

Hepatitis A

PROTOCOL CHECKLIST

- Enter available information into Merlin upon receipt of initial report
- Review background on disease ([see page 2](#)), case definition, and laboratory testing (see page 4)
- Contact provider ([see page 6](#))
- Interview patient(s) or guardian
 - Review disease facts
 - Modes of transmission
 - Incubation period
 - Symptoms
 - Ask about exposure to relevant risk factors ([see page 6](#))
 - Contact with ill persons
 - Travel
 - Consumption of raw foods
 - Restaurant meals
 - Food at public gatherings
 - Source of drinking water
 - Contact with diapered children with diarrhea
 - Occupational exposure
 - Drug use
 - Identify contacts ([see page 7](#))
 - Refer symptomatic contacts to a health care provider
 - Provide postexposure prophylaxis for susceptible contacts (see page 9)
 - Determine whether case or symptomatic contact is in sensitive situation ([see page 9](#))
 - Determine whether patient is part of an outbreak
 - Exclude cases or symptomatic contacts
 - Provide education on how to prevent further transmission (see page 8)
 - Practice proper hand hygiene
 - Vaccine and immune globulin prophylaxis
 - Address patient's questions or concerns
- Follow-up on special situations, including outbreaks or cases in sensitive situations
- Enter additional data obtained from interview into Merlin

Hepatitis A

1. DISEASE REPORTING

A. Purpose of reporting and surveillance

1. To assess the risk of the patient transmitting infection to others and to prevent such transmission.
2. To determine if there is a source of infection of public health concern and to stop transmission from such a source.
3. To identify outbreaks and other undiagnosed cases.

B. Legal reporting requirements

Laboratories, hospitals, and physicians are required to immediately report infection with Hepatitis A to the county health department (CHD) without delay 24/7 by phone upon laboratory confirmation or physician diagnosis.

C. County health department investigation and intervention responsibilities

1. Begin investigation within one business day of receiving report from a provider or laboratory.
2. Implement appropriate control measures to minimize further spread.
3. Report all confirmed and probable cases in Merlin.

2. THE DISEASE AND ITS EPIDEMIOLOGY

A. Etiologic agent

The Hepatitis A virus (HAV) is a picornavirus (positive-strand RNA virus). There is only one HAV serotype. It was first isolated in 1979.

B. Description of illness

Hepatitis A infection is an acute, self-limiting illness. Symptom onset is usually abrupt with fever, malaise, anorexia, nausea, and abdominal pain. Jaundice, dark-colored urine, or light-colored stools might be present at onset or might follow constitutional symptoms within a few days. Clinical illness usually does not last longer than 2 months, although 10% - 15% of persons have prolonged or relapsing signs and symptoms for up to 6 months³. The clinical course of infection varies in severity from mild to fulminant illness lasting weeks to several months. Infection in children less than six years of age is likely to be asymptomatic, with symptoms only occurring in approximately 30%¹ and jaundice in <10%⁹. Among older children and adults, infection usually is symptomatic and typically lasts several weeks, with jaundice occurring in 70% or more¹. Reported case fatality is normally low but can reach 1.8% among persons aged ≥ 50 years². Fulminant hepatitis is rare but people with underlying liver disease of other types have an increased risk of death. No chronic infection is known to occur. Infection results in life-long immunity, which can be demonstrated by detecting immunoglobulin G (IgG) antibody to HAV (anti-HAV) in serum.

Hepatitis A virus is endemic in many developing countries. Levels of endemicity are related to hygienic and sanitary conditions.

C. Reservoirs

Acutely infected humans are the only reservoir, with rare infections of chimpanzees and other primates.

D. Modes of transmission

Transmission is most often person-to-person by the fecal-oral route, but can also occur through fecal contamination of food or water. Most infections result from close personal contact with an infected household member or sexual partner. Common source outbreaks and sporadic cases have also been related to food or water contamination, either directly by a food handler or through sewage contamination. Contaminated foods can transmit HAV if uncooked, cooked at inadequate temperatures to kill the virus, or contaminated after cooking. Waterborne outbreaks are infrequent in developed countries with well-maintained sanitation and water supplies. In the pre-vaccine era, HAV circulated widely among young children, especially in child care centers, with occasional secondary infections occurring in older children and adults.

