

IN THIS ISSUE: Hepatitis Awareness Month – Screening Hepatitis C among Baby Boomers Using Appropriate Tests

Background

This month marks the 21st Hepatitis Awareness Month and the 5th observance of May 19 as National Hepatitis Testing Day in the United States. Approximately 90% of U.S. deaths from viral hepatitis are caused by infection with hepatitis C virus (HCV). In 2013, for the first time, deaths associated with HCV infection surpassed the total number of deaths from 60 other nationally notifiable infectious diseases.¹ Although care and treatment can be life-saving, many of the 3.9 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 focus on HCV screening among baby boomers using appropriate tests.

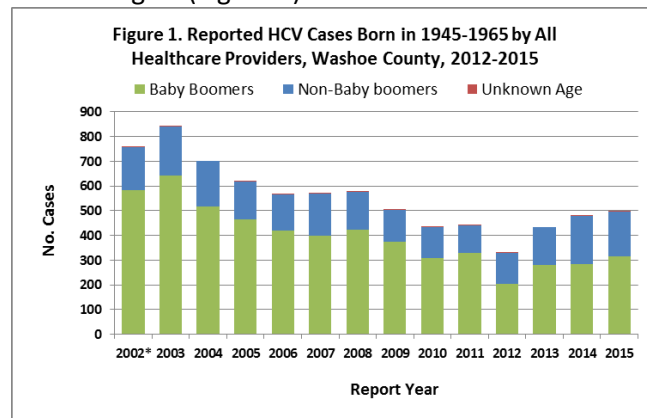
National and Local Statistics

The Washoe County Health District (WCHD) began HCV surveillance on May 1, 2002. This surveillance captures all reported HCV cases including acute or chronic HCV. The system collects data for 13 full years plus eight months in 2002 and is ongoing. What have we known about this topic in the nation vs. in Washoe County? See Table 1 for a comparison.

Characteristics	US	Washoe
No. of persons living with chronic HCV	2.7-3.9 Million	7,766
Estimated Prevalence	1.3%-2.0%	1.8%
Proportion of cases born in 1945-1965	75%	71%
Unware of HCV status	~50%	Unknown
Genotypes		
genotype 1	70%	67%
genotype 2	15-20%	15%
genotype 3	10-12%	16%
genotype 4	1%	2%
genotype 5-6	<1%	

By December 31, 2015, the WCHD HCV surveillance system had detected 7,766 unique persons living with HCV, which represents a prevalence of 1.8% in Washoe County. The highest number of reported HCV cases was 844 in 2003. The volume of case reports decreased every year for the following nine years (2004-2012). In August of 2012, CDC published its recommendations for the identification of chronic hepatitis C virus infection among persons born during the period from 1945-1965 (baby boomers). These recommendations called for universal HCV screening among baby boomers regardless of their risk factors². Since 2013, the

reported morbidity in Washoe County started to increase again (Figure 1).



There was a 50% increase in 2015 compared to 2013. However, the screening coverage among persons born during 1945-1965 was extremely low. For example, out of 34,197 persons born from 1945-1965 who sought medical care in local emergency rooms in 2015, only 883 persons (<3%) received HCV screening tests. Among 883 persons who were tested for HCV, ~20% had laboratory evidence of HCV infection (unpublished data, Washoe County, May 2016). This estimate is much higher than the newly published prevalence of 11.6% among baby boomers in ED settings in Alabama.³ The big difference may be due to targeted testing in Washoe versus universal screening in Alabama. It is highly recommend that Washoe County Healthcare providers (HCPs) order a HCV screening test for those patients born during 1945-1965 if their HCV status is unknown following CDC’s recommendation.

Appropriate Tests to Confirm HCV

The CDC published guideline⁴ regarding HCV testing in May of 2013. The bottom line is that persons with reactive results after HCV antibody testing should be evaluated for the presence of HCV RNA in their blood. **Signal to cut-off (S/Co) ratio is no longer** to be used for HCV confirmation. Local data show that the proportion of HCV cases confirmed by HCV RNA increased from 37.6% in 2005 to 53% in 2015. When HCPs order HCV tests, please remember to order HCV antibody test with reflex to HCV RNA. DO NOT just order HCV antibody test alone. If you haven’t done so, now is the time to MODIFY your practice. The recommended testing sequence is seen in the flow chart on next page.

