



Department of Health and Social Services  
William J. Streur, Acting Commissioner

3601 C Street, Suite 540  
Anchorage, AK 99503

<http://www.epi.alaska.gov>

Division of Public Health  
Ward Hurlburt, MD, MPH, CMO/Director

Local (907) 269-8000  
24 Hour Emergency 1-800-478-0084

Editors:  
Joe McLaughlin, MD, MPH  
Louisa Castrodale, DVM, MPH

Bulletin No. 32 December 2, 2010

## Homicide Epidemiology Update — Alaska, 2003–2008

### Introduction

In 2007, the most recent year for which national comparison data are currently available, Alaska ranked 16<sup>th</sup> in the Nation for homicides.<sup>1,2</sup> Also in 2007, homicide was a top 10 cause of injury deaths among Alaskans aged 0–4 years and 10–54 years, accounting for an estimated 1,604 years of potential life lost prior to age 65 years.<sup>3</sup>

### Methods

Homicide data during 2003–2008 were obtained from the Alaska Violent Death Reporting System (AKVDRS), an active surveillance system that collects risk factor data concerning all violence-related deaths that meet the National Violent Death Reporting System (NVDRS) case definitions.<sup>4,5</sup> Deaths were counted if the decedent was fatally injured in Alaska. Rates were calculated using the National Center for Health Statistics Bridged Race Vintage 2009 Postcensal Population estimates.

### Summary Results

During 2003–2008, 245 homicide cases were recorded in AKVDRS, yielding an annual average of 41 deaths (range: 33–49), and accounting for 18% of all violent deaths. The Alaska age-adjusted homicide rate from 2003–2008 was 6.1 per 100,000 persons; the National age-adjusted homicide rate from 2003–2007 was also 6.1 per 100,000 persons.<sup>3</sup> With respect to the 245 Alaska homicides during 2003–2008,

- 164 (67%) victims were male; the rate for men was 1.9 times higher than the rate for women (8.0 vs. 4.1 per 100,000 population, respectively);
- the median age was 32 years (range: 0–85);
- 112 (46%) decedents were White and 71 (29%) were American Indian/Alaska Native (AI/AN);
- the rate among AI/ANs was 2.6 times greater than that of Whites (10.0 vs. 3.9 per 100,000 population, respectively);
- the highest rates by race, sex, and age were among AI/AN males aged 30–34 years (103.7 per 100,000 population [n=21]) and AI/AN females aged 40–44 years (48.1 per 100,000 population [n=12]);
- rates varied by region of homicide occurrence (Table);
- 216 (94%) events involved a single victim; of the 14 (6%) events that involved multiple victims, five (36%) were combined homicide/suicide events;
- the most commonly documented event characteristics were another precipitating crime (53, 22%) and intimate partner violence (36, 15%) (Figure);
- the most frequently documented victim characteristics included: a) proven or suspected alcohol intoxication (110, 45%)—the majority (89/110, 81%) of these victims had a blood alcohol concentration  $\geq 0.08$  mg/dL; b) the victim knew the suspect(s) as an acquaintance or friend (49, 20%) or was a child, grandchild, or sibling (30, 12%) of the suspect(s); and c) the victim was a current or former spouse or partner of the suspect (29, 12%);
- the primary weapon (i.e., the weapon that killed the victim) used in most homicides was a firearm (124, 51%), followed by a sharp instrument (32, 13%), and personal weapons (e.g., fists, feet, and hands [29, 12%]);
- handguns were involved in 69% (70/102) of homicides where the firearm type was determined, followed by shotguns (11/102, 11%) and long rifles (10/102, 10%);
- the proportion of firearm injury homicides by race was highest for Blacks (24/27, 89%), followed by

Asian/Pacific Islanders (12/17, 70%), Whites (59/112, 53%), and AI/ANs (24/70, 34%);

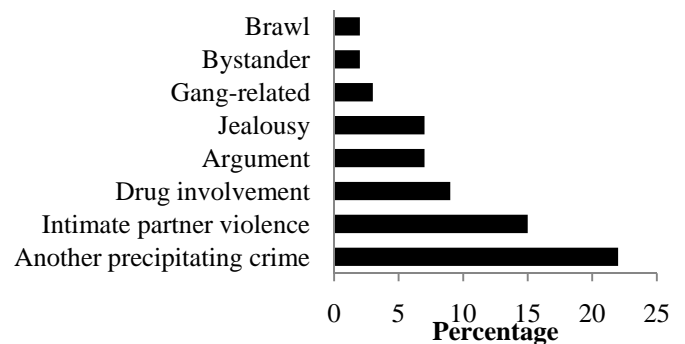
- nine (4%) were classified as gang- or hate-related events; 67% (6/9) of these victims were Asian/Pacific Islanders;
- of victims aged <4 years, 63% (10/16) were children of the suspect; the most common homicide methods used by the suspect were intentional neglect (5/21, 24%), strangulation/suffocation (4/21, 19%), and shaking (4/21, 19%).

**Table. Number, Proportion and Rates of Homicide by Region of Occurrence (N=245) — Alaska, 2003–2008**

| Region           | Number*<br>(% of total) | Rate per<br>100,000 |
|------------------|-------------------------|---------------------|
| Anchorage/Mat-Su | 125 (51)                | 5.9                 |
| Gulf Coast       | 23 (9)                  | 5.1                 |
| Interior         | 37 (15)                 | 6.0                 |
| Northern         | 14 (6)                  | 9.8                 |
| Southeast        | 19 (8)                  | 4.5                 |
| Southwest        | 23 (9)                  | 9.7                 |

\*Four cases were of unknown location.

**Figure. Percentage of Homicide Cases, by Selected Event Characteristics (N=245) — Alaska, 2003–2008**



### Discussion

The AKVDRS provides important insights into Alaska homicide trends and patterns. From 2003–2008, Alaska's homicide rates were highest among males, young adults, Alaska Natives, and persons living in the Northern and Southwestern regions. The relative proportions of Alaska homicides by event characteristics (Figure) were similar to the national proportions.<sup>6</sup> Additional studies on the characteristics of suspects and convicted offenders including victim/suspect/weapon relationships, alcohol/drug abuse, mental health status, and previous episodes of violence are warranted to help focus future prevention efforts.

### References

1. Crime in the United States, Federal Bureau of Investigation. Available at: <http://www.fbi.gov/about-us/cjis/ucr/ucr>
2. US Census Bureau, State Rankings-Statistical Abstract of the United States. Available at: <http://www.census.gov/statab/ranks/rank21.html>
3. Centers for Disease Control and Prevention (CDC). Web-based Injury Statistics Query and Reporting System (WISQARS). Available at: <http://www.cdc.gov/injury/wisqars/fatal.html>
4. Alaska Section of Epidemiology. Overview of the Alaska Violent Death Reporting System. *Bulletin* No 21, July 20, 2010. Available at: [http://www.epi.hss.state.ak.us/bulletins/docs/b2010\\_21.pdf](http://www.epi.hss.state.ak.us/bulletins/docs/b2010_21.pdf)
5. Alaska Section of Epidemiology. Overview of the Alaska Violent Death Reporting System. *Bulletin* No 22, July 20, 2010. Available at: [http://www.epi.hss.state.ak.us/bulletins/docs/b2010\\_22.pdf](http://www.epi.hss.state.ak.us/bulletins/docs/b2010_22.pdf)
6. CDC. Homicides and Suicides --- National Violent Death Reporting System, United States, 2003–2004. *MMWR Morb Mort Wkly Rep* 2006;55(26):721-4. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5526a1.htm>