Epidemiologic Profile of American Indian/Alaska Native Suicide in Three Northwest States

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Definition

• **Suicide** is defined by the Institute of Medicine as “a fatal self-inflicted destructive act with explicit or inferred intent to die”

• **Suicide** is classified on death certificates by medical examiners based on investigation of the circumstances of death
### Age-Adjusted Suicide Rates*
**Youth Aged 15-24**
**United States, 2000–2005**

<table>
<thead>
<tr>
<th></th>
<th>AI/AN</th>
<th>White</th>
<th>Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>18.69</td>
<td>10.65</td>
<td>7.11</td>
</tr>
</tbody>
</table>

*Rate=deaths/100,000 population per year

### 10 Leading Causes of Death for AI/AN Youth Age 15-24, United States, 2005

<table>
<thead>
<tr>
<th>Rank</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unintentional Injury</td>
</tr>
<tr>
<td>2</td>
<td>Suicide</td>
</tr>
<tr>
<td>3</td>
<td>Homicide</td>
</tr>
<tr>
<td>4</td>
<td>Malignant Neoplasms</td>
</tr>
<tr>
<td>5</td>
<td>Heart Disease</td>
</tr>
<tr>
<td>6</td>
<td>Diabetes Mellitus</td>
</tr>
<tr>
<td>7</td>
<td>Liver Disease</td>
</tr>
<tr>
<td>8</td>
<td>Septicemia</td>
</tr>
<tr>
<td>9</td>
<td>(Three causes tied)</td>
</tr>
<tr>
<td>10</td>
<td>(Three causes tied)</td>
</tr>
</tbody>
</table>
Washington

Mechanism of Suicide, AI/AN Females Washington, 1999-2005
- Poisoning: 8%
- Firearms: 40%
- Suffocation/Hanging: 36%
- All Other Causes: 16%

Mechanism of Suicide, AI/AN Males Washington, 1999-2005
- Poisoning: 7%
- Firearms: 13%
- Suffocation/Hanging: 32%
- All Other Causes: 48%

Years of Potential Life Lost (YPLL) Before Age 70, ID, OR, WA – 2005

- Males
- Females

<table>
<thead>
<tr>
<th>Years</th>
<th>ID</th>
<th>OR</th>
<th>WA</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>100</td>
<td>100</td>
<td>400</td>
</tr>
<tr>
<td>200</td>
<td>200</td>
<td>200</td>
<td>600</td>
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<tr>
<td>300</td>
<td>300</td>
<td>300</td>
<td>800</td>
</tr>
<tr>
<td>400</td>
<td>400</td>
<td>400</td>
<td>1000</td>
</tr>
</tbody>
</table>
• Urban Indian Health Institute BRFSS
  – 2001-2005 AI/AN population in counties serviced by Urban Indian Health programs

• NPAIHB Tribal BRFSS
  – Confederated Tribes of the Umatilla Indian Reservation
  – Klamath Tribes
  – Lummi Nation
  – Makah Tribe
  – Nez Perce Tribe
  – Nisqually Tribe
  – Shoshone-Bannock Tribes
Figure 53. Percent of respondents who reported feeling depressed "all" or "most of the time" in the past month by BRFSS tribe, 2001 Northwest Tribal BRFSS Project.
Figure 19. Percent of respondents who reported acute drinking in the past month by BRFSS tribe, 2001

Northwest Tribal BRFSS Project
Figure 29. Percent of respondents whose reported physical activity level meets recommendations, by BRFSS tribe, 2001
Northwest Tribal BRFSS Project
All Races, 9-12 grade

• Unintentional Injuries and Violence
  • 24% Carried a weapon during the past month
  • 32% Were in a physical fight during the past year
  • 9% Attempted suicide during the past year

• Alcohol and Other Drug Use Dietary Behaviors
  • 40% Drank alcohol during the past month
  • 28% Episodic heavy drinking during the past month
  • 16% Smoked cigarettes during the past month
  • 77% Drank < 3 glasses milk in previous 7 days

• Sexual Behaviors
  • 38% Ever had sexual intercourse

Youth Risk Behavior Surveillance System (YRBSS)
Idaho, 2005

Youth Risk Behavior Surveillance System (YRBSS)
U.S. 1991–2005

<table>
<thead>
<tr>
<th>1991</th>
<th>1993</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
<th>2005</th>
</tr>
</thead>
</table>
| **Seriously considered attempting suicide**
  (During the 12 months preceding the survey.) |
| 29.0 (±1.5) | 24.1 (±0.9) | 24.1 (±1.1) | 20.5 (±2.3) | 19.3 (±1.2) | 19.0 (±1.4) | 16.9 (±0.7) | 16.9 (±0.9) |
| **Made a suicide plan**
  (During the 12 months preceding the survey.) |
| 18.6 (±1.5) | 19.0 (±1.1) | 17.7 (±1.4) | 15.7 (±1.3) | 14.5 (±1.4) | 14.8 (±1.1) | 16.5 (±3.5) | 13.0 (±0.9) |
| **Attempted suicide**
  (One or more times during the 12 months preceding the survey.) |
| 7.3 (±0.9) | 8.6 (±0.8) | 8.7 (±0.8) | 7.7 (±0.9) | 8.3 (±1.0) | 8.8 (±0.8) | 8.5 (±1.1) | 8.4 (±0.9) |
Youth Risk Behavior Surveillance System (YRBSS)

Figure 8. Percentage of High School Students Reporting That They Attempted Suicide, by Sexual History and Number of Mood-altering Substances Used, Oregon, 1999

Figure 10. Odds of Reporting Having Made a Suicide Attempt During the Previous 12 Months, by Selected Risk Factors, Oregon High School Students, 1999

- Odds calculated by dividing ratio category within a variable by the least risky.
Next Steps

• Suicide Prevention Task Force
• Detailed Epidemiologic Profile
  – Develop protocol to use RPMS suicide data
  – Native Youth Risk Behavior Survey?
• Increased screening for depression

Thank You!

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