Washington
American Indian & Alaska Native Community Health Profile

Northwest Tribal Epidemiology Center
Northwest Portland Area Indian Health Board
Thank You.

The Northwest Portland Area Indian Health Board and the Northwest Tribal Epidemiology Center would like to acknowledge all the tribal members and families who have contributed to our understanding of health in Northwest Tribal communities; NPAIHB delegates and staff at the IHS and Tribal health facilities in the Portland Area; Portland Area IHS and State staff who have supported this project; and program officers at our funding agencies for their guidance and support.

Suggested Citation: Northwest Portland Area Indian Health Board. *American Indian & Alaska Native Community Health Profile - Washington*. Portland, OR; Northwest Tribal Epidemiology Center, 2014.

Second Printing - March 2015

Northwest Tribal Epidemiology Center
Northwest Portland Area Indian Health Board
2121 SW Broadway, Suite 300
Portland, OR 97201
PH 503-228-4185 • FX 503-228-8182
www.npaihb.org
The Northwest Portland Area Indian Health Board (NPAIHB) is a tribal organization governed by the 43 federally recognized Tribes of Idaho, Oregon, and Washington. Tribal governments appoint a delegate to represent them on the Board, which meets on a quarterly basis. The delegates guide the priorities and programs of the NPAIHB.

This report was developed in an effort to provide Tribes in Washington with accurate health data on priority health issues. Our goal is to provide high quality health data for tribal nations in the Pacific Northwest to inform public health programs and priorities.

The development of this report was supported by grants from the Indian Health Service (#U1B9400001/15) and the Department of Health and Human Services Office of Minority Health (#AIAMP120012-01-00). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of grantor agencies or the U.S. government.
Contents

Foreword .................................................................................................................. i
Letter from the Director ..................................................................................... vii
Introduction ........................................................................................................... 1
   Purpose and Objectives ..................................................................................... 1
   NPAIHB Member Tribes .................................................................................. 2
   Methods ............................................................................................................ 3
   Definitions and Abbreviations ....................................................................... 5
   Guide to Reading a Column Chart ................................................................. 6
   Guide to Reading a Line Chart ....................................................................... 7
   Data Sources .................................................................................................... 8

1. Demographics .................................................................................................. 11
   Population ....................................................................................................... 14
   Age Distribution ............................................................................................. 16
   Educational Attainment .................................................................................. 18
   Economic Indicators ....................................................................................... 20

2. Maternal & Child Health ............................................................................... 23
   Birth Rates ....................................................................................................... 26
   Trends in Teenage Birth Rates ....................................................................... 28
   Infant Mortality .............................................................................................. 30
   Infant Mortality Trends .................................................................................. 32
   Maternal Risk Factors .................................................................................... 34
   Birth Outcomes: Birth Weight & Prematurity .............................................. 36
   Program Spotlight: Native CARS ................................................................. 38
   Program Spotlight: Northwest Tribal Fetal Alcohol Spectrum Disorder (FASD) Project ................................................................. 38

3. Mortality .......................................................................................................... 39
   Leading Causes of Death .............................................................................. 42
   Mortality Rates ............................................................................................... 44
   All-Cause Mortality Trends .......................................................................... 46
   Life Expectancy at Birth ................................................................................ 48
Contents

7. Injury & Violence ................................................................. 121
  Unintentional Injury Hospitalizations ........................................ 124
  Mortality from Unintentional Injuries ...................................... 126
  Unintentional Injury Mortality Across the Life Span .................... 128
  Causes of Unintentional Injury Deaths .................................... 130
  Unintentional Injury Mortality Trends ..................................... 132
  Hospitalizations for Homicide .............................................. 134
  Mortality from Homicide ..................................................... 136
  Homicide Mortality Trends .................................................. 138
  Domestic and Intimate Partner Violence Screening ................... 140
  Program Spotlight: Injury Prevention Program ....................... 142

8. Mental Health & Suicide ..................................................... 143
  Self-Reported Poor Mental Health or Depression ...................... 146
  Depression Screening ....................................................... 148
  Self-Reported Mental Health Treatment .................................. 150
  Mental Health Hospitalizations .......................................... 152
  Suicide Hospitalizations .................................................... 154
  Suicide Mortality ............................................................. 156
  Suicide Mortality Across the Life Span .................................. 158
  Suicide Mortality Trends .................................................... 160
  Program Spotlight: THRIVE ................................................. 162

9. Substance Abuse ............................................................... 163
  Self-Reported Alcohol Consumption ...................................... 166
  Self-Reported Binge Drinking .............................................. 168
  Childhood Experience of Living with Someone who Used or Abused Drugs .................................................. 170
  Hospitalizations Related to Alcohol and Substance Abuse ........ 172
  Accidental Poisonings & Overdose Mortality ......................... 174
  Accidental Poisoning Mortality Across the Life Span ................ 176
  Types of Drug & Alcohol Overdose Deaths ............................. 178
  Accidental Poisoning Mortality Trends .................................. 180
  Program Spotlight: THRIVE ................................................. 182

