over the corresponding time interval. Those unadjusted rates were multiplied by the proportion that age group made up of the 2000 U.S. standard population. Those products were summed to get the overall age-adjusted rate for each time interval. All injury rates presented in this report were age-adjusted, except where annotated or age groups were used.

Regional Classification

Maps within this report provide injury death and hospitalization rates by region. The village where each injury occurred (rather than the village of residence) was used to determine the region for the calculation of rates. For example, an injury involving a resident of Bethel that was injured in a motor vehicle crash in Anchorage would be categorized as an Anchorage/Mat-Su injury.

Many tribal health organization (THO) service areas are geographically small, with corresponding low numbers for population, injury deaths and hospitalizations. To obtain populations and injury frequencies large enough to calculate rates, several THO service areas were combined into one region, creating a total of twelve regions. The regions are defined on page 45, at the start of the Regional Profile section of this report.

Death Data

Rates per 100,000 population were calculated for injury deaths. Death rates were not calculated for any category where the number of deaths was fewer than ten. Injury death rates based on a small number of deaths (at least 10 but less than 20) were flagged (**) because they may be unstable and should be interpreted with caution.

Hospitalization Data

Rates per 10,000 population were calculated for injury hospitalizations. Rates were not calculated where the number of hospitalizations in a category was less than twenty.

Other Notes

Alaska Native People and American Indian People

Throughout this document, both the term "Alaska Native" and the abbreviation "AN/AI" are used to refer to all Alaska Native and American Indian people who reside in Alaska.

Alcohol-related and Drug-related Injury Hospitalizations

This report presents information on alcohol- and drug-related injury hospitalizations. To be included as alcohol- or drug-related in the ATR, there must be a positive blood alcohol or drug test or breathalyzer result within six hours of injury or documentation in the medical record that alcohol or illicit drugs were involved. If a case does not meet these criteria, it will not be recorded as alcohol- or drug-related in the ATR.

Cases where someone other than the patient was involved in causing the injury and under the influence of alcohol or drugs would not be recorded as alcohol- or drug-related in the ATR. This may lead to underestimates of the number of alcohol- or drug-related injury hospitalizations.

n Values

In the data tables in Appendix B, there may be variation in the n values listed for the total number of injuries in each category. This indicates that one of the parameters used on that table (gender, age, region) was missing for a small number of cases. These cases were still included to provide as comprehensive a picture of Alaska Native injuries as possible.

Percentages

Calculations for percentages were rounded to one decimal place, therefore total percentages may not add up to 100.0%.

Statistical Significance

Differences between comparison rates and percentages were considered to be significantly different if the z-value was greater than the critical value at the 0.05 significance level, 1.96, and annotated in the report as p<0.05.



Photo by H. Strayer

Appendix B. Data Tables

Table B-1. Intentional Injury Death Rate^{††} by Region, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Rate ††
Norton Sound *	75	97.4
Northwest Arctic *	50	74.8
Yukon-Kuskokwim *	156	72.2
Arctic Slope	30	58.2
Interior	67	50.4
Anchorage and Matanuska-Susitna *	137	42.4
Bristol Bay	16	33.3**
Kenai Peninsula *	15	29.3**
Southeast	40	28.9
Aleutians and Pribilofs	5	¶
Copper River/Prince William Sound	7	¶
Kodiak	5	¶
All Alaska, Non-Native only	1,221	21.4
All Alaska, AN/Al only	603	51.6

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{*} Regional rate is significantly different from the AN/AI statewide rate , p<0.05 $\,$

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

[¶] Rate not calculated due to small number of deaths (<10)

Table B-2. Intentional Injury Death Rate^{††} by Gender, Race and Year, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

			Alaska	AN/AI		
	N	1ale	Fer	male	To	otal
	n	Rate ††	n	Rate ††	n	Rate ††
1992-1995	194	98.5	57	30.6	251	64.6
1996-1999	180	86.6	47	23.2	227	54.6
2000-2003	163	71.9	62	27.2	225	49.6
2004-2007	181	79.9	66	28.8	247	54.4
2008-2011	191	77.5*	56	23.9	247	51.0*

			Alaska N	on-Native		
	N	1ale	Fer	male	To	tal
	n	Rate ††	n	Rate ††	n	Rate ††
1992-1995	419	39.9	92	9.9	511	25.8
1996-1999	363	36.9	104	11.0	467	24.0
2000-2003	338	32.3	96	9.1	434	20.9
2004-2007	391	34.5	95	8.5	486	21.8
2008-2011	399	32.2*	102	8.4	501	20.7*

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B- 3. Intentional Injury Death by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

n	Total
478	79.3%
125	20.7%
603	100.0%
	478 125

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-4. Intentional Injury Death Rate^{††}, Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	Fe	male	Male		7	Total
Age	n	Rate ††	n	Rate ††	n	Rate ††
0-9	§§	¶	§§	¶	7	¶
10-19	38	31.7	98	78.3	136	55.5
20-29	51	62.6	171	201.2	222	133.4
30-39	26	36.4	72	100.9	98	68.6
40-49	22	28.8	63	83.3	85	56.0
50-59	6	¶	27	47.3	33	28.6
60-69	6	¶	8	¶	14	23.1**
70+	§§	¶	6	¶	8	¶
Total	155	27.0	448	77.0	603	52.2

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-5. Unintentional Injury Death Rate^{††} by Region, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Rate ††
Bristol Bay *	73	158.4
Anchorage and Matanuska-Susitna *	336	136.5
Copper River/Prince William Sound	18	122.3**
Norton Sound	75	114.5
Northwest Arctic	62	112.7
Interior	127	106.9
Aleutians and Pribilofs	17	102.6**
Yukon-Kuskokwim	176	92.4
Kenai Peninsula *	31	75.9
Arctic Slope *	28	70.4
Southeast *	81	66.6
Kodiak	12	55.0**
All Alaska, Non-Native only	2,546	49.5
All Alaska, AN/Al only	1,036	105.1

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{§§} Categories with fewer than five deaths are not reported

[¶] Rate not calculated due to small number of deaths (<10)

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

 $^{^{*}}$ Regional rate is significantly different from the AN/AI statewide rate , p<0.05

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

Table B-6. Unintentional Injury Death Rate^{††} by Gender, Race and Year, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

			Alaska	a AN/AI		
	Male Female			Total		
	n	Rate ††	n	Rate ††	n	Rate ††
1992-1995	319	183.4	118	69.7	437	126.1
1996-1999	272	156.0	105	63.0	377	108.5
2000-2003	286	156.8	125	65.0	411	109.3
2004-2007	287	147.6	115	60.4	402	103.2
2008-2011	302	146.1*	144	72.7	446	109.5*

			Alaska N	on-Native			
	N	1ale	Fei	Female		Total	
	n	Rate ††	n	Rate ††	n	Rate ††	
1992-1995	856	90.2	215	30.1	1,071	61.5	
1996-1999	672	72.7	211	29.8	883	52.1	
2000-2003	744	78.4	276	31.6	1,020	55.1	
2004-2007	702	67.1	276	28.9	978	48.3	
2008-2011	743	64.9*	303	30.9	1,046	48.6*	

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-7. Unintentional Injury Death by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Total
Poisoning	276	26.6%
Drowning	169	16.3%
Motor vehicle	158	15.2%
Other or unspecified	124	12.0%
Off-road vehicle	98	9.5%
Excessive cold	96	9.3%
Threats to breathing	49	4.7%
Fall	35	3.4%
Smoke, fire & flames	32	3.1%
Total	1,037	100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-8. Unintentional Injury Death Rate^{††}, Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	Fe	Female		Male	T	otal
Age	n	Rate ††	n	Rate ††	n	Rate ††
0-9	32	29.2	55	46.5	87	38.2
10-19	36	30.0	81	64.8	117	47.8
20-29	34	41.7	143	168.3	177	106.3
30-39	62	86.8	123	172.3	185	129.5
40-49	62	81.3	125	165.4	187	123.1
50-59	36	61.8	93	163.1	129	111.9
60-69	16	51.7**	49	165.1	65	107.2
70+	40	157.5	50	257.0	90	200.6
Total	318	55.5	719	123.6	1,037	89.8

⁺⁺ Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-9. Suicide Death Rate^{††} by Region, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Rate ††
Norton Sound *	64	81.6
Northwest Arctic *	48	71.6
Yukon-Kuskokwim	130	58.2
Arctic Slope	28	54.6
Interior	54	40.0
Kenai Peninsula	13	26.4**
Anchorage and Matanuska-Susitna *	86	26.1
Bristol Bay	12	25.3**
Southeast *	28	20.2
Aleutians and Pribilofs	§§	¶
Copper River/Prince William Sound	6	¶
Kodiak	5	¶
All Alaska, Non-Native only	953	16.9
All Alaska, AN/Al only	478	40.3

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

^{*} Regional rate is significantly different from the AN/AI statewide rate , p<0.05

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

[¶] Rate not calculated due to small number of deaths (<10)

Table B-10. Suicide Death Rate^{††} by Gender, Race and Year, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

			Alaska	AN/AI		
	Male Female			male	To	otal
	n	Rate ††	n	Rate ††	n	Rate ††
1992-1995	147	73.4	37	19.3	184	46.4
1996-1999	132	59.2	29	13.2	161	36.2
2000-2003	129	56.3	35	14.6	164	35.5
2004-2007	151	66.0	50	21.5	201	43.7
2008-2011	152	60.4*	43	18.4	195	39.7*

	Alaska Non-Native					
	N	1ale	Fer	emale Total		
	n	Rate ††	n	Rate ††	n	Rate ††
1992-1995	309	30.7	59	6.5	368	19.2
1996-1999	260	28.2	68	7.2	328	17.6
2000-2003	262	25.8	67	6.3	329	16.1
2004-2007	292	26.6	67	6.0	359	16.4
2008-2011	334	27 2*	86	7.0	420	17 4 *

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-11. Suicide Death by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

