QUICK FACTS FOR PROVIDERS: Hepatitis A

Reporting Information
Class B1: Report by the close of the next business day after the case or suspected case presents and/or a positive laboratory result to the local public health department where the patient resides. If patient residence is unknown, report to the local public health department in which the reporting health care provider or laboratory is located.

Agent
Hepatitis A virus (HAV) is classified in the Picomaviridae family and is the only member of the Hepatovirus genus. HAV is a single-stranded RNA virus, 27-28nm in diameter.

Source
The source for transmission of HAV is the stool of infected persons.

Occurrence
Hepatitis A remains one of the most frequently reported vaccine preventable diseases in the United States. Incidence appears higher in persons of lower socioeconomic status and cases occur most frequently among children and young adults; greater than 25% of reported cases are in persons <20 years of age. Over 50% of all American >40 years of age have had hepatitis A and are immune to reinfection.

Hepatitis A outbreaks are frequently associated with child-care centers, babysitting settings and households with young children.

Mode of Transmission
Infection is acquired by ingestion of the virus; the mode of transmission is via the fecal-oral route. HAV is spread primarily by close person-to-person contact or through contaminated food. Transmission of HAV among children is facilitated by the high incidence of inapparent illness in infants and toddlers, the fecal-oral mode of spread, and the close personal contact and poor hygiene skills exhibited by children. Household members, babysitters, and child-care staff can be exposed to HAV during diapering or toileting activities. Children play a critical role in sustaining hepatitis A virus transmission in community-wide epidemics due to their asymptomatic or unrecognized infections. Common-source outbreaks from contaminated water supplies are extremely rare in Ohio.
**Period of Communicability**
Infected persons shed virus in their stool from approximately two weeks prior to onset of symptoms through the tenth day after onset. A chronic carrier state has not been demonstrated and hepatitis A does not cause chronic liver disease.

**Incubation Period**
The incubation period ranges from 15-50 days, with an average of 28-30 days.

**Treatment**
There is no specific treatment for hepatitis A infection. The patient's sense of well-being is the best guide for the amount of bed rest required; a simple guide is avoidance of fatigue. A normal diet should be prescribed and some patients prefer frequent small, light meals. A low-fat diet is unnecessary. Corticosteroids are of no benefit in the treatment of hepatitis A and should be avoided.

**Isolation**
Ohio Administrative Code (OAC) 3701-3-13 (L) states: “Hepatitis A: a person with hepatitis A who attends a child care center or works in a sensitive occupation shall be excluded from the child care center or work in the sensitive occupation until ten days after initial onset of symptoms.”

Cases should be instructed to exercise good personal hygiene during the period of communicability, with an emphasis on thorough handwashing. Diapers and other fecally-contaminated articles should be handled with care. In the hospital setting, enteric precautions should be used until 10 days after the onset of symptoms.

**Immune Globulin**
Use of immune globulin (IG) should be reserved for those persons actually at risk of acquiring hepatitis A from contact with the stool of an infected person. Often a nonexposed individual’s request for prophylaxis is based on a misconception of the method of spread of HAV. In these instances, an explanation of the mode of transmission of hepatitis A should be provided instead of IG. It should not be administered to reduce unfounded anxiety.
Contact
Hepatitis A will be prevented or ameliorated in 80%-90% of exposed non-immune persons if immune globulin prophylaxis is administered within two weeks after exposure. Non-vaccinated persons who are routinely considered as candidates for prophylaxis include:

- Household members and others who have had intimate contact with the case, such as sexual partners, persons who have shared illegal drugs, babysitters of children in diapers, playmates of toddlers, etc.
- Residents and staff in institutions for the mentally retarded and other facilities where living conditions and behavior patterns might favor the transmission of HAV.
- Children and staff in a child care setting depending on the ages of the children attending and the number of cases, among other factors. IG prophylaxis may be limited to a classroom or involve the entire child care center, including families of attendees.
- If a food handler is diagnosed with hepatitis A, IG should be administered to other food handlers at the same establishment. Because common-source transmission to patrons is unlikely, IG administration to patrons is usually not recommended, but can be considered if:
  - During the time when the food handler was likely to be infectious, the food handler both directly handled uncooked foods or foods after cooking and had diarrhea or poor hygienic practices; and
  - Patrons can be identified and treated within 2 weeks after the exposure.
  - In settings where repeated exposures to HAV might have occurred (e.g. institutional cafeterias), stronger consideration of IG use might be warranted.
- Non-immune food handlers who are either household or occupational contacts to a person with hepatitis A should receive IG and be instructed to practice good handwashing. Contacts should not be restricted from work and screening for IgM anti-HAV in asymptomatic contacts is not indicated.
- Food Service Operation rules also pertain to this situation. Hepatitis A is a disease, which can be transmitted through food. Persons infected with a disease that is communicable by food are not permitted to work as food handlers. For additional information, refer to Ohio Administrative Code (OAC) Chapter 3717-1 (Ohio Uniform Food Safety Code) Section 02.1, Management and Personnel: Employee Health.
- Persons who are not routinely considered candidates for IG prophylaxis include:
  - School-age children and teachers who are in the same classroom as a case.
  - Persons exposed to a fellow worker with hepatitis A in a store, office, factory or similar work setting.
- Health care workers who care for a patient with hepatitis A; transmission of HAV in the hospital setting is extremely rare.
Prevention and Control

Hepatitis A vaccine, inactivated, is now available and licensed in the United States for use in persons 12 months of age and older. The hepatitis A vaccine has been demonstrated to be safe, immunogenic and efficacious. Protection against clinical hepatitis A begins in some persons as soon as 14-21 days after a single dose of vaccine; nearly all immunized persons have protective antibody by 30 days after the initial dose of vaccine. Based on the successful implementation of childhood hepatitis A vaccination programs in high incidence areas, the Advisory Committee on Immunization Practices (ACIP) recommended in 2005 that all children should receive hepatitis A vaccine at 12-23 months of age. Vaccination should be integrated into the routine childhood vaccination schedule.

The vaccine is recommended for the following groups who are at increased risk of infection:

- International Travelers.
- Men who have sex with men.
- Illegal-drug users (both injecting and non-injecting illegal drugs).
- Persons who have occupational risk for infection (i.e. work with HAV-infected primates or with HAV in a research laboratory).
- Persons who have clotting-factor disorders (i.e. who receive clotting-factor concentrates).
- Persons who have chronic liver disease (there is no need for routine vaccination of persons with chronic hepatitis B or C virus infections without evidence of chronic liver disease).

Groups for whom hepatitis A vaccine is not routinely recommended are as follows:

- Food service workers.
- Sewerage workers.
- Health care workers.
- Child care centers.

Further information can be found in Update: Prevention of Hepatitis A After Exposure to Hepatitis A Virus and in International Travelers. Updated Recommendations of the Advisory Committee on Immunization Practices (ACIP),” MMWR, 2007; 56(41); 1080-1084. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5641a3.htm. Specific vaccine information can also be found in the ODH Vaccine Protocol Manual.