# **Hepatitis A**

# REPORTABLE DISEASES TOOLKIT

Information for Health Care Professionals

# **Reporting Obligations**

Hepatitis A infection is designated as a disease of public health significance and is reportable under the *Ontario Health Protection and Promotion Act.* Report all suspect and confirmed cases **immediately by phone** to the health unit.

# **Epidemiology**

### **Aetiologic Agent:**

Hepatitis A infection is caused by the Hepatitis A virus (HAV), a 27-nanometer picornavirus, positive-strand RNA virus. It has been classified as a member of the family Picornaviridae.

#### **Clinical Presentation:**

Typically, hepatitis A is an acute, self-limiting liver infection. Clinical presentation varies with age at time of infection. Infection among children less than six years of age is usually asymptomatic or mild without jaundice. Illness in older children and adults is typically characterized by a 1-to-7-day prodrome of abrupt onset of fever, malaise, loss of appetite, dark urine, nausea, and abdominal pain followed by jaundice. There is usually complete recovery without complications or sequelae, however, older persons and individuals with chronic liver disease and immunocompromising conditions have an increased risk of progressing to fulminant hepatic failure resulting in death. Extrahepatic complications may occur. Illness usually lasts less than two months; prolonged, relapsing hepatitis for up to one year occurs in 15% of cases; chronic infection is not known to occur.

#### Modes of transmission:

HAV infection is transmitted primarily by the fecal-oral route, through direct contact with infected people or indirectly through ingestion of contaminated water or foods (e.g., fresh, and frozen produce, seafood harvested from contaminated water).

On rare occasions, transmission has been reported after exposure to HAV contaminated blood or blood products obtained from viremic donors during the incubation period of their infection. Transmission may also occur through sexual activities that include direct or indirect oral-anal contact but not through exposure to saliva, semen, or urine.

In addition to foodborne outbreaks, outbreaks have been associated with injecting and non-injecting drug use, men who have sex with men and childcare setting employees or attendees.

The virus may remain infectious in the environment for several weeks.

#### **Incubation Period:**

The incubation period ranges from 15 to 50 days with an average of 28 to 30 days.

#### **Period of Communicability:**

Maximum communicability occurs during the latter part of the incubation period with peak levels in the 2 weeks before clinical illness.

Communicability diminishes rapidly thereafter and ends shortly after the onset of jaundice.

Cases are considered non-infectious 7 days after onset of jaundice

although prolonged viral excretion up to 6 months has been documented in infants and children and immunocompromised individuals. 1,2 Chronic shedding of HAV in feces does not occur.

#### Risk Factors/Susceptibility

Immunity following natural infection is thought to be lifelong. Protective antibody levels following vaccination will persist for at least 20 years or longer and protection likely persists even when antibodies are no longer measurable due to immune memory.

The risk of hepatitis A infection for non-immune travelers depends on factors including destination, length of trip, and living conditions. The risk of hepatitis A is highest among travelers who visit or live in rural areas and who eat and drink in locations with poor sanitation and unsafe food handling practices. However, there is still a risk from travel to urban areas and staying in luxury hotels, and for those who follow good hygiene, water, and food practices.

Immunization with hepatitis A vaccine will prevent infection. See the "<u>Canadian Immunization Guide</u>, evergreen edition, <u>Part 4</u>" for a list of high risk groups who are recommended to receive this vaccine.

#### **Diagnosis & Laboratory Testing**

Serology tests indicating IgM anti-HAV antibodies confirms recent infection. Antibodies are generally detectable in serum 5-10 days after infection and usually decrease to undetectable levels within 6 months after onset of infection. In rare cases, they may persist for longer.

#### **TESTING INFORMATION & REQUISITION**

#### **Treatment & Case Management**

Treatment is under the direction of the individual's health care provider.

Provide education to patients regarding transmission and personal hygiene (hand hygiene after defecation, before and after sexual contact and before handling food).

Exclude cases such as food handler, childcare staff and attendees and health care workers from high-risk settings for 14 days after onset of symptoms, or 7 days after onset of jaundice, whichever comes earlier.

Public health staff will identify and assess contacts of cases for the purpose of post-exposure prophylaxis recommendations (those living in the same household, sexual partners, drug sharing partners, contacts who are food handlers, daycare and institutional attendees or employees).

See the <u>"Canadian Immunization Guide, evergreen edition, Part 4"</u> for postexposure prophylaxis recommendations with Hepatitis A vaccine and Hepatitis A Immune globulin.

#### **Patient Information**

#### PATIENT FACT SHEET

#### References

 Ontario. Ministry of Health. Infectious Diseases Protocol, Appendix 1: Hepatitis A. Toronto: Queen's Printer for Ontario; 2022 [effective 2024 Jan] [cited 2024 Mar 12].

#### Additional Resources

- 1. PHAC. Canadian Immunization Guide, evergreen edition, Part 4.
- Heymann, D.L. Control of Communicable Disease Manual (21st Ed.). Washington, American Public Health Association, 2022.
- PHO, Provincial Infectious Diseases Advisory Committee (PIDAC). Hepatitis A. Post-Exposure Prophylaxis, 2013.
- PHO. Hepatitis A, Dec 2022.