During 1993-1994 firearm injury deaths overtook motor vehicle injury deaths as the leading cause of injury mortality among Alaska residents. In fact, firearm injuries were the leading cause of injury deaths from 1980 to 1994 (Figure 1). Because of the need to better understand the medical burden of firearm injuries in Alaska, firearm injuries are now reportable to the Section of Epidemiology. Firearm injuries must also continue to be reported to the Department of Public Safety, a local law enforcement agency or a village public safety officer.

**Figure 1. Mortality Rates by Injury Category**
Alaska, 1980-1994

Mortality
Vital statistics data provide some information about firearm injury deaths. Victims are most likely in the 15-24 year age group with a mortality rate in Alaska of 56/100,000 persons in 1994 (Figure 2). While the number of firearm injury deaths was lower than among other age groups, 71 deaths occurred in children 0-14 years and 76 deaths occurred in those over 64 years from 1980-1994.

**Figure 2. Age-Specific Firearm Mortality Rates**
Alaska, 1980-1994

The death rate from firearm injuries among Alaska Natives was 2.3 times that of non-Natives in 1994, despite a significant decrease in the Alaska Native firearm injury mortality rate from 80/100,000 in 1980 to 47/100,000 in 1994.

Suicide accounted for the majority (74%) of firearm injury deaths in Alaska during 1994 (Figure 3). Homicide accounted for 19% and unintentional firearm injury deaths accounted for 5% of total firearm injury deaths in Alaska in 1994.

**Figure 3. Types of Firearm Injury Death (n=151)**
Alaska, 1994
Morbidity

The number of nonfatal firearm injuries in Alaska can be estimated by applying national estimates of nonfatal firearm injuries. The U.S. Centers for Disease Control and Prevention reviewed a sample of emergency room visits and determined the ratio of nonfatal to fatal firearm injuries for various types of firearm injuries. Using 1994 Alaska firearm injury deaths, an estimate can be made of Alaska nonfatal firearm injuries (Table 1).

Table 1. Estimated Nonfatal Firearm Injuries
Alaska, 1994

<table>
<thead>
<tr>
<th>Type of Injury</th>
<th>Ratio nonfatal:fatal</th>
<th>Deaths</th>
<th>Estimated nonfatal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assault/Legal intervention</td>
<td>3.3</td>
<td>31</td>
<td>102</td>
</tr>
<tr>
<td>Unintentional</td>
<td>12.8</td>
<td>8</td>
<td>102</td>
</tr>
<tr>
<td>Suicide attempt</td>
<td>0.3</td>
<td>112</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>1.6</td>
<td>151</td>
<td>238</td>
</tr>
</tbody>
</table>

Based on 1994 firearm fatalities in Alaska, there were an estimated 238 nonfatal firearm injuries in Alaska in 1994 for a nonfatal:fatal ratio of 1.6, which was less than the national nonfatal:fatal ratio of 2.6. The lower Alaska ratio is attributable to the greater percentage of suicide among firearm injuries in Alaska.

Firearm Injury Surveillance

In order to better understand the medical burden of firearm injuries in Alaska, firearm injury reporting is essential. Health care providers can either fax or phone reports within 24 hours to the Section of Epidemiology. An answering machine is available 24 hours a day for reporting firearm injuries and other reportable conditions.

Firearm Injury Reporting
Phone (1-800-478-1700) or Fax (562-7802)

The following information should be reported on all firearm injuries:

- Patient name
- Community of residence
- Date of birth
- Date of injury
- Sex
- Health care facility name
- Race

References:

(Contributed by Michael G. Landen, MD, MPH, Section of Epidemiology.)