

**IN THIS ISSUE: HEPATITIS AWARENESS MONTH – HEPATITIS C DATA AND APPROPRIATE SCREENING**

**HEPATITIS AWARENESS MONTH – HEPATITIS C VIRUS AMONG WASHOE COUNTY RESIDENTS AND APPROPRIATE SCREENING TESTS**

**Introduction**

This month marks Hepatitis Awareness Month. The overall national incidence rate for acute hepatitis C in 2016 increased to 1.0 case per 100,000 population from 0.8 cases per 100,000 in 2015. Accounting for underreporting, an estimated 41,200 acute hepatitis C cases occurred in the United States in 2016.<sup>1</sup> Chronic hepatitis C also remains an issue of public health importance. While treatments continue to advance, many of the 3.5 million persons estimated to be living with hepatitis C virus (HCV) infection are unaware of their infection and are not receiving preventive services and medical management. This issue of Epi-News will describe the characteristics of cases of HCV reported in 2016-2017 among Washoe County residents and provide information about appropriate HCV testing.

**2016-17 HCV Case Data**

**Summary data**

A total of 1,254 cases were newly reported to Washoe County Health District (WCHD) between 1/1/16 and 12/31/17. Only 1% of these were acute cases (n=17, Figure 1). However the number of acute cases in 2017 (n=13) was more than triple that in 2016 (n=4).

Notably, 17% of cases reported to WCHD were ruled out. This typically occurred because cases were initially reported based on positive antibody results; however, confirmatory PCR testing was negative, indicating that the case was not infected with HCV. This highlights the importance of confirmatory PCR testing after a reactive HCV antibody result.

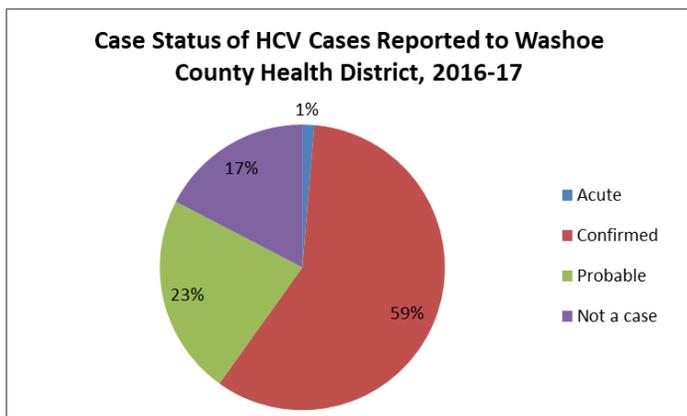


Figure 1. Case status of HCV cases reported to WCHD, 2016-17.

Males accounted for 66% of cases with known gender. Among cases with known race and ethnicity, White, non-

Hispanics accounted for the majority of cases (81%) followed by Hispanics and African Americans (7% each).

**Genotyping**

There are seven genotypes of HCV and different genotypes have different recommended treatment regimens. Therefore, genotyping can be critical for making appropriate treatment decisions. Genotype 1 is the most commonly reported genotype among recent cases in Washoe County (70%, Figure 2). This matches the national data in which genotype 1 accounts for 70% of cases.<sup>1</sup>

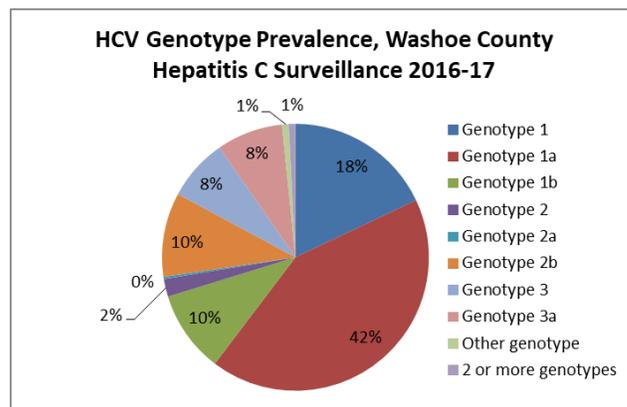


Figure 2. HCV genotype prevalence, Washoe County hepatitis C surveillance 2016-17.

Genotype 1a accounts for 42% of Washoe County genotyped cases. Genotypes 2 and 3 account for 12% and 16% of reported cases, respectively. Infection with two or more genotypes is rare (1%). Prior infection with HCV does not provide protection against later infection with the same or different genotypes.

**Resolution of infection**

Beginning in 2017 WCHD began tracking the current state of infection for reported cases. Cases are classified with active infection, resolved infection, or indeterminate. Resolved infections are cases who later tested negative for HCV. Resolution of infection can occur in one of two ways: spontaneous clearance or treatment. Approximately 15% - 25% of persons infected with HCV spontaneously clear infections while the remainder go on to have chronic infection. While WCHD does not have data regarding HCV treatment within the community, ≥90% of HCV infections can be cured with appropriate treatment.<sup>1</sup> Of the 521 cases reported in 2017, 59 (11%) have since resolved their infection. However, this number may be an underestimate because negative Hepatitis C results are not required to be reported to WCHD.

