



**FOOD MARKETING INSTITUTE**  
**HEPATITIS A INFORMATION GUIDE**

# Hepatitis A Information Guide

FMI now offers a concise guide on Hepatitis A. If you are notified that an employee has Hepatitis A, you need answers. Is the food in my store safe? Are the other employees at risk? What about the customers? This guide will help answer these and other questions. Included in the guide is a checklist of actions to take from notifying the Health Department to undertaking vaccination programs.

This publication is available as a PDF that can be downloaded from the FMI web site at no cost. For copies, visit [www.fmi.org/foodsafety/](http://www.fmi.org/foodsafety/). For bulk requests of printed copies of 100 or more, the cost is \$3.00 each. To order or to obtain more information, please call FMI's Food Safety Programs department at 202-220-0661.



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## Introduction

Hepatitis A is a worldwide infectious disease of the liver caused by the hepatitis A virus (HAV). HAV infection causes inflammation of the liver. The illness is usually mild and characterized by a sudden onset of fever, fatigue, nausea, loss of appetite and abdominal discomfort, followed in several days by jaundice (yellowing of the eyes and skin). When symptoms occur, they usually last fewer than two months, although 10-15 percent of infected people have a prolonged or relapsing disease that can persist for up to six months.

There are several types of viral hepatitis each designated by a letter. The most common types are designated A, B, C and D. Infections by type A are the least serious and can be transmitted by contaminated foods. The other major types are blood-borne or sexually transmitted diseases and are not contracted by eating food.

The incubation period — the time from initial exposure to the virus to the onset of symptoms — ranges from 15 to 60 days. *About half of the infected people never show signs of the illness, but they can still spread the virus.* This often happens with young children, who pass it on to other children and to adults. Only by a blood test can a hepatitis A diagnosis be confirmed.

People who have had hepatitis A acquire lifelong immunity to HAV. About 30 percent of the U.S. population is immune — either from previous exposure to the virus or through vaccination. In the United States, about 180,000 people are infected with hepatitis A yearly and 100 die. Most deaths occur among the elderly and people whose immune systems are compromised.

## Source and Transmission

The virus spreads from person to person because humans are the only known host and initial source of transmission. The virus is shed in the feces (stool), from which it can spread to the hands and to anything the hands touch. The virus can spread undetected from unwashed hands especially after people use the restroom or change a baby's diaper. It can also be transmitted through sewage.

Up to 25 percent of infections are acquired from close household contact. Daycare facilities, especially where diapers are changed, account for 11-16 percent of infections. International travel to countries where hepatitis A is more common is another source of exposure. Only 2-3 percent of infections are due to contact with food and water.

Although food and water do not naturally carry the virus, they can spread it after being contaminated by an infected person. Some of the ways this can happen are:

- *Infected food-handlers can pass on the virus if they do not wash their hands with soap and water after a bowel movement — especially when preparing uncooked foods.*
- *Eating raw or partially cooked shellfish that were harvested from waters contaminated with human waste or sewage containing the virus.*
- *Eating raw fruits, vegetables or other foods that were contaminated during growing, harvesting, processing or handling.*
- *Eating foods that were contaminated after cooking.*

The virus can survive outside the human body on food and surfaces for a long time. It can survive for several days under refrigeration and is not destroyed by freezing. The virus is killed when heated to 185°F (85°C) for one minute, and sanitizing solutions such as chlorine can kill it.

In summary, people are infected by hepatitis A by putting something in the mouth that was contaminated from the stool of an infected person. For this reason, the virus is more easily spread under poor sanitary conditions and by infected people who are not careful about washing their hands.

## **Control and Prevention**

*World health officials agree that routine vaccination of children is the most effective way to reduce hepatitis A. In the short term, vigorous hand-washing is one of the most important methods for containing its spread of the virus.*

The hepatitis A vaccine provides long-term protection. It is licensed for use in people aged two and older, and must be given prior to exposure to the virus. Two shots are needed to assure complete protection which begins about four weeks after the first vaccination.