Virus can remain infectious for at least one month at room temperature on environmental surfaces, and transfer on fomites is important in some settings (e.g., on toys in a child care facility).

E. Incubation Period

15 to 50 days, with an average of 28 days.

F. Period of Communicability

Peak infectivity occurs during the two week period that precedes the onset of jaundice and declines during the week after jaundice appears. In persons without jaundice, peak infectivity occurs as serum alanine aminotransferase (ALT) concentrations increase. Children may excrete the virus for longer periods than adults and, if asymptomatic, may not be recognized as having an infection. Virus may be excreted during a relapse of symptoms³.

G. Treatment

No specific therapy is available. Illness is best addressed through supportive treatment.

H. Prophylaxis

For healthy persons aged 12 months--40 years, single-antigen Hepatitis A vaccine at the age-appropriate dose is preferred to IG because of vaccine advantages that include long-term protection and ease of administration. For persons aged >40 years, IG is preferred because of the absence of information regarding vaccine performance and the more severe manifestations of Hepatitis A in this age group; vaccine can be used if IG cannot be obtained. The magnitude of the risk for HAV transmission from the exposure should be considered in decisions to use IG or vaccine. IG should be used for children aged <12 months, immunocompromised persons, persons who have had chronic liver disease diagnosed, and persons for whom vaccine is contraindicated.

Persons administered IG for whom Hepatitis A vaccine also is recommended for other reasons should receive a dose of vaccine simultaneously with IG. For persons

who receive vaccine, the second dose should be administered according to the licensed schedule to complete the series. The efficacy of IG or vaccine, when administered >2 weeks after exposure, has not been established.

I. Hepatitis A in Florida

Following the introduction of Hepatitis A vaccine in 1995, the general incidence of Hepatitis A infection in the United States has declined dramatically. In 2010, 178 cases of acute Hepatitis A infection were reported to the FL DOH as compared to 612 cases reported in 2000. This represents an incidence rate of 1.0 case per 100,000 persons which is a 16.5% decrease from the previous five-year (2005-2009) average incidence. Of those cases, 78% were classified as confirmed. Very few cases reported contact with a person who had confirmed or suspected Hepatitis A infection in the two to six weeks prior to their illness, suggesting that unrecognized infections remain fairly common. About 33% of patients reported travel outside of the US and Canada in the two to six weeks prior to their illness, with most traveling to destinations in South or Central America.

3. CASE DEFINITION

A. Clinical description

An acute illness with a) discrete onset of symptoms **and** either b) jaundice or elevated serum aminotransferase levels (ALT or AST). Symptoms most commonly include: fever, headache, malaise, anorexia, nausea, vomiting, diarrhea and abdominal discomfort, followed in a few days by jaundice.

B. Laboratory criteria for diagnosis

IgM antibody to Hepatitis A virus (anti-HAV) positive

C. Case classification

Confirmed:

- a clinically compatible case that is laboratory confirmed
- OR
- a clinically compatible case that occurs in a person who has an epidemiologic link with a person who has laboratory confirmed Hepatitis A (i.e., household or sexual contact with an infected person during the 15–50 days before the onset of symptoms)

Probable: a clinically compatible case that is Hepatitis A IgM positive, lacks jaundice or elevated liver enzymes, but has discrete onset of other appropriate symptoms in the absence of another known cause.

Comment

Report liver enzyme results for all cases where these are available.

4. LABORATORY TESTING

A. Criteria for diagnosis

Demonstration of IgM antibodies against HAV (anti-HAV) in the serum of a person with an acute illness compatible with Hepatitis A establishes the diagnosis. In most infected people, serum IgM anti-HAV becomes detectable 5 to 10 days before onset of symptoms and declines to undetectable concentrations less than 6 months after infection. However, people who test positive for IgM anti-HAV more than 1 year after infection have been reported. Anti-HAV IgM has also been detected 2 – 3 weeks after administration of one dose of vaccine in 8 – 20% of adults⁶.

