

# 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 Washington. On the whole, AI/AN in Washington 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. AI/AN had higher hospitalization rates for mental health conditions and suicide than NHW in the state. Suicide is the eighth leading cause of death for AI/AN in Washington.

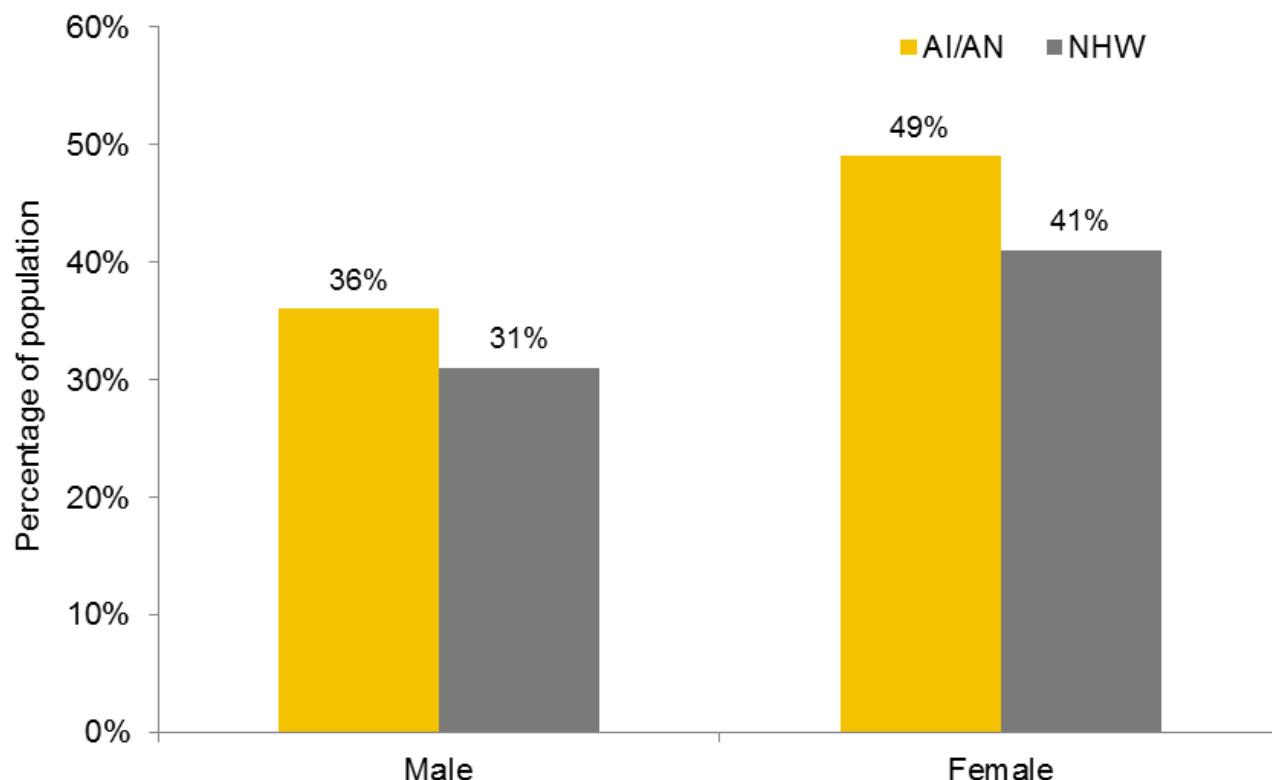
# Self-Reported Poor Mental Health or Depression

From 2006-2012, approximately 36% of AI/AN males and 49% of AI/AN females in Washington reported feeling depressed or in poor mental health for one or more days in the past month (Figure 8.1). This percentage was higher than for NHW in the state (31% of NHW males and 41% of NHW females).

