Hepatitis A

Disease Plan

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Last updated: July 13, 2016 by Jeffrey Eason.

Questions about this disease plan?

Contact the Utah Department of Health Bureau of Epidemiology: 801-538-6191.
WHY IS HEPATITIS A IMPORTANT TO PUBLIC HEALTH?

The hepatitis A virus (HAV) is highly infectious resulting in a high outbreak potential. Until 2004, HAV was the most frequently reported type of hepatitis in the United States (U.S.). In the pre-vaccine era, the primary methods used for preventing HAV were hygienic measures and passive protection with immune globulin (IG). Hepatitis A vaccines were licensed in 1995 and 1996. These vaccines provide long-term protection against HAV infection. The similarities between the epidemiology of hepatitis and poliomyelitis suggest that widespread vaccination of appropriate susceptible populations can substantially lower disease incidence, eliminate virus transmission, and ultimately, eliminate HAV infection.

DISEASE AND EPIDEMIOLOGY

Clinical Description

Hepatitis A Infection
HAV is a self-limiting illness characterized by sudden onset of symptoms including malaise, fever, nausea, and diarrhea. Jaundice, characterized by yellowing of the skin or whites of the eye, dark urine, and clay-colored stool, may follow a few days after initial symptoms. HAV causes disease with varying severity. Generally, symptom severity increases with age. Asymptomatic infections can occur, and are most common in young children. Thirty percent of infected children less than six years of age will have symptoms of disease. Symptoms typically last for several weeks; however, they can last several months in cases with particularly severe disease. Prolonged, relapsing hepatitis for up to one year can occur in some cases, although it is uncommon. Chronic infections are not known to occur. The elderly and persons with chronic liver disease (including chronic hepatitis B or C) are at greater risk of severe HAV and death.

Causative Agent
HAV infection is caused by the hepatitis A virus, an RNA virus of the picornavirus family.

Differential Diagnosis
Hepatitis has a variety of causes including, but not limited to: viral hepatitides (A, B, C, D, E), Epstein-Barr virus, Yellow fever virus, drug-induced hepatitis, toxin-induced hepatitis, auto-immune hepatitis, alcoholic liver disease, Herpes simplex virus, and adenovirus.

Laboratory Identification
HAV infection cannot be definitively diagnosed without a blood test that measures various serologic markers for HAV. Anti-HAV IgM is the gold standard for the detection of acute illness. However, an Anti-HAV IgM positive adult without clinical features of viral hepatitis does not necessarily indicate acute infection. Such patients may have previous HAV infection
with prolonged presence of IgM anti-HAV, a false-positive result, or asymptomatic infection (which is much more common in children less than six years when compared with older children and adults).

Serology Panels
The following table displays the serologic tests available and what their results mean.

Table 1: Serology Panels

<table>
<thead>
<tr>
<th>Serologic Test</th>
<th>Positive Result</th>
</tr>
</thead>
</table>
| Anti-HAV IgM         | • Diagnostic for acute HAV infection.  
                      • False positive tests do occur. Consider clinical compatibility or epidemiologic links.  
                      • Anti-HAV IgM is detectable in virtually every case at their first clinical examination.  
                      • Remains positive for 3-6 months, but can be positive for up to a year.  
                      • Occasionally positive in adults up to two weeks after receiving hepatitis A vaccine.                                                                 |
| Anti-HAV IgG         | • Not diagnostic for acute HAV infection.  
                      • Indicates past infection and immunity.  
                      • Useful for determining the immune status of the patient.  
                      • Positive test results not routinely investigated.                                                                                           |
| Anti-HAV Total       | • Not diagnostic for acute HAV infection.  
                      • Useful to determine immune status of the patient.  
                      • Positive test results not routinely investigated.  
                      • Does not differentiate between IgM and IgG antibodies.                                                                                   |
| HAV viral antigen tests | • Detects the presence of antigen in stool.  
                         • Viral shedding typically completed before the patient seeks medical attention.  
                         • Test has little routine value.                                                                                                           |
| Nucleic acid tests (NAT) | • Not recommended for diagnostic use.                                                                                                               |
| PCR                  | • Not recommended for diagnostic use.                                                                                                               |