Total n Firearm 58.0% 277 Strangulation or suffocation 34.3% 164 Poisoning 25 5.2% Other or unspecified 12 2.5% **Total** 478 100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-12. Suicide Death Rate^{††}, Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	Fe	Female		Male		otal
Age	n	Rate ††	n	Rate ††	n	Rate ††
0-9	§§	¶	§§	¶	§§	¶
10-19	31	25.9	77	61.6	108	44.1
20-29	38	46.6	157	184.7	195	117.1
30-39	21	29.4	50	70.1	71	49.7
40-49	13	17.0**	54	71.4	67	44.1
50-59	§§	¶	22	38.6	25	21.7
60-69	§§	¶	§§	¶	8	¶
70+	§§	¶	§§	¶	4	¶
Total	111	19.4	367	63.1	478	41.4

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-13. Poisoning Death Rate †† by Region, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Rate ††
Anchorage and Matanuska-Suisitna *	135	46.6
Bristol Bay	14	30.8**
Interior	32	26.0
Norton Sound	14	25.0**
Southeast	28	21.8
Northwest Arctic	10	20.2**
Yukon-Kuskokwim *	25	12.9
Aleutians and Pribilofs	§§	¶
Arctic Slope	§§	¶
Copper River/Prince William Sound	§§	¶
Kenai Peninsula	9	¶
Kodiak	§§	¶
All Alaska, non-Native only	683	11.5
All Alaska, AN/AI only	276	27.2

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{§§} Categories with fewer than five deaths are not reported

[¶] Rate not calculated due to small number of deaths (<10)

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

^{*} Regional rate is significantly different from the AN/AI statewide rate, p<0.05

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

[¶] Rate not calculated due to small number of deaths (<10)

^{§§} Categories with fewer than five deaths are not reported

Table B-14. Poisoning Death Rate^{††} by Gender, Race and Year, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

			Alaska	AN/AI			
	N	1ale	Fei	Female		Total	
	n	Rate ††	n	Rate ††	n	Rate ††	
1992-1995	15	9.5	12	7.8	27	8.6	
1996-1999	28	16.0	31	16.6	59	16.3	
2000-2003	35	18.8	36	17.9	71	18.3	
2004-2007	37	17.2	35	18.6	72	18.1	
2008-2011	93	43.3*	75	35.9*	168	39.6*	

	Alaska Non-Native						
	N	1ale	Female		To	Total	
	n	Rate ††	n	Rate ††	n	Rate ††	
1992-1995	49	4.6	15	1.6	64	3.2	
1996-1999	61	5.2	29	3.7	90	4.6	
2000-2003	126	10.2	83	7.8	209	9.1	
2004-2007	141	11.9	80	7.0	221	9.5	
2008-2011	236	17.7*	107	9.2*	343	13.7*	

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-15. Poisoning Death by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Total
Drugs or medications	142	51.4%
Alcohol	114	41.3%
Other or unspecified Poisons	20	7.2%
Total	276	100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-16. Poisoning Death Rate^{††}, Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	Female		N	Male		Total	
Age in Years	n	Rate ††	n	Rate ††	n	Rate ††	
0-9	§§	¶	§§	¶	§§	¶	
10-19	§§	¶	8	¶	12	4.9**	
20-29	17	20.9**	31	36.5	48	28.8	
30-39	39	54.6	33	46.2	72	50.4	
40-49	37	48.5	42	55.6	79	52.0	
50-59	19	32.6**	27	47.3	46	39.9	
60-69	9	¶	§§	¶	13	21.4**	
70+	§§	¶	§§	¶	5	¶	
Total	129	22.5	147	25.3	276	23.9	

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-17. Drowning Death Rate^{††} by Region, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Rate ††
Bristol Bay *	19	41.1**
Yukon-Kuskokwim *	57	28.1
Northwest Arctic *	17	26.1**
Norton Sound	14	20.7**
Interior	18	14.2**
Southeast	17	12.5**
Aleutians and Pribilofs	§§	¶
Anchorage and Matanuska-Suisitna	7	¶
Arctic Slope	8	¶
Copper River/Prince William Sound	§§	¶
Kenai Peninsula	§§	¶
Kodiak	§§	¶
All Alaska, non-Native only	222	3.9
All Alaska, AN/Al only	169	15.1

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{§§} Categories with fewer than five deaths are not reported

[¶] Rate not calculated due to small number of deaths (<10)

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

^{*} Regional rate is significantly different from the AN/AI statewide rate , p<0.05

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

^{§§} Categories with fewer than five deaths are not reported

[¶] Rate not calculated due to small number of deaths (<10)

Table B-18. Drowning Death Rate^{††} by Gender, Race and Year, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

			Alaska	a AN/AI			
	N	1ale	Female		To	Total	
	n	Rate ††	n	Rate ††	n	Rate ††	
1992-1995	89	49.4	14	6.0	103	27.6	
1996-1999	74	41.7	7	¶	81	21.8	
2000-2003	61	30.3	14	5.7	75	17.9	
2004-2007	69	32.3	13	5.0	82	18.6	
2008-2011	52	22.2*	§§	¶	56	12.0*	

			Alaska N	on-Native			
	N	1ale	Female		To	Total	
	n	Rate ††	n	Rate ††	n	Rate ††	
1992-1995	144	13.1	21	2.3	165	7.9	
1996-1999	98	9.2	15	1.7	113	5.6	
2000-2003	90	9.2	7	¶	97	5.0	
2004-2007	75	6.1	10	0.9	85	3.6	
2008-2011	79	6.3*	12	1.2*	91	3.9*	

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-19. Drowning Death by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Total
While in natural water	61	36.1%
Water transport, boating	46	27.2%
Other or unspecified	41	24.3%
Fall into natural water, not from boat	21	12.4%
Total	169	100.0%

[¶] Rate not calculated due to small number of deaths (<10)

^{§§} Categories with fewer than five deaths are not reported

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-20. Drowning Death Rate^{††}, Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	Fe	Female		Male		Total	
Age	n	Rate ††	n	Rate ††	n	Rate ††	
0-9	7	¶	12	10.1**	19	8.3**	
10-19	7	¶	18	14.4**	25	10.2	
20-29	§§	¶	36	42.4	37	22.2	
30-39	§§	¶	28	39.2	31	21.7	
40-49	§§	¶	27	35.7	30	19.8	
50-59	§§	¶	13	22.8**	14	12.1**	
60-69	§§	¶	7	¶	9	¶	
70 +	§§	¶	§§	¶	§§	¶	
Total	24	4.2	145	24.9	169	14.6	

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-21. Motor Vehicle Death Rate^{††} by Region, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Rate ††
Kenai Peninsula *	13	28.9**
Anchorage and Matanuska-Suisitna*	70	25.5
Interior	20	15.9
Norton Sound	11	13.6**
Southeast *	10	7.4**
Yukon-Kuskokwim *	11	4.9**
Aleutians and Pribilofs	§§	¶
Arctic Slope	5	¶
Bristol Bay	6	¶
Copper River/Prince William Sound	6	¶
Kodiak	§§	¶
Northwest Arctic	§§	¶
All Alaska, non-Native only	636	11.7
All Alaska, AN/Al only	158	14.7

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

[¶] Rate not calculated due to small number of deaths (<10)

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

^{§§} Categories with fewer than five deaths are not reported

 $^{^{*}}$ Regional rate is significantly different from the AN/AI statewide rate , p<0.05

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

^{§§} Categories with fewer than five deaths are not reported

[¶] Rate not calculated due to small number of deaths (<10)

Table B-22. Motor Vehicle Death Rate^{††} by Gender, Race and Year, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

			Alaska	AN/AI			
	Male		Female		To	Total	
	n	Rate ††	n	Rate ††	n	Rate ††	
1992-1995	49	26.7	37	20.3	86	23.7	
1996-1999	51	26.5	20	10.3	71	18.2	
2000-2003	56	30.2	21	11.3	77	20.2	
2004-2007	45	20.7	18	7.7	63	14.2	
2008-2011	34	16.4*	22	9.5*	56	12.9*	

	Alaska Non-Native						
	N	1ale	Fei	Female		Total	
	n	Rate ††	n	Rate ††	n	Rate ††	
1992-1995	231	25.2	99	12.9	330	19.2	
1996-1999	173	17.5	72	8.2	245	13.0	
2000-2003	226	23.6	89	9.5	315	16.5	
2004-2007	199	19.3	76	6.9	275	13.7	
2008-2011	141	11.7*	61	5.6*	202	8.7	

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-23. Motor Vehicle Death by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Total
Motor vehicle passenger	91	57.6%
Pedestrian	58	36.7%
Motorcyclist or Bicyclist	9	5.7%
Total	158	100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-24. Motor Vehicle Death Rate^{††}, Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	Female		N	Male		Total	
Age	n	Rate ††	n	Rate ††	n	Rate ††	
0-9	§§	¶	11	9.3**	12	5.3**	
10-19	14	11.7**	12	9.6**	26	10.6	
20-29	9	¶	16	18.8**	25	15.0	
30-39	9	¶	25	35.0	34	23.8	
40-49	7	¶	14	18.5**	21	13.8	
50-59	6	¶	17	29.8**	23	20.0	
60-69	§§	¶	10	33.7**	12	19.8**	
70 +	§§	¶	§§	¶	5	¶	
Total	51	8.9	107	18.4	158	13.7	

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-25. Homicide Death Rate^{††} by Region, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Rate ††
Anchorage and Matanuska-Suisitna*	51	16.3
Norton Sound	11	15.7**
Yukon-Kuskokwim	26	13.9
Interior	13	10.4**
Southeast	12	8.8**
Aleutians and Pribilofs	§§	¶
Arctic Slope	§§	¶
Bristol Bay	§§	¶
Copper River/Prince William Sound	§§	¶
Kenai Peninsula	§§	¶
Kodiak	§§	¶
Northwest Arctic	§§	¶
All Alaska, non-Native only	268	4.5
All Alaska, AN/AI only	125	11.2

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

^{§§} Categories with fewer than five deaths are not reported

[¶] Rate not calculated due to small number of deaths (<10)