**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 Washington 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, Washington, 2006-2012.**



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

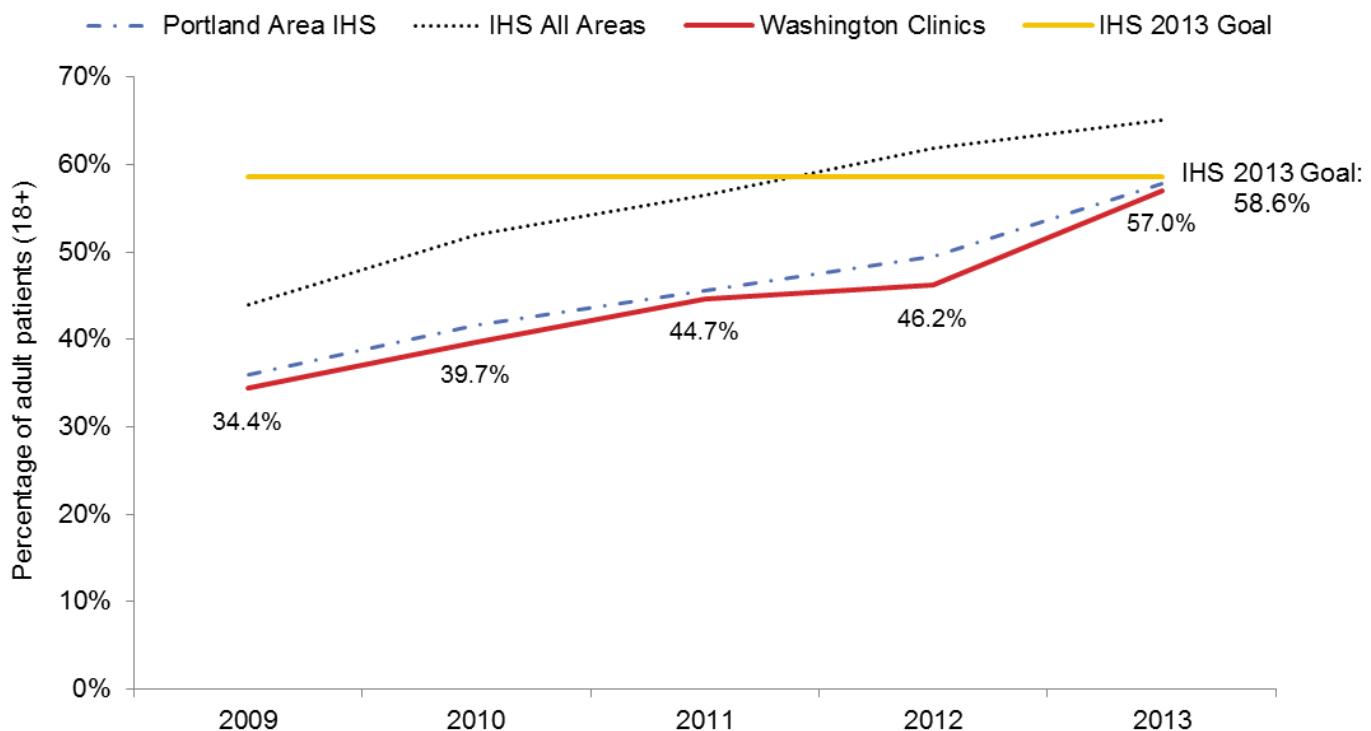
# Depression Screening

IHS tracks the percent 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 Washington clinics, the Portland Area IHS, and the national IHS (Figure 8.2). The national IHS average exceeded the 2013 goal of 58.6%. The screening rate for Washington clinics and the Portland Area IHS were slightly below the 2013 goal for this measure.

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

**Data Notes:** Data labels only shown for Washington clinics. Washington clinics include non-urban federal and tribal Indian health facilities in Washington. 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.**