10. Communicable Diseases .......................................................... 183
    Chlamydia Diagnoses ........................................................ 186
AI/AN in the Pacific Northwest are a small but diverse population. Northwest Tribes have demonstrated their resilience and leadership in facing multiple historical, social, economic and health challenges. Tribal leaders recognize that valid and reliable health statistics are the foundation of a strong public health system. However, AI/AN are not well-represented in local, state, and national health status reports. Without reliable health information, tribes remain limited in their ability to identify priorities and actions that will improve the health of their communities.

This Community Health Profile report describes the health status of AI/AN residing in Washington State, and identifies health disparities experienced by this population. This comprehensive report enhances the available data on the health of AI/AN in Washington State, and can be used by tribal leaders for health policy development and public health decision making.

Since 1996, the Northwest Tribal Epidemiology Center has worked to provide accurate data, training and technical assistance to the 43 federally recognized Tribes in the Portland Area. This report is one of three state-level reports produced by the Improving Data and Enhancing Access – Northwest (IDEA-NW) project and the Northwest Tribal Epicenter.

Victoria Warren-Mears, PHD, RD
Northwest Tribal Epicenter Director
Introduction

Purpose and Objectives

The Northwest Tribal Epidemiology Center (NW TEC), part of the Northwest Portland Area Indian Health Board (NPAIHB), prepared this health profile report in order to provide Northwest Tribes with accurate and up-to-date information on the health of their communities. This report is intended to assist Tribes in Washington to:

- identify health priorities in NW Tribes and Tribal communities,
- aid in the development of new programs and guide allocation of resources,
- identify data gaps and prioritize areas for new research and data collection,
- monitor clinical performance measures for clinic patients, and
- provide supporting data and statistics for grant applications.
NPAIHB Member Tribes

Introduction
Methods

Selection of Health Topics and Indicators

The NW TEC established a planning team for the health profile reports in December 2013. This core group of NW TEC employees holds planning meetings once or twice per month, with open attendance to anyone at NPAIHB. The planning team selected health topics and indicators based on the availability and quality of data, and whether the indicator was considered a high priority for Northwest Tribes (based on the results from a Tribal Health Priorities survey conducted during the April 2013 Quarterly Board Meeting).

Selection of Data Sources and Years

The most high-quality and recently available data were chosen for each health indicator. If statistically sound data on American Indian and Alaska Natives (AI/AN) were not available, we did not report on that indicator. For most indicators, we combined several years of data in order to obtain enough information for analysis and comparisons.

This report uses data from several state and federal data sources. We prioritized NW TEC data sets that have been corrected for AI/AN racial misclassification. These data sets provide more accurate health statistics for the Northwest AI/AN population. In addition, we considered factors such as AI/AN sample size, sampling design, accessibility of the data set, and ability to examine AI/AN-specific data at the state level. Specific information on data sources can be found in the appendix, and data source information accompanies each indicator throughout this report.

Who is represented by the data?

This report focuses on AI/AN who are residents of Washington. For the most part, it does not include members of Washington Tribes who live in other places.

Birth certificate, death certificate and cancer data presented in this report come from vital statistics and cancer registry records held by the state. These data sets usually take their race information from medical records, which sometimes have inaccurate information about a person’s race. If an AI/AN person is incorrectly listed as another race in these data sets, the numbers of AI/AN affected by disease or death appear lower than they actually are. In order to correct this, we compared the birth, hospitalization, death, and cancer data sets to our Northwest Tribal Registry (NTR). The NTR is a list of all AI/AN people who have been seen at an IHS or tribal clinic.

For all the data presented on these topics in this report, we have defined AI/AN as anyone who was originally listed as AI/AN in the vital
statistics or cancer registries, or who appeared in the NTR. It should be noted that the NTR does not include very many urban AI/AN, nor those who self-identify as AI/AN but are not enrolled in a federally recognized Tribe. The NTR also does not include patients who received care at tribal clinics that do not share their patient information with the IHS.

Data presented in this report from other sources such as the Behavioral Risk Factor Surveillance System and U.S. Census Bureau use different definitions of AI/AN, most commonly self-identification.

Data Analysis and Interpretation

When possible, we presented data on males, females, and the total population. Some indicators include a breakdown by age group. Most indicators include a comparison between AI/AN race and non-Hispanic whites (NHW) in the state. For some measures, we compared estimates to Healthy People 2020 targets or to Indian Health Service (IHS) performance goals.

