



Hepatitis A Information Guide for Food Retail

The FMI Hepatitis A Information Guide for Food Retail offers practical and concise guidance on how to respond to, and prevent, Hepatitis A infections within food retail establishments. This guide will answer food retailer questions regarding food safety, consumer and employee risks of infections from the Hepatitis A virus in the food retail setting. To reduce the likelihood of foodborne illness, the food industry must take actionable steps to address the risk of Hepatitis A during growing, harvesting, processing, preparation and service to prevent Hepatitis A contamination and protect the food supply for all customers.

This guide will address the following:

- ▶ What is Hepatitis A?
- ▶ What are the symptoms of Hepatitis A?
- ▶ How is Hepatitis A transmitted?
- ▶ Who are the most at-risk populations?
- ▶ Why is the Hepatitis A virus a concern for the retail food industry?
- ▶ How can the Hepatitis A virus be prevented?
- ▶ How should food retailers respond to a suspected or confirmed Hepatitis A diagnosis?

What is Hepatitis A?

Hepatitis A is an infectious disease of the liver caused by the Hepatitis A virus.^{1,2} This virus is typically transmitted from person-to-person through the fecal-oral route or consuming contaminated food or drink.² Foodborne illness from Hepatitis A can be prevented by delivering the Hepatitis A vaccine; practicing proper handwashing and good personal hygiene; developing strong food safety and sanitation programs; avoiding bare hand contact with ready-to-eat foods; and excluding food workers who have been diagnosed with Hepatitis A from working.² Each of these topics will be covered in greater detail throughout this guide.

What are the symptoms of Hepatitis A?

The symptoms of Hepatitis A infections include a sudden onset of fever, fatigue, nausea, loss of appetite, vomiting, abdominal pain, dark urine, diarrhea, clay-colored stools, joint pain, and followed within several days by jaundice (yellowing of the eyes and skin).² Typically, symptoms appear about four weeks after exposure and usually last less than two months, although 10-15% of infected people have a prolonged or relapsing disease with symptoms lasting up to six months.² Furthermore, Hepatitis A is highly contagious and an infected person can transmit Hepatitis A to others for up to two weeks before symptoms appear.²

Any employee infected with Hepatitis A, whether or not they are exhibiting symptoms, is a risk to food safety and is putting public health in danger. An infected food worker is the most common way Hepatitis A is transmitted in foodborne illness outbreaks. Therefore, employees who are diagnosed with Hepatitis A or employees with symptoms associated with Hepatitis A (i.e., jaundice, diarrhea, vomiting, fever, etc.) should be excluded from working in a food establishment.



Photo credit: Centers for Disease and Control and Prevention

Hepatitis A symptoms include:

- ▶ Fever
- ▶ Fatigue
- ▶ Nausea
- ▶ Loss of appetite
- ▶ Vomiting
- ▶ Abdominal pain
- ▶ Dark urine
- ▶ Diarrhea
- ▶ Clay-colored stools
- ▶ Joint pain
- ▶ Jaundice

How is Hepatitis A transmitted?

Hepatitis A is typically transmitted from person-to-person by the fecal-oral route or consuming contaminated food or beverages.² The fecal-oral route simply means that something has been contaminated with the feces of an infected person and is subsequently ingested through the mouth of an uninfected person.² Fecal contamination can occur when individuals practice poor personal hygiene or improperly wash their hands. In the United States, the fecal-oral route is the most common pathway for Hepatitis A to spread among populations.² Hepatitis A is thought to have a low infective dose and illness can result from ingesting only a few viral particles. Furthermore, infected persons can spread the virus to uninfected persons. Some of the most common transmission examples include:



- ▶ Eating raw or partially cooked shellfish that were harvested from water contaminated with human waste or sewage containing the virus.
- ▶ Infected food handlers can pass on the virus if they prepare food and do not practice proper hand washing with soap and water, especially after using the restroom. (Ill food workers shouldn't handle food.)
- ▶ Eating raw or frozen fruits or vegetables that were contaminated during growing, harvesting, processing or handling.
- ▶ Eating foods that were contaminated after proper cooking procedures were administered.
- ▶ Consuming inadequately treated water or sewage water.

Who are the most at-risk populations?

