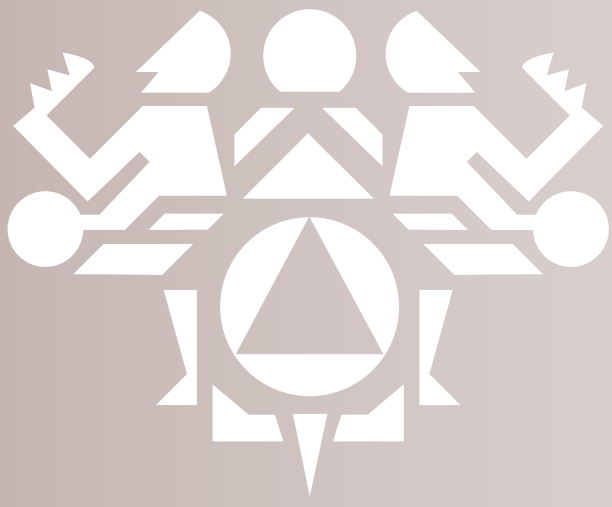
Hepatitis B & C Virus (HBV & HCV) Diagnoses among American Indian/Alaska Native (AI/AN) People Living in Washington

HBV & HCV data from 2007-2016

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 Washington 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 Washington and the US to understand the extent of disease burden experienced by AI/AN communities in Washington.

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 their 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.

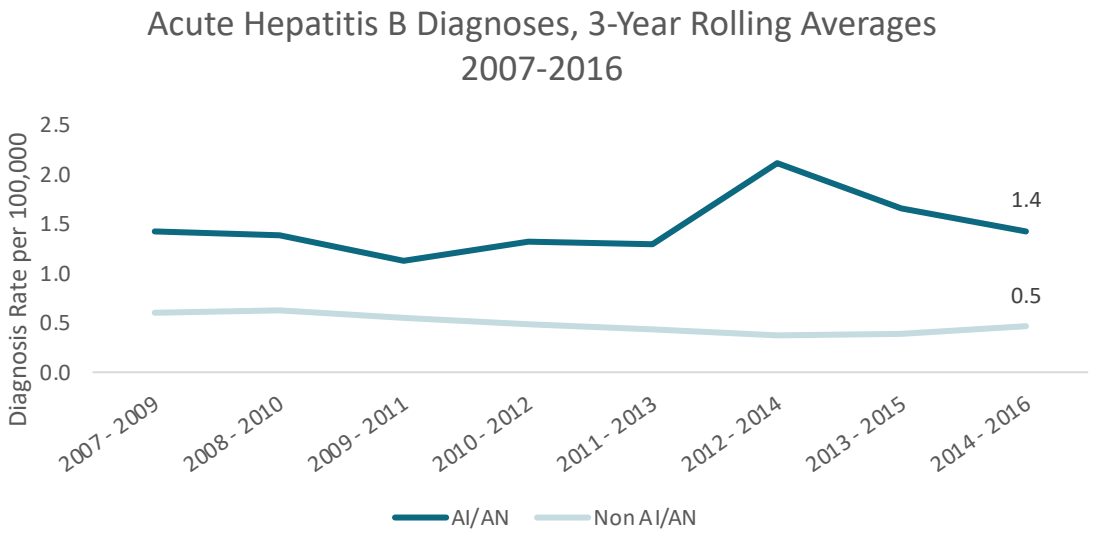
In an effort to address rising rates of viral hepatitis, the US developed The National Viral Hepatitis Action Plan 2017-2020, which the Indian Health Service (IHS) has also adopted due to the high prevalence and incidence of viral hepatitis among American Indians and Alaska Natives. The plan has four 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 activities[iii][1]