Figure 1: Clinical, virologic, and serologic course of hepatitis A

Image courtesy CDC
Chemistry Panels
Liver function tests, such as ALT and AST (aminotransferases), are sensitive for liver damage, but are not specific for HAV infection. In patients without jaundice, elevated serum aminotransferase levels are required to meet the clinical case definition. Typically, the normal value for ALT is 7-50 IU/L and AST is 10-34 IU/L, but reference ranges can be laboratory specific, so it is appropriate to ask the laboratory performing this test to provide their reference range. In acute HAV infection, ALT levels are typically observed in excess of 1,000 IU/L.

Treatment
Treatment for acute HAV infection is supportive.

Case Fatality
Generally, HAV is considered a disease with relatively low case fatality. Fatalities due to HAV are more common with advancing age and in patients with chronic hepatitis C. Reported case fatality rates are 0.1% in infants and children, 0.4% between the ages of 15 and 39 years, and 1.1% in those over age 40.

Reservoir
Humans are the only natural host for HAV. In endemic areas, HAV infection has been documented in pigs, cattle, and chickens.

Transmission
Primary transmission of HAV is by person-to-person spread via the fecal-oral route or through contaminated food or water, which can cause common-source outbreaks. Cooked foods can also be a vehicle for transmitting HAV if the food was inadequately cooked or if the food was contaminated after cooking.

- **Intrinsic infection** is when food is contaminated at the point of production or distribution. These outbreaks are usually linked to produce or other foods that are not cooked.
- **Extrinsic infection** of foods occurs at the point of preparation or serving. The foods themselves are not contaminated, but they are contaminated during preparation, e.g., due to poor handwashing by food preparers. There is no limit to which foods could be extrinsically infected. Even cooked foods, if contaminated after cooking, can be the vehicle for an outbreak.

HAV can also be spread by sexual contact (e.g., oral-anal contact), and among people using illicit drugs – including injection drugs – through close contact, and occasionally, through a blood-to-blood exposure. Bloodborne transmission, although rare, can occur during the viremic phase of the disease. Transfusion-related HAV is quite rare. Intrauterine transmission of HAV has been described.
Susceptibility
Infection is thought to provide lifelong immunity. Immunity after vaccination is thought to last a minimum of 25 years in persons who have received the primary vaccine and the booster, but the exact duration of protection has not yet been determined.

Incubation Period
The average incubation period for HAV is 28-30 days, with a range of 15-50 days.

Period of Communicability
A person with HAV is generally infectious from 21 days prior to illness onset through eight days after the onset of jaundice. HAV is shed in stool in greatest amounts during the one to two weeks before the onset of jaundice. Young children often shed HAV asymptptomatically, and viral shedding in children may persist for up to three months after onset of clinical illness.

Epidemiology
HAV infections occur worldwide and are more prevalent in low socioeconomic areas where a lack of adequate sanitation and poor hygienic practices facilitate spread of the infection. The most commonly reported risk factor in the U.S. is international travel (up to 50% of cases), mainly to Mexico and Central and South America. Community outbreaks due to contaminated water or food have also been described.

Figure 2: Geographic distribution of HAV infection

Image courtesy CDC

In developing countries, the disease is usually endemic. Because of this, most adults are immune due to prior infection, and outbreaks are rare. HAV outbreaks in developed countries have been linked to food and water sources contaminated with HAV. These foods include
tomatoes, green onions, frozen berries, and lettuce. Many outbreaks related to produce have been linked to infected field workers who were not provided adequate toilet facilities. Food may be contaminated at the source of production or during preparation. Public and private health systems should be especially vigilant for HAV cases during natural disaster situations in which sewer systems are compromised.

Persons with a high risk for infection include:
- Travelers to regions where HAV is endemic
- Persons with chronic liver disease
- Men who have sex with men
- Persons using illicit drugs
- Persons with clotting factor disorders
- Childcare workers
- Healthcare providers for incontinent persons

During the late 1980s and 1990s, HAV rates in Utah were significantly higher than national rates. Since 1998, however, Utah rates have declined, and are now below U.S. rates.