Individuals who have not received the Hepatitis A vaccine are at a greater risk of becoming infected with the virus.¹ However, people who are most at risk include:

- ▶ People with direct contact with someone who has Hepatitis A.
- ▶ People who use drugs, both injection and non-injection drugs.
- ▶ Travelers to a country where Hepatitis A is common.
- ▶ Men who have sexual contact with men.
- ▶ Household members or caregivers of a recent adoptee from a country where Hepatitis A is common.
- ▶ People with clotting factor disorders, such as hemophilia.
- ▶ People working with non-human primates.
- ▶ Daycare workers who may change infant diapers.

For more information on at-risk populations, please consult with your local health department or visit the CDC resource: [Hepatitis A Questions and Answers for Health Professionals](#)

Why is the Hepatitis A virus a concern for the retail food industry?

Hepatitis A is a public health threat that is impacting many communities across the U.S. Between 2016 and 2018 the number of cases of Hepatitis A increased 294% compared to the number of cases between 2013 and 2015. In 2016, there were an estimated 4,000 Hepatitis A cases in the United States. From 1995 (when the Hepatitis A vaccine first became available) to 2016, the Hepatitis A infection rate declined by more than 95%.⁴ However, since 2016 there has been a substantial increase in the number of Hepatitis A cases reported.⁴ While some of these cases were due to several large, multi-state foodborne outbreaks of Hepatitis A associated with imported produce, other cases were due to the increasing number of Hepatitis A outbreaks that have occurred in food establishments associated with infected food workers.

Food handlers and managers play a critical role in preventing the spread of Hepatitis A virus

The Hepatitis A virus presents a challenge for the entire food industry. Contamination of food, whether frozen, raw or ready-to-eat, can occur at any step in the supply chain—from farm to fork. The Hepatitis A virus is not destroyed at the temperatures necessary for proper cooking. The Hepatitis A virus is destroyed at high temperatures, such as boiling or cooking food or liquids for at least one minute at a temperature of 185°F (85°C) or above. The virus can withstand refrigeration temperatures and is not destroyed by freezing. Furthermore, the virus can survive outside the human body on surfaces, including food, for several days.²

Infected food workers present another challenge due to the long incubation period of the Hepatitis A virus. It takes several weeks before an individual who is infected with Hepatitis A to show any symptoms. Prior to the onset of symptoms, an individual may feel well, but are unaware they have been infected with Hepatitis A, so they continue to work. During this period, although asymptomatic, the infected individual is highly contagious and can spread the virus.

How can the Hepatitis A virus be prevented?

Food handlers and managers play a critical role in preventing the spread of Hepatitis A virus. Although their occupation does not increase their own risk of Hepatitis A infection, they must bear in mind that any food item or person can carry the virus. Furthermore, public health agencies across the country have correlated a rise in the use of injection and non-injection drugs with a rise in Hepatitis A infections, so it is important for retailers to be aware of the dangers within their communities. This is not just a crisis that impacts urban communities, but rather every community across the nation.^{5,6}



Retailers can take the following actions to proactively prevent the transmission of Hepatitis A by offering food workers the Hepatitis A vaccine; ensuring food workers are practicing proper handwashing, avoiding bare hand contact with ready-to-eat food, and practicing good personal hygiene; developing and implementing strong food safety and sanitation programs; and excluding food workers diagnosed with Hepatitis A from work.



Prevention Step #1

Proactively offer food handlers the Hepatitis A vaccine

Hepatitis A is the only foodborne illness that can be prevented by a safe and effective vaccination.² The Hepatitis A vaccine is the most effective way to prevent transmission of the Hepatitis A virus. The vaccination first became available in 1995. The Hepatitis A vaccine is a two-dose vaccine meaning that individuals should receive two shots with the second shot being administered 6-18 months after the first shot.² Even if the second dose of the vaccine cannot be assured, receiving one-dose of the vaccine can provide protection for healthy individuals and may last for up to 10 years.²

Alternatively, if the Hepatitis A vaccine is not available an immune globulin (IG) can be administered by a healthcare professional. IG is a sterile preparation of concentrated antibodies. Depending on the dosage, IG can provide short term protection for one to two months.² IG can also be administered as postexposure prophylaxis to individuals who have been exposed to Hepatitis A and are not vaccinated. For postexposure prophylaxis, IG should be given within two weeks after exposure for the greatest protection.²

- ▶ Collaborate with the Human Resources department and partner with local health departments to offer vaccines to employees.