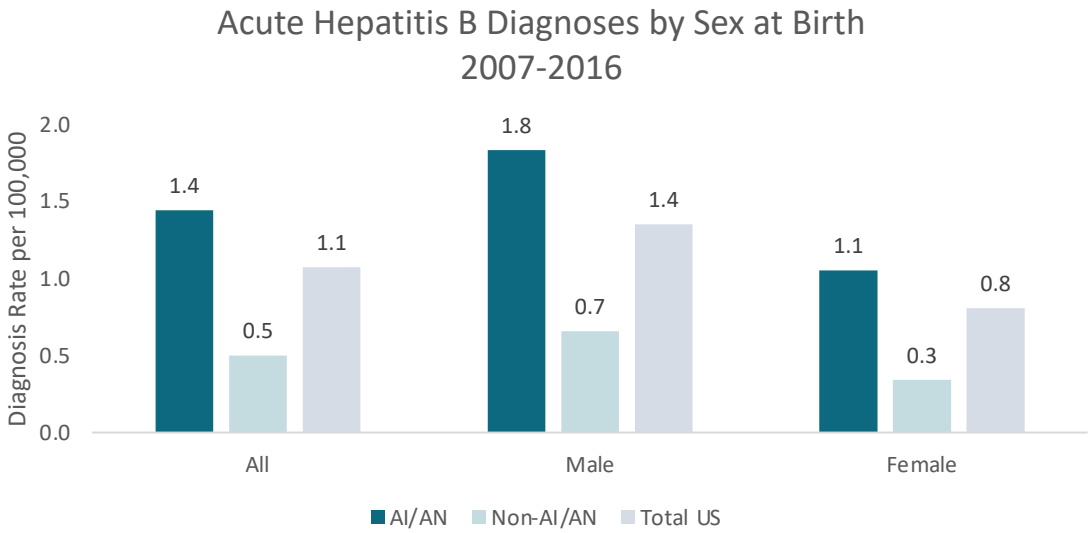
[1]To learn more about viral hepatitis in Indian Country, visit https://www.ihs.gov/dccs/hcv/.

Hepatitis B

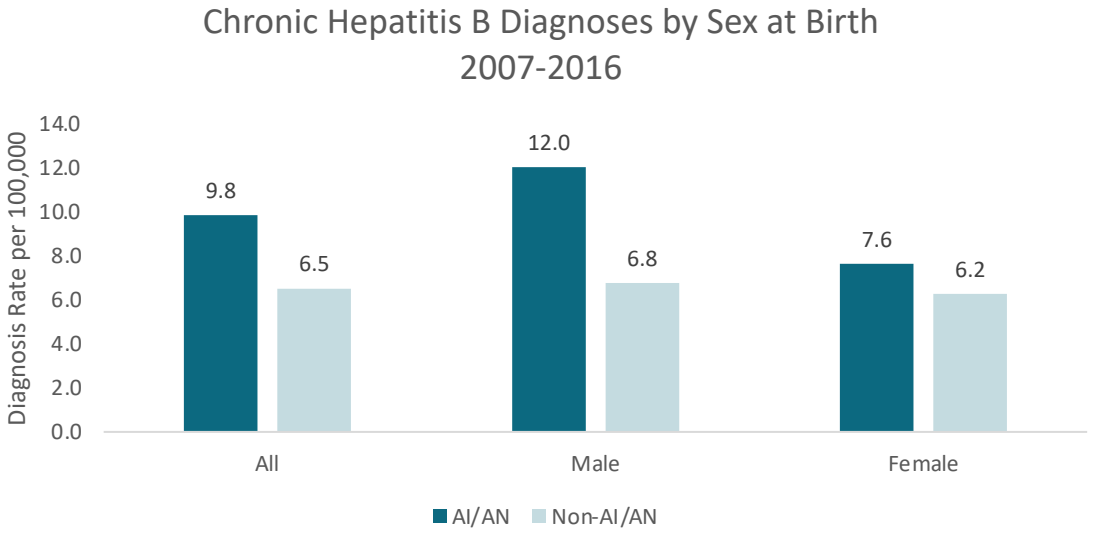
A total of 22 cases of acute HBV were reported among AI/ANs in Washington between 2007-2016, which was approximately four percent of all acute HBV diagnoses during the ten-year period. On average, the AI/AN diagnoses rate for new infections was nearly three times higher than their Non-AI/AN counterparts. These increased rates, particularly between 2012 and 2014, mirror the increase in injection drug use across the nation, a key risk factor associated with acute HBV infections.



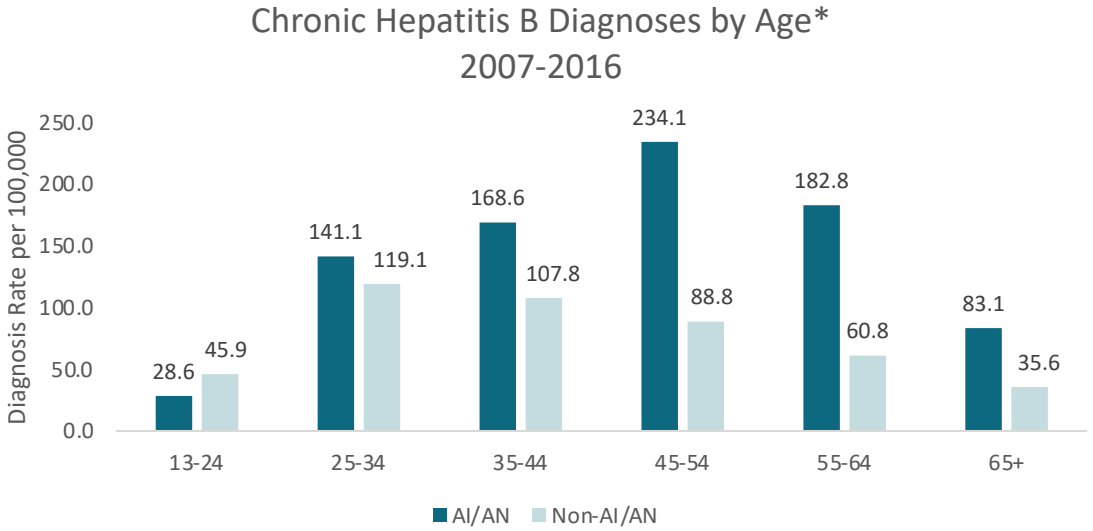
While the overall diagnosis rate of acute HBV among AI/AN in Washington is only slightly higher than the national rate, AI/ANs had nearly three times the rate of acute HBV diagnoses than those of their Non-AI/AN peers in Washington. When explored by sex at birth, AI/AN males experience a diagnosis rate 2.6 times that of Non-AI/AN males, and AI/AN females had 3.7 times higher diagnosis rate than their Non-AI/AN female counterparts.



There were a total of 150 chronic HBV diagnoses among AI/ANs in Washington during the 2007-2016 period, which accounted for approximately one percent of all chronic HBV diagnoses. Overall chronic HBV diagnoses for AI/ANs in Washington were 1.5 times higher than their Non-AI/AN counterparts. When explored by sex at birth, AI/AN males experience a diagnosis rate 1.8 times that of Non-AI/AN males, and AI/AN females had 1.2 times higher diagnosis rate than their Non-AI/AN female counterparts.



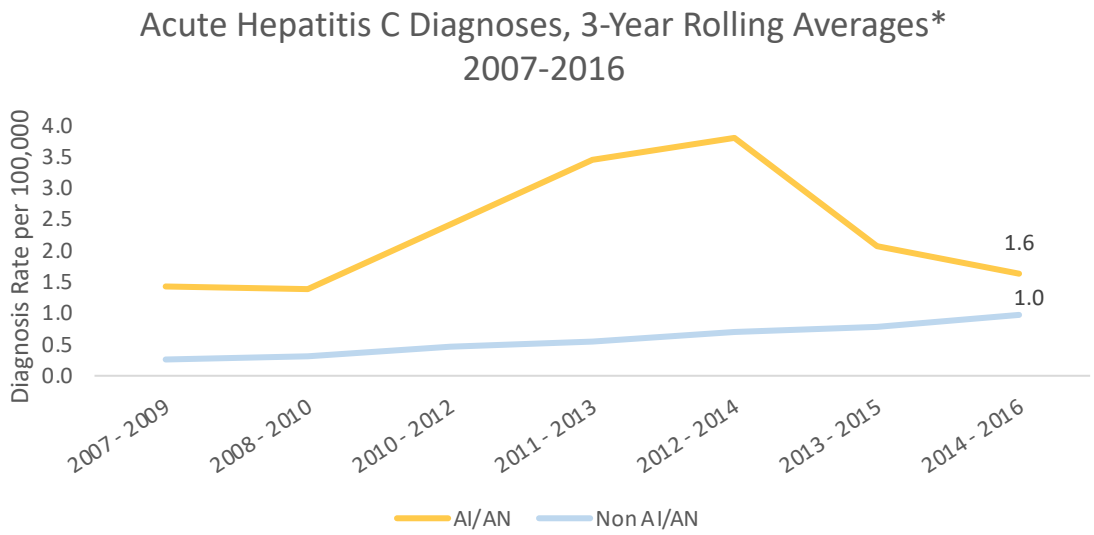
When broken down by age, AI/AN adults aged 45 and older had the largest disparity in HBV diagnoses compared to their Non-AI/AN counterparts, with adults aged 55-64 having a diagnosis rate three times the rate of Non-AI/AN persons in Washington. These age groups are most at risk for acute and chronic 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).*

