

**IN THIS ISSUE: HEPATITIS AWARENESS MONTH: ACUTE HEPATITIS B**

**TITLE: Hepatitis Awareness Month: Acute Hepatitis B**

**Introduction**

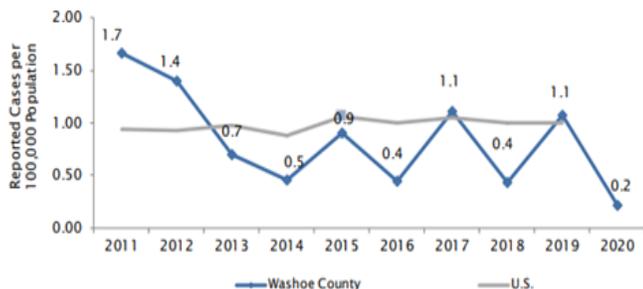
May is designated as Hepatitis Awareness Month in the United States. These next two issues of Epi News will focus on Hepatitis B (HepB) and Hepatitis C, providing clinicians with background information, local epidemiologic data, testing recommendations, prevention strategies, and treatment options.

HepB is a vaccine-preventable liver infection caused by the hepatitis B virus (HBV). HBV is spread when blood, semen, or other body fluids from a person infected with the virus enters the body of someone who is not infected. For many persons HepB is an acute, short-term illness. However, HepB can become a chronic illness that can lead to serious adverse health outcomes, including cirrhosis, liver cancer, and death.<sup>1</sup>

**Epidemiology**

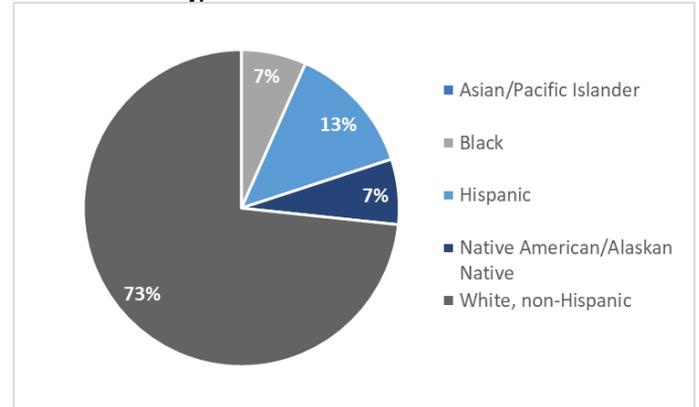
Nationally the rate of acute HepB has remained stable over the past decade around 1.0 cases per 100,000. In Washoe County rates declined in 2011 and 2012 and have remained at or below 1.1 cases per 100,000 since then [Fig 1.]

**Figure 1: Rates of Reported Cases of Acute HepB, Washoe County 2011-2020.**

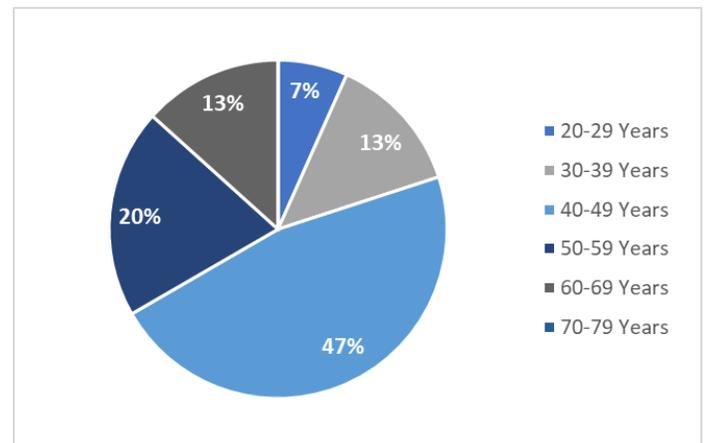


Between 2016 and 2020 fifteen (15) cases of acute HepB were reported in Washoe County. Eighty percent (80%) of cases were male and 73% of cases were white, non-Hispanic [Fig 2.] Approximately half of cases were in the 40-49 year age group with another 20% in the 50-59 year age group [Fig 3.] Nationally in 2019 more than half of acute HepB cases reported to CDC were among persons aged 30–49 years.<sup>2</sup>