Mortality rates presented in this report were calculated using the National Center for Health Statistics bridged race population estimates in the denominator and race-corrected death counts in the numerator. Population estimates were revised after the 2010 census, and as a result the rates presented in this report are not comparable with those found in earlier NW TEC reports.

Where appropriate, statistical tests were used to determine if there were changes over time or differences between groups. If a result is presented as statistically significant, it can be interpreted to mean that there is less than a 5% chance that the difference seen is just a result of random fluctuations. Put another way, it means there is a 95% or higher chance that it reflects a true difference in the population.

It should be noted that statistical significance does not give any insight into whether the difference is relevant clinically or useful for decision making. For example, with a large enough sample size, a tiny decrease in Hemoglobin A1c levels - say from 7.9% to 7.8% - may be statistically significant. However, 7.8% is still well into the diabetic range, and the difference will probably not change a patient’s risk of complications. This would be an example of a result that is statistically significant but not clinically relevant.
Definitions and Abbreviations

**AI/AN:** American Indian or Alaska Native

**Age-adjusted rate:** A rate that controls for different age distributions in populations; allows for more accurate comparisons of health event rates between populations.

**BRFSS:** Behavioral Risk Factor Surveillance System *(see Data Sources)*

**CDC:** Centers for Disease Control and Prevention

**CI:** Confidence interval

**GPRA:** Government Performance and Results Act

**ICD:** International Classification of Diseases

**IHS:** Indian Health Service *(see Data Sources)*

**Incidence:** Number of new health event cases in a population that occur during a specified time period; usually presented as a rate (e.g., number of new HIV cases per 100,000 population that occurred in 2013).

**n:** Sample size

**N:** Population size

**NHW:** Non-Hispanic White

**NPAIHB:** Northwest Portland Area Indian Health Board (“the Board”); established in 1972 as a non-profit tribal advisory organization serving the 43 federally recognized Tribes of Oregon, Washington, and Idaho. NPAIHB is located in Portland, Oregon.

**NW TEC:** The Northwest Tribal Epidemiology Center, or “the Epicenter,” is part of the Northwest Portland Area Indian Health Board. The mission of the EpiCenter is to collaborate with Northwest American Indian tribes to provide health-related research, surveillance, and training to improve the quality of life of AI/AN.

**Prevalence:** Number of people who have a disease, risk factor, or condition in a population; often presented as a percentage (e.g., percentage of current female smokers).

**Principal diagnosis:** In hospital discharge data, the reason a patient was admitted to the hospital for care.

**Tribe:** There are 43 federally recognized Tribes in Oregon, Washington, and Idaho, which are represented by the NPAIHB and NW TEC. There are 566 federally recognized Tribes in the U.S., plus an unknown number of tribes that are not federally recognized.
Diabetes Mortality

Diabetes is the fifth leading cause of death among Idaho AI/ANs. Figure XX shows the age-adjusted death rates for diabetes among AI/ANs and NHWs in Idaho. Female AI/ANs are about 14% more likely to die of the disease than males. Compared to NHWs, AI/AN diabetes death rates are 2.8 times higher. Throughout the Northwest, AI/ANs in all three states have very similar diabetes death rates.

Figure XX. Age-adjusted diabetes mortality rates by race and sex, Idaho, 2006-2012.

<table>
<thead>
<tr>
<th>Race</th>
<th>Sex</th>
<th>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>AI/AN</td>
<td>Male</td>
<td>57.2 (37.3, 88.4)</td>
<td>25.5 (24.0, 26.9)</td>
<td>2.25 (1.59, 3.18)‡</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>65.3 (43.5, 95.4)</td>
<td>19.7 (18.3, 21.1)</td>
<td>3.31 (2.34, 4.68)‡</td>
</tr>
<tr>
<td>Both sexes</td>
<td></td>
<td>62.5 (46.9, 82.6)</td>
<td>22.4 (21.3, 23.4)</td>
<td>2.79 (2.19, 3.57)‡</td>
</tr>
</tbody>
</table>

CI = confidence interval
‡ Indicates a statistically significant difference (p<.05).


Rates are not comparable with those published before 2013 due to change in population estimates.

AI/AN includes all deaths with any mention of AI/AN race in either the Idaho state death certificate data or the Northwest Tribal Registry (NTR), which is maintained by the IDEA-NW Project at NPAIHB.
Guide to Reading a Line Chart

Legend
The legend shows what each color on the chart represents. In this report, AI/AN is usually yellow.

Vertical Axis
The vertical axis label shows what is being measured. In this report, it is usually rates or percentages. When comparing charts, note that the starting and ending values of the axes may not be the same.

95% Confidence Band
Just as in the column chart, the annual values that make up the line are estimates of the true value in the population. The light yellow band around the line shows a “confidence interval”, or a range in which the true value is found 95% of the time.

