Hepatitis C Testing Guide

Quick Reference Guide for Health Care Providers

April 2021

Order HCV antibody
- Results in 3 days
- Window period for detection is 5-10 weeks

Anti-HCV non-reactive

No further testing if immune competent *
- Repeat anti-HCV annually if ongoing risk factors.

Equivocal
- Usually indicates a false positive
- Order HCV RNA to rule out active infection

Anti-HCV reactive
- Indicates prior exposure
- HCV RNA required to confirm active infection
- Antibodies usually persist for life. Do NOT repeat once positive.

HCV RNA detected

Order genotype
Results in 5-10 days

Indicates active infection
To establish chronic infection, HCV RNA may be repeated in 6 months (25% of acute infections spontaneously clear)

Engage into comprehensive care to discuss:
- Workup for HCV treatment† by primary care provider (e.g., liver enzymes, Fib-4, APRI, Fibroscan®)
- Transmission prevention and testing of contacts
- Mental health, alcohol and/or harm reduction care (e.g., opioid agonist therapy), where appropriate

HCV RNA not detected

No evidence of active infection
- Spontaneously cleared, or resolved HCV infection as a result of treatment
- Repeat HCV RNA annually if ongoing risk factors, as reinfection can occur

Questions about results?
BCCDC Public Health Laboratory
1-877-747-2522

Refer to the BCCDC Blood and Body Fluid Exposure (BBFE) Management Guidelines if testing is related to a sexual assault or workplace exposure.

Automatic HCV RNA testing done as of Jan.13/20 on all first time anti-HCV reactive results, and previously anti-HCV reactive results where HCV RNA testing has never been done. Instructions will be provided on the BCCDC PHL lab result in situations where an additional EDTA tube is required for HCV RNA testing to be completed.

* False negatives may occur in the presence of major immunosuppression (e.g., HIV+ where CD4+ < 50 cells/mm³ and agammaglobulinemia). Order HCV RNA where appropriate.

Ω Instructions will be provided on the lab result an EDTA tube is required to confirm an initial HCV RNA ‘not detected’ result.

† For treatment information and treatment approval forms, see the 2018 CASL Hepatitis C Guideline and BC Special Authority Request Forms.
Background

Indigenous peoples continue to be impacted at a significantly higher rate due to historic and present colonial policies and systems that disrupt connection to land, language, and culture, and diminish Indigenous sovereignty. Historical and present intergenerational trauma contributes to the social determinants of health in Indigenous peoples and impacts acquisition risks.

In addition to a lack of support to address social determinants of health, persons who use drugs may lack access to necessary harm reduction supplies and testing that can greatly increase risk for HCV infection.

In BC, injection drug use is the major source of new infections. While prevalent infections are more commonly seen in people born in 1945-65, immigrants from endemic areas (includes regions of Central and East Asia, and North Africa/Middle East, see the 2018 CASL HCV Guidelines) and people who have used illicit drugs in the past.

Direct acting antiviral (DAA) curative treatment is well tolerated and over 95% effective across all genotypes after 12 weeks of treatment. Treatment is free for anyone who has current HCV infection and BC medical coverage, regardless of liver fibrosis stage.

### Clinical Description

<table>
<thead>
<tr>
<th>Acute HCV infection (≤ 6 months)</th>
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<tr>
<td>• Symptoms are usually absent, but can include a wide spectrum of illness, including jaundice</td>
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<tr>
<td>• Around 25% will spontaneously clear within 6 months</td>
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<th>Chronic HCV infection (≥ 6 months)</th>
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<tr>
<td>• Symptoms are usually absent</td>
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<tr>
<td>• Over decades, 20% will develop cirrhosis and 1-5% will develop hepatocellular carcinoma (HCC)</td>
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<td>• Major cause of liver transplantation</td>
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<tr>
<th>HCV Antibody: produced when infected with HCV and usually remains present for life</th>
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<tr>
<td>• A reactive anti-HCV test does not distinguish between resolved or current HCV infection</td>
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<tr>
<td>• Does NOT need to be repeated once result is reported as reactive</td>
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<th>HCV RNA: confirms active infection</th>
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<td>• Does not correlate with disease progression</td>
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<tr>
<td>• Performed 12 weeks after treatment completion to assess for a virologic cure, known as a sustained virologic response (SVR-12)</td>
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<tr>
<td>• Used to screen people who have prior anti-HCV reactive results and have cleared the infection spontaneously or after HCV treatment</td>
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| HCV Genotype: becoming less important with increasing availability of pangenotypic DAA regimens |

### Education

#### After testing - engage into care

• Assess alcohol and substance use, providing harm reduction and mental health care as appropriate.
• Review immunizations (e.g., hep A and B vaccines)
• Offer STI screening, counsel about safer sex
• Healthy liver (e.g., diet, acetaminophen use)

#### Active infection - transmission prevention

• Do not share personal care items
• Do not donate blood, semen, breast milk or body organs/tissues
• Dispose items and sharps with blood in separate bags or containers
• Keep open cuts and sores covered with bandages
• Blood spills can be cleaned with a solution of 1 part bleach to 9 parts water. Apply and let sit for 10 minutes before rinsing.
• There is no immunization and no post-exposure prophylaxis for HCV

### Resources

- **BCCDC PHL** – requisition forms
- **eLab Handbook** – BCCDC PHL information on lab tests
- **BCCDC Hepatitis C course for public health providers**
- **University of Washington - HCV Online Course**
- **Hepatitis Education Canada**
- **Help4Hep** – peer-to-peer helpline