**Figure 3: Hepatitis A incidence Utah vs. U.S. 2004-2014**

Less than 20 cases per year have been reported in Utah since 2006. This decreasing trend is attributed to improved hygiene during food preparation and greater immunity in the population due to increased use of the hepatitis A vaccine. The trend may also be a result of the natural cycle of the disease. The low HAV rates have continued through 2014 to .28 cases per 100,000 persons/year in Utah. Utah’s 2014 HAV incidence rate is 30% less than the 2014 U.S. HAV incidence rate at .40 cases per 100,000 persons/year.
PUBLIC HEALTH CONTROL MEASURES

Public Health Responsibility
- Investigate all confirmed cases of disease and fill out and submit disease investigation forms.
- Identify patient contacts and administer prophylaxis.
- Identify the source of infection for the patient and other possible contacts associated with the infection source.
- Provide information on the temporal, geographic, and demographic occurrence of HAV to facilitate its prevention and control.
- Provide education to the general public, clinicians, and first responders regarding disease transmission and prevention.

Prevention
Vaccination is highly effective in preventing HAV infection, so the best way to prevent infection is through vaccination. However, the vaccine is not 100% effective, and additional measures should also be used to prevent infection and transmission. Persons with acute HAV should prevent fecal-oral transmission of the disease by not cooking or serving food for others until eight days after the onset of jaundice. Infected persons should also abstain from sex until eight days after the onset of jaundice to prevent sexual transmission. Persons who had hepatitis A at age ≥11 years should not donate blood.

Personal Preventive Measures/Education
Persons can avoid exposure to the virus by:
- Always washing their hands thoroughly with soap and water before eating or preparing food, after using the toilet, and after changing diapers.
• Washing their own hands, as well as their child’s hands, after changing diapers, and disposing of diapers in a closed-lid garbage can.
• Washing their hands thoroughly and frequently when ill with diarrhea, or when caring for someone with diarrhea. Hands should be scrubbed for at least 15-20 seconds after cleaning the bathroom, after using the toilet or helping someone use the toilet, after changing diapers, before handling food, and before eating.

Discuss transmission risks that may result from oral-anal sexual contact. Latex barrier protection (e.g., dental dam) may prevent the spread of HAV to a case’s sexual partners, and may be a way to prevent exposure to, and transmission of, other fecal-oral pathogens.

**International Travel**

Travelers should pay attention to what they eat and drink. Recommendations to travelers include:

• “Boil it, cook it, peel it, or forget it.”
• Drink only bottled or boiled water, keeping in mind that bottled, carbonated beverages are safer than bottled non-carbonated ones.
• Ask for drinks without ice, unless the ice is made from bottled or boiled water.
• Avoid popsicles and flavored ices that may have been made with contaminated water.
• Eat foods that have been thoroughly cooked and are still hot and steaming.
• Avoid raw vegetables and fruits that cannot be peeled. Vegetables like lettuce are easily contaminated and are very hard to wash well.
• Peel your own raw fruits or vegetables, and do not eat the peelings.
• Avoid foods and beverages from street vendors.

**Post-Exposure Prophylaxis**

When indicated, hepatitis A vaccine or immune globulin (IG) can be administered to contacts of a case of HAV to prevent infection. The decision to use vaccine or IG should take into account patient characteristics, including age and medical conditions. Standard IG is a concentrated solution of antibodies prepared from pooled human plasma. IG should be administered as soon as possible after exposure, and it is 80-90% effective in preventing HAV if given within 14 days of exposure.

The vaccine is composed of inactivated whole viruses and is just as effective as IG in preventing disease if given within 14 days of exposure.

