Testing of source patients after potential exposure of health care personnel to hepatitis C virus — CDC guidance, United States, 2020*

**Option A (preferred)**

Initial testing with a NAT for HCV RNA

- NAT for HCV RNA
  - +
  - -
  - STOP

Refer to care for pre-existing infection
Follow-up testing recommended for HCP

**Option B**

Test for antibody against HCV (anti-HCV) with reflex to a NAT if positive

- Anti-HCV test
  - +
  - -
  - STOP

If NAT for HCV RNA is not available:

- NAT for HCV RNA
  - +
  - -
  - STOP

*Testing of the source patient should be performed as soon as possible (preferably within 48 hours) after exposure.*

- Testing may follow option A (preferred), which is testing with a NAT for HCV RNA, or option B, which is testing for anti-HCV with reflex to NAT for HCV RNA if positive. If the source patient is known or suspected to have recent behaviors that increase the risk for HCV acquisition (e.g., injection drug use within the previous 4 months) or if risk cannot be reliably assessed, initial testing of the source patient should include a NAT for HCV RNA.

- A source patient found to be positive for HCV RNA should be referred to care.

- Follow-up testing of HCP is recommended if the source patient is HCV RNA positive, anti-HCV positive with HCV RNA status unknown, or cannot be tested.

- **Persons with detectable HCV RNA at any point** should be referred to care consistent with current AASLD-IDSA guidelines for evaluation and treatment of all persons with acute or chronic HCV infection. Guidance for hepatitis C treatment (https://www.hcvguidelines.org) is evolving with emerging data on treatment with direct-acting antivirals.


**Abbreviations:** AASLD-IDSA = American Association for the Study of Liver Diseases and the Infectious Diseases Society of America; HCP = health care personnel; HCV = hepatitis C virus; NAT = nucleic acid test.
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Initially test HCP for anti-HCV with reflex to HCV RNA test if positive. Testing should be done as soon as possible. (preferably within 48 hours) after the exposure (baseline testing) and may be simultaneous with source-patient testing.

Baseline: anti-HCV + and HCV RNA +

Refer to care for pre-existing infection

Baseline: anti-HCV – or baseline: anti-HCV + and HCV RNA –

If the flow diagram in Figure 1 indicates HCP follow-up

NAT for HCV RNA
3–6 weeks after exposure

HCV RNA +

HCV RNA – or not tested

Refer to care

If the flow diagram in Figure 1 does not indicate HCP follow-up

Test for anti-HCV with reflex to HCV RNA test if positive at 4–6 months after exposure

HCV RNA + or anti-HCV seroconversion to +

Refer to care

STOP

STOP

– Baseline testing of HCP for anti-HCV with reflex to a NAT for HCV RNA if positive should be done as soon as possible (preferably within 48 hours) after the exposure and may be simultaneous with source-patient testing.

– If follow-up testing is recommended based on the source-patient’s status, test for HCV RNA at 3–6 weeks postexposure. Testing for HCV RNA performed at 6 weeks postexposure has the advantage of coinciding with human immunodeficiency virus (HIV) postexposure testing schedules if HIV surveillance is recommended.

– If HCV RNA is negative at 3–6 weeks postexposure, a final test for anti-HCV at 4–6 months postexposure is recommended due to the possibility of intermittent periods of aviremia in acute HCV infection. If the HCP was anti-HCV positive and HCV RNA negative at baseline, testing at this time should be conducted for HCV RNA detection, as persons successfully treated for HCV infection will remain anti-HCV positive and HCV RNA negative unless reinfected. Testing performed at 6 months postexposure has the advantage of coinciding with hepatitis B virus (HBV) postexposure testing schedules if HBV testing is recommended.

– HCP with anti-HCV seroconversion and negative HCV RNA should be referred for further evaluation. False-positive anti-HCV results are known to occur among low-risk populations.

– Anti-HCV seroconversion occurs on average 8–11 weeks after exposure, although cases of delayed seroconversion have been documented among persons with immunosuppression such as in HIV infection. For persons who had a negative anti-HCV result and are immunocompromised, testing for HCV RNA can be considered.

– Also, for persons with a positive anti-HCV and negative HCV RNA result, HCV RNA testing should be repeated if an additional potential HCV exposure occurred within the past 6 months, clinical evidence of HCV infection is present, or concerns exist about specimen integrity, including handling and storage conditions that might have compromised test results. Exposed persons who develop viral syndromes suggestive of acute HCV infection at any point should be retested for HCV RNA.

– Persons with detectable HCV RNA at any point should be referred to care consistent with current AASLD-IDSA guidelines for evaluation and treatment of all persons with acute or chronic HCV infection. Guidance for hepatitis C treatment (https://www.hcvguidelines.org) is evolving with emerging data on treatment with direct-acting antivirals.