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

^{*} Regional rate is significantly different from the AN/AI statewide rate , p<0.05

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

^{§§} Categories with fewer than five deaths are not reported

[¶] Rate not calculated due to small number of deaths (<10)

Table B-26. Homicide Death Rate^{††} by Gender, Race and Year, 1992-2011

Data Source: Alaska Bureau of Vital Statistics

			Alaska	AN/AI			
	N	1ale	Fei	Female		Total	
	n	Rate ††	n	Rate ††	n	Rate ††	
1992-1995	47	25.1	20	11.3	67	18.2	
1996-1999	48	27.4	18	10.0	66	18.3	
2000-2003	34	15.6	27	12.7	61	14.1	
2004-2007	30	14.0	16	7.4	46	10.7	
2008-2011	39	17.1*	13	5.5*	52	11.3*	

			Alaska N	on-Native			
	N	lale	Female		To	Total	
	n	Rate ††	n	Rate ††	n	Rate ††	
1992-1995	110	9.2	33	3.4	143	6.6	
1996-1999	103	8.7	36	3.7	139	6.4	
2000-2003	76	6.6	29	2.8	105	4.8	
2004-2007	99	7.9	28	2.6	127	5.4	
2008-2011	65	5.0*	16	1.4*	81	3.3*	

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-27. Homicide Death by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Total
Firearm	62	49.6%
Other or unspecified	39	31.2%
Sharp object	18	14.4%
Strangulation or suffocation	6	4.8%
Total	125	100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-28. Homicide Death Rate^{††}, Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	Female		Male		Total	
Age	n	Rate ††	n	Rate ††	n	Rate ††
0-9	§§	¶	§§	¶	7	¶
10-19	7	¶	21	16.8	28	11.4
20-29	13	16.0	14	16.5	27	16.2
30-39	§§	¶	22	30.8	27	18.9
40-49	9	¶	9	¶	18	11.9**
50-59	§§	¶	5	¶	8	¶
60-69	§§	¶	§§	¶	6	¶
70+	§§	¶	§§	¶	§§	¶
Total	44	7.7	81	13.9	125	10.8

^{††} Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-29. Intentional Hospitalization Rate§ by Region, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	n	Rate §
Norton Sound *	642	83.3
Northwest Arctic *	509	78.7
Interior	619	46.6
Yukon-Kuskokwim	1,004	45.8
Southeast *	536	38.1
Arctic Slope *	189	35.6
Anchorage and Matanuska-Suisitna *	1,163	35.6
Bristol Bay *	176	34.5
Copper River/Prince William Sound *	38	24.9
Kodiak*	47	22.9
Kenai Peninsula *	94	19.0
Aleutians and Pribilofs *	24	12.8
All Alaska, non-Native only	4,171	7.1
All Alaska, ANAI only	5,066	43.2

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{§§} Categories with fewer than five deaths are not reported

[¶] Rate not calculated due to small number of deaths (<10)

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

 $^{^{*}}$ Regional rate is significantly different from the AN/AI statewide rate , p<0.05

Table B-30. Intentional Injury Hospitalization Rate[§] by Gender, Race and Year, 1992-2011

Data Source: Alaska Trauma Registry

			Alaska	AN/AI			
	M	ale	Fen	Female		Total	
	n	Rate §	n	Rate §	n	Rate §	
1992-1995	804	41.4	593	30.8	1,397	36.2	
1996-1999	937	45.3	821	38.5	1,758	41.9	
2000-2003	983	44.9	932	40.4	1,915	42.5	
2004-2007	1,093	47.9	1,122	47.9	2,215	47.9	
2008-2011	1,012	42.4	916	37.9*	1,928	40.1*	

	Alaska Non-Native						
	M	ale	Female		То	Total	
	n	Rate §	n	Rate §	n	Rate §	
1992-1995	884	7.7	555	5.4	1,439	6.6	
1996-1999	898	7.8	853	8.1	1,751	8.0	
2000-2003	935	7.9	974	9.1	1,909	8.5	
2004-2007	887	7.3	811	7.3	1,698	7.3	
2008-2011	817	6.4*	731	6.5*	1,548	6.5	

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-31. Intentional Injury Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Trauma Registry

	n	Total
Suicide Attempt	3,022	59.6%
Assault	2,047	40.4%
TOTAL	5,069	100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-32. Intentional Injury Hospitalization Rate[§], Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	Female		N	Male		Total	
Age	n	Rate §	n	Rate §	n	Rate §	
0-9	19	¶	30	2.5	49	2.1	
10-19	691	57.6	453	36.2	1,144	46.7	
20-29	787	96.6	918	108.0	1,705	102.4	
30-39	420	58.8	497	69.6	917	64.2	
40-49	375	49.2	449	59.4	824	54.3	
50-59	143	24.6	188	33.0	331	28.7	
60-69	37	12.0	28	9.4	65	10.7	
70 +	14	¶	19	¶	33	7.4	
Total	2,486	43.4	2,582	44.4	5,068	43.9	

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-33. Unintentional Hospitalization Rate by Region, Alaska Native People, 2002-2011 Data Source: Alaska Trauma Registry

	n	Rate §
Bristol Bay *	627	134.4
Norton Sound *	858	131.0
Arctic Slope *	532	130.3
Northwest Arctic *	746	126.9
Copper River/Prince William Sound *	164	109.0
Southeast *	1,350	107.2
Interior	1,261	105.5
Yukon-Kuskokwim	1,913	102.9
Anchorage and Matanuska-Suisitna *	2,726	102.4
Kenai Peninsula *	382	94.9
Kodiak *	163	81.1
Aleutians and Pribilofs *	109	62.1
All Alaska, non-Native only	24,583	51.6
All Alaska, ANAI only	10,943	109.2

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

[¶] Rate not calculated due to small number of hospitalizations (<20)

^{*} Regional rate is significantly different from the AN/AI statewide rate , p<0.05

Table B-34. Unintentional Injury Hospitalization Rate[§] by Gender, Race and Year, 1992-2011

Data Source: Alaska Trauma Registry

	Alaska AN/AI					
	M	ale	Fen	nale	Total	
	n	Rate §	n	Rate §	n	Rate §
1992-1995	2,363	131.8	1,462	97.0	3,825	115.3
1996-1999	2,569	137.3	1,636	99.9	4,205	119.3
2000-2003	2,776	139.2	1,820	100.9	4,596	120.5
2004-2007	2,724	130.3	1,900	101.0	4,624	116.6
2008-2011	2,337	106.9*	1,752	90.4*	4,089	100.1*

	Alaska Non-Native						
	M	ale	Fen	nale	Total		
	n	Rate §	n	Rate §	n	Rate §	
1992-1995	6,191	68.7	3,221	49.3	9,412	60.2	
1996-1999	5,994	65.1	3,507	50.6	9,501	59.1	
2000-2003	6,317	65.3	4,161	52.7	10,478	60.0	
2004-2007	6,089	59.8	4,148	48.2	10,237	54.9	
2008-2011	5,461	50.4*	3,989	43.0*	9,450	47.6*	

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-35. Unintentional Injury Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Trauma Registry

	n	Total
Falls	4,807	43.9%
Other Incidents	1,933	17.6%
Motor Vehicle	1,375	12.6%
ATV	776	7.1%
Snowmachine	749	6.8%
Other Vehicle	551	5.0%
Cut	391	3.6%
Poisoning	373	3.4%
Total	10,955	100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-36. Unintentional Injury Hospitalization Rate[§], Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	Fe	male	N	/lale	To	tal
Age	n	Rate §	n	Rate §	n	Rate §
0-9	567	51.7	797	67.3	1,364	59.8
10-19	679	56.6	1,285	102.7	1,964	80.2
20-29	509	62.5	1,183	139.2	1,692	101.6
30-39	432	60.5	786	110.1	1,218	85.3
40-49	544	71.3	973	128.7	1,517	99.9
50-59	550	94.4	629	110.3	1,179	102.3
60-69	442	142.9	352	118.6	794	131.0
70+	813	320.1	410	210.7	1,223	272.6
Total	4,536	79.1	6,415	110.3	10,951	94.8

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-37. Falls Hospitalization Rate§ by Region, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	n	Rate §
Arctic Slope *	234	72.1
Southeast *	769	65.6
Norton Sound *	348	64.3
Northwest Arctic	278	57.4
Bristol Bay	223	57.1
Kenai Peninsula	166	51.5
Interior *	534	51.4
Copper River/Prince William Sound	68	49.6
Yukon-Kuskokwim *	679	45.9
Kodiak *	68	38.4
Aleutians and Pribilofs *	61	37.0
Anchorage and Matanuska-Suisitna *	1,328	36.3
All Alaska, non-Native only	12,128	29.1
All Alaska, ANAI only	4,799	56.8

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

^{*} Regional rate is significantly different from the AN/AI statewide rate , p<0.05 $\,$

Table B-38. Falls Hospitalization Rate§ by Gender, Race and Year, 1992-2011

Data Source: Alaska Trauma Registry

		_	Alaska	•		_
	M	ale	Fen	nale	То	tal
	n	Rate §	n	Rate §	n	Rate §
1992-1995	714	48.1	733	59.4	1,447	54.7
1996-1999	773	51.8	831	60.5	1,604	57.0
2000-2003	940	56.3	927	60.4	1,867	59.0
2004-2007	950	53.3	1,007	62.9	1,957	59.2
2008-2011	877	46.0	1,070	62.0	1,947	55.3

	Alaska Non-Native						
	M	ale	Fen	Female		Total	
	n	Rate §	n	Rate §	n	Rate §	
1992-1995	2,005	29.0	1,600	30.1	3,605	30.1	
1996-1999	2,039	27.3	1,940	33.1	3,979	31.0	
2000-2003	2,264	27.8	2,427	34.4	4,691	31.7	
2004-2007	2,403	27.5	2,541	32.5	4,944	30.6	
2008-2011	2,341	24.7*	2,635	30.3	4,976	28.1	

