8. Mental Health & Suicide

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Mental health is closely tied to and affected by our physical, social, and spiritual health. Historical trauma, community violence, family history, and drug or alcohol use can all contribute to poor mental health outcomes. Common mental health conditions include depression, anxiety, panic disorder, attention deficit disorder, and obsessive-compulsive disorder. Patients can manage these conditions with proper treatment from qualified medical providers.

Self-harm and suicide are among the most tragic consequences of mental health illness. Suicide rates for AI/AN are typically highest in early adulthood and decrease with age, while suicide rates in the general population tend to increase with age. In recent data from the CDC, suicide was the second leading cause of death for AI/AN teens and young adults. At the state level, annual suicide rates for AI/AN tend to fluctuate widely because the actual number of deaths each year is relatively small. Data from several years are often compiled to address this challenge.

This section of the report presents data on mental health and suicide in Oregon. On the whole, AI/AN in Oregon reported higher rates of poor mental health and depression than NHW in the state. Despite reporting relatively high levels of poor mental health, AI/AN men were less likely than NHW men to receive treatment for these conditions. Females were more likely than males to be hospitalized for suicide, while males had higher mortality rates from suicide. Suicide is the eighth leading cause of death for AI/AN in Oregon.
From 2006-2012, approximately 26% of AI/AN males and 42% of AI/AN females in Oregon reported feeling depressed or in poor mental health for one or more days in the past month (Figure 8.1). This percentage similar for males (26% of NHW males reported poor mental health or depression), and was higher for AI/AN females than for NHW females (36%).


Data Notes: The BRFSS prevalence estimates (shown as a percentage) are weighted to make the survey responses representative of the Oregon population. The sample sizes presented below the figures are the unweighted number of people who answered this question for the indicated years.
Figure 8.1: Prevalence of self-reported depression or poor mental health in the past month by race and sex, Oregon, 2006-2012.

Sample sizes (n): AI/AN males=783; AI/AN females=1,148; NHW males=49,342; NHW females=77,177.


Data Notes: The BRFSS prevalence estimates (shown as a percentage) are weighted to make the survey responses representative of the Oregon population. The sample sizes presented below the figures are the unweighted number of people who answered this question for the indicated years.
IHS tracks the percentage of AI/AN patients ages 18 years and older who received a depression screening in the past year. Since 2009, the screening rate for depression has increased for Oregon clinics, the Portland Area IHS, and the national IHS (Figure 8.2). Oregon clinics and the national IHS average exceeded the 2013 goal of 58.6%, while Portland Area IHS was slightly below the 2013 goal for this measure.

**Data Source:** Portland Area Indian Health Service.

**Data Notes:** Data labels only shown for Oregon clinics. Oregon clinics include non-urban federal and tribal Indian health facilities in Oregon. Portland Area IHS clinics include non-urban federal and tribal Indian health facilities in Idaho, Oregon, and Washington.
Figure 8.2: Percentage of IHS AI/AN patients (ages 18 and older) who were screened for depression during the past year, 2009-2013.
Despite reporting high levels of depression and poor mental health, only 1.3% of AI/AN males in Oregon reported receiving treatment for a mental health condition or emotional problem from 2006-2012 (Figure 8.3). A higher percentage of AI/AN females (12.6%) reported receiving mental health treatment when compared to NHW females (11.5%).

**Data Source:** CDC Behavioral Risk Factor Surveillance System (BRFSS), 2006-2012.

**Data Notes:** The BRFSS prevalence estimates (shown as a percentage) are weighted to make the survey responses representative of the Oregon population. The sample sizes presented below the figures are the unweighted number of people who answered this question for the indicated years.
Figure 8.3: Prevalence of self-reported mental health treatment by race and sex, Oregon, 2006-2012.

Sample sizes (n): AI/AN males=73; AI/AN females=80; NHW males=5,343; NHW females=8,313.


Data Notes: The BRFSS prevalence estimates (shown as a percentage) are weighted to make the survey responses representative of the Oregon population. The sample sizes presented below the figures are the unweighted number of people who answered this question for the indicated years.
From 2010 to 2011, 5.2% of AI/AN hospitalizations in Oregon had a mental health disorder as the principal diagnosis (Table 8.1). Males of both races had a higher proportion of mental health hospitalizations than females. The age-adjusted hospital discharge rate for mental health disorders was significantly higher for AI/AN males compared to NHW males (Figure 8.4).

**Data Source:** Oregon state hospital discharge data (Oregon Office for Health Policy and Research), 2010-2011, corrected for misclassified AI/AN race by the IDEA-NW Project.