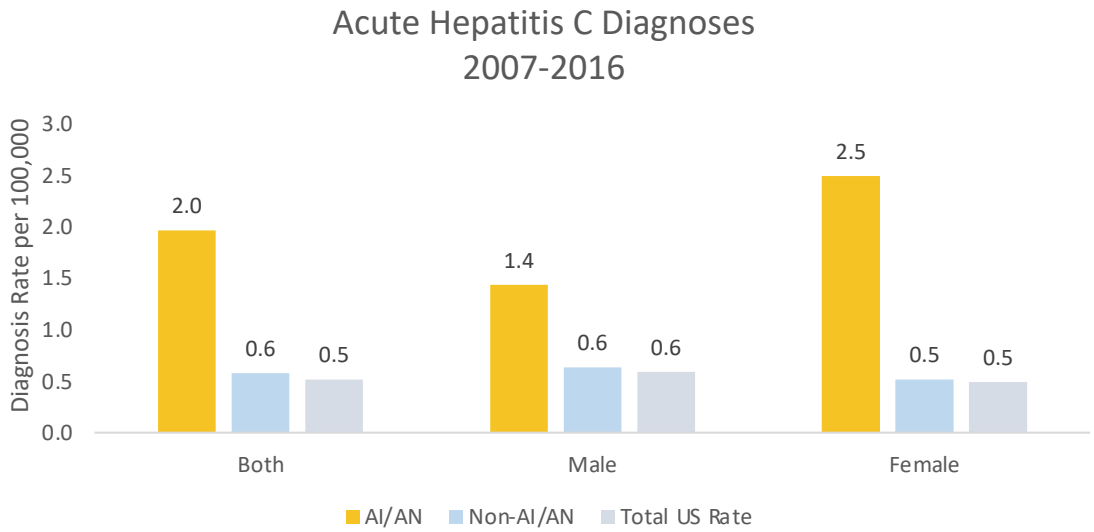
Hepatitis C

A total of 30 cases of acute HCV were reported among AI/ANs in Washington between 2007-2016, which was nearly six percent of all acute HCV diagnoses during the ten-year period. New HCV infection diagnoses fluctuated during this time, with a low between 2009-2011 and a peak in 2012-2014, mirroring the peak in new acute HBV diagnoses among AI/ANs in Washington during the same period.

