Hepatitis C Surveillance

In June, 2015, attendees at the annual conference of the Council of State and Territorial Epidemiologists updated several national case definitions. The new case definitions and new approaches to case reporting will change how hepatitis C surveillance is done in Washington State.

National Case Definition for 2016

This newsletter focuses on surveillance for hepatitis C. In addition, chikungunya is now nationally notifiable, reportable in Washington under Arboviral disease. Likewise, report fever with travel to an area with dengue or with laboratory evidence of dengue under Arboviral disease. Also report cases of laboratory confirmed hantavirus infection even without pulmonary syndrome; none of these rare have been identified in our state. The yersiniosis case definition now includes a Probable classification based on PCR results. The case definition for blood lead classifies tests as either Confirmed or Unconfirmed, the latter combining previous Suspected and Probable cases. Current national case definitions are at: http://wwwn.cdc.gov/nndss/conditions/search/

Beginning January, 2016, hepatitis C is a single disease with a continuum. National case classifications for acute and chronic hepatitis C changed.

<table>
<thead>
<tr>
<th>Classification of Hepatitis C Infections</th>
<th>Present</th>
<th>Absent</th>
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<tbody>
<tr>
<td>Discrete onset of symptom(s) [headache, malaise, fever, anorexia, vomiting, diarrhea, or abdominal pain] AND either jaundice or ALT &gt; 200 IU/L</td>
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<tr>
<td>Any HCV nucleic acid test positive OR HCV antigen or genotype positive OR test conversion in past 12 months</td>
<td>Confirmed, Acute</td>
<td>Confirmed, Chronic</td>
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<tr>
<td>HCV antibody positive only</td>
<td>Probable, Acute</td>
<td>Probable, Chronic</td>
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Classifying criteria reflect the presence or absence of acute symptoms and type of laboratory test that was positive; all cases require at least one positive test result. Acute and chronic hepatitis C case definitions both have Confirmed and Probable classifications; the Probable classification is new for acute hepatitis C.

Discrete onset of compatible symptoms with either jaundice or elevated ALT must be present for an acute case unless there was documented test seroconversion within 12 months (previously 6 months). The prior cutoff for elevated ALT of 400 IU/L will drop to 200 IU/L but is not needed if jaundice occurs. Since only 20-30% of acute hepatitis C infections are symptomatic, and many symptomatic people do not seek testing, most acute cases are not identified.

Unlike tests available for acute hepatitis A or B infection, there is no IgM test for hepatitis C. The available tests are HCV antibody (including rapid tests) or viral presence (nucleic acid or genotype) but core antigen detection tests are currently under evaluation and have not yet been FDA approved. Under the new 2016 case definition, viral presence is a confirming result while just positive HCV antibody supports a Probable classification.

**Hepatitis C Reporting for 2016**

Washington State Department of Health follows the national convention that cases are reported by year of onset using complete calendar weeks (Sunday – Saturday) for publication in weekly MMWR updates. The new hepatitis C case definitions apply to cases with onsets (acute) or years of diagnosis (chronic) starting January 3rd, 2016. Local health jurisdictions using different surveillance time frames may initiate the new case definition on other schedules.

The updated acute hepatitis C case report form’s Laboratory Section will have viral detection (including qualitative, quantitative, or genotype), test conversion within the past year, and ALT levels > 200 IU/L as case-defining variables. There are also a few changes in the case-defining clinical criteria. Diabetes was added as a risk factor in the Exposure Section; potential bloodborne exposures can occur during blood glucose testing in a healthcare or long term care setting.

The acute hepatitis C form consistent with the 2016 case definition is available on our website, but Public Health Issue Management System (PHIMS) data entry screens will continue to show variables
for entering 2015 acute hepatitis C cases until the February surveillance closeout when the guidelines and the PHIMS screen will be updated. Chronic hepatitis C forms will not be updated.

**Surveillance Recommendations**

Acute hepatitis C, representing new onsets of infection, accounts for fewer than 100 reports a year in Washington. As a primarily bloodborne infection, hepatitis C is often associated with injection drug use and acute cases are generally younger adults. As a result, acutely infected persons may be difficult to contact and interview, limiting the available information.

Chronic hepatitis C results in liver damage and sometimes liver failure or liver cancer. It is detected due to associated symptoms or during screening for a known risk factor. The Centers for Disease Control and Prevention recommend testing the following persons for HCV infections:

- Adult born from 1945 through 1965
- Anyone who currently injects drugs or ever injected drugs, even once or many years ago
- Anyone receiving clotting factor concentrates produced before 1987
- Anyone receiving a transfusion of blood, blood components, or an organ transplant before July 1992
- Long-term hemodialysis recipient
- Person with abnormal liver function tests
- Person with HIV infection
- Healthcare, emergency medical, and public safety worker after needlestick, sharps, or mucosal exposure to HCV-positive blood
- Child born to HCV-positive woman

The Department of Health is recommending increased intensity of surveillance for hepatitis C. Local health jurisdictions (LHJ) receiving only a laboratory report positive for hepatitis C should attempt to obtain additional information for each new case. The provider ordering the test should assign a diagnosis (acute or chronic hepatitis C) and provide basic clinical case information. A fax form for providers is available from either the Office of Communicable Disease Epidemiology or the Office of Infectious Disease (contacts below). If staff time constraints prevent contacting all providers, prioritize cases likely to be acute based on age (such as \( \leq 30 \) years or \( \geq 70 \) years) or cases among women of child-bearing age.

Chronic hepatitis C case information documented on the new form should be entered on the PHIMS hepatitis C, **chronic – long form**. Cases reported without provider information (e.g. positive laboratory result from a blood bank) should be contacted and interviewed.

When completed by the medical provider, the new form will:

- Allow designation of a case as acute or chronic
- Provide sufficient laboratory information to classify a case as probable or confirmed
- Collect pertinent information for each case such as reason for current testing, pregnancy status, treatment information (if recommended), and common risk factors.
The chronic hepatitis surveillance program designates a subset of chronic hepatitis C cases for enhanced surveillance. If selected later for this subset, a case can be interviewed and the PHIMS content updated on the long form.

A person with hepatitis C should be advised to prevent further liver damage by avoiding alcohol, checking with a provider about all medications used, and if susceptible getting vaccines for hepatitis A and hepatitis B. A specialist can advise about treatment options. Hepatitis C transmission can be reduced or prevented by:

- Covering open lesions
- Cleaning up blood-contaminated material
- Not sharing blood testing equipment, razors, toothbrushes, or nail clippers
- Not sharing needles, syringes, or drug works
- Using barrier methods correctly every time when having sex
- Not donating blood, tissues, or other body fluids
- Notifying healthcare and dental personnel of the hepatitis C status

Surveillance for hepatitis C is an ongoing challenge for public health agencies due to the limited resources available to review a substantial number of laboratory reports, deduplicate chronic hepatitis records and perform investigations to obtain information missing on initial reports. However, obtaining a better understanding of the epidemiology of hepatitis in Washington will allow us to better guide decisions about prevention resources, projected medical need for treatment or liver transplant, and improving access to care. The Washington State Department of Health thanks you for your assistance in helping us improve our understanding of the populations we serve and in making Washington a healthier place to live.

**Resources for local health jurisdiction investigators in Washington**

Epidemiology of chronic hepatitis C or provider fax form: Luke Syphard at 360-236-3415

Acute hepatitis C investigation, epidemiology of acute hepatitis C, or provider fax form: Marcia Goldoft at 206-418-5433

Chronic hepatitis C case investigation or to determine if a chronic hepatitis C case was previously reported in Washington State: Alison Puckett at 360-236-3502