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-39. Falls Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Trauma Registry

	n	Total
Same level, slipping or stumbling	2,129	44.3%
Other or unspecified	948	19.7%
From one level to another	780	16.2%
Stairs or steps	532	11.1%
Out of building or other structure	207	4.3%
Same level, collision or shoving by person	110	2.3%
Ladders or scaffolding	103	2.1%
Total	4,809	100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-40. Falls Hospitalization Rate§, Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	Fe	male	N	1ale	To	otal
Age	n	Rate §	n	Rate §	n	Rate §
0-9	246	22.4	295	24.9	541	23.7
10-19	137	11.4	280	22.4	417	17.0
20-29	173	21.2	274	32.2	447	26.9
30-39	189	26.5	241	33.8	430	30.1
40-49	297	38.9	397	52.5	694	45.7
50-59	385	66.1	312	54.7	697	60.5
60-69	373	120.6	195	65.7	568	93.7
70 +	716	281.9	296	152.1	1,012	225.6
Total	2,516	43.9	2,290	39.4	4,806	41.6

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-41. Suicide Attempt or Self Harm Hospitalization Rate[§] by Region, Alaska Native People, 2002-2010

Data Source: Alaska Trauma Registry

	n	Rate §
Norton Sound *	514	64.5
Northwest Arctic *	301	45.2
Yukon-Kuskokwim *	647	27.1
Interior	355	26.2
Southeast	335	23.5
Arctic Slope *	109	19.8
Kodiak *	35	16.5
Bristol Bay *	88	16.4
Anchorage and Matanuska-Suisitna *	539	16.0
Kenai Peninsula *	63	12.8
Copper River/Prince William Sound	19	¶
Aleutians and Pribilofs	7	¶
All Alaska, non-Native only	2,890	4.9
All Alaska, ANAI only	3,021	24.9

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

 $^{^{*}}$ Regional rate is significantly different from the AN/AI statewide rate , p<0.05

[¶] Rate not calculated due to small number of hospitalizations (<20)

Table B-42. Suicide Attempt or Self Harm Hospitalization Rate by Gender, Race and Year, 1992-2010 Data Source: Alaska Trauma Registry

			Alaska	AN/AI		
	M	ale	Fen	nale	То	tal
	n	Rate §	n	Rate §	n	Rate §
1992-1995	253	12.4	376	18.3	629	15.3
1996-1999	366	16.4	597	26.9	963	21.6
2000-2003	396	17.5	742	31.6	1,138	24.5
2004-2007	495	21.0	870	36.1	1,365	28.5
2008-2010	342	18.4*	639	35.0*	981	26.6*

Alaska Non-Native

	Male		Female		Total	
	n	Rate §	n	Rate §	n	Rate §
1992-1995	323	2.8	461	4.5	784	3.6
1996-1999	450	3.9	752	7.1	1,202	5.4
2000-2003	468	4.0	877	8.1	1,345	6.0
2004-2007	458	3.8	722	6.5	1,180	5.1
2008-2010	374	4.0*	586	6.9*	960	5.4*

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-43. Suicide Attempt or Self Harm Hospitalization by Type, Alaska Native People, All Ages, 2002-2010 Data Source: Alaska Trauma Registry

	n	Total
Poisoning	2,204	76.0%
Cutting or piercing instrument	371	12.8%
Firearms, air guns or explosives	131	4.5%
Hanging, strangulation or suffocation	126	4.3%
Other or unspecified	69	2.4%
Total	2,901	100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-44. Suicide Attempt or Self Harm Hospitalization Rate[§], Gender and Age Group, Alaska Native People, 2002-2010

Data Source: Alaska Trauma Registry

	Female		N	Male		Total	
Age	n	Rate §	n	Rate §	n	Rate §	
0-9	§§	¶	6	¶	8	¶	
10-19	610	55.5	256	22.4	866	38.7	
20-29	581	81.9	383	51.8	964	66.5	
30-39	297	46.0	175	27.2	472	36.6	
40-49	254	36.6	140	20.4	394	28.6	
50-59	95	18.7	52	10.5	147	14.6	
60-69	27	10.1	8	¶	35	6.7	
70+	6	¶	8	¶	14	¶	
Total	1,872	34.4	1,028	19.1	2,900	26.2	

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-45. Assault Hospitalization Rate[§] by Region, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	n	Rate §
Northwest Arctic *	208	33.6
Interior	264	20.4
Anchorage and Matanuska-Suisitna *	624	19.6
Norton Sound	128	18.7
Yukon-Kuskokwim	357	18.7
Bristol Bay	88	18.1
Arctic Slope	80	15.9
Southeast *	201	14.6
Kenai Peninsula *	31	6.2
Copper River/Prince William Sound	19	¶
Aleutians and Pribilofs	17	¶
Kodiak	12	¶
All Alaska, non-Native only	1,281	2.2
All Alaska, ANAI only	2,045	18.4

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

[¶] Rate not calculated due to small number of hospitalizations (<20)

^{*} Regional rate is significantly different from the AN/AI statewide rate , p<0.05

 $[\]P$ Rate not calculated due to small number of hospitalizations (<20)

Table B-46. Assault Hospitalization Rate[§] by Gender, Race and Year, 1992-2011

Data Source: Alaska Trauma Registry

	Alaska AN/AI Male Female Total				tal	
	n	Rate §	n	Rate §	n	Rate §
1992-1995	551	29.1	217	12.5	768	20.9
1996-1999	571	28.8	224	11.6	795	20.2
2000-2003	587	27.5	190	8.8	777	18.1
2004-2007	598	27.0	252	11.7	850	19.4
2008-2011	614	26.6*	212	9.3*	826	18.0*

			Alaska No	n-Native			
	M	ale	Female		To	Total	
	n	Rate §	n	Rate §	n	Rate §	
1992-1995	561	4.8	94	0.9	655	3.0	
1996-1999	448	3.9	101	1.0	549	2.6	
2000-2003	467	4.0	97	0.9	564	2.5	
2004-2007	429	3.5	89	0.8	518	2.2	
2008-2011	396	3.1*	87	0.8	483	2.0*	

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-47. Assault Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Trauma Registry

	n	Total
Fight or brawl	1,121	54.8%
Other or unspecified	269	13.1%
Cutting or piercing instrument	236	11.5%
Struck by blunt or thrown object	182	8.9%
Child or adult abuse	92	4.5%
Human bite	74	3.6%
Firearms or explosives	73	3.6%
Total	2,047	100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-48. Assault Hospitalization Rate[§], Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	Female		N	Male		Total	
Age	n	Rate §	n	Rate §	n	Rate §	
0-9	17	¶	24	2.0	41	1.8	
10-19	53	4.4	177	14.2	230	9.4	
20-29	190	23.3	519	61.1	709	42.6	
30-39	115	16.1	307	43.0	422	29.5	
40-49	115	15.1	305	40.3	420	27.7	
50-59	41	7.0	135	23.7	176	15.3	
60-69	10	¶	20	6.7	30	4.9	
70 +	8	¶	11	¶	19	¶	
Total	549	9.6	1,498	25.8	2,047	17.7	

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-49. Motor Vehicle Hospitalization Rate[§] by Region, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	n	Rate §
Copper River/Prince William Sound *	38	24.4
Anchorage and Matanuska-Suisitna *	615	19.7
Kenai Peninsula *	92	18.8
Interior	180	13.3
Southeast	169	12.4
Kodiak	23	9.1
Bristol Bay *	46	8.9
Norton Sound *	56	7.8
Arctic Slope *	42	6.8
Northwest Arctic *	27	4.2
Yukon-Kuskokwim *	65	2.8
Aleutians and Pribilofs	7	¶
All Alaska, non-Native only	4,270	7.8
All Alaska, ANAI only	1,376	12.1

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

[¶] Rate not calculated due to small number of hospitalizations (<20)

^{*} Regional rate is significantly different from the AN/AI statewide rate , p<0.05 $\,$

[¶] Rate not calculated due to small number of hospitalizations (<20)

Table B-50. Motor Vehicle Hospitalization Rate by Gender, Race and Year, 1992-2011

Data Source: Alaska Trauma Registry

			Alaska	AN/AI			
	M	ale	Fen	nale	То	Total	
	n	Rate §	n	Rate §	n	Rate §	
1992-1995	312	16.7	232	12.9	544	14.8	
1996-1999	370	18.1	254	13.2	624	15.7	
2000-2003	385	18.0	282	13.6	667	15.8	
2004-2007	305	13.6	252	11.4	557	12.5	
2008-2011	274	11.0*	210	9.1*	484	10.1*	

			Alaska No	n-Native			
	M	ale	Female		To	Total	
	n	Rate §	n	Rate §	n	Rate §	
1992-1995	1,298	12.7	765	9.1	2,063	11.0	
1996-1999	1,206	11.7	761	8.3	1,967	10.1	
2000-2003	1,338	12.9	805	8.5	2,143	10.8	
2004-2007	1,093	9.8	691	6.7	1,784	8.3	
2008-2011	944	7.9*	524	4.8*	1,468	6.4	

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-51. Motor Vehicle Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Trauma Registry

	n	Total
Collision with other vehicle	382	27.7%
Collision with pedestrian or bicyclist	363	26.3%
Crash without collision	340	24.7%
Motorcycle	135	9.8%
Other or unspecified	99	7.2%
While boarding or alighting	59	4.3%
Total	1,378	100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-52. Motor Vehicle Hospitalization Rate[§], Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	Female		N	Male		Total	
Age	n	Rate §	n	Rate §	n	Rate §	
0-9	32	2.9	63	5.3	95	4.2	
10-19	126	10.5	186	14.9	312	12.7	
20-29	153	18.8	191	22.5	344	20.7	
30-39	90	12.6	103	14.4	193	13.5	
40-49	86	11.3	105	13.9	191	12.6	
50-59	63	10.8	73	12.8	136	11.8	
60-69	18	¶	33	11.1	51	8.4	
70 +	33	13.0	19	¶	52	11.6	
Total	603	10.5	773	13.3	1,376	11.9	

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-53. All-Terrain Vehicle Hospitalization Rate [§] by Region, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	n	Rate §
Bristol Bay *	98	19.1
Northwest Arctic *	102	15.0
Norton Sound *	111	14.6
Arctic Slope *	72	13.6
Yukon-Kuskokwim *	193	8.9
Interior	72	5.2
Southeast *	28	1.9
Anchorage and Matanuska-Suisitna *	41	1.2
Kenai Peninsula	17	¶
Kodiak	16	¶
Aleutians and Pribilofs	13	¶
Copper River/Prince William Sound	7	¶
All Alaska, non-Native only	836	1.4
All Alaska, ANAI only	774	6.5

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

[¶] Rate not calculated due to small number of hospitalizations (<20).