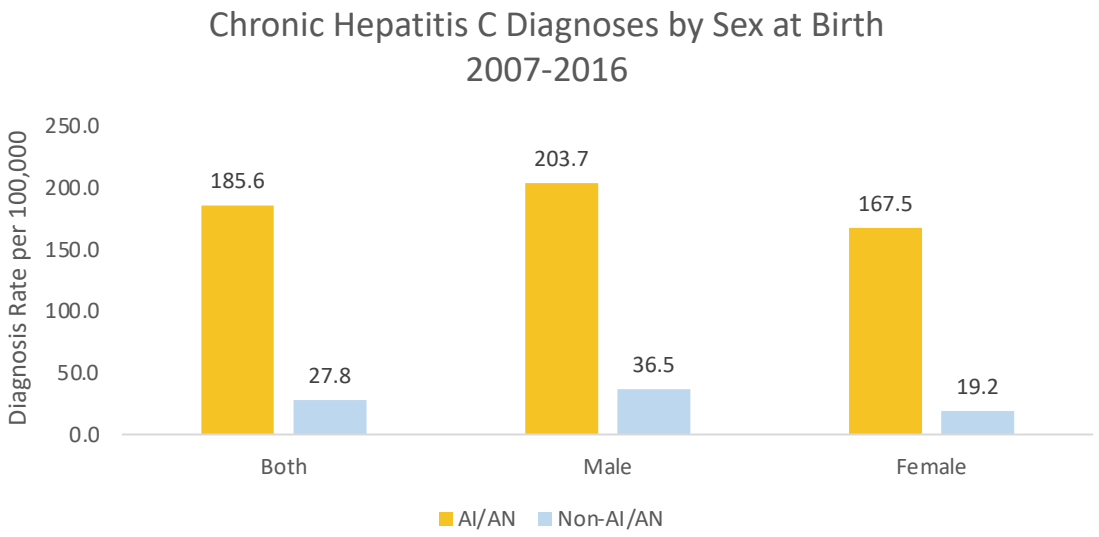


**Data between 2009 and 2011 have be suppressed due counts less than 5.*

Between 2007 and 2016, the diagnosis rate of acute HCV for AI/ANs in Washington was four times higher than the national rate of acute HCV diagnoses and over three times that of Non-AI/ANs in Washington. AI/AN males had a diagnosis rate 2.3 times higher than their Non-AI/AN peers and AI/AN females had a diagnosis rate five times that of Non-AI/AN females.

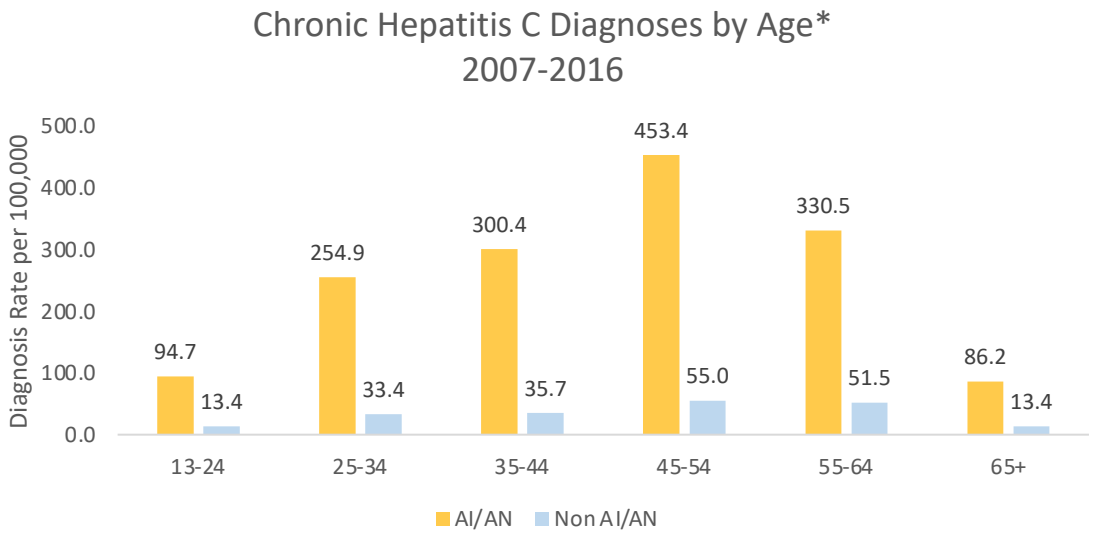


There were a total of 2,835 chronic HCV diagnoses among AI/ANs in Washington during the 2007-2016 period, which accounted for nearly five percent of all chronic HCV diagnoses. Chronic HCV diagnoses were 6.7 times higher for AI/ANs in Washington than Non-AI/ANs between 2007-2016. While the rate for AI/AN males was 5.6 times higher than Non-AI/AN males, the greatest disparity was between AI/AN females and their Non-AI/AN peers: AI/AN females had a diagnosis rate nearly nine times that of Non-AI/AN females.



AI/AN females had a diagnosis rate nearly nine times that of Non-AI/AN females.

