



**Hepatitis B & C Virus (HBV & HCV)
Diagnoses among American Indian/Alaska
Native (AI/AN) People Living in Oregon**

HBV & HCV data from 2007-2018



**NORTHWEST PORTLAND AREA
INDIAN HEALTH BOARD**
Indian Leadership for Indian Health



NPAIHB

This data brief summarizes hepatitis B and hepatitis C diagnoses among American Indian/Alaska Native (AI/AN) people living in Oregon State. While there are five known hepatitis viruses (A, B, C, D, E), this brief focuses on hepatitis B and C. Comparisons are made to Non-AI/ANs in Oregon and the US to understand the extent of disease burden experienced by AI/AN communities in Oregon.

Overview

Viral hepatitis is a communicable disease that affects the health of the liver. Both hepatitis B (HBV) and hepatitis C (HCV) are transmitted through blood, perinatal transmission, and sexual contact (less common for HCV). Both viruses are of major public health concern due to their potential to cause severe clinical outcomes, including liver cirrhosis (scarring of the liver), failure, cancer, and even death. Symptoms of HBV and HCV often go unnoticed and therefore screening for these viruses is essential for early intervention, especially for those that have greater risk of acquiring the viruses. It is possible for new infections of viral hepatitis to spontaneously resolve on its own, however, there is risk for both HBV and HCV to develop into chronic, long-term infections: more than half of acute HCV cases will develop a chronic infection and two to six percent of adults will go on to develop a chronic HBV infection. ^{i,ii}

Though HBV and HCV have similar modes of transmission and morbidity, they are distinct in how they are prevented and treated. Hepatitis B is vaccine-preventable but does not have curative treatment, though it can be controlled through various antiviral medications that suppress viral load and stop viral progression. Hepatitis C, on the other hand, is not vaccine preventable, but is curable through various antiviral drug regimens that promote a sustained virologic response (SVR).

While rates for acute HBV infections have remained relatively stable over the past decade, new diagnoses of acute HCV have increased nationally over the last several years due to the opioid epidemic, and persons who inject drugs (PWID) are most at risk.ⁱ Recommended routine screening for all adults and risk/harm reduction programs like needle exchanges and other public health interventions are key to reducing the transmission of both HBV and HCV.

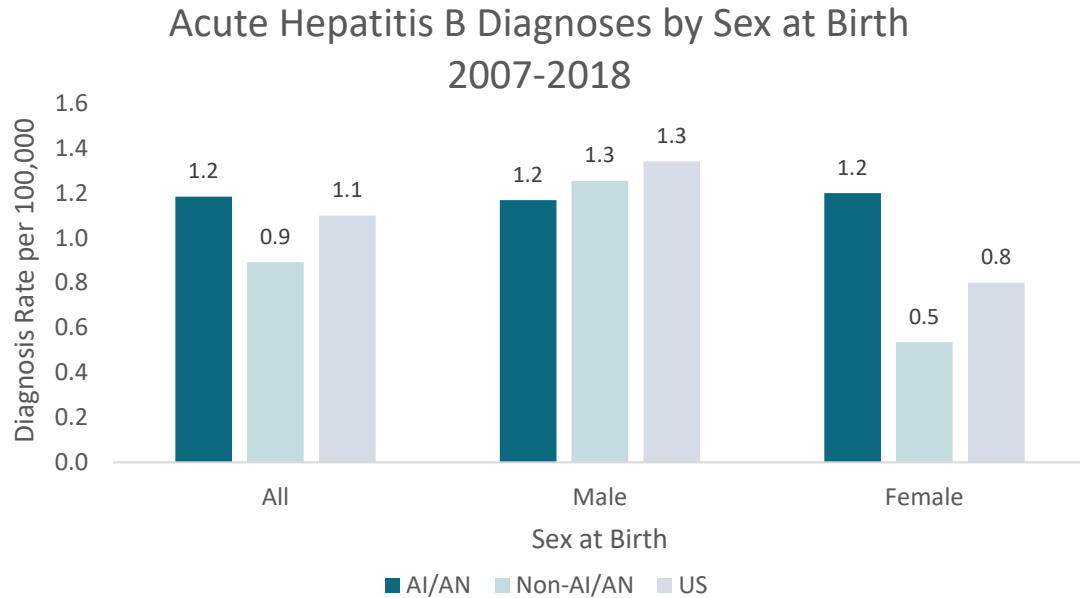
In an effort to address rising rates of viral hepatitis, the US developed The National Viral Hepatitis Action Plan 2017-2020, which the Indian Health Service has also adopted due to the high prevalence and incidence of viral hepatitis among American Indians and Alaska Natives. The plan has four main goals:

1. Prevent new viral hepatitis infections
2. Reduce deaths and improve the health of people living with viral hepatitis
3. Reduce viral hepatitis health disparities
4. Coordinate, monitor, and report on implementation of viral hepatitis activitiesⁱⁱⁱ¹

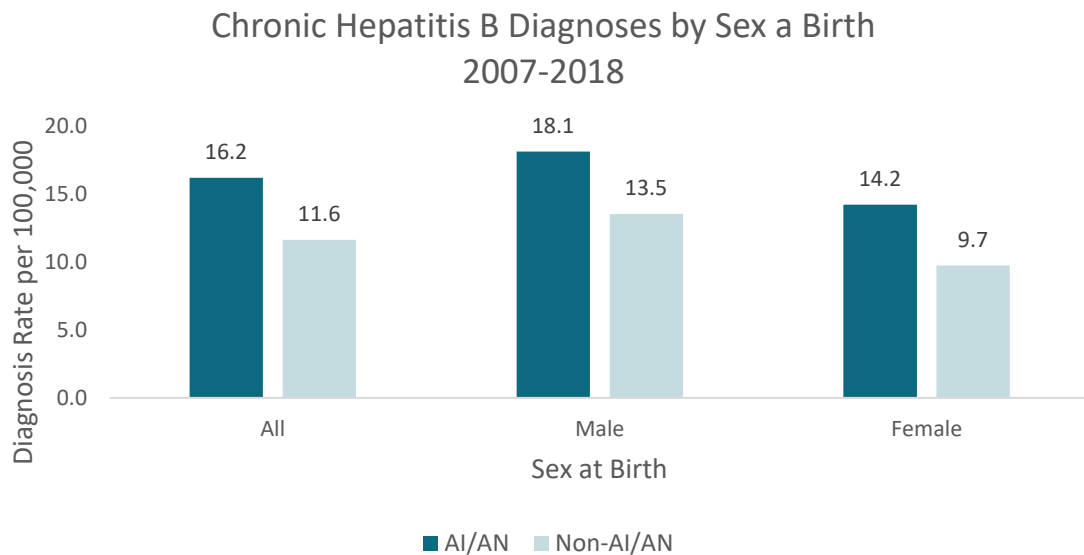
¹To learn more about viral hepatitis in Indian Country, visit <https://www.ihs.gov/dccs/hcv/>.