**Data Notes:** Principal diagnosis codes categorized using the Agency for Healthcare Research and Quality’s Clinical Classification Software. The following level-2 principal diagnosis codes were included: 5.1 (adjustment disorders), 5.2 (anxiety disorders), 5.3 (attention deficit, conduct, and disruptive behavior disorders), 5.4 (delirium, dementia, and amnestic and other cognitive disorders), 5.5 (developmental disorders), 5.6 (disorders usually diagnosed in infancy, childhood, or adolescence), 5.7 (impulse control disorders not elsewhere classified), 5.8 (mood disorders), 5.9 (personality disorders), 5.10 (schizophrenia and other psychotic disorders), 5.13 (suicide and intentional self-inflicted injury), and 5.15 (miscellaneous mental disorders).
8. Mental Health & Suicide

Table 8.1: Inpatient hospital discharges for mental health disorders by race and sex, Oregon, 2010-2011.

<table>
<thead>
<tr>
<th>Sex</th>
<th>AI/AN N† (%)</th>
<th>NHW N† (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>335 (7.3%)</td>
<td>10,816 (4.8%)</td>
</tr>
<tr>
<td>Female</td>
<td>269 (3.8%)</td>
<td>11,632 (3.8%)</td>
</tr>
<tr>
<td>Both Sexes</td>
<td>604 (5.2%)</td>
<td>22,448 (4.2%)</td>
</tr>
</tbody>
</table>

† N = number of hospitalizations. The percentages were calculated using the total inpatient hospitalizations for each group: AI/AN male (N=4,603), AI/AN female (N=7,015), AI/AN total (N=11,618), NHW male (N=225,270), NHW female (N=303,952), and NHW total (N=529,222).

Figure 8.4: Age-adjusted hospital discharge rates for mental health disorders by race and sex, Oregon, 2010-2011.

Data Source: Oregon state hospital discharge data (Oregon Office for Health Policy and Research), 2010-2011, corrected for misclassified AI/AN race by the IDEA-NW Project.

Data Notes: Principal diagnosis codes categorized using the Agency for Healthcare Research and Quality's Clinical Classification Software. The following level-2 principal diagnosis codes were included: 5.1 (adjustment disorders), 5.2 (anxiety disorders), 5.3 (attention deficit, conduct, and disruptive behavior disorders), 5.4 (delirium, dementia, and amnestic and other cognitive disorders), 5.5 (developmental disorders), 5.6 (disorders usually diagnosed in infancy, childhood, or adolescence), 5.7 (impulse control disorders not elsewhere classified), 5.8 (mood disorders), 5.9 (personality disorders), 5.10 (schizophrenia and other psychotic disorders), 5.13 (suicide and intentional self-inflicted injury), and 5.15 (miscellaneous mental disorders).
In 2010-2011, 1.1% of AI/AN hospitalizations in Oregon were suicide-related (Table 8.2). This was higher than the percentage of suicide-related hospitalizations for NHW (0.8%). Compared to males, females of both races had a higher proportion of suicide-related hospitalizations and higher age-adjusted hospitalization rates (Figure 8.5) This is the opposite pattern observed for suicide mortality, which points to differences in mechanism, causing more successful suicide attempts among males.

**Data Source:** Oregon state hospital discharge data (Oregon Office for Health Policy and Research), 2010-2011, corrected for misclassified AI/AN race by the IDEA-NW Project.

**Data Notes:** Injury manner and intent were determined using the External Cause of Injury Matrix developed for ICD-9 external cause codes, from the Centers for Disease Control and Prevention (CDC). (“ICD Injury Matrices,” 2009)
Table 8.2: Inpatient hospital discharges for suicide by race and sex, Oregon, 2010-2011.

<table>
<thead>
<tr>
<th>Sex</th>
<th>AI/AN N† (%)</th>
<th>NHW N† (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>42 (0.9%)</td>
<td>1,658 (0.7%)</td>
</tr>
<tr>
<td>Female</td>
<td>85 (1.2%)</td>
<td>2,611 (0.9%)</td>
</tr>
<tr>
<td>Both Sexes</td>
<td>127 (1.1%)</td>
<td>4,269 (0.8%)</td>
</tr>
</tbody>
</table>

† N = number of hospitalizations. The percentages were calculated using the total inpatient hospitalizations for each group: AI/AN male (N=4,603), AI/AN female (N=7,015), AI/AN total (N=11,618), NHW male (N=225,270), NHW female (N=303,952), and NHW total (N=529,222).