Presence of IgG anti-HAV provides evidence of immunity and is detectable shortly after the appearance of IgM. A positive total anti-HAV (i.e., IgM and IgG combined) test result alone is **not** considered confirmatory for acute illness, since it may represent immunity from past infection or vaccination.

HAV RNA can be detected in blood and stools of most persons during acute infection through nucleic acid amplification methods, but these are not generally used for diagnostic purposes.

B. Services available at the Bureau of Public Health Laboratories (BPHL)

The BPHL offers IgM and IgG serologic testing for Hepatitis A. The tests are also widely available at commercial laboratories.

C. Testing requests

Serum for anti-HAV IgM testing can be collected from patients from the onset of symptoms until 4–6 months after onset.

D. Interpretation of results

False positive anti-HAV IgM results can occur, especially in older persons without consistent symptoms. The Sentinel Counties Study, conducted by CDC in six U.S. counties, found that out of 140 persons with a positive IgM anti-HAV test result during 2003, 87 did not have actual illness that met the case definition for Hepatitis A or any other type of hepatitis. Those persons were significantly older (mean age 58, median age 65, range 2-91 years) than the remaining 53 persons who did have illness consistent with the case definition (mean age 40, median age 38, range 6-82 years)⁵. **IgM testing should only be requested when evaluating a patient with an acute illness suggestive of Hepatitis A infection. The use of IgM anti-HAV as a screening tool or as part of testing panels used in the workup of nonacute liver function abnormalities should be discouraged.** Testing of persons with no clinical symptoms of acute viral hepatitis and among populations with a low prevalence of acute HAV infection lowers the predictive value of the IgM anti-HAV test and can lead to test results that are false positive or of no clinical importance.

5. CASE INVESTIGATION**A. Contact the physician or hospital**

1. Confirm acute Hepatitis A infection has been diagnosed in the reported patient(s) and symptoms are consistent with an acute Hepatitis A infection. False positive IgM results are common, particularly in older people and those without acute illness.
2. Obtain as much information as possible about the case, such as:
 - a. Contact information
 - b. Demographic information (e.g., DOB, gender, race, ethnicity)
 - c. Date of onset
 - d. Signs and symptoms
 - e. Laboratory tests performed
 - f. Treatments already prescribed for the case and for contacts
 - g. Vaccine and immune globulin history
3. Ask what information has been given to the patient, including whether the patient knows about the diagnosis.
4. Notify the physician that you will be contacting the case as DOH follows up on all cases of Hepatitis A infection to assess risk factors, to better characterize the occurrence of Hepatitis A infection in Florida, and to take necessary steps to prevent additional cases. Also review infection control recommendations and address any concerns in regards to the CHD contacting the case.

B. Interview the case

1. Complete an interview as soon as possible after the case is reported to optimize recall.
 - a. Make at least three phone call attempts to reach the case; calls should be made at different times of the day with at least one call being made in the evening.
 - b. If phone calls are unsuccessful, mail a letter to the patient requesting that he/she contact the CHD and/or conduct a home visit or leave a letter for the patient.
 - c. If the patient is unable to provide information (e.g., too ill or too young), interview a proxy (e.g., spouse, parent) to provide further information.
2. Once contact is made, education about Hepatitis A infection should be provided and an interview should be conducted to obtain any further information not already gathered from the provider or hospital. *Go to:* <http://www.cdc.gov/hepatitis/PDFs/vhsp02.pdf> to access the CDC Viral Hepatitis Case Report form which can be used to guide the interview and can be completed during the interview.
3. Pertinent items to cover during the interview include:
 - a. Education
 - b. Demographic information (e.g., DOB, gender, race, ethnicity)
 - c. Identification of possible exposures and risks during exposure period (15-50 days before onset of illness)
 - Close contact (e.g., household member, sex partner, shared a meal) with any person who had an illness compatible with Hepatitis A (obtain each person's name and contact information).
 - Obtain information for both male and female sex partners regardless of the patient's gender.