Hepatitis B

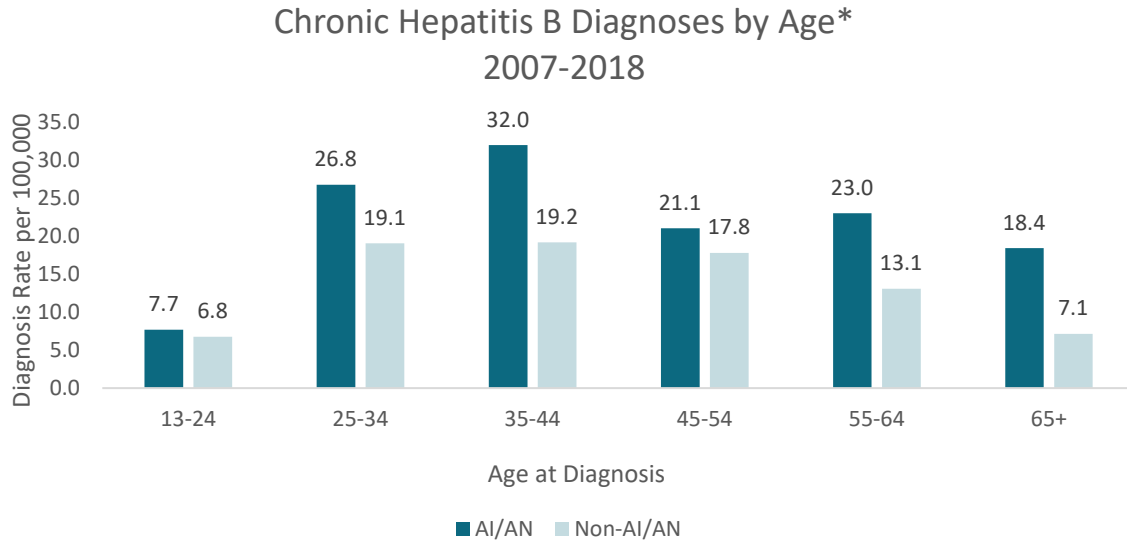
A total of 12 cases of acute HBV were reported among AI/ANs in Oregon between 2007-2018, which was approximately three percent of all acute HBV diagnoses during the twelve-year period. Overall, the AI/AN diagnosis rate for new HBV infections was slightly higher than the national acute HBV rate and 1.3 times higher than their Non-AI/AN counterparts in Oregon. When explored by sex at birth, the male AI/AN diagnosis rate was lower than both the national and male Non-AI/AN in Oregon rates. However, the female AI/AN diagnosis rate was 2.4 times higher than the female Non-AI/AN diagnosis rate.



There were a total of 164 chronic HBV diagnoses among AI/ANs in Oregon during the 2007-2018 period, which accounted for approximately three percent of all chronic HBV diagnoses. AI/AN Diagnosis rates for chronic HBV was approximately 1.4 times higher than their Non-AI/AN counterparts, even when stratified by sex at birth.



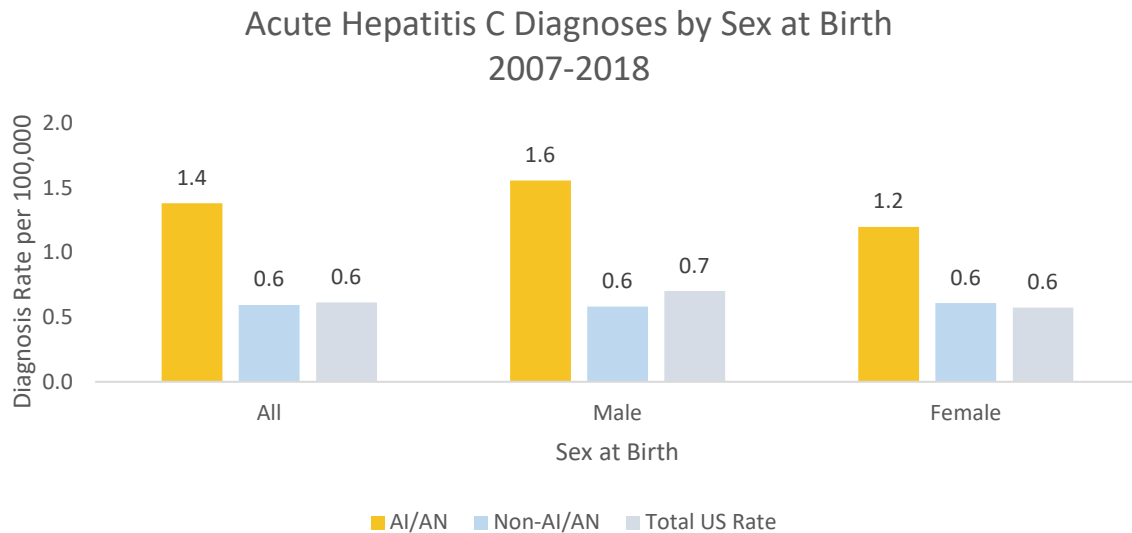
While diagnosis rates were greater for AI/AN persons across all age groups, the greatest disparity is seen for those aged 55 and older, with a diagnosis rate for AI/AN persons 1.7 times higher than Non-AI/AN persons between the ages of 55 and 64, and 2.6 times higher for those 65 and older. These age groups are most at risk for acute and chronic HBV infection due to a lack of vaccine availability prior to 1990 for these groups and an increase in injection drug use.ⁱⁱ



