



michigan municipal league

Liability & Property Pool Workers' Compensation Fund

RISK CONTROL SOLUTIONS

A Service of the Michigan Municipal League Liability and Property Pool and
the Michigan Municipal League Workers' Compensation Fund

PROTECTING YOUR EMPLOYEES FROM HEPATITIS C

The individuals who serve your community as police officers, firefighters and EMS face many hazards on the job. One of these hazards is exposure to communicable diseases that are spread by blood and other bodily fluids. Exposure to these communicable diseases places not only the employee but also his or her family at risk. Among these diseases is chronic Hepatitis C. (HCV)



HEPATITIS C

A healthy liver is essential because the organ does many things to keep people alive. The liver fights infections and stops bleeding. It removes drugs and other poisons from the blood. The liver also stores energy for when a person needs it.

Hepatitis C (HCV) is a liver disease. Hepatitis (HEP-ah-TY-tis) makes the liver swell and stops it from working properly. The cause of Hepatitis C is a virus, a germ that causes sickness. For example, a virus causes the flu. People can pass viruses to each other in many different ways.

People can contact Hepatitis C ONLY IF THEY CONTACT THE BLOOD OF AN INFECTED PERSON.

CONTRACTING HEPATITIS C

The most common form of transmission for Hepatitis C is through an intravenous drug needle (IV). In fact, most cases (60-90%) are IV drug-related. Even if an individual experimented a few times many years ago, he or she has a significant chance of contracting the disease.

Individuals may also contract the disease if,

- They received treatment for clotting problems with a blood product made before 1987,
- They received a blood transfusion or solid organ transplant (e.g., Kidney, liver, heart) from an infected donor,
- They were ever on long-term kidney dialysis,
- Their mothers had Hepatitis C when she gave birth to you (6% chance of spreading infection),
- They ever had sex with a person who had HCV,
- They lived with someone who had the infection and shared items such as razors or toothbrushes that might have had blood on them.
- They were ever health care workers, police officers or firefighters and had frequent contact with blood in the work place, especially accidental needlesticks.

People **CANNOT** get Hepatitis C by:

- Shaking hands with a person who has HCV.
- Hugging a person who has HCV.

- Kissing a person who has HCV.
- Sitting next to a person who has HCV.
- Sharing eating utensils or drinking glasses with a person who has HCV.
- Casual contact with a person who has HCV.
- Food or water.

KNOW THE SYMPTOMS OF HCV

Symptoms of the disease can vary. Many people with Hepatitis C don't have symptoms. However, some people with Hepatitis C feel like they have the flu. Therefore, a person might:

- Feel tired.
- Feel sick to your stomach.
- Have a fever.
- Not want to eat.
- Have stomach pain.
- Have diarrhea.

In more severe cases people may have:

- Dark yellow urine
- Light-colored stools
- Yellowish eyes and skin

Although Hepatitis C is serious for some people, it is not for others. Although infected people carry the virus in their system for the rest of their lives, most of these persons have a normal life span. However, in approximately 20 percent of the people with chronic Hepatitis C infection, the disease gradually progresses over 10 to 30 years and leads to permanent scarring of the liver. And, in a small number of those people, HCV can lead to cancer of the liver and/or death. Currently, Hepatitis C is responsible for about 8,000 to 10,000 deaths each year in the United States and is the number one cause of liver transplantation. This is why, if you suspect that you may have Hepatitis C or fit any of the risk factors, you should go see your doctor and get tested.

METHODS OF DETECTING HEPATITIS C

Blood tests are the only means of detecting Hepatitis C. The tests show if a person has Hepatitis C and how serious it is. Sometimes, the test can show that a person has the virus even when he or she doesn't. This can happen in people with very low risk of having disease. The opposite can happen also. The test may show a person doesn't have the virus although he or she does. That's why a person should have testing twice, three to six months apart, whether he or she is positive or negative the first time. If the two separate tests, three to six months apart, indicate the absence of the virus, then there is no cause for worry. If the test comes back positive both times or if it comes back positive the first time and you have a large number of risk factors, the doctor will do further studies. Usually, doctors will measure the level of ALT (alanine aminotransferase, a liver enzyme) in the blood. An elevated ALT indicates inflammation of the liver and the person should be checked further for chronic (long-term) liver disease and possible treatment. The doctor may also do a liver biopsy. Biopsy (BYE-op-see) is a simple test. The doctor removes a tiny piece of the liver through a needle. The doctor checks the piece of liver for signs of Hepatitis C and damage and then determines what treatment the person should receive. A healthcare professional familiar with chronic Hepatitis C should do all of these evaluations.

TREATING HEPATITIS C



Healthcare professionals treat Hepatitis C with a drug called Interferon administered through shots. If the drug does not work after three months, the doctor will stop the treatment. If the drug does work, the treatment will continue for a year. Interferon doesn't work for everyone, so doctors are developing and testing other drugs.

A person who had Hepatitis C for many years may need surgery. Over time, Hepatitis C can cause the liver to stop working. If that happens, the person will need a new liver. The surgery is called a liver transplant. It involves taking out the old, damaged liver and putting in a new, healthy one from a donor.

PROTECTING AGAINST HEPATITIS C

Most people can protect themselves and others from Hepatitis C by:

- Not sharing drug needles with anyone.
- Not using an infected person's toothbrush, razor, or any item that might have blood on it.
- Making sure that clean tools are in use when getting a tattoo or body piercing.
- Using condoms if they or their partner has Hepatitis C.
- Not donating blood or plasma. The person who receives it could become infected with the virus.



Because firefighters, EMS, and police have a higher risk of exposure, protection must include:

- Infection control training,
- Instruction in the department's standard operating procedures for handling situations in which exposure to blood or other bodily fluids is likely, including appropriate personal protective equipment, and
- Training in post-exposure procedures.

The following are general guidelines for protecting against contracting Hepatitis C:

- Always use gloves: if there is blood or body fluids, assume it's infectious.
- Wear disposable medical gloves during any person-to-person contact when the potential exists for contact with blood, body fluids, non-intact skin or other infectious material.
- Use a mask and eye shields. If blood or body fluids could splash onto the face, use eye shields and mask or full-face shield. Achieve facial protection by using both a face mask and eye protection, or by using a full-face shield. If airborne particles are likely, both the employee and the patient should wear masks.
- Use a gown or fire fighting gear: fluid-resistant gowns protect clothing from splashes. Structural fire fighting gear also protects clothing from splashes and is preferable in fire, rescue, or vehicle extrication activities.
- If blood or body fluids could splash on the head or feet, use appropriate barrier protection. Under certain circumstances, head covers and/or shoe covers should be required to protect these areas from potential contamination. Structural fire fighting gear (boots, helmets) may be used for barrier protection.

In addition, all personnel who provide emergency or health services must complete:

- Initial infection control training at the time of assignment to tasks where occupational exposure may occur.
- Refresher infection control training at least annually thereafter.

All materials for training employees in infection control must be appropriate in content and vocabulary to the educational level, literacy, and language of members receiving training.

Training must OSHA Regulation 29 CFR Part 1910.1030 (and for firefighters with NFPA Standard 1581) and shall include:

- An accessible copy of 20 CFR Part 1910.1030 and an explanation of its contents.
- A general explanation of the epidemiology and symptoms of bloodborne diseases.
- An explanation of the modes of transmission of bloodborne pathogens.
- An explanation of the department exposure control plan and how the employee can obtain a copy.
- An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
- Information on the types, proper use, location, removal, handling, decontamination and the disposal of personal protective equipment.
- An explanation of the basis for selection of personal protective equipment.
- Information on the hepatitis B vaccine, including information on its efficacy, safety, and the benefits of being vaccinated and notification that the vaccine and vaccination will be provided at no charge.
- Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials.
- An explanation of the procedure to follow if an exposure occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- Information on the post-exposure evaluation and follow-up that the department is required to provide following an exposure incident.
- An explanation of the signs and labels and/or color-coding required for biohazard materials as well as information on the proper storage and disposal of biohazard materials.
- Opportunity for interactive questions and answers.



Infection control trainers must be knowledgeable in all of the program elements listed above, particularly as they relate to emergency services provided by the specific department.

Each department should maintain written records of all training sessions for three years after the date on which the training occurs. Training records will include:

- The dates of the training sessions.
- The contents or a summary of the training sessions.
- The names and qualifications of persons conducting the training.
- The names and job titles of all person attending the training sessions.

BEST-PRACTICE RECOMMENDATIONS

It is important to promote testing of all personnel **TO ESTABLISH A BASELINE**. The combination of improved prevention techniques, more complete exposure documentation, and baseline testing will greatly aid in proving on-the-job infection for future illness. And, of course, a positive result will allow treatment to begin at the earliest possible time to avoid the beginning of, or progression of, liver damage.

For more information about occupational health concerns, request a copy of "Occupational Health Concerns: An Overview," available from:

- MML Risk Management Services at 800/653-2483; or
- The League's Loss Control Services at 800/482-0626.

NOTE: This document is not intended to be legal advice or implied to identify all occupational health concerns. Public agencies are encouraged to contact a specialist for assistance in implementing these or other changes.