Overview of the Alaska Violent Death Reporting System

Background
Prior to 2003, Alaska violent death data were collected and described independently by several organizations across the state. Although these data were of high quality, they were not integrated and provided only a limited view of the characteristics of violent deaths in Alaska. In 2003, Alaska became one of six states funded by the Centers for Disease Control and Prevention (CDC) to implement the National Violent Death Reporting System (NVDRS) model that collates information into a centralized database to monitor the magnitude and characteristics of violent death at the national, state, and local levels. Currently, 19 states participate in NVDRS.

NVDRS defines a violent death as a death resulting either from the intentional use of physical force or power against oneself, another person, or a group or community. NVDRS case definitions are coded on the basis of the International Classification of Diseases, 10th Revision (ICD-10).

An average of 228 violent deaths occur in Alaska annually. The Alaska Violent Death Reporting System (AKVDRS) attempts to answer critical questions about the nature and cause of these violent deaths in order to guide the development of effective Alaska-specific prevention and intervention strategies. Using the NVDRS guidelines, AKVDRS coordinates the collection, aggregation, and analysis of data regarding deaths associated with intentional self harm, assault, an accidental firearm injury, terrorism, legal intervention, and any undetermined cause of death (Table).

The primary objectives of AKVDRS are to:
- link violent death record data from disparate sources;
- provide timely information through rapid data retrieval;
- describe the circumstantial and environmental factors that contribute to violent deaths; and
- characterize perpetrators, including their relationship to the victim(s).

Table. AK VDRS Case Identification by ICD-10 Code

<table>
<thead>
<tr>
<th>ICD-10 Codes</th>
<th>Manner of Death</th>
<th>Death &lt; 1 year after injury</th>
<th>Death &gt; 1 year after injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>X60-X84</td>
<td>Intentional self harm (suicide)</td>
<td>Y87.0</td>
<td>Y87.0</td>
</tr>
<tr>
<td>X85-X99, Y06-Y09</td>
<td>Assault (homicide)</td>
<td>Y87.1</td>
<td>Y87.1</td>
</tr>
<tr>
<td>Y16-Y34</td>
<td>Undetermined intent</td>
<td>Y87.2, Y89.9</td>
<td></td>
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<tr>
<td>W32-W34</td>
<td>Accidental firearm</td>
<td>Y86 (due to firearms)</td>
<td></td>
</tr>
<tr>
<td>Y35.0-Y35.4, Y35.6-Y35.7</td>
<td>Legal intervention</td>
<td>Y89.0</td>
<td></td>
</tr>
<tr>
<td>U01-U03</td>
<td>Terrorism</td>
<td>U02 (unknown)</td>
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</tbody>
</table>

Deaths as a result of injury(ies) sustained and meeting the NVDRS definition have “gunshot wound acquired during a fight” listed as an immediate cause of death listed as “systemic infection” may have “gunshot wound acquired during a fight” listed as an underlying cause, which is not given an ICD-10 code. The AKVDRS data are analyzed biannually and summary data are shared with stakeholders through various mechanisms (e.g., Bulletins, presentations, fact sheets, and annual reports).

In addition to aiding Alaska’s efforts for the prevention of violent deaths, the AKVDRS contributes de-identified data to the NVDRS, which pools all of the state-based violent death reporting system data together. The NVDRS public dataset is available on CDC’s Web-based Injury Statistics Query and Reporting System (WISQARS) website. CDC also provides periodic summary reports in the Morbidity and Mortality Weekly Report.

Comment
The results of a 5-year review of AKVDRS data from 2004–2008 are available in a companion Bulletin. Through compiling data from multiple sources statewide, the AKVDRS can be used to monitor the occurrence of violence-related fatal injuries and assist public health authorities in the development, implementation, and evaluation of programs and policies to prevent violent deaths in Alaska.

References