The vaccine is recommended for persons who are more likely to contract hepatitis or who are more likely to grow seriously ill if infected. The vaccine is recommended for:

- Children living in communities with high rates of hepatitis A, such as native villages in Alaska and American Indian reservations.
- Persons who travel to or work in areas where hepatitis A is common. The first dose should be given at least four weeks before travel.
- Men who have sex with men.
- People with chronic liver disease.
- People who conduct HAV research.
- People who inject illegal drugs.
- People with blood-clotting disorders, such as hemophilia

Another type of injection — immune globulin (IG) — can provide protection for three to five months or lessen illness if given immediately after exposure to the virus. It can protect people only if it is administered within 14 days of exposure. Sometimes IG is used during an outbreak to reduce the spread of hepatitis A throughout a community and to lessen the severity of the illness.

To prevent person-to-person spread, good hygiene and proper sanitation are paramount. Always wash hands vigorously with soap and warm water after using the toilet or changing a diaper and before preparing or eating food.

## Hepatitis A and Food-Handlers

Foodborne hepatitis A outbreaks are relatively uncommon in the United States. When they occur, however, intensive public health action may be required to contain them.

Food-handlers play a critical role in preventing the spread of foodborne hepatitis. Although their occupation does not increase their own risk of HAV infection, they must bear in mind that any food item can be a carrier of the virus. The most common sources are raw and undercooked shellfish harvested from polluted waters. Ready-to-eat foods can be contaminated when handled by a person who is shedding the virus. Cold cuts and sandwiches, fresh-squeezed juices, raw fruits and vegetables, and salads have also been implicated in outbreaks. Water can be contaminated from sewage or other sources of human feces. Contamination of food by infected workers in restaurants is also a source of hepatitis A infection.

*The single, most critical way that food-handlers can prevent the spread of HAV is to wash hands thoroughly and often* — upon arriving at work, after using the toilet, after breaks and at many other times during food preparation.

As a general precaution for all communicable diseases, employees who handle food should be monitored for early signs of illness. Be observant when greeting employees and managers. Watch for symptoms such as coughing, sneezing and vomiting, and complaints of sore throat, cramps or diarrhea. Symptoms more specific to hepatitis include fever, fatigue, nausea and abdominal discomfort. These symptoms are sometimes followed by jaundice (yellowing of the eyes and skin). When these signs appear, an HAV diagnosis can be confirmed by a blood test.

By the time a person with HAV exhibits symptoms, then he/she have already been shedding the virus in their stool for at least the previous two weeks. He/she may continue to pass the virus for another week after the symptoms have appeared. Given the virus's long incubation period, people who may have been exposed should be on the alert for early warning signs of the disease.

## Suspected or Confirmed Cases

If food-handlers have any signs of hepatitis A, show concern for their condition, and ask how long the symptoms have existed and whether they are under medical care. At this point, it is imperative to use good judgment and, if necessary, remove the employee from work — or at least from a food-handling position — until they have received a written release from a physician.

If employees undergo medical treatment and say they are *suspected* of having hepatitis, take the following steps:

- Exclude them from work until they have a medical release.
- Find out if the diagnosis is confirmed and what type of hepatitis they have. For food safety reasons, you need to know if the person is diagnosed with type A. Ask the employees for permission to have the physician or laboratory release the test results to the food store's management.
- Place greater emphasis on personal hygiene in the food store. Encourage more rigorous attention to proper hand-washing, food-handling and sanitation practices.

- Pay special attention to the health of other employees — particularly those who may have close personal contact with workers suspected of having hepatitis. Casual contact, such as working together, does not increase the risk of infection. It is possible, however, that others may have been exposed by contacting a common source such as food or water.

It is important to note that the time when an infected person most likely passes the virus in their stool is during the two weeks prior to the onset of the symptoms and about one week afterwards. Thus, employees who were not at work at least 14 days before the person developed symptoms are at little or no risk of contaminating food. If the diagnosis of hepatitis A is *confirmed*, take the following additional steps.