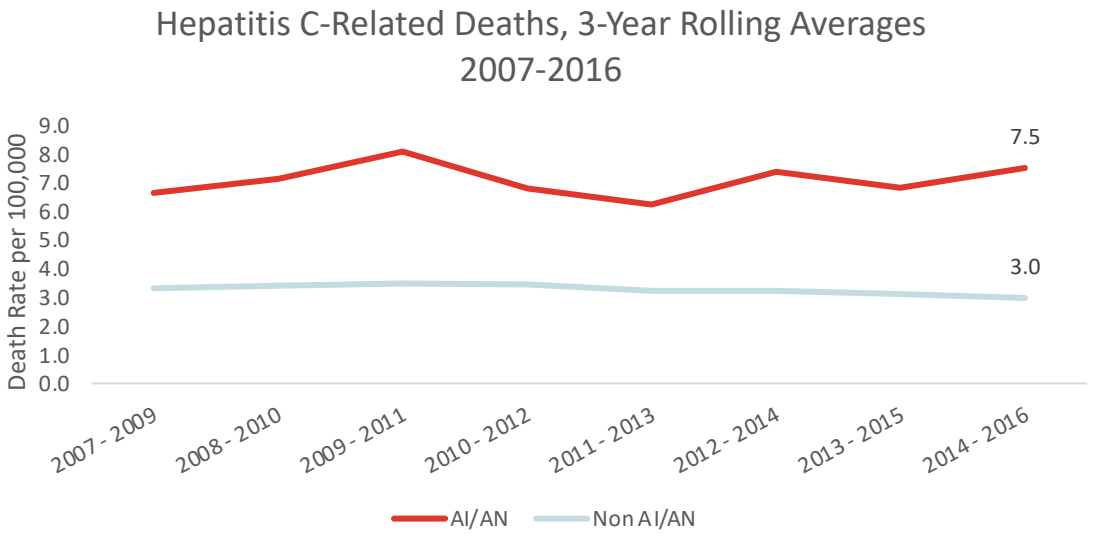
All age groups for AI/AN chronic HCV diagnoses were at least **seven times higher** than Non-AI/AN persons in Washington. The greatest disparities were between the ages of 35-44 and 45-54, with diagnosis rates for AI/ANs 8.4 and 8.2 times higher, respectively.



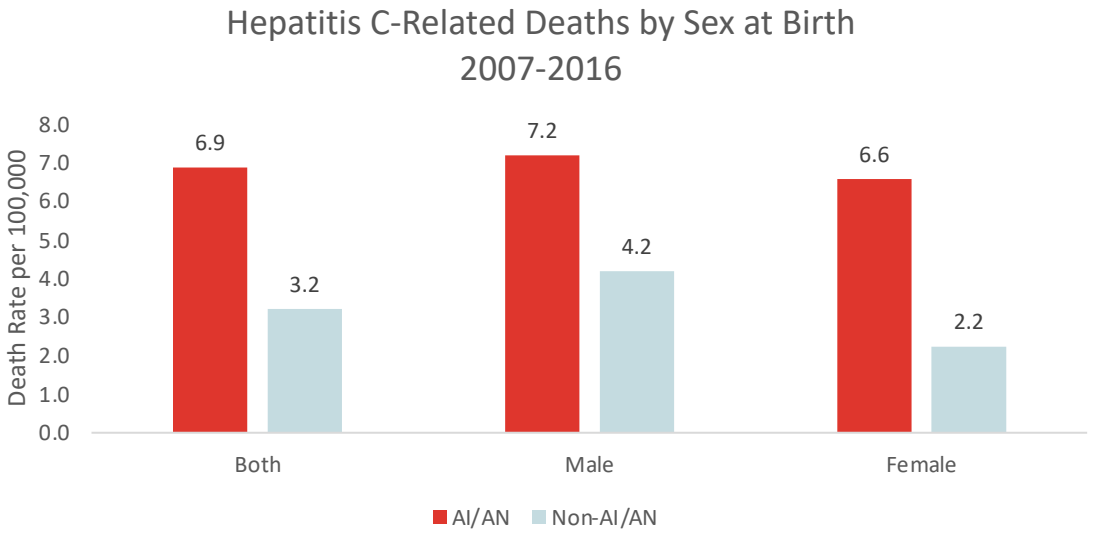
**Diagnosis rates for persons under the age of 13 have been suppressed due to the small amount of diagnoses for this age group (cases <5).*