- Contact with diapered children, with children in child care or other setting for preschool children, or with staff of these facilities.
 - Travel outside the United States in the 2-6 weeks before symptom onset (obtain travel dates, trip locations, and food history).
 - Any food sources such as restaurants, other food services, or social gatherings/group settings, where the patient ate a meal in the 2-6 weeks before symptom onset (obtain names, dates, and locations).
 - Sources of drinking water at home, at work, and during trips in the 2-6 weeks before symptom onset (obtain dates and trip locations).
 - Consumption of any raw or partially cooked shellfish in the 2-6 weeks before symptom onset (obtain dates and names of sources)
 - Injection or non-injection drug use.
- d. Identify an outbreak by asking if any additional persons may have been the source of infection, or if there are other potentially infected persons, or susceptible contacts and potential secondarily infected persons. These persons can include personal contacts who were known or thought to be ill in the 2-6 weeks before symptom onset, other persons known or thought to be currently ill with similar symptoms and onset dates, and susceptible personal contacts with significant opportunity for fecal-oral exposure during the period of communicability (1-2 weeks before the onset of symptoms until about 7 days after jaundice or symptom onset). These contacts can include:
- Household contacts;
 - Sexual contacts;
 - Persons who have eaten food prepared or handled by the patient;
 - Child care contacts;
 - Persons who have shared illicit drugs with the case;
 - Others with ongoing close personal contact with the patient (e.g., family, friends, coworkers, patients, etc.).
- Any person with compatible illness should be reported and investigated in the same manner.
- Is the patient in a sensitive situation?
 - Food handler
 - Child care worker
 - Child care attendee
 - Health care worker
- e. Has patient had Hepatitis A vaccine and immune globulin history
- Dates
 - Doses

C. Environmental assessment

An environmental assessment is indicated if a commercial food service facility, child care center, or public water supply appears to be implicated as the source of infection.

D. Merlin data entry

Create a case in Merlin under disease code **07010 – HEPATITIS A**. Enter the data collected into Merlin, being sure to include all required fields on the Basic Data screen, complete the Case Symptoms screen, and attach all relevant lab results. Please note that liver function test results should be entered as a lab result. The extended data screen should also be completed in Merlin.

6. CONTROLLING FURTHER SPREAD**A. Patient/household education on prevention recommendations**

1. Hepatitis A epidemiology and clinical manifestations
 - a. Modes of transmission
 - b. Incubation period
 - c. Symptoms (noting that persons may be infectious without being ill)
2. Control of infected patients
 - a. Improve personal hygiene and sanitation
 - Patients should wash hands frequently, especially after bathroom visits and touching any soiled item. Caregivers should wash hands frequently, especially after changing diapers or touching any soiled item. Handwashing should be performed for at least 10 seconds using soap and running water. Lather and rinse the palms, backs of hands, between fingers, under fingernails, and around wrists. Hand washing using antimicrobial soap is the preferred method for hand hygiene practices effective against Hepatitis A virus. The ability for alcohol-based hand rubs to kill Hepatitis A virus or other non-lipophilic viruses depends on the alcohol concentration, amount of time hands are exposed to the alcohol, and viral variant.
 - Ensure sanitary disposal of all wastes.
 - Frequently clean and disinfect bathrooms. Diaper changing areas and soiled toys of an infected person should also be frequently cleaned and disinfected.
 - b. Isolation
 - Patients and caregivers should enforce strict enteric precautions (e.g. avoid close contact with others) during the first two weeks of illness and for one week after onset of jaundice. In a neonatal intensive care setting outbreak, prolonged precautions must be considered².
 - Patients should not prepare food for others until one week after onset of illness
 - Patients should avoid contact with childcare centers until one week after onset of illness
3. General prevention
 - a. Vaccination with the full, two-dose series of Hepatitis A vaccine for long-term protection. Immune globulin may be an option against Hepatitis A virus for short-term protection.
 - b. Improved sanitation and personal hygiene
 - Frequent handwashing or use of hand sanitizer especially after using the bathroom, changing diapers, play time, handling of pets or soil, touching any soiled item, and before food preparation and eating.
 - Clean and disinfect bathrooms, diaper changing areas, and soiled toys on a routine basis
 - Drink only safe water supplies
 - Always wash raw fruits and vegetables