Shaded Area
The line charts in this report show how a measure has changed over time. Some measures have undergone changes in definition or the way data are collected during the time frame being reported. Shaded areas on the chart indicate the point in time when changes like this occurred. Any abrupt changes across that time should be interpreted with caution - they may be a result of the definition change rather than an actual change in the population.

Horizontal Axis
These labels show what years are being reported.

Annual Percent Change
If there has been a statistically significant change in the measure across the time period, an arrow here will show whether it increased or decreased. The value shows the average yearly change. If there was no statistically significant change, no arrow is shown.
U.S. Census Bureau

The U.S. Census provides official population counts and demographic information for the United States. The U.S. Census provides information on population age, race, sex, household make-up, income, education, insurance status, and other demographics. Race information collected by the Census Bureau is self-reported, and individuals can report belonging to more than one race group.

Website: [http://www.census.gov/](http://www.census.gov/)

American Community Survey (ACS)

The ACS is an ongoing national survey conducted by the Census Bureau. It is sent to approximately 250,000 addresses monthly (or 3 million per year), and provides population-level information on age, race, sex, household make-up, income, education, insurance status, and other demographics. Race information in the ACS is self-reported, and individuals can report belonging to more than one race group.

Website: [http://www.census.gov/acs/www/](http://www.census.gov/acs/www/)

Behavioral Risk Factor Surveillance System (BRFSS)

The BRFSS is a national telephone survey that collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury annually. It is run by the Centers for Disease Control and Prevention (CDC) and conducted by individual state health departments.

Website: [http://www.cdc.gov/brfss/](http://www.cdc.gov/brfss/)

Indian Health Service (IHS) GPRA performance measures

The Indian Health Service (IHS) reports on performance measures to track the quality of care it provides to patients, in accordance with the Government Performance and Results Act (GPRA). Health topics covered by these measures include behavioral health, cancer screening, cardiovascular disease, dental health, diabetes, immunizations, and prenatal HIV screening.

Website: [http://www.ihs.gov/qualityofcare/](http://www.ihs.gov/qualityofcare/)

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) Atlas

The NCHHSTP Atlas provides an interactive platform for accessing data collected by the CDC’s NCHHSTP. This interactive tool provides an effective way to disseminate data on the reported occurrence of nationally notifiable infectious diseases in the U.S., including HIV, viral hepatitis, some sexually transmitted diseases (STDs), and tuberculosis (TB), while allowing users to observe trends and patterns by creating detailed reports, maps, and other graphics.

Website: [http://www.cdc.gov/nchhstp/atlas/](http://www.cdc.gov/nchhstp/atlas/)
Data Sources

Washington State birth certificate and linked birth-death files
Data from Washington State birth certificates and linked birth-death files are from the Washington State Department of Health’s Center for Health Statistics. The data were accessed using Washington’s Community Health Assessment Tool. The data included in this report have not been corrected for misclassified AI/AN race.


Washington State death certificates, corrected for misclassified race
Washington State death certificate data are from the Washington State Department of Health’s Center for Health Statistics. These data that have been corrected for misclassified AI/AN race by the IDEA-NW Project (part of the NW TEC). AI/AN includes all death records with any mention of AI/AN race in either the Washington state dataset or the Northwest Tribal Registry (NTR), which is maintained by the IDEA-NW Project.

Website: [http://www.npaihb.org/epicenter/project/improving_data_enhancing_access_northwest_idea_nw](http://www.npaihb.org/epicenter/project/improving_data_enhancing_access_northwest_idea_nw)

Washington State Cancer Registry (WSCR) data, corrected for misclassified race
Washington State cancer registry data are from the WSCR office at the Washington State Department of Health. These data that have been corrected for misclassified AI/AN race by the IDEA-NW Project (part of the NW TEC). AI/AN includes all records with any mention of AI/AN race in either the WSCR dataset or the Northwest Tribal Registry (NTR), which is maintained by the IDEA-NW Project.

Website: [http://www.npaihb.org/epicenter/project/improving_data_enhancing_access_northwest_idea_nw](http://www.npaihb.org/epicenter/project/improving_data_enhancing_access_northwest_idea_nw)

Washington State Comprehensive Hospital Abstract Reporting System (CHARS) inpatient hospital discharge data, corrected for misclassified race
Washington inpatient hospital discharge data are from the CHARS office at the Washington State Department of Health. These data that have been corrected for misclassified AI/AN race by the IDEA-NW Project (part of the NW TEC). AI/AN includes all inpatient hospitalizations with any mention of AI/AN race in either the CHARS dataset or the Northwest Tribal Registry (NTR), which is maintained by the IDEA-NW Project.

Website: [http://www.npaihb.org/epicenter/project/improving_data_enhancing_access_northwest_idea_nw](http://www.npaihb.org/epicenter/project/improving_data_enhancing_access_northwest_idea_nw)