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## AKVDRS Suicide Update — Alaska, 2007–2011

### Background

Alaska had the second highest suicide rate in the nation in 2010, the most recent year for which national comparison data are currently available.<sup>1</sup> During 2005–2009, suicide was the leading cause of death among Alaskans aged 15–44 years and the sixth leading cause of death overall in Alaska.<sup>2</sup> This *Bulletin* provides an update on suicide epidemiology data from the Alaska Violent Death Reporting System (AKVDRS), an active surveillance system that collects risk factor data concerning all violent deaths that meet the National Violent Death Reporting System case definitions.<sup>3</sup>

### Methods

We reviewed AKVDRS suicide data from 2007–2011. Deaths were counted if the decedent was fatally injured in Alaska. Crude rates were calculated using the Alaska Department of Labor's population estimates data.

### Summary Results

During 2007–2011, 771 suicides were recorded in AKVDRS, yielding an annual average of 154 suicide deaths (range: 142–169), and accounting for 62% of all violent deaths in Alaska.

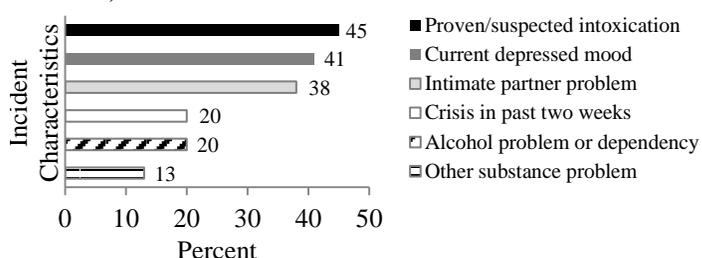
From 2007–2011, the average annual crude suicide rate was 25.8 per 100,000 persons aged  $\geq 10$  years. Crude rates by sex and age were highest among males aged 20–24 years and  $\geq 85$  years, and among females aged 20–24 (73.9, 112.6, and 17.0 per 100,000 persons, respectively). Rates by race were highest among American Indian/Alaska Native people (AI/AN), followed by Whites, Blacks, and Asian/Pacific Islanders (49.0, 22.2, 14.4, and 7.9 per 100,000 persons, respectively). Rates by month ranged from 1.7–2.7 per 100,000 persons, with the highest rate occurring in July and the lowest rates occurring in January and October. Rates by region were highest in the Northern and Southwestern regions (67.8 and 53.5 per 100,000 persons, respectively).

Characteristics of the 771 suicides are as follows:

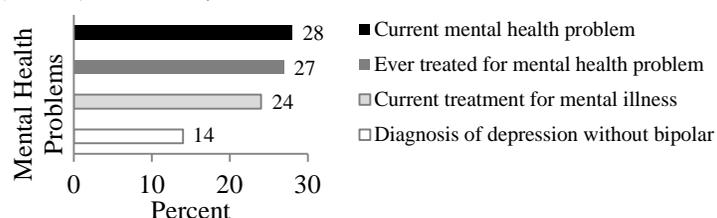
- the most commonly documented incident characteristics included proven or suspected alcohol intoxication and current depressed mood (Figure 1);
- 156 (20%) decedents had a known alcohol problem or dependency (Figure 1); of these, 85 (54%) lived in communities that restricted sales and/or personal use of alcohol;
- 134 (17%) decedents had a blood alcohol concentration (BAC)  $\geq 0.08$  g/dL;
- 275 (36%) decedents were tested for opiates, of which, 34 (12%) were positive and 22 (8%) died as a result of an opiate overdose;
- 708 (92%) decedents had documented life stressors -- the most common (besides mental health problems) were physical health problems (167, 22%), recent criminal/legal problems (115, 15%), and financial problems (83, 11%);
- 214 (28%) decedents had a documented current mental health problem (Figure 2); of these, 183 (86%) were receiving treatment for their mental health problem, and 87 (41%) had disclosed their intent to commit suicide within the past year;
- 161 (21%) decedents were current or former U.S. military personnel;
- 106 (14%) decedents had at least one known previous suicide attempt (range: 1–30 attempts);
- 61 (8%) decedents had perpetrated intimate partner violence within the past month;
- 13 (2%) decedents were involved in homicide-suicides (accounting for 18 homicides); and

- gunshot injury was the most common cause of death (males: 427/617, 69%; females: 71/154, 46%), followed by hanging/strangulation/suffocation (males: 139/617, 23%; females: 42/154, 27%), and poisoning (males: 30/617, 5%; females: 33/154, 21%).

**Figure 1. Incident Characteristics of Suicides (N=771) — Alaska, 2007–2011**



**Figure 2. Mental Health Characteristics of Suicides (N=771) — Alaska, 2007–2011**



### Discussion

Compared to 2004–2008, Alaska's average annual crude suicide rate was 2% lower during 2007–2011.<sup>4</sup> From 2007–2011, Alaska's suicide rates continued to be highest among males, young adults, AI/AN, and persons living in rural regions of the state. Mental health problems and other life stressors are highly associated with suicide, and the data presented here indicate that the vast majority (92%) of Alaska suicide decedents had at least one such stressor.

In 2010, 15% of the Alaska population was composed of current or former U.S. military personnel (unpublished data);<sup>5</sup> the data presented here indicate that 21% of the suicides occurred among current or former U.S. military personnel, suggesting that this population might be at increased risk for suicide in Alaska. More research is needed to better characterize suicide risk in this population.

### Recommendations

1. Health care providers should monitor patients for warning signs, such as indications of alcohol and substance abuse; depression or other mental health problems; prior disclosure of intent to commit suicide; and recent substantial life stressors, including intimate partner problems.
2. Providers should engage in open discussions with at-risk patients to promote risk-reduction strategies (information is available at: <http://www.sprc.org/for-providers> and [www.cdc.gov/violenceprevention/suicide/prevention.html](http://www.cdc.gov/violenceprevention/suicide/prevention.html)).

### References

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