Educational resources for CHDs are available through the FDOH Hepatitis Prevention Program: http://www.doh.state.fl.us/disease_ctrl/aids/hep/index.html

C. Management of contacts

1. Determine whether any identified contacts of the infected patient are immune or susceptible to Hepatitis A virus. Persons are considered immune to Hepatitis A virus if they have received at least one dose of Hepatitis A vaccine at least 28 days prior to the exposure, or if they have a history of laboratory confirmed Hepatitis A infection. Serologic testing of contacts to determine immune status is generally not recommended.
2. Provide education
3. Symptomatic contacts of a confirmed patient should be referred to a health care provider and tested for Hepatitis A infection.
4. Susceptible persons recently exposed to HAV should be administered a single dose of vaccine or immune globulin for postexposure prophylaxis as soon as possible, within two weeks after exposure.

D. Infection control recommendations

1. Hospitalized cases should be treated using standard precautions. In addition, contact precautions should be used for diapered or incontinent persons for at least one week after onset of symptoms¹. These contact precautions should be maintained in infants and children less than three years of age for the duration of the hospitalization; for children 3–14 years of age for two weeks after onset of symptoms; for those older than 14 years of age for one week after onset of symptoms¹¹.
2. Environmental cleaning of contaminated surfaces. Virus is inactivated by high temperature (85 °C or >185°F) and by some disinfectants including a 1:100 dilution of household bleach in water or cleaning solutions containing quaternary ammonium and/or HCl⁹.

E. Environmental measures

1. Food handlers ([see page 10](#))
2. Child care facilities ([see page 10](#))
3. If a contaminated public or private water supply is implicated as the source of infection, notify the CHD environmental health service and request assistance.
4. If the patient's home is served by a failing sewage system, notify the CHD environmental health services for assistance in preventing exposure of others to the sewage effluent.

7. MANAGING SENSITIVE SITUATIONS**A. Determining a sensitive situation**

As defined by Florida Administrative code 64D-3.028, a sensitive situation is a setting in which the presence of a case would increase significantly the probability of spread of the diagnosed or suspected disease or condition and would, therefore, constitute a public health hazard. Examples of such settings are: schools, child-care facilities, hospitals and other patient-care facilities, food storage, food processing establishments or food outlets.

B. Food handlers

If Hepatitis A infection is diagnosed in a food handler, the following actions should be taken:

1. Exclude the patient from the food service facility for one week after onset of symptoms¹.
2. Notify CHD environmental health services for assistance.
3. Notify the facility employer and/or manager and provide education regarding the epidemiology of Hepatitis A virus and the importance of hand hygiene and glove use.
4. Visit the food facility.
 - a. Provide education to food handling staff as needed.
 - b. Evaluate the need for postexposure prophylaxis.
 - c. Evaluate all food handlers for current or recent Hepatitis A infection.
 - d. Ensure sick staff exclusions.
 - e. Ensure personal control measures (e.g., hand washing).
 - f. Ensure environmental control measures (e.g., no bare hand contact with prepared foods, glove use).
5. Administer Hepatitis A vaccine or immune globulin to other susceptible food handlers at the same food service facility within two weeks of exposure¹.
6. Ask the facility employer and/or manager or other designee to monitor all food handlers at risk for Hepatitis A infection for one incubation period (50 days) after the last exposure to the case.
7. Common-source transmission to patrons is unlikely but postexposure prophylaxis of people who ate food at the establishment may be considered if:
 - a. The food handler directly handled uncooked food or food after cooking during the infectious period and had diarrhea or poor hygiene practices and
 - b. Prophylaxis can be administered to patrons within two weeks of the exposure.