- Since *hepatitis A is a reportable disease*, the attending physician must notify the health department.
- Employees should be encouraged – not penalized – for notifying store management about suspected or confirmed illness due to HAV. Store management should notify the Health Department of an employee-related HAV illness.
- Identify all the tasks the infected person performed at least the 14 days before the onset of symptoms.
- Identify any other employees who may have had close personal contact with the infected person, including co-workers and household members. Strongly advise them to consult their physician and receive an immune globulin injection.
- Make all employees aware of the symptoms of hepatitis and the need to inform management if they develop any of them. To promote understanding and to prevent apprehension, consider working with the health department or a local clinic to educate employees about hepatitis A control and prevention.
- Take stringent steps to reinforce the importance of thorough hand-washing. Appropriate actions include holding employee meetings, posting signs in work areas, adopting mandatory hand-washing schedules and routinely checking that workers are abiding by these rules.
- Take all reasonable efforts to minimize direct handling of food — particularly food that receives no further cooking. Emphasize and monitor the use of disposable gloves or utensils.
- Infected employee should be allowed to return to work only after receiving a medical release from the attending physician or after consulting with the health agency.

All extra preventive measures should be continued for *60 days* after the last case — the maximum incubation period for hepatitis A. After that time — and if no other person has contracted hepatitis A — it is safe to assume that efforts have been successful to prevent the spread of the virus within the food operation.

The health department may offer immune globulin injections to people at risk for contracting hepatitis A during an outbreak or following a confirmed case. Some health officials may request the food handlers receive HAV vaccinations in locales where outbreaks are recurring and where it is cost-effective as a control mechanism.

# **Additional Information about Hepatitis A**

**Centers for Disease Control and Prevention (CDC)**

**Hepatitis Hotline: 1-888-4HEPCDC**

<http://www.cdc.gov/ncidod/diseases/hepatitis/a/index.htm>

**American Liver Foundation**

**1-800-GoLiver or 1-888-4HEPABC**

<http://www.liverfoundation.org>

**Hepatitis Foundation International**

**1-800-891-0707**

<http://www.hepfi.org/Hepinfo/HAV.htm>

## **Vaccine Information**

**HAVRIX®**

GlaxoSmithKline

Manufactured by SmithKline Beecham Biologicals

Rixensart, Belgium

Distributed by SmithKline Beecham Pharmaceuticals, Philadelphia, PA

1-888-825-5249

**VAQTA®**

Manufactured by Merck and Co., Inc.

West Point, PA

[http://www.merck.com/product/usa/pi\\_circulars/v/varivax/7999909.pdf](http://www.merck.com/product/usa/pi_circulars/v/varivax/7999909.pdf)

# Hepatitis A Checklist

- \_\_\_ Look for signs or symptoms of hepatitis A.
  - Fever
  - Tiredness
  - Loss of appetite
  - Nausea, vomiting and/or stomach ache
  - Jaundice (yellowing of the skin and eyes)
- \_\_\_ Ask how long the symptoms have persisted and whether the person is under medical care.
- \_\_\_ If necessary, remove the employee from work, or at least from any food-handling position.
- \_\_\_ Exclude the employee from work until he/she has a medical release.
- \_\_\_ Place greater emphasis on personal hygiene in the store. Encourage more rigorous attention to proper hand-washing, food-handling and sanitation practices.
- \_\_\_ Pay special attention to the health of other employees, particularly those who may have close personal contact with the individual suspected of having hepatitis A. It is possible for more than one employee to contract hepatitis from the same source.
- \_\_\_ If a physician or laboratory confirms that the employee does not have hepatitis A, then the potential for food contamination by the ill employee is not an issue.

**If an employee is diagnosed with hepatitis A, the following actions are recommended:**

- \_\_\_ Notify the health department and offer full cooperation. Since hepatitis A is a reportable disease, the health department may already know about the confirmed case. *Expect a visit from a health department investigator.*
- \_\_\_ Document all tasks performed by the employee for at least 14 days before the onset of symptoms.
- \_\_\_ Pay particular attention to any tasks in which the employee handled ready-to-eat foods. Document the sanitation and hand-washing practices during the performance of these tasks.
- \_\_\_ Make other employees aware of the symptoms of hepatitis A and the need to inform management if they develop any of them. Consider working with a local health organization or clinic to educate employees how to control and prevent hepatitis A.
- \_\_\_ Continue to monitor employees for any symptoms of hepatitis. Because symptoms may not appear for as long as two months after exposure to the virus, be vigilant for at least 60 days.
- \_\_\_ During this time, enforce stringent hand-washing and sanitation procedures throughout the store.
- \_\_\_ Allow the infected employee to return to work only after receiving a medical release from the attending physician or after consulting with the local health department.