^{*} Regional rate is significantly different from the AN/AI statewide rate , p<0.05 $\,$

[¶] Rate not calculated due to small number of hospitalizations (<20)

Table B-54. All-Terrain Vehicle Hospitalization Rate§ by Gender, Race and Year, 1992-2011

Data Source: Alaska Trauma Registry

			Alaska	AN/AI			
	M	ale	Female		To	Total	
	n	Rate §	n	Rate §	n	Rate §	
1992-1995	142	7.3	63	3.3	205	5.2	
1996-1999	180	8.5	74	3.2	254	5.7	
2000-2003	180	7.3	123	5.1	303	6.2	
2004-2007	201	9.3	130	5.5	331	7.3	
2008-2011	183	7.5	105	4.3*	288	5.9*	

			Alaska No	n-Native			
	M	ale	Female		Tot	Total	
	n	Rate §	n	Rate §	n	Rate §	
1992-1995	139	1.3	48	0.5	187	0.9	
1996-1999	171	1.5	33	0.3	204	1.0	
2000-2003	189	1.7	66	0.6	255	1.2	
2004-2007	255	2.1	105	0.9	360	1.6	
2008-2011	241	2.0*	96	0.9*	337	1.4*	

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-55. All-Terrain Vehicle Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Trauma Registry

	n	Total
ATV Driver	473	61.1%
ATV Passenger	193	24.9%
Other or unspecified	58	7.5%
Pedestrian	50	6.5%
Total	774	100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-56. All-Terrain Vehicle Hospitalization Rate[§], Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	Fe	Female		Male		Total	
Age	n	Rate §	n	Rate §	n	Rate §	
0-9	29	2.6	46	3.9	75	3.3	
10-19	123	10.4	144	11.5	269	11.0	
20-29	48	5.9	121	14.2	169	10.2	
30-39	27	3.8	72	10.1	99	6.9	
40-49	28	3.7	49	6.5	77	5.1	
50-59	16	¶	17	¶	33	2.9	
60-69	6	¶	10	¶	16	¶	
70 +	20	7.9	18	¶	38	8.5	
Total	297	5.2	477	8.2	776	6.7	

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-57. Snowmachine Hospitalization Rate by Region, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	n	Rate §
Northwest Arctic *	136	21.0
Yukon-Kuskokwim *	259	13.4
Arctic Slope *	63	12.2
Bristol Bay *	53	10.9
Norton Sound *	76	10.4
Interior	98	7.3
Anchorage and Matanuska-Suisitna *	36	1.0
Copper River/Prince William Sound *	9	¶
Kenai Peninsula	9	¶
Aleutians and Pribilofs	§§	¶
Kodiak	§§	¶
Southeast	§§	¶
All Alaska, non-Native only	580	1.0
All Alaska, ANAI only	749	6.5

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

[¶] Rate not calculated due to small number of hospitalizations (<20)

^{*} Regional rate is significantly different from the AN/AI statewide rate , p<0.05

^{§§} Categories with fewer than five hospitalizations are not reported

[¶] Rate not calculated due to small number of hospitalizations (<20)

Table B-58. Snowmachine Hospitalization Rate§ by Gender, Race and Year, 1992-2011

Data Source: Alaska Trauma Registry

			Alaska	AN/AI		
	Male		Female		Total	
	n	Rate §	n	Rate §	n	Rate §
1992-1995	214	11.1	72	3.8	286	7.5
1996-1999	257	12.6	76	3.9	333	8.3
2000-2003	267	12.4	83	3.8	350	8.0
2004-2007	232	10.2	82	3.5	314	6.8
2008-2011	204	9.0*	58	2.4*	262	5.6*

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	Male		Female		Total	
	n	Rate §	n	Rate §	n	Rate §
1992-1995	177	1.5	36	0.3	213	1.0
1996-1999	222	1.9	54	0.5	276	1.3
2000-2003	241	2.1	57	0.5	298	1.3
2004-2007	195	1.6	44	0.4	239	1.0
2008-2011	156	1.2*	46	0.4	202	0.8*

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-59. Snowmachine Hospitalization by Type, Alaska Native People, All Ages, 2002-2011

Data Source: Alaska Trauma Registry

	n	Total
Snowmachine Driver	541	72.2%
Snowmachine Passenger	115	15.4%
Other or unspecified	52	6.9%
Pedestrian	41	5.5%
Total	749	100.0%

^{*} Significantly different from the 1992-1995 rate, p<0.05

Table B-60. Snowmachine Hospitalization Rate[§], Gender and Age Group, Alaska Native People, 2002-2011

Data Source: Alaska Trauma Registry

	Fe	Female		Male		Total	
Age	n	Rate §	n	Rate §	n	Rate §	
0-9	10	¶	16	¶	26	1.1	
10-19	55	4.6	148	11.8	203	8.3	
20-29	41	5.0	178	20.9	219	13.2	
30-39	25	3.5	85	11.9	110	7.7	
40-49	20	2.6	71	9.4	91	6.0	
50-59	10	¶	35	6.1	45	3.9	
60-69	14	¶	17	¶	31	5.1	
70 +	5	¶	19	¶	24	5.4	
Total	180	3.1	569	9.8	749	6.5	

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-61. Alaska Unintentional Poisoning Death Rate^{††} by Race, Alcohol and Drugs Combined, 2002-2011

Data Source: Alaska Bureau of Vital Statistics

	n	Rate††
AN/AI	256	25.3
Non-Native	649	10.9
Rate Ratio		2.3

⁺⁺ Death rate per 100,000 age-adjusted to 2000 US standard population

Table B-62. Alaska Native Unintentional Poisoning Death Rate^{††}, Type and Year, 1996-2011

Data Source: Alaska Bureau of Vital Statistics

	Drugs		Ald	cohol
	n	Rate ††	n	Rate ††
1996-1999	20	6.1	16	4.2**
2000-2003	41	10.5	17	4.8
2004-2007	42	11.0	23	5.6
2008-2011	72	16.4	87	21.1
Rate Ratio		2.7		5.0

⁺⁺ Death rate per 100,000 age-adjusted to 2000 US standard population

[¶] Rate not calculated due to small number of hospitalizations (<20)

^{**} Rate is based on 10-19 deaths and should be interpreted with caution

Table B-63. Self-Inflicted Drug Poisoning Hospitalization Rate[§] by Race and Year, 1992-2010

Data Source: Alaska Bureau of Vital Statistics

	ANAI		non-	-ANAI
	n	Rate §	n	Rate §
1992-1995	408	10.0	624	2.8
1996-1999	696	15.8	995	4.5
2000-2003	832	18.0	1,118	4.9
2004-2007	1,008	21.1	985	3.1
2008-2010	713	19.5	769	4.3
Rate Ratio		2.0		1.5

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-64. Alaska Native Self-Inflicted Drug Poisoning Hospitalization Rate[§] by Gender, 2002-2010

Data Source: Alaska Bureau of Vital Statistics

	n	Rate §
Female	1,522	28.1
Male	598	11.4
Rate Ratio		2.5

[§] Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

Table B-65. Self-Inflicted Drug Poisoning Hospitalization Rate[§] by Race and Year, 1992-2010

Data Source: Alaska Bureau of Vital Statistics

	ANAI		non	-ANAI
	n	Rate §	n	Rate §
1992-1995	228	5.7	1,899	53.9
1996-1999	550	12.9	2,273	59.7
2000-2003	901	20.1	2,755	68.1
2004-2007	1,106	23.8	2,888	67.4
2008-2010	931	19.4	2,563	57.4
Rate Ratio		3.4		1.1

§ Hospitalization rate per 10,000 age-adjusted to 2000 US standard population

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

This table identifies the ICD-9 and -10 codes assigned to each injury mechanism as described in this report. In a few areas as noted the categorization differed between injury deaths and hospitalizations, based on injury frequency differences between the two data sets. ICD code assignments were applied to both data sets unless otherwise notated.