C. Child Care Settings

Because most HAV infections in young children are asymptomatic, illness among adult staff members or household contacts is often the first (and only) indication of an outbreak in a child care facility. If Hepatitis A infection is diagnosed in a child care worker, a child care attendee, or two or more households of child care attendees, the following actions should be taken:

1. Exclude any patients among staff or attendees with Hepatitis A infection from the facility for one week after onset of symptoms¹.
2. Notify the CHD environmental health services for assistance.
3. Notify the child care center director and provide education regarding the epidemiology of Hepatitis A infection and the importance of hand hygiene, environmental cleaning, and keeping the food preparation area separate from the diapering area. Diaper-changers should not prepare foods; and water for formula or juices should not come from the bathroom or hand washing faucet.
4. Visit the child care facility.
 - a. Provide education to child care workers and parents as needed.
 - b. Evaluate the need for postexposure prophylaxis.
 - c. Evaluate anyone with a gastrointestinal illness or jaundice within the past 2-6 weeks and determine their immune status. Ensure sick staff and child exclusions.
 - d. Ensure personal control measures (e.g., hand washing).
 - e. Ensure environmental control measures (e.g., toy cleaning, food preparation, bathroom cleaning).
5. Administer Hepatitis A vaccine or immune globulin to all susceptible staff and attendees if (1) one or more cases of hepatitis A are recognized in children or

- staff members; or (2) cases are recognized in two or more households of center attendees¹.
- a. Postexposure prophylaxis needs to be recommended only to contacts in the same classroom as the case if the center does not provide care to diapered children.
 - b. When an outbreak occurs (i.e., cases of hepatitis A in two or more families), postexposure prophylaxis should also be considered for household members of children (center attendees) in diapers¹
6. Ask the facility director and/or manager or other designee to monitor all staff and attendees at risk for Hepatitis A infection for one incubation period (50 days) after the last exposure to the case.
 7. To identify infections quickly, surveillance should be conducted by the CHD for hepatitis-like illness among households connected to the facility for one incubation period (50 days) after onset of the last case. All households of attendees should be provided with basic information about Hepatitis A virus and hygiene, and instructed to contact the CHD immediately if anyone develops a hepatitis-like illness.

D. Hospitals

Usually, healthcare-associated Hepatitis A infection in hospital personnel has occurred through spread from patients with acute HAV infection in whom the diagnosis was not recognized. Careful hygienic practices should be emphasized when a patient with jaundice or known or suspected Hepatitis A infection is admitted into the hospital. When outbreaks occur, Hepatitis A vaccine or IG is recommended for people in close contact with infected patients¹.

9. ROUTINE PREVENTION

The major methods of prevention for Hepatitis A infections are improved sanitation (e.g., in food preparation and of water sources), personal hygiene (e.g., hand hygiene after diaper changes in child care settings), immunization with Hepatitis A vaccine, and administration of IG.¹

A. Hepatitis A Immunization

Hepatitis A vaccine is preferred unless contraindicated. IG can be used to provide short-term protection where one dose of 0.02 mL/kg confers protection against Hepatitis A infection for up to three months, and a dose of 0.06 mL/kg protects for 3 to 5 months. Completion of the Hepatitis A vaccine series according to the licensed schedule is necessary for long-term protection against Hepatitis A infection.

The Hepatitis A vaccines currently licensed in the United States include HAVRIX®, VAQTA®, and the combination vaccine TWINRIX®, which contains both Hepatitis A and Hepatitis B viral antigens. HAVRIX® and VAQTA® are licensed for persons 12 months of age and older and have pediatric and adult formulations that are administered in a two-dose schedule and given as a series separated by 6–12 months and 6–18 months respectively. TWINRIX® is licensed for persons 18 years of age and can be administered in a three-dose schedule or an accelerated

four-dose schedule. All Hepatitis A-containing vaccines are administered intramuscularly.