**Figure 2. Race/Ethnicity of Acute HepB Cases in Washoe County, 2016-2020**



**Figure 3. Age Distribution of Acute HepB Cases in Washoe County, 2016-2020**



**Risk Factors**

Nationwide in 2019 1,055 (33%) acute HepB cases reported at least one risk behavior or exposure during the 6 weeks to 6 months before illness onset. (Risks were not identified for 30% of cases and risk data were missing for 37% of cases.) The most commonly identified risk factor was injection drug use (35% of the 1,780 cases for which injection drug use information was available), followed by multiple sexual partners (23% of the 1,042 cases for which information regarding multiple sexual partners was available).<sup>2</sup> In Washoe County between 2016 and 2020 the most commonly reported risk factors among 15 acute HepB cases were no history of HepB vaccine (73%) and injection drug use, sexual contact with multiple

partners, and ever treated for a sexually transmitted disease (27%) [Table 1.]

**Table 1. Risk Factors Reported by Acute HepB Cases in Washoe County, 2016-2020**

Risk Factor	#	%
No history of HepB vaccine	11	73%
Ever treated for a sexually transmitted disease	4	27%
Injected drugs not prescribed by a doctor	4	27%
Male with sexual contact with 2-5 female partners	4	27%
MSM (man with sexual contact with male partner)	3	20%
Used street drugs but did not inject	3	20%
Unknown* (unable to locate for interview)	3	20%
Female with sexual contact with 1 male partner	2	13%
Incarcerated for longer than 24 hours	1	7%
Male with sexual contact with 1 female partner	1	7%
Hospitalized	1	7%
Tattoo	1	7%
Blood exposure (not health care related, includes sharing needles)	1	7%
Denied any risk factors	1	7%
Dental work or oral surgery	0	0%
Surgery	0	0%
Incarcerated for longer than 6 months	0	0%
IV infusions and/or injections in outpatient setting	0	0%
Sexual contact of a person with confirmed acute or chronic HBV infection	0	0%

## Prevention

Several HepB vaccines are available in the United States. The Advisory Committee on Immunization Practices (ACIP) recently updated recommendations for HepB vaccination to include all infants, children aged <19 years, adults aged 19 through 59 years, and adults aged 60 years and older with risk factors for HepB. Adults aged 60 years and older without known risk factors for hepatitis B may also receive HepB vaccination.<sup>3</sup> Please see the previous Epi News, Vol. 42 No. 08, issued on May 11, 2022 for more detail on these updated recommendations.

## Signs & Symptoms

Signs and symptoms of acute HepB infection can include fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored stool, joint pain, and jaundice. Infection can be asymptomatic, with signs and symptoms often varying by age. Most children <5 years of age are asymptomatic, whereas 30%–50% of people age ≥5

years have signs and symptoms. Symptoms typically last for several weeks but can persist for up to six months. Disease is more severe among adults age >60 years.<sup>1</sup>

## Diagnosis & Testing

Three different serologic tests are needed (hepatitis B surface antigen [HBsAg], hepatitis B surface antibody [anti-HBs], and total hepatitis B core antibody [anti-HBc]) to determine whether a patient has acute or chronic HepB infection, is immune to HepB, or is susceptible and in need of vaccination.<sup>1</sup> For detailed information about HepB screening and specific serologic markers, see CDC’s “Interpretation of Hepatitis B Serologic Test Results”, available at <https://www.cdc.gov/hepatitis/hbv/pdfs/SerologicChartv8.pdf>. CDC also offers an online training for HepB serology, available at <https://www.cdc.gov/hepatitis/resources/professionals/training/serology/training.htm>.

## Treatment

Treatment for acute HepB infection is supportive. Antiviral medication is available for persons with chronic infection; however, these patients require linkage to care with regular monitoring to prevent liver damage and/or hepatocellular carcinoma.<sup>1</sup>

## Reporting

The list of reportable communicable diseases and reporting forms can be found at:

<http://tinyurl.com/WashoeDiseaseReporting>

**Report all HepB infections (both acute and chronic) to the Washoe County Health District. To report, please call 775-328-2447 or fax your report to the WCHD at 775-328-3764.**

## Acknowledgement

Thank you to all health care providers, infection control practitioners, laboratory staff, as well as schools and daycares for their reporting and collaboration to make this work possible.

## References

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