

New cluster of 12 Hepatitis A cases (non-travel related) in Muskoka Please consider pre-exposure immunization in your patients (version 2)

Attention: Physicians, Emergency Departments, Nurse Practitioners, Infection Control Practitioners, Occupational Health Professionals, Walk-In Clinics/Urgent Care Clinics, Midwives, Family Health Teams, Central LHIN, NSM LHIN

Date: March 1, 2020 (Updated March 3, 2020 – Correction in the number of cases)

The Simcoe Muskoka District Health Unit (SMDHU) is currently investigating an increase in Hepatitis A (HAV) cases in Muskoka. Ten lab confirmed cases of HAV (eight men, one woman, one child), and two probable cases in children have been reported since October 2019. Six cases that have been subtyped/genotyped are genetically identical and all of the cases reside in the region north of Gravenhurst. Investigations are underway to identify any potential common exposures or risk factors/behaviors. There have been between zero and six cases of HAV reported in Simcoe Muskoka each year since 2000. While most HAV cases are related to travel, this has been ruled out in all of the current cases.

Disease Process

Typically, HAV is an acute, self-limiting liver infection with clinical presentation varying depending on the age of the case. Infection is usually asymptomatic in children and jaundice develops in < 10% of children six years and under. Symptoms may start 15 to 50 days after exposure and usually resolve on their own.

Typically, acute clinical illness is characterized by:

- A one to seven day prodrome period of abrupt onset fever, malaise, anorexia, nausea and abdominal pain followed by jaundice.
- Dark urine and light-colored stools, as well as pruritus may occur, and an enlarged liver may be seen.
- Extra-hepatic complications may occur.
- It has been reported that between 3% and 20% of cases may experience relapsing disease.
- Fulminant HAV and death are rare. There is usually complete recovery without complications or sequelae. Chronic infection is not known to occur.

Testing Recommendations

If patients present in your office with unexplained symptoms that are consistent with HAV, please consider ordering liver function tests (ALT, AST, ALP, GGT), and HAV IgM and IgG antibodies. Please note outbreak #2260-2020-086 on the lab requisition for HAV serology. Antibodies are generally detectable in serum five to ten days after infection and usually decrease to undetectable levels within six months after onset of infection. In rare cases, antibodies may persist for longer. Detection of IgG antibodies signals recovery from acute HAV infection. When IgG antibodies are detected alone, they indicate some level of immunity either from past infection or previous immunization.

“Total HAV virus antibody” (total IgM and IgG antibody) is not a confirmatory test for acute HAV infection but is used as an initial screening test in some laboratories. For further information about HAV IgM and IgG human diagnostic testing, contact the Public Health Ontario Laboratories or refer to the Public Health Ontario Laboratory Services webpage:

http://www.publichealthontario.ca/en/ServicesAndTools/LaboratoryServices/Pages/Hepatitis_A_Diagnostic_Serology.aspx#.VxT6K45VhXs



Consider Pre-exposure Immunization

HAV vaccine is recommended for anyone older than six months of age who is at an increased risk of infection or severe illness, but also for those who would like to decrease their risk of acquiring HAV. Given the cluster of unknown origin in Muskoka, please consider discussing immunization with your patients, especially within the cluster geography.

HAV vaccine is publicly funded for the persons meet the following high-risk criteria

- Intravenous drug use
- Liver disease (chronic), including Hepatitis B and C
- Men who have sex with men

Risk factors

Although many reported cases of HAV have no identifiable risk factors, the following individuals are considered to be at increased risk of HAV infection:

- Travelers to HAV-endemic countries. Studies estimate that 44% to 55% of reported HAV cases in Canada are linked to travel. Low-budget travelers, volunteer humanitarian workers, and Canadian-born children of new Canadians returning to their country of origin to visit friends and relatives, may be at increased risk. The risk of HA for susceptible travelers to developing countries is estimated to range from 0.1/1,000 to 1/1,000 per month.
- Individuals living in communities at risk of HAV outbreaks or in which HAV is endemic.
- Household or close contacts of children adopted from HAV-endemic countries.
- Men who have sex with men (MSM).
- Injectable and non-injectable illicit drug users.
- Workers involved in research on HAV virus or production of HAV vaccine who may be exposed to HAV.
- Military personnel and humanitarian relief workers who are likely to be posted to areas with high rates of HAV.
- Zoo-keepers, veterinarians and researchers who handle non-human primates.
- People receiving repeated replacement of plasma-derived clotting factors.

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People at increased risk of severe illness or complications from HAV infection include:

- Individuals with chronic liver disease
- Individuals over 60 years of age

For further information regarding HAV, to coordinate access to immunoglobulin or to report a suspect or confirmed case of HAV, please contact the Infectious Diseases team at (705) 721-7520 extension 8809 during business hours or after hours to 1-888-225-7851.