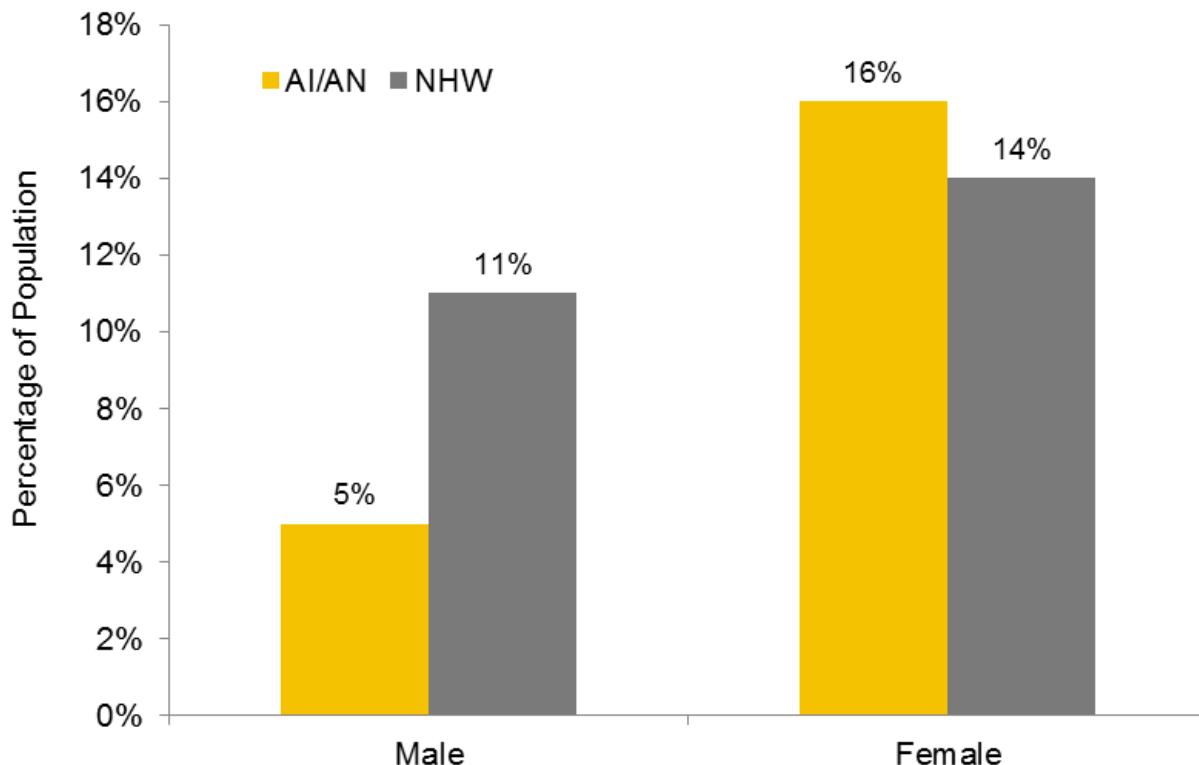
# Self-Reported Mental Health Treatment

Despite reporting higher levels of depression and poor mental health than NHW males, only 5% of AI/AN males in Washington reported receiving treatment for a mental health condition or emotional problem in 2012 (Figure 8.3). A higher percentage of AI/AN females (16%) reported receiving mental health treatment when compared to NHW females (14%).

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

**Data Notes:** The BRFSS prevalence estimates (shown as a percentage) are weighted to make the survey responses representative of the Washington 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, Washington, 2012.**



<sup>†</sup> Sample sizes (n): AI/AN males=65; AI/AN females=87; NHW males=5,369; NHW females=7,391.

# Mental Health Hospitalizations

In 2011, 1.0% of AI/AN hospitalizations in Washington 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 2.8 times higher for AI/AN males than NHW males, and 2.4 times higher for AI/AN females than NHW females (Figure 8.4).

**Data Source:** Washington state hospital discharge data (CHARS), 2011, corrected for misclassified AI/AN race by the IDEA-NW Project.