**Diagnosis rates for persons under the age of 13 have been suppressed due to the small amount of diagnoses for this age group (cases <5).*

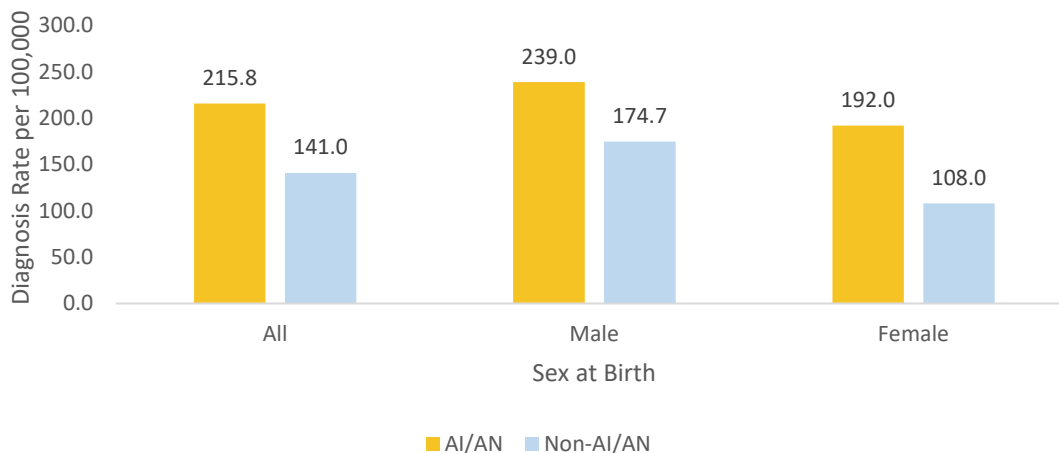
Hepatitis C

A total of 14 cases of acute HCV were reported among AI/ANs in Oregon between 2007-2018, which was nearly five percent of all acute HCV diagnoses during the twelve-year period. Overall, the diagnosis rate for new HCV infections for AI/AN persons in Oregon was over two times that of Non-AI/AN persons in Oregon and of the total national rate. When explored by sex at birth, male AI/AN persons had the greatest disparity, with a rate 2.7 times higher than Non-AI/AN persons.



