Tip Sheet: Investigating Acute Hepatitis C Cases

Why is it important to investigate acute Hepatitis C cases?
• To **collect accurate and meaningful data** for surveillance and reporting, and to contribute to knowledge about transmission and risk factors associated with hepatitis C (HCV) in Massachusetts.
• To **prevent additional cases** by providing information to the person diagnosed with HCV infection on how to avoid exposing others.
• To **improve outcomes** for HCV-infected individuals by educating them on the importance of continued medical evaluations and providing referrals to medical or support services.
• To **identify clusters** of cases or outbreaks, in particular, those that appear to involve healthcare-associated transmission; the more quickly we can identify these situations the more quickly we can stop further transmission.

What is the role of the LBOH in acute HCV investigation?
• To collect missing data on the case, particularly information about an individual’s **symptoms and risk history**.
• To educate the case on ways they can reduce the risk of transmission to others.
• To provide referrals to the case for medical or support services as needed.

What is the role of the MDPH Division of Epidemiology in acute HCV investigation?
• To assess and triage cases, assigning to the LBOH only those suspect acute HCV cases that are determined to need further investigation based on specific criteria. For example, cases with a reported history of injection drug use (IDU) will be reviewed as is without being assigned to the LBOH for additional follow-up, as it is likely that the IDU is the source of the infection. Narrowing the caseload in this way allows the LBOH to use limited time and resources efficiently.
• To classify cases based on information collected by the LBOH investigation and identify those that may be acutely infected. A case of HCV infection would be considered potentially acute if the person had discrete onset of symptoms such as jaundice, elevated liver enzymes (ALT>200) or bilirubin (≥3) reported, or evidence of recent seroconversion (a negative antibody test for HCV in the 12 months prior to the positive result).
• To determine whether further investigation into a case is needed. For example, the epidemiologist may request additional details in the case of a potential healthcare-associated transmission.

How are acute HCV cases assigned to LBOH?

HCV cases with a RNA-positive result have a teleform mailed to the ordering provider. This form collects information on symptoms and risk history. HCV cases enter a workflow, monitored by MDPH epidemiologists, depending on symptoms or specific laboratory results reported. RNA-positive suspect acute HCV cases are assigned to the LBOH if MDPH does not receive a returned teleform within one month, or the ordering provider does not report a history of IDU for the case. All suspect acute HCV cases with only antibody positive results are assigned to the LBOH for investigation.
How is the LBOH notified of an acute HCV case that needs to be investigated?

When a suspect case of acute HCV infection is identified by the Division of Epidemiology, an epidemiologist will notify the LBOH by creating a task in MAVEN. The task will indicate that an investigation needs to be conducted and will have a due date of one month from the date the LBOH was notified of the case. Once created, MAVEN will generate an email (as shown below) to the individual to whom the task is assigned. In addition to creating the task, an epidemiologist will also contact the LBOH via phone to answer any questions.

Once this email is received, the LBOH nurse or health agent should access the event ID in MAVEN, and review the case and investigation instructions in the “Notes” field.

What are the steps a LBOH should take to complete an acute HCV investigation?

1. Familiarize yourself with the questions in the case’s demographic, clinical and risk history question packages so you know what information remains to be collected. In addition to the question packages, please review the case’s laboratory results.
2. Contact the ordering provider(s) listed on the lab(s) for further clinical and risk history information. Start with the provider listed on the most recent laboratory test.