Data set involved	<u>Mechanism</u>	ICD-9 codes assigned	ICD-10 codes assigned
(Hospitalizations)	ATV	E821.0-821.9	
(Hospitalizations)	Cut, Pierce	E920	
(Deaths)	Drowning	E830.0 - E830.9, E832.0 - E833.9, E910.0 - E910.9	V90.0 - V90.9, V92.0 - V92.9, W65.0 - W74.9
(Deaths)	Excessive Cold	E901.0 - E901.9	X31.0 - X31.9
	Fall	E880.0 - E881.9, E882, E883.0 - E886.9, E888.0 - E888.9	W00.0 - W19.9
	Homicide, Assault	E960.0 - E960.9, E 961, E962.0 - E962.9, E 963, E964, E965.0 - E965.9, E966, E967.0 - E968.9, E969	X85.0 - X99.9, Y00.0 - Y09.9, Y87.1
	Motor Vehicle	E810.0 - E825.9, E929.0	V02.0 - V04.9, V09.0 - V09.9, V12.0 - 14.9, V19.0 - V85.9, V87.0 - V89.9, Y85.0 - Y85.9
(Hospitalizations)	Natural and Environmental Factors	E900-909, 928.0-928.2	
(Deaths)	Off-Road Vehicle	E820.0-821.9	V86.0 - V86.9
	Other and Unspecified	All codes not listed in other categories	All codes not listed in other categories
(Hospitalizations)	Other Vehicles	E800-807, E826, E833-838, E840-845	
	Poisoning	E850.0 - E850.9, E851, E852.0 - E855.9, E856, E857, E858.0 - 866.9, E867, E868.0 - E869.9, E929.2	X40.0 - X49.9
	Smoke, Fire, Flames	E890.0 - E891.9, E892, E893.0 - E893.9, E894, E895, E896, E897, E898.0 - E898.9, E899, E929.4	X00.0 - X09.9
(Hospitalizations)	Snowmachine	E820.0-820.9	
(Hospitalizations)	Struck by Person/Object	E916-917	
(Hospitalizations)	Submersion and Suffocation	E830.0 - E830.9, E832.0 - E832.9, E910.0 - E910.9, E911, E912, E913.0 - E913.9	
	Suicide, Self Harm	E950.0 - E953.9, E954, E955.0 - E955.9, E956, E957.0 - E958.9, E959	X60.0 - X84.9, Y87.0
(Deaths)	Threats to Breathing	E911, E912, E913.0 - E913.9	W75.0 - W84.9
	Undetermined Intent	E980.0 - E983.9, E984, E985.0 - E985.9, E986, E987.0 - E988.9, E989	Y10.0 - X34.9, Y87.2

Community remoteness was defined using the following categories, based on data from the Alaska Rural Primary Care Facility Needs Assessment Project Final Report prepared for the Denali Commission, October, 2000. The codes classify communities by travel distance and type needed to reach a hospital.

Codes:

- **0** = In community with highest level of hospital care in Alaska (Anchorage)
- 1 = In community with a hospital with more limited service
- 2 = On the road system within 100 miles of a hospital
- 3 = Within 100 air/water miles of a hospital, or more than 100 miles by road
- **4** = More than 100 air/water miles from a hospital

<u>Code</u>	Community	Region
4	Adak	Aleutians and Pribilofs
4	Akhiok	Kodiak
4	Akiachak	Yukon-Kuskokwim
4	Akiak	Yukon-Kuskokwim
4	Akutan	Aleutians and Pribilofs
4	Alakanuk	Yukon-Kuskokwim
4	Alatna	Interior
3	Alcan	Interior
2	Aleknagik	Bristol Bay
4	Alexander Creek	not census designated
4	Allakaket	Interior
4	Ambler	Northwest Arctic
4	Anaktuvuk Pass	Arctic Slope
2	Anchor Point	Kenai Peninsula
0	Anchorage	Anchorage/Mat-Su
4	Anderson	Interior
3	Andreafsky	Yukon-Kuskokwim
4	Angoon	Southeast
3	Aniak	Yukon-Kuskokwim
4	Anvik	Interior
4	Arctic Village	Interior
4	Atka	Aleutians and Pribilofs

<u>Code</u>	Community	Region
4	Atmautluak	Yukon-Kuskokwim
4	Atqasuk	Arctic Slope
1	Barrow	Arctic Slope
4	Beaver	Interior
1	Bethel	Yukon-Kuskokwim
4	Bettles	Interior
3	Big Delta	Interior
2	Big Lake	Anchorage/Mat-Su
4	Birch Creek	Interior
4	Brevig Mission	Norton Sound
4	Buckland	Northwest Arctic
4	Deering	Northwest Arctic
3	Delta Junction	Interior
1	Bristol Bay	Bristol Bay
3	Dot Lake	Interior
3	Dry Creek	Interior
4	Eagle	Interior
1	Eagle River/Chugiak	Anchorage/Mat-Su
4	Edna Bay	Southeast
4	Eek	Yukon-Kuskokwim
4	Egegik	Bristol Bay
2	Eklutna	Anchorage/Mat-Su

<u>Code</u>	Community	Region
4	Ekwok	Bristol Bay
4	Elfin Cove	Southeast
4	Elim	Norton Sound
0	Elmendorf AFB	Anchorage/Mat-Su
4	Emmonak	Yukon-Kuskokwim
2	Ester	Interior
4	Evansville	Interior
2	Eyak	Copper River/PWS
1	Fairbanks	Interior
4	False Pass	Aleutians and Pribilofs
3	Ferry	Interior
4	Fort Yukon	Interior
2	Fox	Interior
2	Fox River	Kenai Peninsula
2	Fritz Creek	Kenai Peninsula
3	Gakona	Copper River/PWS
4	Galena	Interior
4	Gambell	Norton Sound
4	Game Creek	Southeast
1	Girdwood	Anchorage/Mat-Su
3	Glennallen	Copper River/PWS
4	Golovin	Norton Sound
4	Goodnews Bay	Yukon-Kuskokwim
4	Grayling	Interior
3	Gulkana	Copper River/PWS
3	Gustavus	Southeast
3	Haines	Southeast
4	Halibut Cove	Kenai Peninsula
2	Happy Valley	Kenai Peninsula
3	Harding Lake	Interior

<u>Code</u>	Community	Region
3	Healy	Interior
4	Healy Lake	Interior
4	Hobart Bay	Southeast
3	Hollis	Southeast
4	Holy Cross	Interior
2	Butte	Anchorage/Mat-Su
3	Cantwell	Interior
3	Central	Interior
4	Chalkyitsik	Interior
4	Chase	Anchorage/Mat-Su
4	Chefornak	Yukon-Kuskokwim
4	Chenega Bay	Copper River/PWS
4	Chevak	Yukon-Kuskokwim
2	Chickaloon	Anchorage/Mat-Su
4	Chignik	Bristol Bay
4	Chignik Lagoon	Bristol Bay
4	Chignik Lake	Bristol Bay
3	Chiniak	Kodiak
3	Chistochina	Copper River/PWS
3	Chitina	Copper River/PWS
4	Chuathbaluk	Yukon-Kuskokwim
3	Circle	Interior
3	Circle Hot Springs	Interior
2	Clam Gulch	Kenai Peninsula
4	Clark's Point	Bristol Bay
3	Coffman Cove	Southeast
2	Cohoe	Kenai Peninsula
4	Cold Bay	Aleutians and Pribilofs
2	College	Interior
2	Cooper Landing	Kenai Peninsula