Figure 8.5: Age-adjusted hospital discharge rates for suicide by race and sex, Oregon, 2010-2011.
Suicide Mortality

Suicide is the eighth leading cause of death among Oregon AI/AN. Figure 8.6 shows the age-adjusted death rates for suicide among AI/AN and NHW in Oregon. Male AI/AN were almost three times more likely to die from suicide than females. While the rates of completed suicides were much higher for males, it should be noted that several studies have found that females are more likely to attempt suicide than males; however, females are less likely to choose a violent mechanism and so are more likely to survive the attempt\textsuperscript{1,2}. There was very little difference in suicide rates between the races in Oregon, and AI/AN in this state had the lowest rates of suicide in the Northwest region.

\begin{itemize}
\end{itemize}

Data Source: Oregon state death certificates, 2006-2010, corrected for misclassified AI/AN race by the IDEA-NW Project.
Suicide is the eighth leading cause of death among Oregon AI/ANs. Figure 8.6 shows the age-adjusted death rates for suicide among AI/ANs and NHWs in Oregon. Male AI/ANs are almost three times as likely to die from suicide as females. While the rates of completed suicides are much higher for males, it should be noted that several studies have found that females are more likely to attempt suicide than males; however, females are less likely to choose a violent mechanism and so are more likely to survive the attempt. There is very little difference in suicide rates between the races in Oregon, and AI/ANs in this state have the lowest rates of suicide in the Northwest region.

While the majority of Oregon AI/AN suicides occurred between 20 and 39 years of age, the largest disparity between AI/ANs and NHWs was seen among youth. Rates of suicide among AI/ANs 10-19 years old were 2.8 times higher than those seen among NHW youth in the same age range.

Table 8.3: Age-adjusted suicide mortality rates by race and sex, Oregon, 2006-2010.

<table>
<thead>
<tr>
<th>Sex</th>
<th>AI/AN Rate (95% CI)</th>
<th>NHW Rate (95% CI)</th>
<th>AI/AN vs. NHW Rate Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>24.0 (16.1, 38.1)</td>
<td>27.0 (25.8, 28.2)</td>
<td>0.9 (0.7, 1.2)</td>
</tr>
<tr>
<td>Female</td>
<td>8.1 (4.6, 15.3)</td>
<td>7.7 (7.1, 8.3)</td>
<td>1.1 (0.6, 1.7)</td>
</tr>
<tr>
<td>Both Sexes</td>
<td>15.7 (11.7, 21.8)</td>
<td>16.9 (16.3, 17.6)</td>
<td>0.9 (0.7, 1.2)</td>
</tr>
</tbody>
</table>

CI = confidence interval

Figure 8.6: Age-adjusted suicide mortality rates by race and sex, Oregon, 2006-2010.
Suicide Mortality Across the Life Span

Figure 8.7 shows age-specific suicide mortality rates (columns) for AI/AN and NHW in Oregon from 2006-2010. The line shows the rate ratio comparing the two populations. While the majority of Oregon AI/AN suicides occurred between 20-39 years of age, the largest disparity between AI/AN and NHW was seen among youth. Rates of suicide among AI/AN 10-19 years old were 2.8 times higher than those seen among NHW youth in the same age range.

Data Source: Oregon state death certificates, 2006-2010, corrected for misclassified AI/AN by the IDEA-NW Project.
Figure 8.7: Age-specific suicide mortality rates by race, Oregon, 2006-2010.

Note: Rate Ratio is a comparison of AI/AN to NHW rates; a value above 1 indicates AI/AN rates are higher than NHW. Black markers are shown for age groups in which the AI/AN rates are statistically significantly higher than NHW rates. Categories for which AI/AN had fewer than 5 deaths are not shown (0 - 9 years, 70+ years).
Suicide is a sensitive issue, but one that is of great concern to many AI/AN communities. While the data on suicide among Northwest AI/AN is sobering, there are many factors that can protect against suicide, including:

- Connecting to family and friends
- Connecting to culture and spirituality
- Good emotional and physical health
- Positive communication with family or friends
- Restricted access to lethal means
- Access to mental health care
- Problem solving skills

Since 2009, NPAIHB’s THRIVE program has assisted Northwest tribes in implementing culturally appropriate suicide prevention programs and media campaigns.

THRIVE’s activities are directed by three priority goals:

1. Increase knowledge and awareness about suicide among Tribal community members.
2. Improve intertribal and interagency communication about suicide prevention and treatment.
3. Increase the capacity of Tribal health programs to track, prevent, and treat suicide.

THRIVE works with other NPAIHB projects to convene the *NW Native Adolescent Health Alliance*, which is an inclusive, multi-functional group that meets in OR, WA, and ID to discuss cross-cutting planning and prevention strategies targeting AI/AN teens and young adults.

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