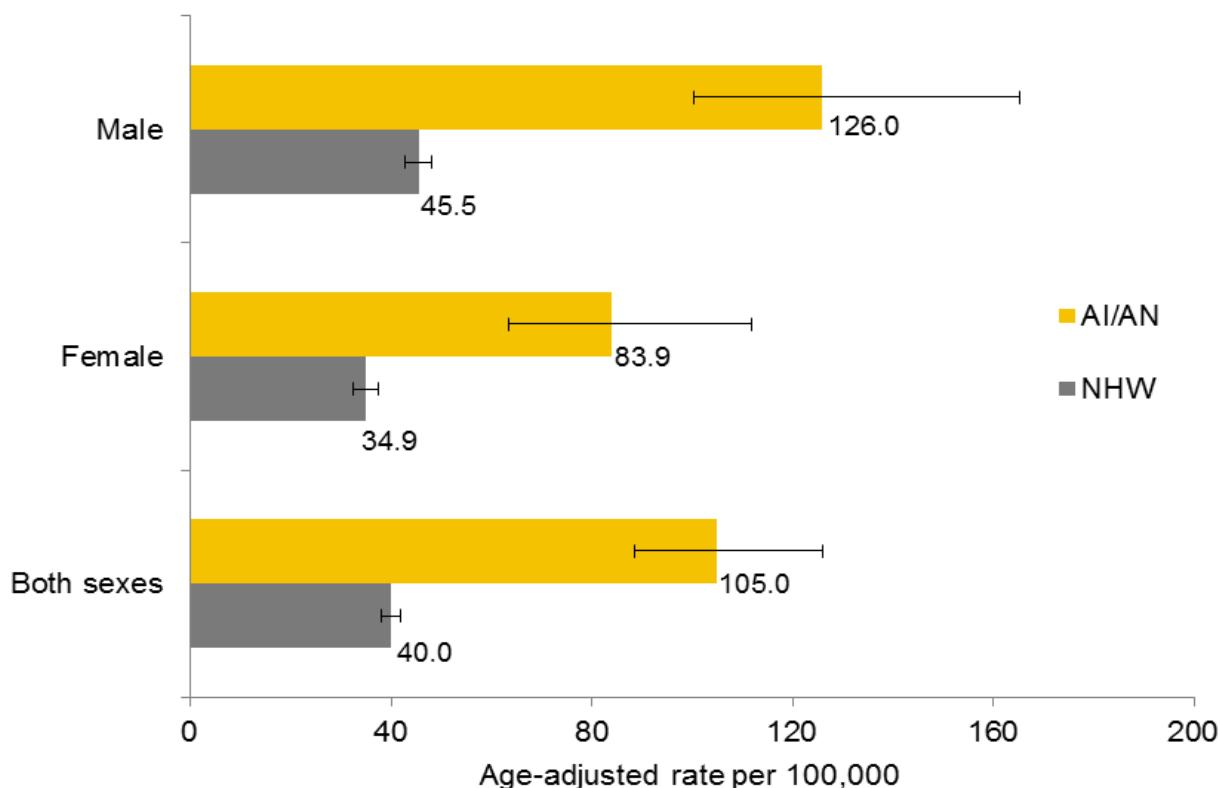
**Data Notes:** Principal diagnosis codes categorized using the Agency for Healthcare Research and Quality's Clinical Classification Software. The following level-2 principal diagnosis codes were included: 5.1 (adjustment disorders), 5.2 (anxiety disorders), 5.3 (attention deficit, conduct, and disruptive 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).

**Table 8.1: Inpatient hospital discharges for mental health disorders by race and sex, Washington, 2011.**

Sex	AI/AN N (%) <sup>†</sup>	NHW N (%) <sup>†</sup>
Male	90 (1.6%)	1,262 (0.8%)
Female	58 (0.7%)	1,044 (0.5%)
<b>Both Sexes</b>	<b>148 (1.0%)</b>	<b>2,306 (0.6%)</b>

<sup>†</sup>N = number of inpatient hospitalizations. The percentages were calculated using the total inpatient hospitalizations for each group: AI/AN male (5,731), AI/AN female (8,741), AI/AN total (14,472), NHW male (159,142), NHW female (212,276), NHW Total (371,418)

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



# Suicide Hospitalizations

In 2011, 0.7% of AI/AN hospitalizations in Washington were suicide-related (Table 8.2). This was higher than the percentage of suicide-related hospitalizations for NHW (0.6%). Compared to males, females of both races had a higher proportion of suicide-related hospitalizations and higher age-adjusted hospitalization rates (Figure 8.5). Compared to their NHW counterparts, the suicide hospitalization rate was 66% higher for AI/AN females and 22% higher for AI/AN males.