Vaccination (HAVRIX or VAQTA) is recommended for:

• Healthy persons aged 12 months-40 years of age

IG is recommended for:

• Persons >40 years
• Infants <12 months
• Immunocompromised persons
• Persons who have had chronic liver disease
• Persons for whom vaccination is contraindicated

The following conditions should be met to be offered vaccine or IG after an exposure to HAV:
• The case to which the person was exposed is a confirmed case. Laboratory confirmation of HAV is generally obtained before administering prophylaxis.
• Exposure occurred within the case patient’s infectious period. A person with contact to the case outside the infectious period is not considered a case contact.
• Less than 14 days have passed since the last exposure occurred.

Persons who have received one dose of hepatitis A vaccine at least one month before a HAV exposure do not need prophylaxis. The safety of hepatitis A vaccine for pregnant women has not been determined, but there is no evidence that it is harmful to either pregnant women or their unborn babies.

Pregnancy or lactation is not a contraindication to IG use. Persons administered IG for whom hepatitis A vaccine also is recommended for other reasons should receive a dose of vaccine simultaneously with IG.

The Bureau of Epidemiology (BOE) at the Utah Department of Health supplies IG to local health departments to administer to contacts of confirmed or highly suspected HAV cases in Utah. This IG can be stored at the local health department by arrangement with BOE. BOE does not supply IG dispensed for any other reason (e.g., pre-exposure prophylaxis, contact to a non-Utah case, etc.). In such circumstances, IG recipients or local health departments are responsible for the cost.

IG is administered in a single dose at the following dosage: 0.02 mL/kg. Plan to use approximately 0.5 mL IG per 50 lbs. Use the following algorithm to determine the amount of IG to administer:

\[
x \times 0.454 \times 0.02 = \text{mL IG}
\]

Vaccination for HAV is recommended for travelers to areas where HAV is endemic. However, travelers should receive IG before travel under the following circumstances:
• If they are allergic to a component of the vaccine or elect not to receive vaccine
• If they are <2 years of age (vaccine is not licensed for this age group)
• If they are traveling to an endemic area in <4 weeks, they may receive vaccine and IG at the same time (in different anatomical sites)

**Vaccine**
The vaccines containing HAV antigen that are currently licensed in the U.S. include the single-antigen vaccines HAVRIX® (manufactured by GlaxoSmithKline, Rixensart, Belgium) and VAQTA® (manufactured by Merck & Co., Inc., Whitehouse Station, New Jersey) and the
combination vaccine TWINRIX® (containing both HAV and HBV antigens; manufactured by GlaxoSmithKline). All are inactivated vaccines. In 2005, the Advisory Committee on Immunization Practices (ACIP) recommended that hepatitis A vaccination be included in the routine childhood vaccination schedule to be administered to infants 12-23 months of age. Additionally, ACIP has recommended that vaccination programs target children 2-18 years of age living in states, counties, or communities with an increased risk of HAV infection.

The safety of hepatitis A vaccine for pregnant women has not been determined, but there is no evidence that it is harmful to either pregnant women or their unborn babies.

Vaccination should also be considered for persons at high risk of contracting HAV.

Persons who should be vaccinated include the following:
- Persons traveling to, or working in, countries with high or intermediate rates of HAV, such as Central or South America, the Caribbean, Mexico, Asia (except Japan), Africa, and southern or eastern Europe. The vaccine series should be started at least one month before traveling.
- Men who have sex with men.
- Injecting and non-injecting drug users.
- Persons with chronic liver disease (not just infection), including those who are awaiting or have received liver transplants.
- Persons who receive clotting factor concentrates.
- Persons who have occupational risk for infection; specifically, those who work with HAV-infected primates or with HAV in a research laboratory setting. Sewage workers do not need to be vaccinated.
- Persons who anticipate close personal contact (e.g., household or regular babysitting) with an international adoptee during the first 60 days after arrival in the United States from a country with high or intermediate endemicity for hepatitis A.

The hepatitis A vaccine should be administered in two doses, 6-12 months apart. Both vaccines have pediatric and adult formulations. The hepatitis A vaccine is not protective until 14 days after receiving the initial dose.

Isolation and Quarantine Requirements

Isolation: Persons diagnosed with HAV that are associated with school or childcare should be excluded for eight days after the onset of jaundice. Food handlers should also be excluded until eight days after the onset of jaundice.