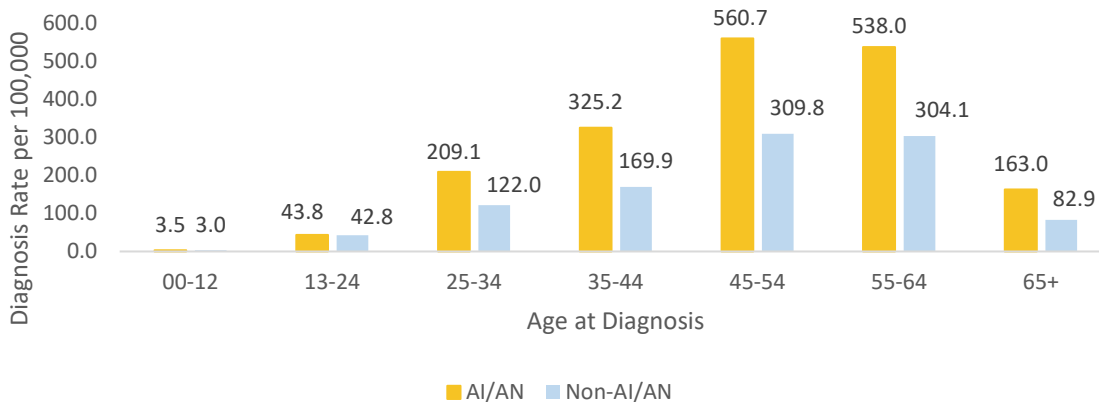
There were a total of 2,187 chronic HCV diagnoses among AI/ANs in Oregon during the 2007-2018 period, which accounted for nearly three percent of all chronic HCV diagnoses. Overall chronic HCV diagnoses were 1.5 times higher for AI/AN persons in Oregon than Non-AI/AN during this time period. When exploring diagnosis rates by sex at birth, AI/AN females experience the greatest disparity, with a rate two times that of Non-AI/AN females in Oregon.

Chronic Hepatitis C Diagnoses by Sex at Birth
2007-2018



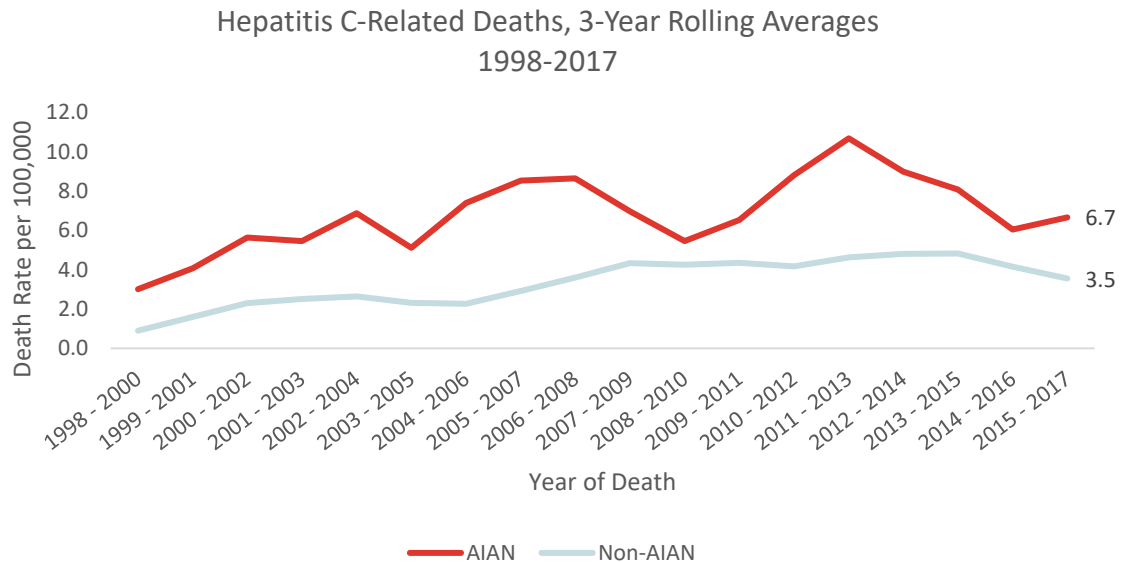
While diagnosis rates were greater for AI/AN persons across all age groups, the rates for those aged 25 and older were nearly two times that of Non-AI/AN persons in Oregon.