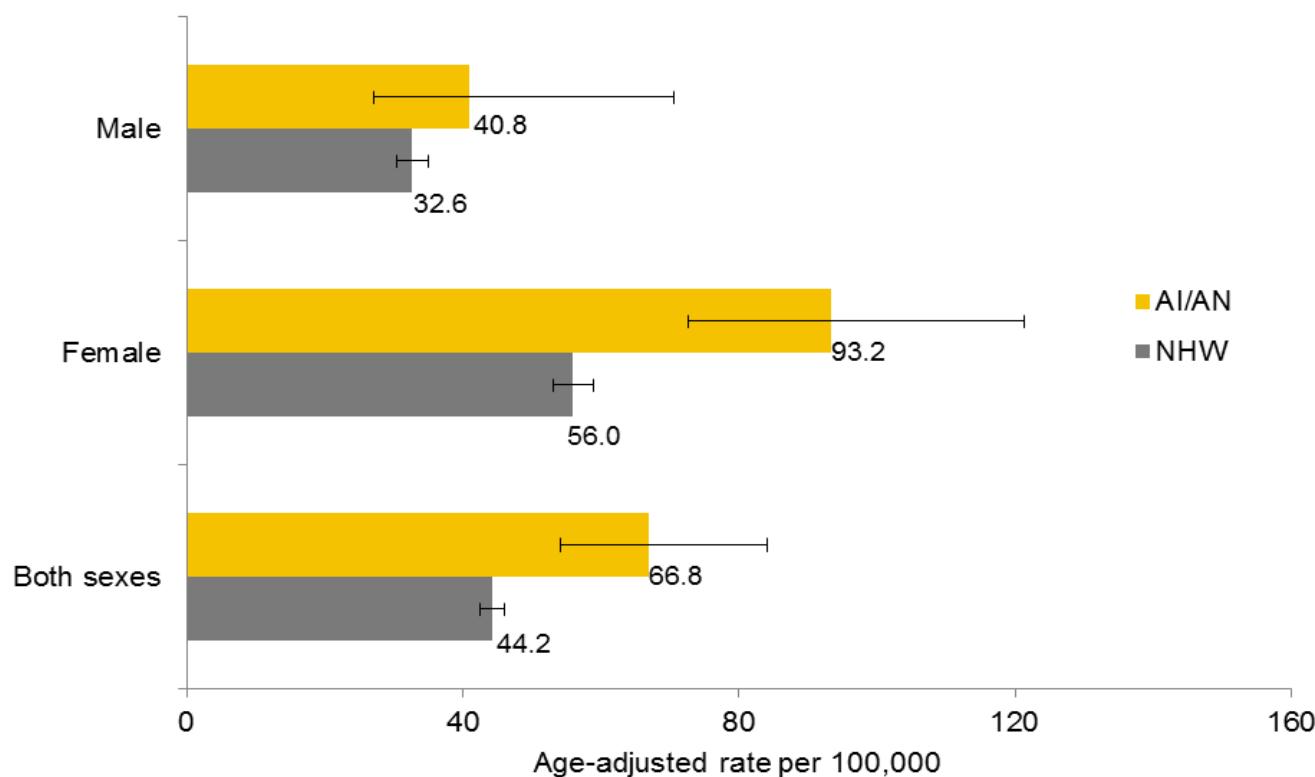
**Data Source:** Washington state hospital discharge data (CHARS), 2011, corrected for misclassified AI/AN race by the IDEA-NW Project.

**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, Washington, 2011.**

<b>Sex</b>	<b>AI/AN N (%)<sup>†</sup></b>	<b>NHW N (%)<sup>†</sup></b>
<b>Male</b>	29 (0.5%)	816 (0.5%)
<b>Female</b>	71 (0.8%)	1,380 (0.7%)
<b>Both Sexes</b>	100 (0.7%)	2,196 (0.6%)

<sup>†</sup>N = number of inpatient hospitalizations. The percentages were calculated using the total inpatient hospitalizations for each group: AI/AN male (5,731), AI/AN female (8,741), AI/AN total (14,472), NHW male (159,142), NHW female (212,276), NHW Total (371,418)

**Figure 8.5: Age-adjusted hospital discharge rates for suicide by race and sex, Washington, 2011.**

# Suicide Mortality

Suicide was the eighth leading cause of death among AI/AN in Washington from 2006-2010. AI/AN males and females had higher mortality rates from suicide than their NHW counterparts in the state, and AI/AN males were over two and a half times more likely to die from suicide than females (Table 8.3 and Figure 8.6). 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.<sup>1,2</sup>

AI/AN in Washington have higher mortality rates from suicide compared to AI/AN in Oregon, but have lower rates compared to AI/AN in Idaho.

