CLINICIAN CONSULTATION CENTER
National rapid response for HIV management and bloodborne pathogen exposures.

*This table is a portion of the CCC PEP Quick Guide. It is intended to be used in conjunction with the Quick Guide and not as a standalone document.*

**Testing Recommendations for the Exposed Person (HCV)**

| **Recommendations** | | **Baseline testing** | **Initial follow-up** | **Final follow-up** |
|---|---|---|---|---|
| **PEPline 2017** | HCV+ SP[1]<br>or<br>SP has potential HCV risk factors | HCV Ab[2] | 6 weeks[3]<br>HCV RNA | 6 months (24 weeks)<br>HCV Ab[2, 4-5] |
| | SP HCV status unknown<br>or<br>SP is known and has no known HCV risk factors | | Optional: 6 week HCV RNA | |
| CDC 2016 [6] | | HCV Ab[2] | ≥3 weeks HCV RNA | Optional: ≥6 month HCV Ab[2] |
| CDC 2001 [7] | | HCV Ab and ALT | If earlier diagnosis desired: HCV RNA at 4-6 weeks | 4-6 months<br>HCV Ab and ALT |
| Abbreviations: HCV+ = hepatitis C positive; SP = source person; Ab = antibody; ALT = alanine aminotransferase | | | | |
| **1** For purposes of initial post-exposure management, a source person can be considered HCV+ if either HCV antibody or HCV RNA is positive (RNA is the more accurate indicator, as some people may have positive HCV antibody but are subsequently found to be HCV RNA negative).<br>**2** If HCV antibody is positive at any point, follow-up HCV RNA testing is required. Persons with confirmed positive HCV RNA results should be referred for further evaluation and care. | | | | |

**3** The PEPline recommends initial HCV follow-up test at 6 weeks, to coincide with the first HIV follow-up test. There are no data that establish a clinical advantage to testing at 3 weeks vs. 6 weeks [*Glynn, et al, Busch, et al, Hajarizadeh, et al*]. HCV RNA becomes detectable beginning at 3 weeks. Testing earlier than 6 weeks can be performed at the discretion of the managing clinician, especially if preliminary assessment is needed. Positive HCV RNA indicates likely infection. However, approximately 25% of new infections will clear spontaneously [*Naggie, et al*]. Refer to an experienced provider for additional counseling, testing, and follow-up if positive.

**4** In HCV infection, HCV RNA can be transiently undetectable [*Mosley, et al*]. Additionally, HCV antibodies develop slowly. Therefore, even though an early initial negative HCV RNA can be preliminarily reassuring, the PEPline recommends further HCV antibody testing at 6 months (24 weeks) post-exposure to confirm transmission did not occur.

**5** An interval (i.e. 12-16 week) HCV antibody test may provide some reassurance for exposed persons in many instances (and align with HIV surveillance). However: (a) testing at this time point may not impact overall exposure management significantly, and (b) it is not sufficiently sensitive to completely exclude HCV transmission. Even at 15 weeks, only about 80% of HCV-infected persons will have positive HCV Ab [*MMWR rr5005a1*]. Therefore, the 6 month (24-week) HCV antibody test is considered to be conclusive in excluding HCV acquisition: ≥97% will be positive at 6 months post exposure [*MMWR rr5005a1].*

**6** Updated Information for Healthcare Personnel Potentially Exposed to Hepatitis C Virus (HCV): Recommended Testing and Follow-up (CDC). Nov 2016. Accessed at: http://www.cdc.gov/hepatitis/pdfs/testing-followup-exposed-hc-personnel-3d.pdf.

**7** Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis. MMWR 2001; 50 (RR11): 1-42.

Note regarding exposed persons with symptoms: Symptoms of a viral illness compatible with acute HCV at any point up to 6 months post-exposure should prompt immediate evaluation.
Note regarding availability and feasibility of HCV RNA testing: HCV RNA testing might not be available or feasible at all institutions. If it is not possible to obtain the recommended HCV RNA testing, surveillance using antibody testing is essential in assessing HCV transmission.

Note regarding hepatic enzyme testing: The PEPline does not recommend routine liver enzyme testing for follow-up because of the possibility of abnormal results from causes other than HCV.

References cited:

Busch MP, Shafer KAP. Acute-phase hepatitis C virus infection: implications for research, diagnosis, and treatment. Clin Infect Dis. (2005) 40 (7):959-961.
Glynn SA, Wright DJ, Kleinman SH, et al. Dynamics of viremia in early hepatitis C virus infection. Transfusion. 2005 June; 45(6):994–1002.
Hajarizadeh B, Grebely J, Applegate T, et al. Dynamics of HCV RNA levels during acute hepatitis C virus infection. J Med Virol. 2014 Oct; 86(10): 1722–1729.
Mosley JW, Operskalski EA, Tobler LH, et al. The course of hepatitis C viraemia in transfusion recipients prior to availability of antiviral therapy. J Viral Hepat. 2008 Feb;15(2):120-8.
Naggie S, Holland DP, Sulkowski MS, et al. Hepatitis C virus postexposure prophylaxis in the healthcare worker: why direct-acting antivirals don't change a thing. Clin Infect Dis. 2017 Jan 1;64(1):92-99. Epub 2016 Sep 28.
Recommendations for preventing transmission of infections among chronic hemodialysis patients. MMWR. April 27, 2001;50(RR05):1-43. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5005a1.htm.