Age Specific Rates for Chronic Hepatitis C Diagnoses
2007-2018

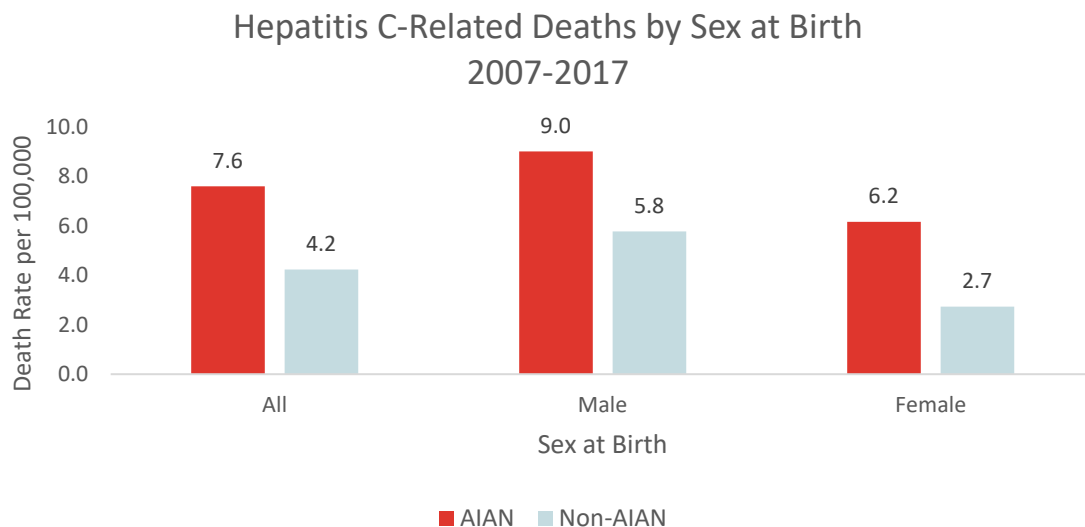


Hepatitis C-Related Deaths

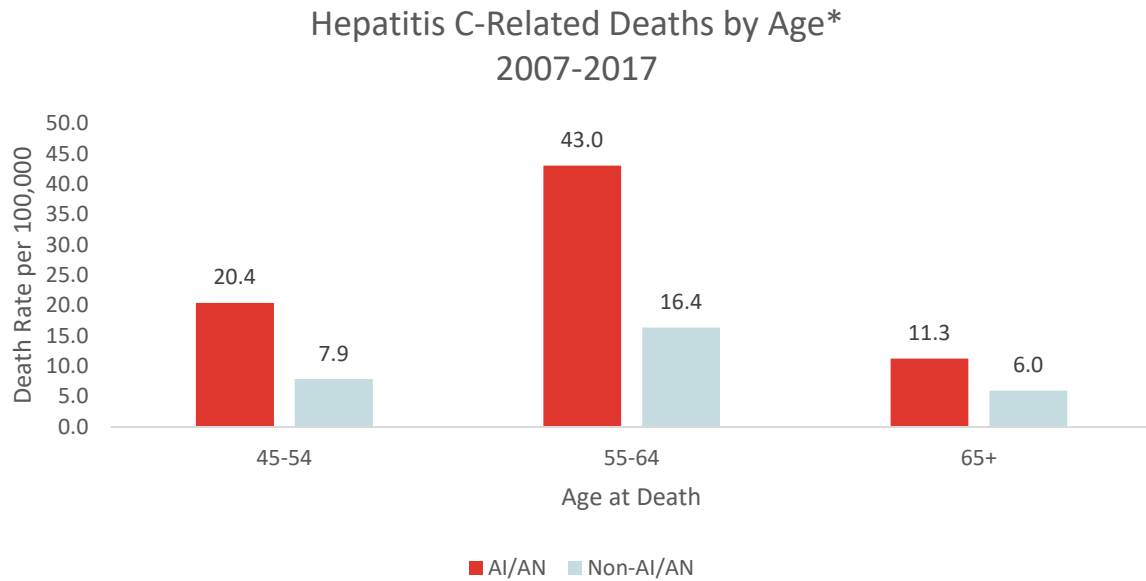
Nationally, HCV-related deaths disproportionately impact AI/ANs than any other race/ethnicity.^{iv} Over the last twenty years, the rate of HCV-related deaths in Oregon among AI/AN persons fluctuated, with a low of 3 deaths per 100,000 between 1998 and 2000 and a high of 10.7 deaths per 100,000 between 2011 and 2013. While the death rate for AI/AN persons in Oregon between 2015 and 2017 was below the national AI/AN death rate for HCV-related deaths in 2017 (10.24 deaths per 100,000), the trend shows a slight increase from the previous three years.