Vaccination with Hepatitis A vaccine is recommended for the following (if susceptible):

- All children at age one year (12–23 months) of age. Children who are not vaccinated by two years of age can be vaccinated at subsequent visits.
- Persons one year of age and older traveling to or working in countries with high or intermediate prevalence of Hepatitis A infections, such as those located in Central or South America, Mexico, Asia (except Japan), Africa, and eastern Europe (IG can be given prior to departure for immediate, temporary protection but vaccination is preferred.)
- Men who have sex with men.
- Persons who use street drugs.
- Persons with chronic liver disease.
- Persons with clotting-factor disorders who are treated with clotting factor concentrates.
- Persons who have occupational risk for infection such as working with HAV-infected primates or working with HAV in research laboratories.
- Persons who anticipate close personal contact (e.g., household contact or regular babysitting) with an international adoptee from a country of high or intermediate endemicity during the first 60 days following arrival of the adoptee in the country. (Ideally administer the first dose two or more weeks before arrival of the adoptee.)

In addition, consider initiating Hepatitis B vaccination for any person at risk for exposure to Hepatitis B virus.

For the most recent Advisory Committee on Immunization Practices (ACIP) recommendations for Hepatitis A vaccine, consult the CDC ACIP at <http://www.cdc.gov/vaccines/recs/acip/>

B. Preexposure Prophylaxis

Hepatitis A immunization is recommended routinely for children 12 through 23 months of age, for people who are at increased risk of infection, for people who are at increased risk of severe manifestations of Hepatitis A if infected, and for any person who wants to obtain immunity.

When evaluating the need for preexposure prophylaxis, determine whether persons are immune or susceptible to Hepatitis A infection. Persons are considered immune to Hepatitis A virus if they have received at least one dose of Hepatitis A vaccine at least 28 days prior to the exposure or if they have a history of laboratory confirmed Hepatitis A infection.

C. Postexposure Prophylaxis

When evaluating the need for postexposure prophylaxis, determine whether persons are immune or susceptible to Hepatitis A virus. Persons are considered immune to Hepatitis A infection if they have received at least one dose of Hepatitis A vaccine at least 28 days prior to the exposure or if they have a history of laboratory confirmed Hepatitis A infection.

1. Immune Globulin (IG)

Passive immunization with IG (0.02 mL/kg) should be given as soon as possible, but no more than two weeks after exposure. IG can provide short-term protection against HAV. When given within two weeks of exposure to HAV, IG is greater than 85% effective in preventing symptomatic infection¹. People who are given IG for postexposure prophylaxis and for whom Hepatitis A vaccine is also recommended for other reasons should receive a dose of vaccine simultaneously with IG.

2. Vaccine

Active immunization should be given as soon as possible, but no later than two weeks after exposure. Completion of the Hepatitis A vaccine series according to the licensed schedule is necessary for long-term protection against Hepatitis A.

3. Vaccine vs. IG for Susceptible Persons

a. Within two weeks of exposure or less

- **Healthy persons aged 12 months – 40 years of age:** Single-antigen Hepatitis A vaccine is preferred at the age-appropriate dose because of the vaccine's advantages, including long-term protection and ease of administration, and the equivalent efficacy of vaccine to IG.
- **Healthy persons >40 years of age:** IG (0.02 mL/kg) is preferred because of the absence of information regarding vaccine performance in this age group and because of the more severe manifestations of Hepatitis A infection in this age group. Vaccine can be used at the age-appropriate dose if IG cannot be obtained. The magnitude of risk of HAV transmission should be considered in decisions to use IG or vaccine.
- Children <12 months of age, immunocompromised persons, persons with chronic liver disease, and persons for whom vaccine is contraindicated: IG (0.02 mL/kg) should be used.

- ##### b. No postexposure prophylaxis is recommended when the time since exposure exceeds two weeks. Although, for those 12 months of age or older, Hepatitis A vaccine may be indicated at the age-appropriate dose for ongoing exposure.

9. REFERENCES

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