1. Dorgan BL. The Tragedy of Native American Youth Suicide. *Psychological Services* 2010;7(3):213-218.

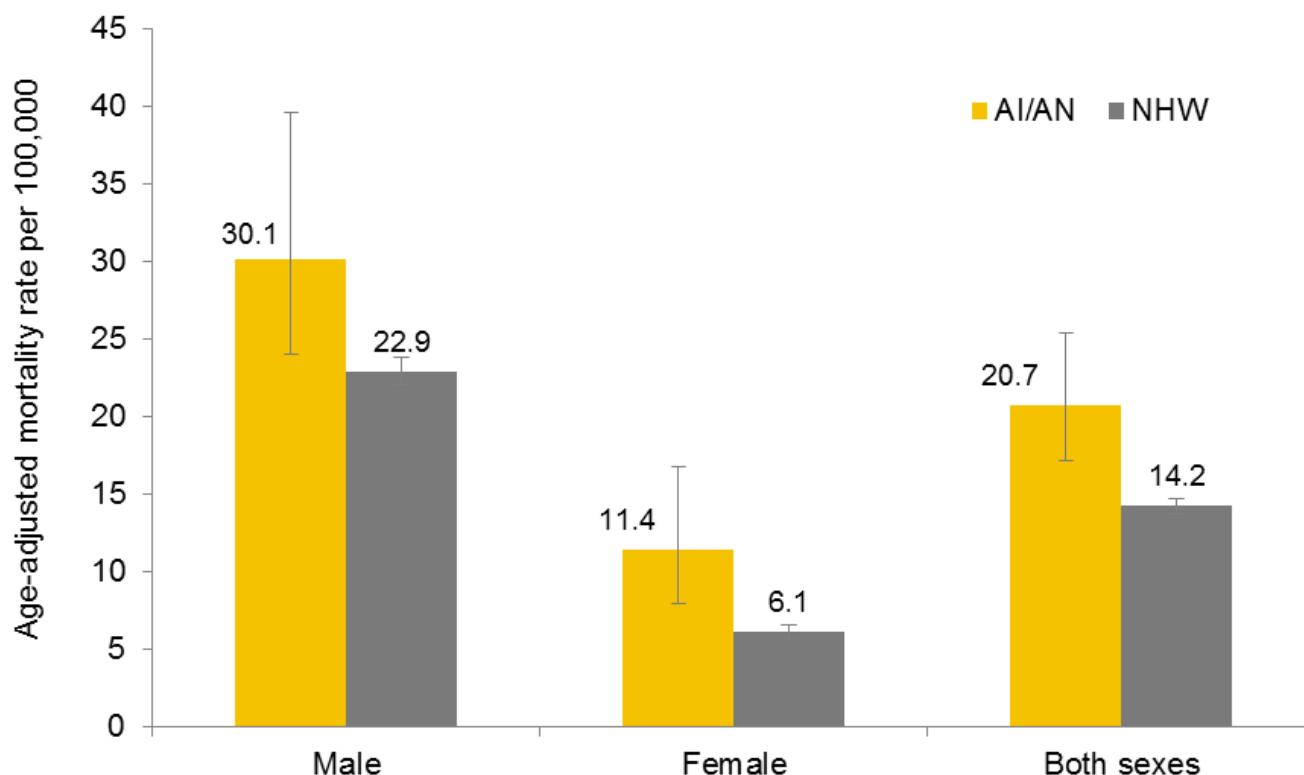
2. Alcantara C, Gone JP. Reviewing Suicide in Native American Communities: Situating Risk and Protective Factors within a Transactional-Ecological Framework. *Death Studies* 2007;31:457-477.

**Data Source:** Washington state death certificates, 2006-2010, corrected for misclassified AI/AN race by the IDEA-NW Project.

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

Sex	AI/AN Rate (95% CI)	NHW Rate (95% CI)	AI/AN vs. NHW Rate Ratio (95% CI)
Male	30.1 (24.0, 39.6)	22.9 (22.0, 23.8)	1.31 (1.08, 1.60)‡
Female	11.4 (7.9, 16.7)	6.1 (5.7, 6.6)	1.87 (1.35, 2.57)‡
Both Sexes	20.7 (17.2, 25.3)	14.2 (13.7, 14.7)	1.46 (1.23, 1.72)‡