Prevention Step #2

Ensure food workers are practicing proper handwashing, avoiding bare hand contact with ready-to-eat foods and practicing good personal hygiene

A study analyzing foodborne outbreaks where food workers were implicated in the spread of foodborne illness, found that bare hand contact with ready-to-eat food, handling of food by an infected food worker, and improper handwashing were the most common factors contributing to the outbreaks.⁷ Therefore, it is critical to prevent food workers' hands from being a vehicle of contamination and achieve active managerial control over risk factors that could contribute to foodborne illness.

- ▶ Employees should wash their hands frequently and immediately prior to working with food, clean equipment and utensils.
- ▶ Employees should thoroughly wash their hands after any activity that may result in contamination, including after using the bathroom and handling trash or waste.
- ▶ Ensure handwashing sinks are properly equipped with supplies necessary for proper handwashing (i.e., running water, soap, paper towels, trash can, and signage).
- ▶ Designated handwashing sinks should be in a convenient location for food employees to use in food preparation and warewashing areas, as well as in restrooms.
- ▶ Employees should avoid bare hand contact, especially with ready-to-eat foods. Gloves should be available and easily accessible to all employees in areas with ready-to-eat foods and near handwashing stations.
- ▶ Toilet room facilities and surfaces should be cleaned and sanitized frequently.
- ▶ The Person in Charge (PIC) should routinely monitor employee handwashing to ensure proper handwashing procedures are being followed (see section 2-201.11 for PIC requirements in FDA *Food Code*).³



Prevention Step #3

Develop and implement strong food safety and sanitation programs

Because the Hepatitis A virus is heat resistant, cooking is an ineffective means for controlling the virus and alternative actions must be taken to prevent contamination. Therefore, it is necessary for retail food establishments to develop and implement strong food safety programs that include appropriate measures for controlling risk factors associated with Hepatitis A.

- ▶ If a surface is exposed to Hepatitis A, use a disinfectant that is effective against Hepatitis A, as indicated on product label or product specification sheet.
 - For more information on whether a disinfectant is effective against Hepatitis A, search the product name in the [Environmental Protection Agency's \(EPA\) registered product database](#).⁸
- ▶ Develop and implement written procedures for employees to follow when responding to vomitus or diarrheal events.
 - Procedures should address specific actions to take to minimize the spread of contamination and exposure of employees, consumers, food and surfaces that were exposed to vomitus or fecal matter (FDA *Food Code* 2-501.11; FDA *Food Code* Annex 3).³
- ▶ Purchase food from approved suppliers with strong food safety programs in place.

- ▶ Create a cleanup kit for employees to use when cleaning up vomit or diarrhea.

Clean up kit should include:

- Instructions for employees to follow to properly clean up vomit and diarrhea.
- Personal Protective Equipment (PPE), including two sets of gloves, masks and gowns to clean spills of vomitus or feces.⁸
- Paper towels and cleaning tools needed for effective cleanup.
- Chemicals needed for cleanup, including absorbent materials to contain vomit/diarrhea, and a disinfectant that is effective against Norovirus and Hepatitis A.
- Tape, signage or some other means for blocking off affected area.
- Impervious bag for employees to discard PPE after use and used cleanup supplies.⁸ Waste should be disposed in appropriate biohazard waste container.
- Secure trash container to manage and dispose waste safely.

- ▶ Ensure shellstock containers have a source identification tag/label that contains the required information.
 - Do not commingle shellstock from another shellstock container with different certification numbers, different harvest dates, or harvest location as identified on the shellstock tag/label.³
 - Maintain accurate records for shellstock as provided on the source identification tag/label. Records shall be kept for at least 90 days after the shellstock container is emptied.³
- ▶ Utilize a safe water supply and ensure water used in your facility complies with all local, state and federal regulations.
- ▶ Avoid bare hand contact with ready-to-eat food. Consider glove use with raw foods in high impact areas.
- ▶ Establish a robust employee health policy.





Prevention Step #4

Exclude food workers diagnosed with Hepatitis A from working in a food establishment

Hepatitis A is a reportable diagnosis meaning that food establishments must report any Hepatitis A diagnosis to the proper regulatory authority.³ Excluding food workers from working who have been diagnosed with Hepatitis A provides maximum protection by reducing the likelihood that the virus will be transmitted from an infected food worker into the food.

- ▶ Develop and implement an employee health policy. Employees should know their responsibility when it comes to reporting information about their health to their manager.
- ▶ Employees should receive training on the symptoms associated with Hepatitis A along with their responsibility to notify the PIC if they are diagnosed with Hepatitis A or are experiencing jaundice, vomiting, or diarrhea.
 - The PIC is responsible for ensuring that employees are made aware in a verifiable manner (e.g., employee reporting agreement, training attendance) of their responsibilities to report this information about their health (i.e., symptoms of illness, illness diagnosis and exposure to illness).³
- ▶ The FDA *Food Code* requires food workers who have been diagnosed with Hepatitis A to be excluded from working in the food establishment (FDA *Food Code* 2-201.12).³
 - Food workers with symptoms such as fever, diarrhea, vomiting and/or jaundice should also be excluded.
 - An employee who has been excluded for Hepatitis A, according to Section 2-201.13(B) of the 2017 FDA *Food Code*, can be reinstated if the PIC obtains approval from the regulatory authority and one of the following conditions is met:
 1. The food employee has been jaundiced for more than 7 calendar days;
 2. The anicteric food employee has been symptomatic with symptoms other than jaundice for more than 14 calendar days; or
 3. The food employee provides to the PIC written medical documentation from a health practitioner stating that the food employee is free of a Hepatitis A virus infection.
- ▶ Individuals serving a highly susceptible population who have a history of exposure to Hepatitis A within the last 30 days should be restricted from working with exposed food, clean equipment, utensils, linens or unwrapped single-service or single-use articles.
- ▶ Check your local or state food code for specific information about excluding and reinstating ill food workers diagnosed with Hepatitis A.

How should food retailers respond to a suspected or confirmed Hepatitis A diagnosis?

If store employees show any symptoms associated with Hepatitis A infection (i.e., jaundice, fever, vomiting, or diarrhea, etc.), the PIC should ask when symptoms began (i.e., onset date) and whether they have sought medical care. However, it is also likely that infected food employees will not show symptoms of the Hepatitis A virus. Therefore, preventing the illness is critical to ensure food handlers do not knowingly, or unknowingly, transmit the virus.

The *FDA Food Code* permits exclusion from working in a food retail establishment based on symptoms prior to a diagnosis. Employees experiencing jaundice, fever, vomiting or diarrhea should be excluded from working in a food establishment. Employees excluded for vomiting or diarrhea can return to work if they are asymptomatic for at least 24 hours or receive a written release from a physician, as long as the illness is not due to Hepatitis A or an infection from Norovirus, *Shigella* spp., *Salmonella* (nontyphoidal), Typhoid fever (caused by *Salmonella* Typhi) or Shiga toxin-producing *E. coli*.³

If an employee is diagnosed with Hepatitis A or is experiencing symptoms associated with Hepatitis A, take the following steps:

- ▶ Notify the appropriate regulatory authority if an employee has been diagnosed with Hepatitis A or is experiencing jaundice.³
- ▶ Immediately send food employee home and exclude the infected food employee from working in the food establishment. Work with the local regulatory authority to determine when the employee is permitted to return to work.
- ▶ Cooperate with local regulatory authorities throughout their investigation and be prepared to provide any information and records that they request.
- ▶ Consider working with local regulatory authority to administer Hepatitis A vaccines to employees.
- ▶ Ensure employees are trained on the symptoms of Hepatitis A, the internal procedures to inform management of a Hepatitis A diagnosis and/or symptoms of vomiting, diarrhea, and jaundice or exposure to the Hepatitis A virus. This information should be included in employee health policies and all employees should be trained on when and why they need to report symptoms and illnesses.



Examples of the type of information the regulatory authority may request during an investigation include:

- Employee's job duties (e.g., handling ready-to-eat foods)
- Cleaning/sanitation logs
- Documentation of handwashing
- Illness history
- Work schedule
- A list of employees who may have come in contact with the infected employee during the time period in question

- ▶ Review CIFOR guidelines on “[Foodborne Disease Outbreak Response](#)” to determine whether a food recall must be established and work closely with local or state regulatory authorities about a possible outbreak.¹⁰
- ▶ Work with internal communications and crisis response teams to provide important information to the public about Hepatitis A infections impacting stores.¹⁰
- ▶ Be open and honest with employees, customers, regulatory officials and all stakeholders regarding possible or known cases of Hepatitis A.

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