Hepatitis C-Related Deaths

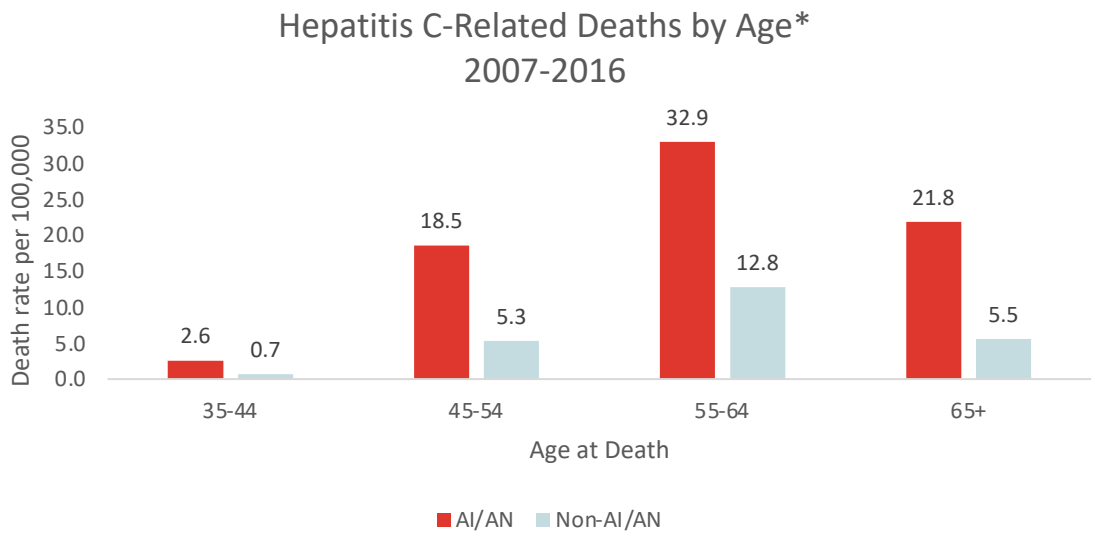
Nationally, HCV-related deaths disproportionately impact AI/ANs than any other race/ethnicity.[iv] Over the last ten years, the rate of HCV-related deaths in Washington among AI/ANs was at least three times higher than Non-AI/ANs. While the death rate for AI/ANs in Washington between 2014 and 2016 was below the national AI/AN death rate for HCV-related deaths in 2016 (9.8 deaths per 100,000), the trend shows a slight increase from the previous three years and moving away from the national goal of reducing AI/AN HCV-related deaths to less than 7.17 deaths per 100,000 by 2023.[v]



The overall death rate for AI/ANs in Washington between 2007 and 2016 was about two times higher than the death rate of their Non-AI/AN counterparts. When examining death rates by sex at birth, AI/AN males had a death rate 1.7 times higher than that of Non-AI/AN males, and women had the greatest disparity, with a death rate three times higher than Non-AI/AN females.



While every age group for AI/ANs in Washington had a death rate at least twice as high as Non-AI/ANs, adults aged 35-44 and 65 and older had death rates four times that of Non-AI/AN persons. Culturally relevant prevention programs, early screening, and improved access to HCV treatment are necessary for the elimination of these health disparities for American Indian and Alaska Native communities.



**Diagnosis rates for persons under the age of 35 have been suppressed due to the small amount of diagnoses for these age groups (cases <5).*

Washington 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.
- **Washington Data Sources**: Washington 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, general communicable disease surveillance, and death certificate data.

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Public Health Improvement and Training

NPAIHB's Public Health Improvement and Training (PHIT) project provides support and technical assistance to tribes seeking to build strong public health capacity, systems, and processes that serve the needs of their communities. PHIT's Washington Tribal Public Health Improvement (WTPHI) project is currently focused on enhancing public health capabilities to address communicable disease.

Website: http://www.npaihb.org/tribal-public-health-improvement-and-training/

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This report was prepared by staff from NPAIHB's IDEA-NW and Public Health Improvement and Training projects. This publication was supported by funding from the State of Washington Foundational Public Health Services contract #CBO24576 and Centers for Disease Control and Prevention cooperative agreement number NU58DP006385. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the State of Washington or the Centers for Disease Control and Prevention.

[i] Viral Hepatitis, Hepatitis C. https://www.cdc.gov/hepatitis/hcv/index.htm. Accessed October 1, 2020.
[ii] Viral Hepatitis, Hepatitis B. https://www.cdc.gov/hepatitis/hbv/index.htm. Accessed October 1, 2020.
[iii] National Viral Hepatitis Action Plan, Department of Health and Human Services. https://www.hhs.gov/hepatitis/viral-hepatitis-action-plan/index.html. Accessed October 1, 2020.
[iv] Viral Hepatitis Surveillance United States, 20117. https://www.cdc.gov/hepatitis/statistics/2017surveillance/pdfs/2017HepSurveillanceRpt.pdf. Accessed October 5, 2020.
[v] Division of Viral Hepatitis 2025 Strategic Plan. https://www.cdc.gov/hepatitis/pdfs/DVH-StrategicPlan2020-2025.pdf. Accessed October 10, 2020.

Washington Tribal Public Health Improvement Project
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