HEPATITIS C VIRUS (HCV) - POST EXPOSURE TESTING
(OCUPATIONAL HEALTH)

To be used in conjunction with the Occupational Exposure section of the agency Infection Control Manual

I. DEFINITION:

Hepatitis C is a liver disease caused by the hepatitis C virus: the virus can cause both acute and chronic hepatitis infection, ranging in severity from a mild illness lasting a few weeks to a serious, lifelong illness. The hepatitis C virus (HCV) is a bloodborne virus and the most common modes of infection are through unsafe injection practices; inadequate sterilization of medical equipment; and the transfusion of unscreened blood and blood products. HCV is not transmitted efficiently through occupational exposures to blood. The risks of transmission of HCV after exposure to blood or body fluids infected with HCV are as follows:

- Mucous Membrane Exposure - <1.8%
- Venipuncture, Blood to Blood Exposure - approximately 1.8%

II. LABORATORY TESTING:

A. FOR THE SOURCE

Draw (venipuncture) one serum separator tube (SST) of the source’s blood for baseline testing for HCV RNA test.

The HCV RNA test is used to detect acute hepatitis C virus infection early before the appearance of HCV antibodies appear in the serum (i.e., <2 months from exposure), detection and confirmation of chronic HCV infection, and quantification of HCV RNA in serum (viral load) of persons with chronic HCV infection. The source must consent to having their blood drawn and tested related to this exposure using (ODH 887) Bloodborne Pathogens Post-Exposure Blood Collection and Testing of Source Person Consent.

Note: The hepatitis C (HCV RNA) test and hepatitis B antigen test cannot be run using the same tube of blood. One SST tube of blood is required for the hepatitis B antigen (HbsAg) test and a separate SST tube of blood is required for the HCV RNA test.

B. FOR THE EXPOSED EMPLOYEE

1. All employees who have a BBP occupational exposure are encouraged to participate in baseline serology testing. The employee must elect to consent or decline to having their blood specimens collected for baseline testing using (ODH1087) Bloodborne Pathogen Post-Exposure Consent Declination Form to document the employee’s choice.

2. With the employee’s signed consent, draw (venipuncture) two full serum separator tubes of the employee’s blood for baseline anti-HCV testing through the contract lab. This baseline test should be done within 48 hours of the exposure.

3. Order anti-HCV with reflex to HCV RNA lab testing as the employee’s baseline lab test. Note: The Anti-HCV and HbsAb can be run on one tube of blood and a second tube will be needed for the reflex HCV-RNA.

4. If the employee’s baseline anti-HCV test is negative, follow-up testing at ≥ 3 weeks after the exposure with HCV RNA testing on one serum separator tube of the employee’s blood.

5. If the employee’s follow-up HCV RNA lab result is positive, refer the employee to PCP for further care.
6. If employee’s baseline anti-HCV and HCV RNA test are both positive, refer the employee to their PCP for care of the pre-existing chronic infection.

7. If the employee’s baseline anti-HCV is positive and the baseline HCV RNA test is negative, follow up with additional HCV RNA testing ≥3 weeks after exposure.

8. If the employee’s baseline anti-HCV is positive and both the reflex and follow-up HCV RNA test are negative, additional testing for hepatitis C is not needed.

9. All lab test results are documented on the Employee Health Specimen Log.

C. SPECIAL CONSIDERATIONS

1. All positive anti-HCV baseline test results on employees must be followed up with HCV RNA testing to rule out a false positive anti-HCV test.

D. MANAGEMENT FOR THE EXPOSED EMPLOYEE:

1. In the absence of PEP for HCV, recommendations for post exposure management are intended to achieve early identification of chronic disease through monitoring for symptoms of viral illness and additional serology testing. If post exposure follow-up on the exposed employee indicates the presence of HCV, immediately contact your District Nurse Manager and/or Nursing Service (405-271-5183) for further assistance in getting exposed employee referred for medical management from an Infectious Disease Specialist.

2. All employees who convert to an acute positive hepatitis C infection following an occupational exposure should be evaluated by a provider with expertise in assessment of liver disease severity and HCV treatment.

3. Provide employee centered counseling:

   a. The employee exposed to HCV infected blood does not need to take any special precautions to prevent secondary transmission during the follow-up period; however, they should refrain from donating blood, plasma, organs, tissue, or semen.

   b. The exposed employee does not need to modify sexual practices or refrain from becoming pregnant.

   c. If the exposed woman is breastfeeding, she does not need to discontinue.

   d. Modification to the exposed employee’s patient-care responsibilities are not necessary to prevent transmission to clients solely based on their exposure to HCV positive blood.

FOR THE SOURCE:

Refer clients with positive HCV RNA test results to their PCP for further testing and follow-up.

REFERENCE:
