Preventing Acquisition and Spread of Hepatitis A in the Workplace

This WorkCare Fact Sheet discusses hepatitis A exposure risks, symptoms, treatment and prevention.

Hepatitis A is a highly contagious liver infection caused by the hepatitis A virus (HAV). It can affect the liver's ability to produce nutrients, filter toxins in the blood and fight infection.

Illness severity can range from mild to severe. Almost all people who get hepatitis A recover completely and do not have any lasting liver damage. However, some people feel ill for months, and an outbreak can have serious economic and social ripple effects.

Unlike types B and C, hepatitis A is a self-limiting disease that does not result in chronic infection. Antibodies the body produces in response to HAV last for life and protect against reinfection.

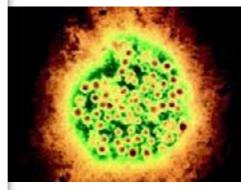
Exposure Risk

HAV is able to survive the body's highly acidic digestive tract and can live externally for months. It is one of the most frequent causes of foodborne infection worldwide. While high temperatures such as boiling or cooking food or liquids for at least one minute at 185°F (85°C) kills the virus, freezing temperatures do not.

HAV is most commonly found in regions where there are poor sanitary conditions. In the U.S., the rate of reported HAV cases was 1,390 per 100,000 population in 2015. The actual rate is higher because many cases are not reported. According to the Centers for Disease Control and Prevention (CDC), infection rates reached a 40-year low in 2014, largely because of vaccinations and other preventive interventions.

Since March 2017, the CDC Division of Viral Hepatitis has been assisting several state and local health departments with hepatitis A outbreaks attributed to person-to-person contact primarily in homeless populations and among people who use injection and non-injection drugs. Information on local hepatitis A case counts and outbreak response is available on web pages for the locations affected by the outbreak. Affected states include California, Michigan and Utah.

HAV is usually spread when a person touches feces or a contaminated object and then their mouth, or consumes food products or beverages contaminated by the feces of an infected person. Foods can become contaminated at any point, from planting and growing, to picking and packaging. Likely hosts for the virus at a microscopic level include fruits, vegetables, shellfish, ice and water.



Hepatitis A virus magnified. **Source:** www.cdc.gov





A person can get hepatitis A:

- From an infected person who does not thoroughly wash his or her hands after going to the bathroom and then touches objects or food products
- When a parent or caregiver does not properly wash his or her hands after changing diapers or cleaning up the stool of an infected person
- When someone has sexual contact with an infected person

Exposure risk is also greater for those who use recreational drugs or have clotting-factor disorders such as hemophilia.

Symptoms

Adults are more likely to have symptoms than children. Symptoms may include:

- Fever
- Dark urine
- Fatigue
- Clay-colored bowel movements
- Loss of appetite

- Joint pain
- Nausea
- Jaundice (yellow skin or eyes)
- Vomiting
- Abdominal pain

If symptoms occur, they usually appear two to six weeks after exposure. Symptoms typically develop over a period of several days and last less than two months, although some people can be ill for as long as six months. A person can transmit the virus to others up to two weeks before symptoms appear.

Diagnosis and Treatment

A blood test is used to verify the presence of hepatitis A. The evaluating clinician will also ask about symptoms and suspected exposure routes.

A medical professional should be consulted when exposure is suspected but symptoms have not developed. If the potentially exposed person has not previously received an HAV vaccination, an injection of immune globulin, which helps produce antibodies in the short term, or hepatitis A vaccine may be recommended—as long as administration occurs within the first two weeks following suspected exposure.

There are no special treatments for hepatitis A. During recovery, rest, adequate nutrition and fluids are recommended. People with hepatitis A should check with a medical professional before taking any prescription medication, supplements or over-the-counter remedies to avoid potential effects on the liver. Alcohol, which is linked to liver damage, should be avoided.





Prevention

Vaccination is believed to be the best way to prevent hepatitis A. Vaccination is recommended for all children at age 1 year and for:

- · Travelers to countries with high rates of hepatitis A
- Men who have sexual contact with other men
- Users of injection and non-injection recreational drugs
- People with chronic liver diseases such as hepatitis B or C
- People who are treated with clotting-factor concentrates
- People who work with hepatitis A-infected animals or in a hepatitis A research lab

The vaccine contains inactive virus that stimulates the body's natural immune system to produce antibodies against the virus. The vaccine is given as two shots in six-month intervals. A combination hepatitis A and B vaccine may be given to adults over 18 as three shots over a six-month period. (There is no vaccine for hepatitis C.) No serious side effects have been reported from the hepatitis A vaccine. Soreness at the injection site may be experienced.

Travel Health

Prospective travelers are advised to consult with a travel health specialist before visiting any region with elevated hepatitis A exposure risk. Vaccination or a shot of immune globulin may be recommended before traveling to countries in Central or South America, Mexico and certain parts of Asia, Africa and Eastern Europe. Risk for infection increases with duration of travel and is highest for those who live in or visit rural areas, trek in back-country areas, or frequently eat or drink in settings with poor sanitation.

The first dose of hepatitis A vaccine should be given as soon as travel is planned. Two weeks or more before departure is optimal, but any time before travel provides some protection, according to TravelCare® professionals at WorkCare.

In the U.S., chlorination is used to kill HAV in public water supplies. Sealed, bottled water is considered a safe alternative for ice, drinking and brushing teeth in less-developed countries. Travelers also can minimize their risk by avoiding uncooked shellfish and fresh fruits or vegetables that are not peeled or prepared by the traveler.

Other preventive measures include global solutions to improve sanitary conditions and provide immunizations in affected regions.

Routine precautions to help prevent the spread of disease include frequent handwashing with soap and warm water, especially after using the bathroom, changing a diaper or cleaning up feces, and before handling food products.

Resources

Hepatitis A:

- 1. <u>Centers for Disease Control</u> and Prevention
- 2. World Health Organization

Travelers' Health:

- 1. www.cdc.gov/travel/
 www.cdc.gov/travel/
 yellowBookCH4-HepA.aspx
- 2. WorkCare Inc. TravelCare®