NOTE: A food handler is any person directly preparing or handling food. This can include a patient care or childcare provider.

Hospital: Enteric precautions should be followed for eight days after onset of jaundice.

Quarantine: Exposed food handling facility employees should be excluded from their occupations for 28 days, unless they receive a prophylactic dose of hepatitis A vaccine or immune globulin (IG) within 14 days of exposure. (Exceptions to this exclusion are documentation of HAV vaccination or demonstrated serologic evidence of immunity to HAV.)
CASE INVESTIGATION

Reporting
All cases of hepatitis A should be reported to public health immediately.

Table 2: Reporting criterion

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical Evidence</strong></td>
<td></td>
</tr>
<tr>
<td>Acute onset</td>
<td>N N N N N</td>
</tr>
<tr>
<td>Jaundice</td>
<td>N</td>
</tr>
<tr>
<td>Fever</td>
<td>O O O O O</td>
</tr>
<tr>
<td>Headache</td>
<td>O O O O O</td>
</tr>
<tr>
<td>Malaise</td>
<td>O O O O O</td>
</tr>
<tr>
<td>Anorexia</td>
<td>O O O O O</td>
</tr>
<tr>
<td>Nausea</td>
<td>O O O O O</td>
</tr>
<tr>
<td>Vomiting</td>
<td>O O O O O</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>O O O O O</td>
</tr>
<tr>
<td>Abdominal Pain</td>
<td>O O O O O</td>
</tr>
<tr>
<td><strong>Clinical and Administrative Data</strong></td>
<td></td>
</tr>
<tr>
<td>Healthcare record contains a diagnosis of hepatitis A</td>
<td>S</td>
</tr>
<tr>
<td>Death certificate lists hepatitis A as a cause of death or a significant condition contributing to death</td>
<td>S</td>
</tr>
<tr>
<td><strong>Laboratory Evidence</strong></td>
<td></td>
</tr>
<tr>
<td>Elevated serum aminotransferase levels (ALT or AST)</td>
<td>N N</td>
</tr>
<tr>
<td>Hepatitis A IgM positive</td>
<td>S N N</td>
</tr>
<tr>
<td><strong>Epidemiological Evidence</strong></td>
<td></td>
</tr>
<tr>
<td>Contact of a lab-confirmed hepatitis A case 15-50 days prior to onset of symptoms</td>
<td>N N</td>
</tr>
</tbody>
</table>

Notes:
S = This criterion alone is sufficient to report a case
N = This criterion in conjunction with all other “N” and any “O” criteria in the same column is required to report a case.
O = At least one of these “O” criteria in each category in the same column (e.g., clinical presentation and laboratory findings)—in conjunction with all other “N” criteria in the same column—is required to report a case.
**Case Definition**

**Hepatitis A, Acute (2011)**

**Clinical case definition**
An acute illness with a discrete onset of any sign or symptom consistent with acute viral hepatitis (e.g., fever, headache, malaise, anorexia, nausea, vomiting, diarrhea, and abdominal pain), and either a) jaundice, or b) elevated serum aminotransferase (ALT or AST) levels.

**Laboratory criteria for diagnosis**
Immunoglobulin M (IgM) antibody to hepatitis A virus (anti-HAV) positive

**Case classification**
*Confirmed*: a case that meets the clinical case definition and is laboratory confirmed

OR

A case that meets the clinical case definition and occurs in a person who has an epidemiologic link with a person who has laboratory-confirmed hepatitis A (e.g., household or sexual contact with an infected person during the 15-50 days before the onset of symptoms)

**Table 3: Classification table**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Case Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical Evidence</strong></td>
<td></td>
</tr>
<tr>
<td>Acute onset</td>
<td>N</td>
</tr>
<tr>
<td>Jaundice</td>
<td>N</td>
</tr>
<tr>
<td>Fever</td>
<td>O</td>
</tr>
<tr>
<td>Headache</td>
<td>O</td>
</tr>
<tr>
<td>Malaise</td>
<td>O</td>
</tr>
<tr>
<td>Anorexia</td>
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<tr>
<td>Vomiting</td>
<td>O</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>O</td>
</tr>
<tr>
<td>Abdominal Pain</td>
<td>O</td>
</tr>
<tr>
<td><strong>Laboratory Evidence</strong></td>
<td></td>
</tr>
<tr>
<td>Elevated serum aminotransferase levels (ALT or AST)</td>
<td>N</td>
</tr>
<tr>
<td>Hepatitis A IgM positive</td>
<td>N</td>
</tr>
<tr>
<td><strong>Epidemiological Evidence</strong></td>
<td></td>
</tr>
<tr>
<td>Household or sexual contact of a lab-confirmed hepatitis A case 15-50 days prior to onset of symptoms</td>
<td>N</td>
</tr>
</tbody>
</table>
Case Investigation Process

- Local and state health departments should be immediately notified.
- Food handlers should be excluded from work until eight days after the onset of jaundice.
- Childcare center cases should be excluded until eight days after the onset of jaundice.
- All case contacts should be identified and appropriately managed (explained in detail below).

Outbreaks

CDC defines a foodborne outbreak as, “an incident in which two or more persons experience a similar illness resulting from the ingestion of a common food.” In order to confirm an outbreak of HAV, detection of hepatitis A IgM in serum from two or more persons who consumed epidemiologically implicated food is necessary. The source of the infection should be identified and measures taken to identify additional ill persons and/or to remove the source from consumers.

Identification of Case Contacts and Management

A case contact meets one or more of the following descriptions:

1. Close personal contacts include household members, sexual contacts, drug-using contacts, and persons who shared utensils or cups with the case
2. Childcare center contacts
3. Close contacts in a hospital or long-term-care setting, especially contacts of incontinent cases
4. Other food handlers in an establishment if the index case is a food handler diagnosed with HAV

Childcare

If a confirmed case of HAV occurs in a childcare setting, parents and staff must be notified. HAV fact sheets should also be sent with the letter. Control of HAV in childcare settings includes the following steps:

- When the case is an employee or child enrolled in a center in which all children are toilet-trained, vaccine or IG is recommended for susceptible employees in contact with the case, and for all susceptible children in the same room as the case.
- When a HAV infection is identified in an employee or a child, or in the household contacts of two of the enrolled children in a childcare center where children are not toilet-trained, vaccine or IG is recommended for all susceptible employees and all
susceptible, enrolled children in the facility. During the six weeks after the last case is identified, susceptible new employees and children should also receive vaccine or IG.

- Strictly enforce policies about handwashing (with children and staff) and about disinfecting objects and environmental surfaces with appropriate disinfectants, such as bleach solutions.
- Make sure all parents and staff understand that they must notify the program if any person in their household is diagnosed with HAV.
- If recognition of an outbreak in a childcare setting is delayed by three or more weeks from the onset of the index case, or if illness has occurred in three or more families, vaccine or IG should be considered for household members of all center attendees.

**Note:** Childcare setting employees who prepare food, feed children, or administer medications to attendees are considered food handlers and must follow the isolation and quarantine requirements for food handling facility employees who are contacts of cases of HAV.

**School**
HAV occurring in a school setting usually does not pose a significant risk of transmission, and prophylaxis is usually not indicated. However, vaccine or IG may be given to those who have personal contact with a case during the case’s infectious period (e.g., sharing food, or eating or drinking utensils, with a case). If a case of HAV occurs in a kindergarten or preschool class, or in a class where hygiene may not be optimal, more stringent control measures may be needed. Strictly enforce handwashing and cleanliness policies and ensure that all bathrooms are properly supplied with soap, paper towels, and toilet paper. Request that all parents and staff notify the school if any person in their household is diagnosed with HAV.

**Community Residential Programs**
Actions taken in response to a case of HAV infection in a community residential program should be handled on a case-by-case basis. Management of contacts will depend on the level of hygiene of the case and the type of facility. Roommates and anyone sharing food or eating or drinking utensils should be considered household contacts and should be given vaccine or IG within 14 days of exposure. If HAV occurs in a staff member of a residential program, the case should be considered a food handler if there was an opportunity to feed residents, distribute medication, prepare food, or perform dental procedures during the two weeks prior to symptom onset.