3Copper CenterCopper River/PWS3CoppervilleCopper River/PWS1CordovaCopper River/PWS4Covenant LifeSoutheast3CraigSoutheast4Crooked CreekYukon-Kuskokwim2Crown PointKenai Peninsula4Cube CoveSoutheast1HomerKenai Peninsula3HoonahSoutheast4HopeKenai Peninsula2HopeKenai Peninsula2HoustonAnchorage/Mat-Su4HusliaInterior3HydersSoutheast4HyderSoutheast4IgiugigBristol Bay4IliamnaBristol Bay4IliamnaBristol Bay4Ilvanof BayKenai Peninsula1JuneauSoutheast2KachemakKenai Peninsula4KakeSoutheast4KaktovikArctic Slope2KalifonskyKenai Peninsula4KaltagInterior4KarlukKodiak3KasaanSoutheast4KarlukKodiak3KasiglukYukon-Kuskokwim	<u>Code</u>	Community	<u>Region</u>
1 Cordova Copper River/PWS 4 Covenant Life Southeast 3 Craig Southeast 4 Crooked Creek Yukon-Kuskokwim 2 Crown Point Kenai Peninsula 4 Cube Cove Southeast 1 Homer Kenai Peninsula 3 Hoonah Southeast 4 Hooper Bay Yukon-Kuskokwim 2 Hope Kenai Peninsula 2 Houston Anchorage/Mat-Su 4 Hughes Interior 4 Huslia Interior 4 Huslia Interior 5 Southeast 4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 4 Ivanof Bay Bristol Bay 5 Venai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 5 Kachemak Kenai Peninsula 5 Kachemak Kenai Peninsula 6 Kaktovik Arctic Slope 7 Karluk Kodiak 8 Kodiak 9 Kenai Peninsula	3	Copper Center	Copper River/PWS
4 Covenant Life Southeast 3 Craig Southeast 4 Crooked Creek Yukon-Kuskokwim 2 Crown Point Kenai Peninsula 4 Cube Cove Southeast 1 Homer Kenai Peninsula 3 Hoonah Southeast 4 Hooper Bay Yukon-Kuskokwim 2 Hope Kenai Peninsula 2 Houston Anchorage/Mat-Su 4 Hughes Interior 4 Huslia Interior 3 Hydaburg Southeast 4 Hyder Southeast 4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 5 Iliamna Bristol Bay 6 Iliamna Bristol Bay 7 Iliamna Bristol Bay 8 Iliamna Southeast 9 Ivanof Bay Kenai Peninsula 1 Juneau Southeast 9 Kachemak Kenai Peninsula 9 Kake Southeast 9 Kaktovik Arctic Slope 9 Kalifonsky Kenai Peninsula 9 Kaltag Interior 9 Karluk Kodiak 9 Kodiak 9 Kodiak 9 Kodiak 9 Kodiak 9 Kodiak	3	Copperville	Copper River/PWS
3 Craig Southeast 4 Crooked Creek Yukon-Kuskokwim 2 Crown Point Kenai Peninsula 4 Cube Cove Southeast 1 Homer Kenai Peninsula 3 Hoonah Southeast 4 Hooper Bay Yukon-Kuskokwim 2 Hope Kenai Peninsula 2 Houston Anchorage/Mat-Su 4 Hughes Interior 4 Huslia Interior 3 Hydaburg Southeast 4 Hyder Southeast 4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 5 Jakolof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 5 Southeast 7 Juneau Southeast 8 Southeast 9 Jakolof Bay Kenai Peninsula 1 Juneau Southeast 9 Kenai Peninsula 1 Kake Southeast 9 Kenai Peninsula 1 Kake Southeast 2 Kalifonsky Kenai Peninsula 3 Kasaan Southeast	1	Cordova	Copper River/PWS
4 Crooked Creek Yukon-Kuskokwim 2 Crown Point Kenai Peninsula 4 Cube Cove Southeast 1 Homer Kenai Peninsula 3 Hoonah Southeast 4 Hooper Bay Yukon-Kuskokwim 2 Hope Kenai Peninsula 2 Houston Anchorage/Mat-Su 4 Hughes Interior 4 Huslia Interior 3 Hydaburg Southeast 4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 4 Ivanof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 3 Kake Southeast 4 Kaktovik Arctic Slope 2 Kalifonsky Kenai Peninsula 4 Katag Interior 4 Karluk Kodiak 5 Southeast	4	Covenant Life	Southeast
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4 Cube Cove Southeast 1 Homer Kenai Peninsula 3 Hoonah Southeast 4 Hooper Bay Yukon-Kuskokwim 2 Hope Kenai Peninsula 2 Houston Anchorage/Mat-Su 4 Hughes Interior 4 Huslia Interior 3 Hydaburg Southeast 4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 4 Ilvanof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 5 Kalifonsky Kenai Peninsula 1 Kaltag Interior 4 Karluk Kodiak 3 Kasaan Southeast	4	Crooked Creek	Yukon-Kuskokwim
1 Homer Kenai Peninsula 3 Hoonah Southeast 4 Hooper Bay Yukon-Kuskokwim 2 Hope Kenai Peninsula 2 Houston Anchorage/Mat-Su 4 Hughes Interior 4 Huslia Interior 3 Hydaburg Southeast 4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 5 Iliamna Bristol Bay 6 Ivanof Bay Kenai Peninsula 7 Juneau Southeast 8 Kachemak Kenai Peninsula 9 Kake Southeast 9 Kalifonsky Kenai Peninsula 9 Kenai Peninsula 9 Kaltag Interior 9 Karluk Kodiak 9 Kasaan Southeast	2	Crown Point	Kenai Peninsula
3 Hoonah Southeast 4 Hooper Bay Yukon-Kuskokwim 2 Hope Kenai Peninsula 2 Houston Anchorage/Mat-Su 4 Hughes Interior 4 Huslia Interior 3 Hydaburg Southeast 4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 4 Ivanof Bay Bristol Bay 4 Jakolof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 5 Kalifonsky Kenai Peninsula 6 Kaltag Interior 7 Karluk Kodiak 7 Kasaan Southeast	4	Cube Cove	Southeast
4 Hooper Bay Yukon-Kuskokwim 2 Hope Kenai Peninsula 2 Houston Anchorage/Mat-Su 4 Hughes Interior 4 Huslia Interior 3 Hydaburg Southeast 4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 4 Ivanof Bay Bristol Bay 4 Jakolof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 5 Kalifonsky Kenai Peninsula 6 Kaltag Interior 7 Karluk Kodiak 7 Kasaan Southeast	1	Homer	Kenai Peninsula
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2 Houston Anchorage/Mat-Su 4 Hughes Interior 4 Huslia Interior 3 Hydaburg Southeast 4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 4 Ivanof Bay Bristol Bay 4 Jakolof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 5 Kalifonsky Kenai Peninsula 6 Kaltag Interior 7 Karluk Kodiak 7 Kasaan Southeast	4	Hooper Bay	Yukon-Kuskokwim
4 Hughes Interior 4 Huslia Interior 3 Hydaburg Southeast 4 Hyder Southeast 4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 4 Ivanof Bay Bristol Bay 5 Jakolof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 5 Kalifonsky Kenai Peninsula 6 Kenai Peninsula 7 Kenai Peninsula 8 Kenai Peninsula 9 Kenai Peninsula	2	Норе	Kenai Peninsula
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3 Hydaburg Southeast 4 Hyder Southeast 4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 4 Ivanof Bay Bristol Bay 4 Jakolof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 5 Kalifonsky Kenai Peninsula 6 Kaltag Interior 7 Karluk Kodiak 7 Kasaan Southeast	4	Hughes	Interior
4 Hyder Southeast 4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 4 Ivanof Bay Bristol Bay 4 Jakolof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 5 Kalifonsky Kenai Peninsula 6 Kaltag Interior 7 Karluk Kodiak 7 Kasaan Southeast	4	Huslia	Interior
4 Igiugig Bristol Bay 4 Iliamna Bristol Bay 4 Ivanof Bay Bristol Bay 4 Jakolof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 2 Kalifonsky Kenai Peninsula 4 Kaltag Interior 4 Karluk Kodiak 3 Kasaan Southeast	3	Hydaburg	Southeast
4 Iliamna Bristol Bay 4 Ivanof Bay Bristol Bay 4 Jakolof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 2 Kalifonsky Kenai Peninsula 4 Kaltag Interior 4 Karluk Kodiak 3 Kasaan Southeast	4	Hyder	Southeast
4 Ivanof Bay Bristol Bay 4 Jakolof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 2 Kalifonsky Kenai Peninsula 4 Kaltag Interior 4 Karluk Kodiak 3 Kasaan Southeast	4	Igiugig	Bristol Bay
4 Jakolof Bay Kenai Peninsula 1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 2 Kalifonsky Kenai Peninsula 4 Kaltag Interior 4 Karluk Kodiak 3 Kasaan Southeast	4	Iliamna	Bristol Bay
1 Juneau Southeast 2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 2 Kalifonsky Kenai Peninsula 4 Kaltag Interior 4 Karluk Kodiak 3 Kasaan Southeast	4	Ivanof Bay	Bristol Bay
2 Kachemak Kenai Peninsula 4 Kake Southeast 4 Kaktovik Arctic Slope 2 Kalifonsky Kenai Peninsula 4 Kaltag Interior 4 Karluk Kodiak 3 Kasaan Southeast	4	Jakolof Bay	Kenai Peninsula
4 Kake Southeast 4 Kaktovik Arctic Slope 2 Kalifonsky Kenai Peninsula 4 Kaltag Interior 4 Karluk Kodiak 3 Kasaan Southeast	1	Juneau	Southeast
4 Kaktovik Arctic Slope 2 Kalifonsky Kenai Peninsula 4 Kaltag Interior 4 Karluk Kodiak 3 Kasaan Southeast	2	Kachemak	Kenai Peninsula
2 Kalifonsky Kenai Peninsula 4 Kaltag Interior 4 Karluk Kodiak 3 Kasaan Southeast	4	Kake	Southeast
4 Kaltag Interior 4 Karluk Kodiak 3 Kasaan Southeast	4	Kaktovik	Arctic Slope
4 Karluk Kodiak 3 Kasaan Southeast	2	Kalifonsky	Kenai Peninsula
3 Kasaan Southeast	4	Kaltag	Interior
	4	Karluk	Kodiak
4 Kasigluk Yukon-Kuskokwim	3	Kasaan	Southeast
	4	Kasigluk	Yukon-Kuskokwim

<u>Code</u>	Community	Region
2	Kasilof	Kenai Peninsula
2	Kenai	Kenai Peninsula
3	Kenny Lake	Copper River/PWS
1	Ketchikan	Southeast
4	Kiana	Northwest Arctic
4	King Cove	Aleutians and Pribilofs
3	King Salmon	Bristol Bay
4	Kipnuk	Yukon-Kuskokwim
4	Kivalina	Northwest Arctic
3	Klawock	Southeast
3	Klukwan	Southeast
2	Knik	Anchorage/Mat-Su
4	Kobuk	Northwest Arctic
1	Kodiak	Kodiak
4	Kokhanok	Bristol Bay
4	Koliganek	Bristol Bay
4	Kongiganak	Yukon-Kuskokwim
4	Kotlik	Yukon-Kuskokwim
1	Kotzebue	Northwest Arctic
4	Koyuk	Norton Sound
4	Koyukuk	Interior
4	Kupreanof	Southeast
4	Kwethluk	Yukon-Kuskokwim
4	Kwigillingok	Yukon-Kuskokwim
4	Lake Minchumina	Interior
4	Larsen Bay	Kodiak
2	Lazy Mountain	Anchorage/Mat-Su
4	Levelock	Bristol Bay
3	Lignite	Interior
4	Lime Village	Yukon-Kuskokwim

<u>Code</u>	Community	Region
4	Little Diomede	Norton Sound
4	Lower Kalskag	Yukon-Kuskokwim
2	Lutak	Southeast
3	Manley Hot Springs	Interior
4	Manokotak	Bristol Bay
4	Marshall	Yukon-Kuskokwim
2	McCarthy	Copper River/PWS
4	McGrath	Interior
3	McKinley Park	Interior
2	Meadow Lakes	Anchorage/Mat-Su
4	Mekoryuk	Yukon-Kuskokwim
3	Mendeltna	Copper River/PWS
2	Mentasta Lake	Copper River/PWS
3	Metlakatla	Southeast
4	Meyers Chuck	Southeast
4	Minto	Interior
2	Moose Creek	Interior
2	Moose Pass	Kenai Peninsula
3	Mosquito Lake	Southeast
4	Mountain Village	Yukon-Kuskokwim
3	Naknek	Bristol Bay
4	Nanwalek	Kenai Peninsula
4	Napakiak	Yukon-Kuskokwim
4	Napaskiak	Yukon-Kuskokwim
3	Naukati Bay	Southeast
4	Nelson Lagoon	Aleutians and Pribilofs
2	Nenana	Interior
4	New Stuyahok	Bristol Bay
4	Newhalen	Bristol Bay
4	Newtok	Yukon-Kuskokwim