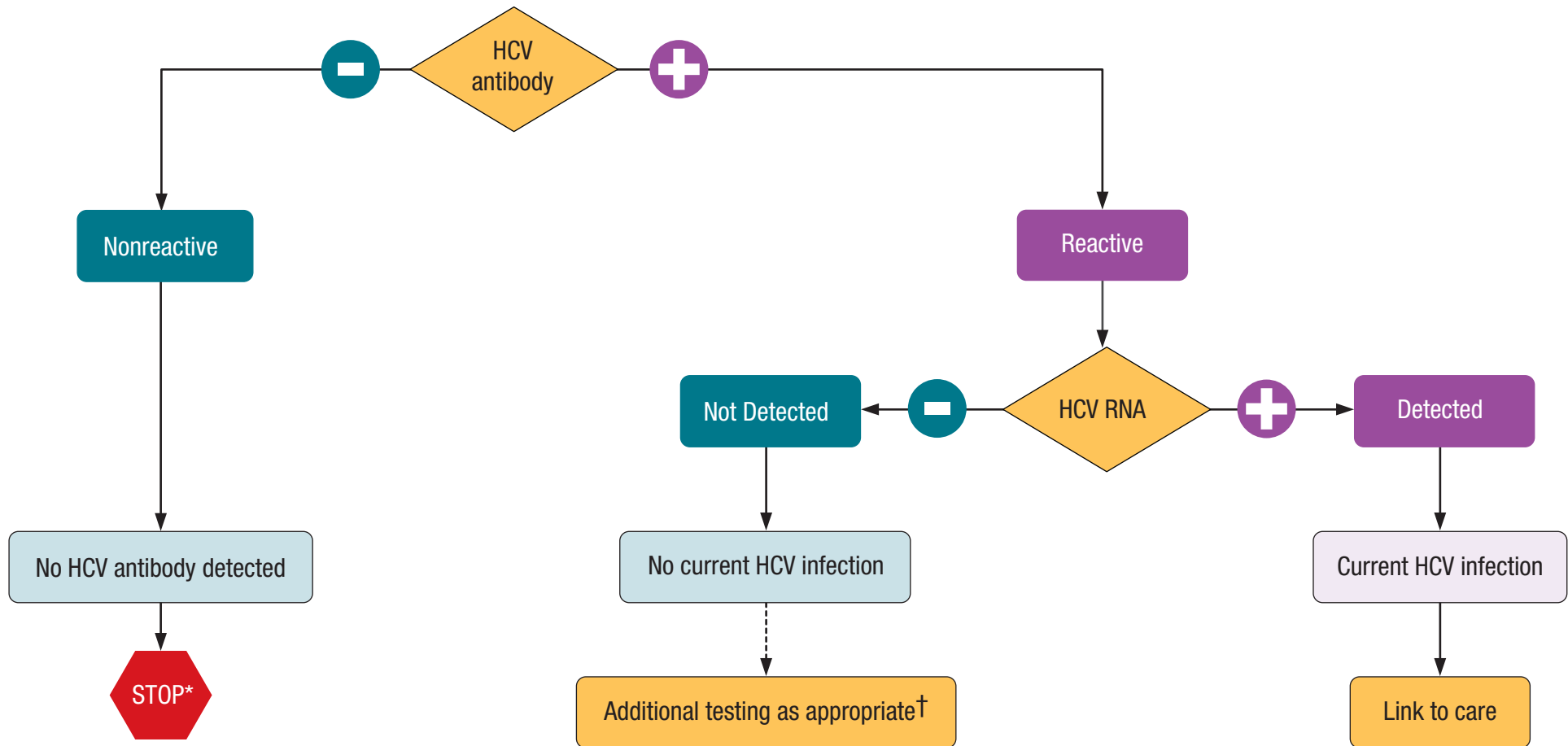
¹ http://www.cdc.gov/mmwr/volumes/65/wr/mm6518a1.htm?s_cid=mm6518a1_w
² http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6104a1.htm?s_cid=rr6104a1_e%20-%20Box

³ John P. Donnelly, et. al. Emergency Department Screening for Hepatitis C Virus: Geographic Reach and Spatial Clustering in Central Alabama. Clinical Infectious Diseases. December 24, 2015.
⁴ <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6218a5.htm>

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 laboratorians. MMWR 2013;62(18).