Hospitalists or emergency room physicians may be difficult to reach. Contact a hospital’s infection preventionist if the case is hospitalized or presented to the emergency department. An Infection Preventionist Contact List can be found by clicking the Help button in the MAVEN navigation bar and then clicking the Infection Preventionist Resources drop-down list.
a. Verify with the provider that the case is aware of their HCV diagnosis.

b. Review all related laboratory results with the provider and ask if they are aware of any additional laboratory results including other HCV tests and liver enzyme tests (AST/ALT/bilirubin). If they have additional results, ask that they fax them to MDPH at 617-983-6813.
c. Complete the questions in the Clinical Question Package with the provider. Discuss the date of diagnosis, whether this is a new diagnosis, and symptoms. **Symptom information is critical for correctly classifying a case as acute.**

![Clinical Question Package](image)

- **Note any symptoms in the clinical question package**
- **Ask if case is pregnant or diabetic**


d. Discuss the patient’s risk history with the ordering provider. Record all available risk history and exposure information in the Risk/Exposure/Control & Prevention Question Package. It is essential that information about risk history and exposure is collected to determine if any public health interventions are necessary to prevent others from contracting HCV. If there is only an unusual risk history and no history of IDU (e.g. medical procedures, tattoos, etc.), please contact the epidemiologist on-call at 617-983-6800.
3. Contact the case to complete any missing information in the Risk/Exposure/Control & Prevention Question Package and provide education on HCV infection. Reassure the individual that all information is kept strictly confidential. Focus particularly on those questions related to healthcare. Some of the questions are about sensitive topics, such as drug use, and should be asked in a non-judgmental manner. Please go through all risk related questions without making assumptions about an individual’s behavioral history.

4. Educate the individual about preventing transmission and ways to protect her/his liver. Resources on these topics can be found online on the websites listed below. If you feel you need more training on these topics, please inform the epidemiologist who assigned you the case.

**Educational Resources:**

MDPH viral hepatitis fact sheets can be found here in multiple languages:

https://www.mass.gov/service-details/infectious-diseases-a-z

CDC Viral Hepatitis Division resources:

https://www.cdc.gov/hepatitis/

5. Provide referrals to medical or support services if needed. HCV infection can be cured. There are a number of highly effective HCV antiviral medications with limited side effects on the market. MassHealth will cover HCV screening and treatment for all members without restrictions related to fibrosis score, substance use abstinence, or prescriber specialty.
While there is no vaccine to prevent HCV, there are strategies that can help to keep from getting or transmitting the infection. Persons who inject drugs can substantially reduce their risk of getting and transmitting viral hepatitis and other blood borne infections by using a sterile needle and syringe for every injection. Familiarize yourself with local syringe services programs, overdose prevention/substance use disorder programs, and testing and linkage to treatment sites for individuals with HCV infection.

It is recommended that persons with HCV infection receive the HAV and HBV vaccine. Discuss vaccination with the case. Vaccination can occur at the PCP’s office.

**Referral Resources:**

Find an MDPH-supported syringe service program near you:  
[https://www.mass.gov/syringe-service-programs](https://www.mass.gov/syringe-service-programs)

Testing sites, linkage to treatment for individuals with HCV infection, and other resources such as overdose prevention programs:  

Substance use disorder treatment programs:  
[https://www.mass.gov/treatment-recovery-services](https://www.mass.gov/treatment-recovery-services)

6. Attempt to contact the case at least three times, documenting each attempt in the notes section in MAVEN. Try calling at different times of the day to accommodate for different schedules. Contact the provider again for a working phone number if the number is missing or inactive. If you have made several attempts to obtain case information, but have been unsuccessful (e.g., the health care provider and/or case does not return your calls or respond to a letter, or the case refuses to divulge information or is too ill to be interviewed), please complete the question packages with as much information as you have gathered. Note in the administrative question package that the case was lost to follow-up.

I’ve completed my acute HCV case investigation. Now what?

Update the original task to reflect “Complete” by clicking on the task tab from the event dashboard. Enter the date you completed the task and assign the task back to the epidemiologist who is listed as the task’s
creator. Once the task is updated, MAVEN will generate an email to the epidemiologist so they will know you’ve completed your investigation.

If you have any questions about acute HCV follow-up, please contact the Division of Epidemiology at 617-983-6800. If you have questions about MAVEN, please contact the ISIS helpdesk at 617-983-6801.