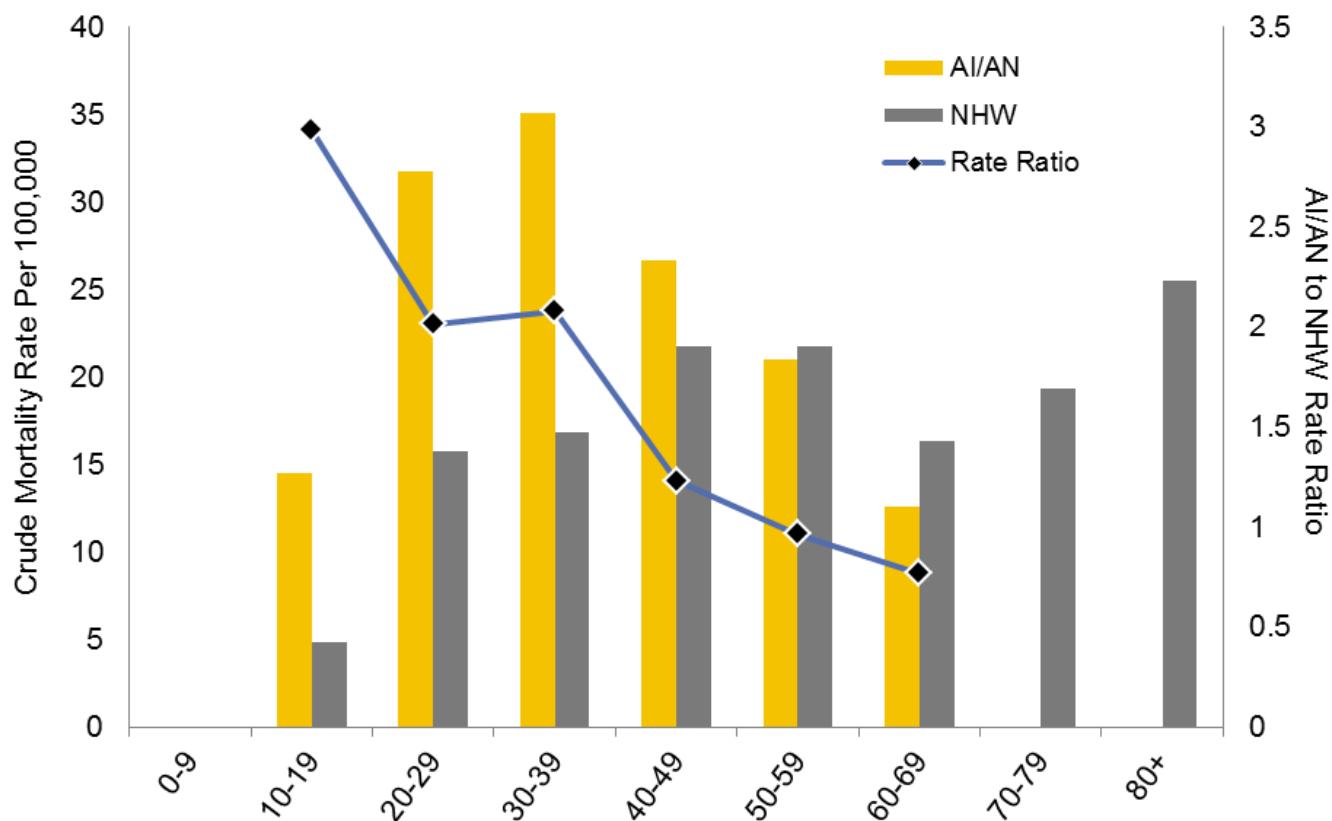
CI = confidence interval

‡ Indicates a statistically significant difference ( $p < .05$ ).**Figure 8.6: Age-adjusted suicide mortality rates by race and sex, Washington, 2011.**

# Suicide Mortality Across the Life Span

Figure 8.7 shows age-specific suicide mortality rates (columns) for AI/AN and NHW in Washington from 2006-2010. The line shows the rate ratio comparing the two populations. While the majority of Washington AI/AN suicides occurred between 20 and 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 three times higher than those seen among NHW youth in the same age range.

**Data Source:** Washington 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, Washington, 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.

# Suicide Mortality Trends

Figure 8.8 shows suicide mortality trends for the AI/AN and NHW population in Washington between 1990 and 2010. The yellow shaded section around the AI/AN line represents a 95% confidence interval band.

