Infectious Disease Epidemiology Report

Hepatitis A in Maine, 2011

Background
Hepatitis A is a liver disease caused by hepatitis A virus (HAV). HAV is spread from person to person by the fecal-oral route. Poor hand washing by infected persons increases the risk of transmission. The virus spreads more easily in areas where sanitary conditions and personal hygiene practices are poor. Most infections result from exposure during international travel or contact with a household member or sex partner who has hepatitis A. Casual contact, as in the office or school setting, does not spread the virus.

Symptoms of acute HAV infection include tiredness, loss of appetite, nausea, abdominal discomfort, dark urine, clay-colored stool, jaundice or elevated liver function tests. Acute HAV infection is classified by a discrete onset of symptoms, elevated liver enzymes or jaundice, and positive serology. Symptoms appear within 15 to 50 days of infection with the virus, although children are less likely to have symptoms. There is no chronic form of hepatitis A and infection provides lifelong immunity. There is a vaccine for hepatitis A.

Methods
Acute HAV infections in Maine are reportable immediately upon recognition or strong suspicion of disease. Reported cases are investigated by Maine CDC to determine the exposure, identify close contacts, and provide education. Epidemiologists also make recommendations for prevention, follow up testing, and vaccination.

Results
In 2011, six cases of hepatitis A were reported in Maine compared to seven cases in the previous year. The rate of acute HAV infection in Maine was 0.5 cases per 100,000 persons in 2011. This is slightly higher than the national rate of 0.4 cases of acute HAV infection per 100,000 persons (Figure 1).

The cases were split evenly among males and females (Figure 2).

In 2011, hepatitis A cases were reported from three Maine counties. Four cases (67%) were in Lincoln County and one case each was reported from Cumberland and Knox Counties.

Risk factors were collected for all six cases in 2011. Four cases (67%) were close contacts of a confirmed case of acute HAV infection. Three cases (50%) reported travel history during the exposure period. One case reported men who have sex with men (MSM) (Figure 3).
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Figure 3. Reported risk factors* for hepatitis A, Maine 2011 (N=6)

- Travel
- Contact of case
- MSM

* Cases could report more than one risk factor.

Prevention and Control
Improving sanitary conditions and hand hygiene is important in preventing acute HAV infection. Washing hands after using the bathroom, changing a diaper, or before preparing or eating food can help prevent infection.

Hepatitis A is vaccine-preventable. Hepatitis A vaccine is recommended for all persons age one and above. The vaccine is administered in a 2-dose schedule, six months apart. Hepatitis A vaccine is recommended routinely for children and for persons at increased risk for hepatitis A. Persons at increased risk for hepatitis A include:

- Travelers
- MSM
- Drug users
- Persons who have occupational risk for infection
- Persons with clotting factor disorders

Infection with HAV can be avoided after exposure to a confirmed case with timely administration of hepatitis A vaccine or immune globulin. This is called post-exposure prophylaxis and is effective if given within two weeks of exposure.

In 2009, the Advisory Committee on Immunization Practices (ACIP) recommended routine hepatitis A vaccine for household members and other close personal contacts of adopted children newly arriving from countries where HAV infection is endemic. Because the majority of children have asymptomatic or unrecognized infections, they play a role in HAV transmission and serve as a source of infection for others.

Prevention measures for HAV infection include the following:

- Consider vaccination for all children and persons at increased risk for HAV infection, including travelers, MSM, drug users, persons with occupational risk for infection, and persons with clotting factor disorders
- Practice good hand washing, especially before handling or eating food, after toilet use and after changing diapers
- Dispose of feces in a sanitary manner in daycare or residential settings
- Avoid sexual practices that may allow fecal-oral transmission
- When traveling, do not drink tap water or use ice and avoid eating uncooked foods in developing countries where the water may not be safe and sanitation is poor

Acute hepatitis A cases are required to be reported immediately to Maine CDC at 1-800-821-5821. Information about hepatitis A is available online at [www.maine.gov/dhhs/boh/ddc/epi/hepatitis/A.shtml](http://www.maine.gov/dhhs/boh/ddc/epi/hepatitis/A.shtml) and [www.cdc.gov](http://www.cdc.gov).