<sup>1</sup> <https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#d1>

**FACT**  
Hepatitis C is a leading cause of liver cancer.  
click here to learn more.

**FACT**  
People born from 1945-1965 are 5 times more likely to be infected with Hepatitis C.  
LEARN MORE

**BORN FROM 1945-1965?**  
CDC recommends you get tested for Hepatitis C.  
GET TESTED. Learn more



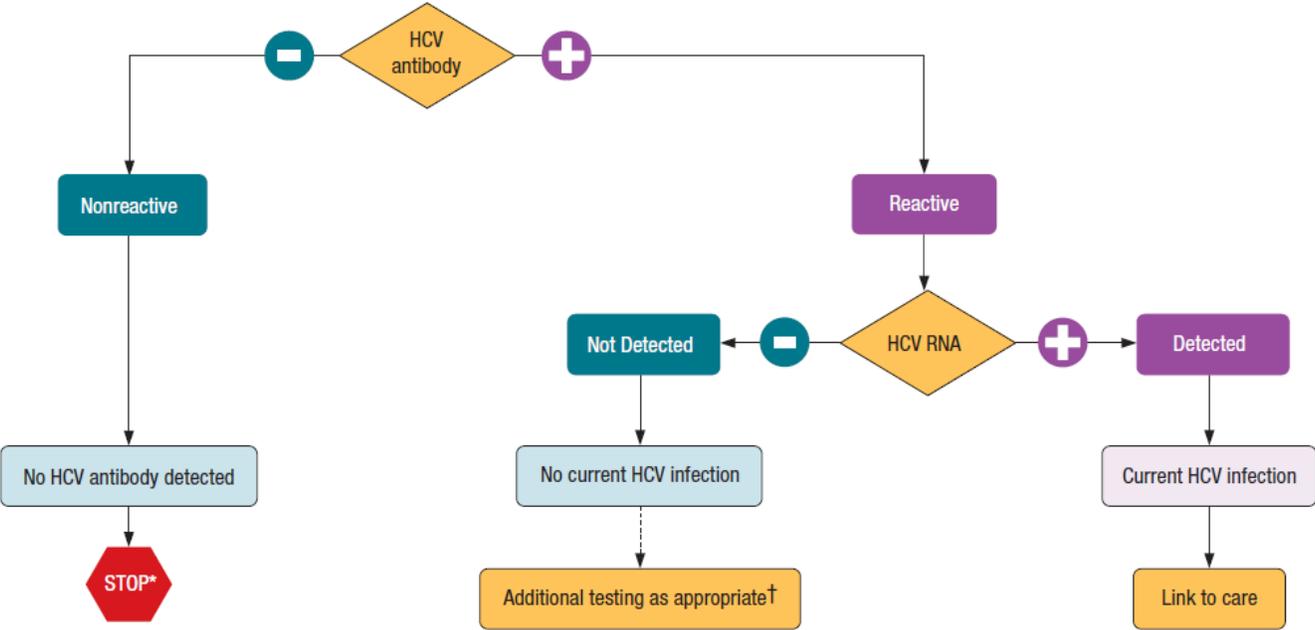
**Appropriate Tests to Confirm HCV**

The CDC published guidelines<sup>2</sup> regarding HCV testing in May of 2013. In summary, persons with reactive results after HCV antibody testing should be evaluated for the presence of HCV RNA in their blood (i.e., HCV PCR test). If HCV RNA is detected, that indicates current HCV infection. If HCV RNA is not detected, that indicates either past (resolved) HCV infection or false HCV antibody positivity.

Local data show that the proportion of HCV cases confirmed by HCV RNA increased from 53% in 2015 to 82% in 2017. This is a great improvement but still indicates that one in five (1 in 5) patients are not being appropriately tested. **When ordering HCV tests, please order an HCV antibody test with reflex to HCV RNA (PCR). Do NOT just order an HCV antibody test alone.** The recommended testing sequence is seen in the flow chart below (Figure 3).

**Recommended Testing Sequence for Identifying Current Hepatitis C Virus (HCV) Infection**

U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention



\* For persons who might have been exposed to HCV within the past 6 months, testing for HCV RNA or follow-up testing for HCV antibody is recommended. For persons who are immunocompromised, testing for HCV RNA can be considered.  
 † To differentiate past, resolved HCV infection from biologic false positivity for HCV antibody, testing with another HCV antibody assay can be considered. Repeat HCV RNA testing if the person tested is suspected to have had HCV exposure within the past 6 months or has clinical evidence of HCV disease, or if there is concern regarding the handling or storage of the test specimen.  
 Source: CDC. Testing for HCV infection: An update of guidance for clinicians and laboratories. MMWR 2013;62(18).

Figure 3. Recommended testing sequence for identifying current hepatitis c virus (HCV) infection.

**Acknowledgement**

We are grateful to all health care providers, infection control practitioners, and laboratory staff for their reporting and collaboration to make this work possible.

<sup>2</sup> <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6218a5.htm>