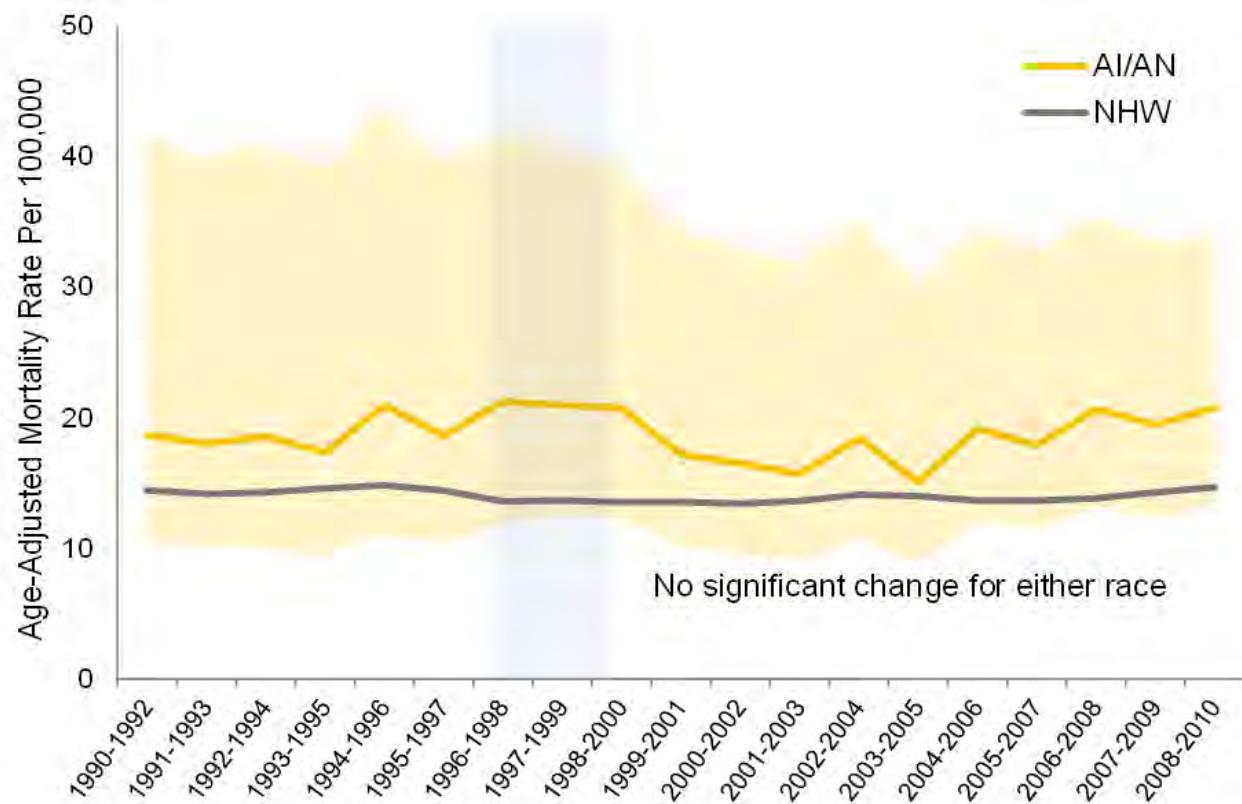
Due to the small number of deaths each year, it is difficult to show a significant difference between the two populations on an annual basis; however, combining multiple years as in Figure 8.6 allows us to confirm that AI/AN suicide rates are in fact higher than NHW.

Suicide rates have remained steady for both races since 1990, and no changes in the disparity occurred. However, recently AI/AN females have shown an increase in suicide rates, with an average increase of 7.5% per year between 1999 and 2010.

**Data Source:** Washington state death certificates, 2006-2010, corrected for misclassified AI/AN race by the IDEA-NW Project.

**Data Notes:** APC = Annual Percentage Change. Cause of death coding on death certificates underwent a change from ICD-9 to ICD-10 between 1998 and 1999. Data shown in the trend charts in this report have not been adjusted to reflect this change. Comparability ratios for the broad categories reported here show that the change did not have a large impact for these statistics, however any abrupt changes between 1998 and 1999 should be interpreted with caution.

**Figure 8.8: Age-adjusted suicide mortality rates, three year rolling averages, by race, Washington, 1990-2010.**



Note: The shaded rectangle indicates the year cause of death coding changed from ICD-9 to ICD-10. Any abrupt changes between 1998 and 1999 should be interpreted with caution.



## Program Spotlight: THRIVE

### Tribal Health: Reaching Out Involves Everyone

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.

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<http://www.npaihb.org/epicenter/project/thrive>

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.