The overall death rate for AI/ANs in Oregon between 2007 and 2017 was nearly two times higher than the death rate of their Non-AI/AN peers. When examining death rates by sex at birth, AI/AN males had a death rate 1.6 times higher than that of Non-AI/AN males and women had the greatest disparity, with a death rate two times higher than Non-AI/AN females.



While the HCV-related death rate for AI/AN persons was higher than Non-AI/AN persons across the age groups examined, the disparity was greatest among those between the ages of 45 and 64, with a death rate 2.6 times higher than Non-AI/AN persons. Culturally relevant prevention programs, early screening, and improved access to HCV treatment are necessary in the elimination of these health disparities for American Indian and Alaska Native communities.



**Diagnosis rates for persons under the age of 45 have been suppressed due to the small amount of diagnoses for these age groups (cases <5).*

Oregon Tribal Viral Hepatitis Resources

Indian Country ECHO HCV, Technical Assistance and Capacity Building

Indian Country ECHO is a free service for clinicians and health programs serving American Indian and Alaska Native people.

To enhance clinicians' and programs' ability to effectively manage the care of patients with complex conditions, we offer a variety of online ECHO clinics, trainings, and technical assistance.

As Indian Country ECHO-trained clinicians gain new skills, capacity increases to offer enhanced specialized care. Referrals decrease and individuals with complex medical conditions get the care they need where they live, from clinicians they know.

HCV Clinic: <https://www.indiancountryecho.org/program/hepatitis-c/>

About the Data

- Counts less than five have been suppressed to maintain patient privacy.
- Crudes rates were used for comparison between AI/ANs and Non-AI/ANs.
- Deaths related to HCV may be underreported/underrepresented as HCV infection may be unknown/not documented in death-related health records.
- **Oregon Data Sources:** Oregon Department of Health Viral Hepatitis Program, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW project.
- **National Data Sources:** Centers for Disease Control and Prevention (CDC) WONDER, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) AtlasPlus
- HCV Deaths includes records with the following ICD codes for HCV as the underlying cause of death: ICD-10 (B17.1, B18.2).
- The data presented in this brief may not be comparable to information published by state or federal agencies due to differences in how we identify AI/AN individuals.

About this Report

IDEA-NW

The Northwest Portland Area Indian Health Board's IDEA-NW Project aims to address racial misclassification of AI/AN people by identifying incorrect race information in health datasets such as state surveillance systems. The race information is corrected and used to create more accurate health reports for AI/AN communities in order to improve targeted prevention efforts. This report was made using race-corrected hepatitis B, hepatitis C, and death certificate data.

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ⁱViral Hepatitis, Hepatitis C. <https://www.cdc.gov/hepatitis/hcv/index.htm>. Date accessed October 1, 2020.

ⁱⁱViral Hepatitis, Hepatitis B. <https://www.cdc.gov/hepatitis/hbv/index.htm>. Date accessed October 1, 2020.

ⁱⁱⁱNational Viral Hepatitis Action Plan, Department of Health and Human Services. <https://www.hhs.gov/hepatitis/viral-hepatitis-action-plan/index.html>. Date accessed October 1, 2020.

^{iv}Viral Hepatitis Surveillance United States, 20117.

<https://www.cdc.gov/hepatitis/statistics/2017surveillance/pdfs/2017HepSurveillanceRpt.pdf>. Date accessed October 5, 2020.

^vDivision of Viral Hepatitis 2025 Strategic Plan. <https://www.cdc.gov/hepatitis/pdfs/DVH-StrategicPlan2020-2025.pdf>. Date accessed October 10, 2020.



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