Chronic Hepatitis C Virus—Case Investigation Prioritization, Policy, and Health Department Capacity

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Tennessee Department of Health
Surveillance Activities for Chronic Hepatitis C

Due to varying levels of resources, jurisdictions might be at different stages of implementing surveillance activities for chronic hepatitis C. The following section provides best practice models for core and enhanced surveillance activities for consideration by jurisdictions. Enhanced surveillance activities should be identified based on local priorities.

**Best Practice Models for Core and Enhanced Chronic Hepatitis C Surveillance**
Best Practices: Case Investigation Prioritization

• Pregnant people

• New cases reported in elderly patients (e.g., ≥ 70 years of age)

• People < 40 years of age that might represent emerging risks

• People living with HIV
Best Practices: Quality Assurance

• Establish a process for data cleaning and standardizing laboratory reports

• Assess case investigations and laboratory reports for completeness and accuracy

• Identify and review potential duplicate laboratory reports, patients, and/or case investigations
Best Practices: Analyses

- Create an annual report, situational analysis, or other data product that can be widely shared with providers, advocated, stakeholders, and other public health professionals.
Best Practices: Policy

• Research existing health code/policy related to HCV reporting and the process for changing such policies

• Identify who should report HCV cases

• Determine what should be reportable
How do you determine what is reportable to the state health department? How does the state health department make reporting entities aware of reporting requirements?

- Tennessee Administrative Code: Chapter 1200-14-01-.02 (Reportable Diseases):
  - “All healthcare providers and other persons knowing of or suspecting a case, culture, or specimen of a reportable disease or event shall report that occurrence to the Department of Health in the time and manner set forth by the Commissioner in the List.” ¹

- The Tennessee Department of Health publishes Commissioner of Health’s Letter and Summary of Reporting Changes to Providers and Laboratories Statewide annually:
How will reporting entities provide this information to the state health department? How long do they have to report?

- Expected timeframes vary by condition (i.e., same day to within one week) and reports are accepted online or via fax (providers) and via fax or electronic laboratory reporting for on boarded sites (laboratories).
  - [https://www.tn.gov/content/dam/tn/health/documents/reportable-diseases/PH-1600.pdf](https://www.tn.gov/content/dam/tn/health/documents/reportable-diseases/PH-1600.pdf)

- Providers
  - [https://www.tn.gov/content/dam/tn/health/documents/reportable-diseases/Provider-list-2021.pdf](https://www.tn.gov/content/dam/tn/health/documents/reportable-diseases/Provider-list-2021.pdf)

- Laboratories
  - [https://www.tn.gov/content/dam/tn/health/documents/reportable-diseases/Lab-list-2021.pdf](https://www.tn.gov/content/dam/tn/health/documents/reportable-diseases/Lab-list-2021.pdf)
Should dual reporting (providers and laboratories) be considered in certain instances?

- If a facility has their own laboratory, and they cannot complete a test in which the results are reportable themselves, they will send the specimen to the reference laboratory to complete the testing.
  - In Tennessee, both the facility and the reference laboratory must report.

- If a condition is both laboratory and healthcare provider reportable (e.g., acute hepatitis C virus).
  - In Tennessee, the laboratory must report the test result and healthcare provider must report the disease information.
What is the minimum laboratory reporting content required?

- In Tennessee, this includes patient demographics (i.e., DOB, address, sex at birth, gender, race, ethnicity, telephone number), ordering provider (i.e., facility name, phone number, address), performing laboratory (i.e., name, phone number, address), test performed, accession number, specimen type/source and collection date, result (quantitative and qualitative), interpretation, and reference range.
Health Department Capacity (TN)

- Staff: At least 2 FTES for data entry are needed to process laboratory reports, apply appropriate CDC/CSTE case definition, and submit notifications
  - TN receives about 3,000 HCV laboratory reports per month (paper and electronic)

- Staff: At least 1 FTE epidemiologist is needed to conduct quality assurance
  - Reviewing/approving notifications prior to submission to CDC (HL7) and ensuring appropriate CDC/CSTE case definition
  - Conducting internal quality assurance and de-duplication measures established
  - Developing annual epidemiological profile and update Viral Hepatitis NBS User Guide

- Staff: At least 1.0 FTE Informatician
  - Onboard facilities for electronic laboratory reporting
  - Oversee implementation of Hepatitis Message Mapping Guide (HL7) and successful ongoing notification transmittal to CDC
Special Thank You

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Tasha Martin (Oregon Health Authority)
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Rui Zhao (Louisville Metro Department of Public Health and Wellness)
Thank You

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Classification Scenario One

• The health department received a laboratory result on a person 62 years of age who has a positive anti-HCV result and a positive HCV RNA result

• Total bilirubin level was 0.2 mg/dL, and ALT was 22 IU/L/

• The patient could not be matched with an existing acute or chronic case of hepatitis C in the surveillance system
Classification Questions

- Does this meet the age criterion?
- Does this meet laboratory criteria?
- Does this meet clinical criteria?
- Is this a new event?
- What is the case classification?
## Classification Scenario One

<table>
<thead>
<tr>
<th>Case Classification Criteria</th>
<th>Scenario</th>
<th>Rationale for Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age criterion: &gt; 36 months of age</td>
<td>62 years of age</td>
<td>√</td>
</tr>
<tr>
<td>Confirmatory laboratory evidence:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCV detection test (i.e., HCV RNA, HCV genotype, or HCV antigen)</td>
<td>Positive</td>
<td>√</td>
</tr>
<tr>
<td>Clinical criteria: Jaundice of peak elevated total bilirubin ≥ 3.0 mg/dL or peak elevated ALT &gt; 200 IU/L and the absence of a more likely diagnosis</td>
<td>No</td>
<td>X</td>
</tr>
<tr>
<td>New event criterion 1: Is the patient newly reported?</td>
<td>Yes</td>
<td>√</td>
</tr>
<tr>
<td>New event criterion 2: Does the patient have an acute hepatitis C event in the surveillance system in a previous MMWR year and ≥ 1 year after acute onset?</td>
<td>No</td>
<td>X</td>
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**Case Classification: Confirmed Chronic Hepatitis C Virus**
Classification Scenario Two

• The health department received an HCV genotype laboratory result on a person 38 years of age

• The patient was matched to an existing acute hepatitis C case in your jurisdiction’s surveillance system from 18 months prior (i.e., positive HCV antibody with positive reflexed HCV RNA)
Classification Questions

• Does this meet the age criterion?
• Does this meet laboratory criteria?
• Does this meet clinical criteria?
• Is this a new event?
• What is the case classification?
### Classification Scenario Two

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**Case Classification: Confirmed Chronic Hepatitis C Virus**
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