<u>Code</u>	Community	Region
4	Nightmute	Yukon-Kuskokwim
2	Nikiski	Kenai Peninsula
2	Nikolaevsk	Kenai Peninsula
4	Nikolai	Interior
4	Nikolski	Aleutians and Pribilofs
2	Ninilchik	Kenai Peninsula
4	Noatak	Northwest Arctic
1	Nome	Norton Sound
4	Nondalton	Bristol Bay
4	Noorvik	Northwest Arctic
2	North Pole	Interior
3	Northway	Interior
3	Northway Junction	Interior
4	Nuiqsut	Arctic Slope
4	Nulato	Interior
4	Nunam Iqua	Yukon-Kuskokwim
4	Nunapitchuk	Yukon-Kuskokwim
4	Old Harbor	Kodiak
4	Oscarville	Yukon-Kuskokwim
4	Ouzinkie	Kodiak
1	Palmer	Anchorage/Mat-Su
3	Paxson	Copper River/PWS
4	Pedro Bay	Bristol Bay
3	Pelican	Southeast
4	Perryville	Bristol Bay
1	Petersburg	Southeast
4	Pilot Point	Bristol Bay
4	Pilot Station	Yukon-Kuskokwim
4	Pitka's Point	Yukon-Kuskokwim
3	Platinum	Yukon-Kuskokwim

<u>Code</u>	Community	Region
2	Pleasant Valley	Interior
4	Point Baker	Southeast
4	Point Hope	Arctic Slope
4	Point Lay	Arctic Slope
4	Port Alexander	Southeast
4	Port Alsworth	Bristol Bay
4	Port Clarence	Norton Sound
4	Port Graham	Kenai Peninsula
4	Port Heiden	Bristol Bay
4	Port Lions	Kodiak
4	Port Protection	Southeast
2	Primrose	Kenai Peninsula
4	Prudhoe Bay	Arctic Slope
4	Quinhagak	Yukon-Kuskokwim
4	Rampart	Interior
4	Red Devil	Yukon-Kuskokwim
2	Ridgeway	Kenai Peninsula
4	Ruby	Interior
4	Russian Mission	Yukon-Kuskokwim
4	Saint George	Aleutians and Pribilofs
4	Saint Mary's	Yukon-Kuskokwim
3	Saint Michael	Norton Sound
4	Saint Paul Island	Aleutians and Pribilofs
2	Salamatof	Kenai Peninsula
2	Salcha	Interior
4	Sand Point	Aleutians and Pribilofs
4	Savoonga	Norton Sound
2	Saxman	Southeast
4	Scammon Bay	Yukon-Kuskokwim
4	Selawik	Northwest Arctic
3	Seldovia	Kenai Peninsula
1	Seward	Kenai Peninsula

<u>Code</u>	Community	Region
4	Shageluk	Interior
4	Shaktoolik Norton Sound	
4	Shishmaref	Norton Sound
4	Shungnak	Northwest Arctic
1	Sitka	Southeast
3	Skagway	Southeast
4	Skwentna	Anchorage/Mat-Su
3	Slana	Copper River/PWS
4	Sleetmute	Yukon-Kuskokwim
1	Soldatna	Kenai Peninsula
4	South Naknek	Bristol Bay
4	Stebbins	Norton Sound
2	Sterling	Kenai Peninsula
4	Stevens Village	Interior
4	Stony River	Yukon-Kuskokwim
2	Sutton	Anchorage/Mat-Su
4	Takotna	Interior
2	Talkeetna	Anchorage/Mat-Su
3	Tanacross	Interior
4	Tanana	Interior
4	Tatitlek	Copper River/PWS
4	Tazlina	Copper River/PWS
3	Teller	Norton Sound
4	Tenakee Springs	Southeast
4	Tetlin	Interior
3	Thorne Bay	Southeast
3	Togiak	Bristol Bay
3	Tok	Interior
4	Toksook Bay	Yukon-Kuskokwim
3	Tonsina	Copper River/PWS
2	Trapper Creek	Anchorage/Mat-Su
4	Tuluksak	Yukon-Kuskokwim

<u>Code</u>	Community	<u>Region</u>
4	Tuntutuliak	Yukon-Kuskokwim
4	Tununak	Yukon-Kuskokwim
4	Twin Hills	Bristol Bay
2	Two Rivers	Interior
4	Tyonek	Kenai Peninsula
4	Unalakleet	Norton Sound
4	Unalaska	Aleutians and Pribilofs
4	Upper Kalskag	Yukon-Kuskokwim
1	Valdez	Copper River/PWS
4	Venetie	Interior
4	Wainwright	Arctic Slope

<u>Code</u>	Community	Region
4	Wales	Norton Sound
1	Wasilla	Anchorage/Mat-Su
3	Whale Pass	Southeast
4	White Mountain	Norton Sound
3	Whitestone Logging Camp	Southeast
3	Whittier	Copper River/PWS
2	Willow	Anchorage/Mat-Su
4	Wiseman	Interior
2	Womens Bay	Kodiak
1	Wrangell	Southeast
4	Yakutat	Southeast



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Appendix F. Glossary of Terms

Age-adjusted rate

The application of age-specific rates in a population of interest to a standardized age distribution in order to eliminate differences in observed rates that result from age differences in population composition. This adjustment is usually done when comparing two or more populations at one point in time or one population at two or more points in time.

Intentional Injuries

Intentional injuries are purposeful or deliberate harm caused by one person to themselves or another person. The most common categories of intentional injures are suicide/suicide attempt, homicide, assault and abuse.

Rate ratio

A comparison of two rates to show how many times larger or smaller one is compared to the other. Generally, the rate in the population of interest is compared with that of a standard population (for which data are available and published). A rate ratio of less than one means that the rate in the population of interest is lower than that of the comparison population. For example, a rate ratio of 0.8 means that the rate in the population of interest is 20 percent lower than in the comparison population. Conversely, a rate ratio of 1.2 means that the rate in the population of interest is 20 percent higher than in the comparison population.

Unadjusted rate

An estimate of the proportion of a population that experiences the event of interest (e.g. assault hospitalization rate) during a specified period. It is calculated by dividing the number of observations by the appropriate population multiplied by 100,000 (or other appropriate multiplier). When interpreting these rates, remember that rates may be affected by differences in population structures between 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.

Unintentional Injuries

Unintentional injuries are all injuries where the harmful outcome was not intended or planned, or was not caused on purpose. The term "accident" is not used in this report because it implies that the injury cannot be prevented.

Errata corrected October 7, 2014

Falls, Injury Hospitalizations, page 32

Figure 38. Falls Hospitalization Rate by Gender, Race, and Year 1992-2011: Alaska Native and Non-Native male and female data were reversed. For example, rates labeled "AK AN/AI Male" are for AN/AI females.

Suicide Attempt or Self Harm, Injury Hospitalizations, page 34

Figure 41. Suicide Attempt or Self Harm Hospitalization Rate by Gender, Race, and Year 1992-2010: Alaska Native and Non-Native male and female data were reversed. For example, rates labeled "AK AN/ AI Male" are for AN/AI females.

Appendix B. Data Tables

Page 85 Table B-2, Intentional Injury Death Rate by Gender, Race and Year, 1992-2011: Alaska Non-Native n values for male and female are reversed. All rates are listed correctly.

Page 95 Table B-22. Motor Vehicle Death Rate by Gender, Race and Year, 1992-2011: Header is missing for Alaska Native data (Alaska Native Male, Female, Total). Alaska Non-Native Total n values and rates are incorrect. Correct values are:

Alaska Non-Native		
	Total	
	n	Rate
1992-1995	330	19.2
1996-1999	245	13.0
2000-2003	315	16.5
2004-2007	275	13.1
2008-2011	202	8.7

Page 103 Table B-38, Falls Hospitalization Rate by Gender, Race and Year, 1992-2011: Alaska Native and Non-Native male and female data were reversed. For example, rates labeled "AK AN/AI Male" are for AN/AI females. All n values are listed correctly.

Page 105 Table B-42, Suicide Attempt or Self Harm Hospitalization Rate by Gender, Race and Year, 1992-2010: Alaska Native and Non-Native male and female data were reversed. For example, rates labeled "AK AN/AI Male" are for AN/AI females. All n values are listed correctly.

Page 109 Table B-50, Motor Vehicle Hospitalization Rate by Gender, Race and Year, 1992-2011: Alaska Non-Native Total n values and rates are incorrect. Correct values are:

	Alaska Non-Native		
	Total		
	n	Rate	
1992-1995	2,063	11.0	
1996-1999	1,967	10.1	
2000-2003	2,143	10.8	
2004-2007	1,784	8.3	
2008-2011	1,468	6.4	

Errata corrected May 5, 2014

Executive Summary, page 2

Injury Deaths 2nd bullet: corrected percent decrease in rate values. Drowning (from 56.6% to 56.5%), motor vehicle (from 45.7% to 45.6%), homicide (from 38.3% to 37.9%) and suicide (from 14.3% to 14.4%).

Injury Hospitalizations 1st **bullet:** corrected names of 3rd leading cause (from motor vehicle crashes to assaults) and percent of injury hospitalizations the three leading causes comprised (from 71.6% to 60.4%).

Suicide, Injury Deaths, page 15

Summary, 3rd bullet: corrected percentage firearms were of means of suicide deaths (from 57.9% to 58.0%).

Drowning, Injury Deaths, page 19

Summary, 3rd bullet: corrected percentage being or falling into natural water were of circumstances for drowning deaths (from 48.3% to 48.5%).

Suicide Attempt or Self Harm, Injury Hospitalizations, page 35

Summary, 1st **bullet:** corrected percentage suicide attempt and self harm were of all injury hospitalizations (from 19.5% to 18.0%) and corrected the number of all injury hospitalizations (from 14,914 to 16,141).

All-Terrain Vehicle, Injury Hospitalizations, page 41

Summary, 2nd bullet: reversed rates to associate them with the correct time periods (from "5.9 and 5.2" to "5.2 and 5.9").

Summary box, 3rd bullet: corrected percentage ATV drivers were of all ATV-related hospitalizations (from 61.2% to 61.1%).

Errata corrected April 28, 2014

Inside front cover

Behavioral Health Department's Substance Abuse Prevention Initiative added as a funder for the report.

Acknowledgements, page i

Suggested Citation: Added suggested citation before Acknowledgements.

Leading Causes of Injury Hospitalization, pages 26-27

Figures 27 – 30: Changed Data Source to Alaska Trauma Registry

Special Topics, page 71

Drug and Alcohol Poisonings: Added information on national percentages of unintentional poisoning causes.