**Infected Food Handler**
A confirmed case of HAV in a food handler is a potentially serious event and requires that risk for both coworkers and the public be assessed as quickly as possible. If a food handler is a laboratory-confirmed case of HAV, all other food handling employees in the facility must receive vaccine or IG within two weeks of exposure. Unless the food handling facility employee contacts can produce documentation of vaccination against HAV, can show immunity to HAV by serology, or receive vaccine or IG within two weeks of exposure, they must be excluded from work for 28 days from the date of exposure or until eight days after the onset of jaundice if symptoms develop. The same exclusion criteria apply to any food
handling contacts of any confirmed case. In order to determine if the public needs to be notified of possible exposure to HAV, a complete food handling history of the case for the two weeks before symptom onset needs to be reviewed. This review should include dates worked, job duties, foods prepared, and whether gloves or other barrier protection were used by the food handler.

Vaccine or IG administration to patrons should be considered if:

- During the time when the food handler was likely to be infectious, the food handler both directly handled cooked foods or foods that were served uncooked, and had diarrhea or poor hygienic practices; and
- Patrons can be identified and treated within two weeks after the exposure. In settings where repeated exposures to HAV might have occurred (e.g., institutional cafeterias), stronger consideration of more widespread IG use might be warranted.

If it is determined that patrons would benefit from vaccine or IG administration, the local health department will be responsible for posting public notices, issuing press releases, and/or holding press conferences to identify and inform patrons at risk, and for coordinating the administration of vaccine or IG to individuals, with support from the Utah Department of Health as requested.

**Hospitals**

Administration of vaccine or IG to hospital personnel caring for infected patients is not routinely indicated unless an outbreak is occurring. However, if a hospital staff member is diagnosed with HAV and can be considered a food handler, then food handler guidelines must be followed.
REFERENCES


✔ VERSION CONTROL

Updated Dec 2014 – CSTE reporting criteria, case definition, and case classification swim lanes included.
Updated Jul 2015 – Formatting and design edits. Quick links added. Addition of “Why is Hepatitis A and Hepatitis E important to Public Health?” section. Edits to “Causative Agent” and “Public Health Responsibility” sections. Updates to the list of references used. Addition of “UT-NEDSS Minimum/Required Fields by Tab” section.
Updated Nov 2015 – Separated Hepatitis A and Hepatitis E into individual plans.
Updated July 2016- updated post-exposure guidance.
## UT-NEDSS Minimum/Required Fields by Tab

### Demographic
- First Name
- Last Name
- Birth Gender
- Race
- Ethnicity
- State
- County
- Date of Birth
- Occupation
- Area Code
- Phone number

### Clinical
- Date Diagnosed
- Imported From
- Onset Date
- Syndrome:
  - Please specify:
- Syndrome:
- Died
- Date of Death
- List dose number, date, manufacturer and lot number of all doses given:
- Has the patient received immune globulin (IG) in the last 6 months?
- Does the patient have an elevated ALT level?
- Test Result
- Test Type
- Does the patient have an elevated AST level?

### Epidemiological
- Risk Factor
- Attends school
- Did the patient attend while ill?
- What is the name of the facility where the patient handled food?
- Did the patient work while ill?
- What is the name of the daycare?
- Did the patient attend while ill?
- What is the name of the healthcare facility?
- Did the patient work while ill?
- If case works at the facility, did they work while ill?

### Contacts
- Childcare Association
- Was the patient a contact of a person with confirmed or suspected Hepatitis A infection?
- Any contacts ill with similar symptoms?
- List all contacts in the listed time period below (the communicable period) in the contacts table.
- Did the patient attend a group event during the exposure period?
- Does the case live or work in a long term care facility, assisted living center, or other type of group home setting?
  - Name of facility:

### Laboratory
- Was ALT (SGPT) done?

### Reporting
- Date first reported to public health
Administrative
- Outbreak name
- State case Status
- Outbreak Associate