

Hepatitis A Cluster in Muskoka: Update #1 Hepatitis A Case in a Huntsville Food Handler: Post Exposure Prophylaxis (PEP) Immunization Recommendations

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 11, 2020

The Simcoe Muskoka District Health Unit (SMDHU) has been investigating [an increase in Hepatitis A \(HAV\) cases in Muskoka](#). The investigation thus far has identified that the index case of this cluster was a returning traveler who then introduced this subtype into the community. It has now propagated person-to-person spread with secondary transmission. There has been one new case to report which brings the total confirmed cases to 13.

SMDHU has now been notified of a case of hepatitis A in a food handler, who worked at the Family Place Restaurant and Pizza, 1 King William St., Huntsville on certain dates and times between February 19th and March 7th, 2020.

Hepatitis A vaccine given within 14 days of exposure may prevent the disease. Individuals who have received two doses of the hepatitis A vaccine or have previously had hepatitis A infection, will have immunity from the disease, and do not require further vaccine.

SMDHU strongly recommends that anyone who worked at, dined or had takeout from the restaurant on the following times and dates receive the hepatitis A vaccine:

- Feb 26: 5:30 a.m. – 2 p.m.
- Feb 27: 8 a.m. – 2 p.m.
- Feb 28: 8 a.m. – 2 p.m.
- Feb 29: 8 a.m. – 2 p.m.
- March 1: 8 a.m. – 2 p.m.
- March 4: 6 a.m. – 8 a.m.
- March 7: 8 a.m. – 9 a.m.

A free immunization clinic is being held at the Canada Summit Centre (Active Living Centre located at the back of the Summit Centre), 20 Park Drive, Huntsville, on:

- Wednesday, March 11: 2 p.m. – 8 p.m.
- Thursday, March 12: 10 a.m. – 8 p.m.
- Friday, March 13: 10 a.m. – 3 p.m.

Because the vaccine is no longer effective more than 14 days after exposure, other patrons who dined or had takeout at the restaurant at the dates and times listed below should monitor for symptoms of hepatitis A and contact their health care provider if they experience symptoms:

- Feb 19: 5:30 a.m. – 2 p.m.
- Feb 21: 8 a.m. – 2 p.m.
- Feb 22, 23: 6 a.m. – 2 p.m.



The restaurant is working closely with SMDHU and this occurrence is not a direct reflection on the restaurant, as this disease can happen at any time in any setting. It has been inspected and is compliant with public health standards.

Indications for Post Exposure Prophylaxis (PEP):

Everyone six months of age and over should be offered hepatitis A vaccine as soon as possible if they worked or ate at the restaurant identified during the times specified above up to 14 days after the exposure date (unless contraindicated or fully immunized in the past – see below for definition of fully immunized).

It is recommended that monovalent vaccine be used as it has a more robust immune response required for PEP efficacy. Only one dose of hepatitis A vaccine is indicated for PEP. A second dose is indicated for long term protection. The second dose would not be publicly-funded.

Age group OR underlying condition	Post-exposure prophylaxis (PEP)	Comments
Less than 6 months of age	Serum immune globulin	Hepatitis A vaccine is not authorized for children less than six months of age.
6 months to less than 12 months of age (who are not immunocompromised and do not have chronic liver disease)	Hepatitis A vaccine	NACI's evidence review found that vaccination of infants 6 to 12 months of age with inactivated hepatitis A vaccines is immunogenic and safe. For this age group, use of the hepatitis A vaccine is considered off-label.
12 months to 49 years of age (who are not immunocompromised and do not have chronic liver disease)	Hepatitis A vaccine	If immunocompromised or have chronic liver disease, see appropriate row below.
50 years of age and over	Hepatitis A vaccine*	For individuals 50 years of age and over who are offered PEP in the context of food handler transmission, only vaccine is recommended.*
Pregnant or breastfeeding women	Hepatitis A vaccine	The vaccine has not been studied in clinical trials, but because the vaccine is prepared from inactivated viruses, no risk to the developing fetus is anticipated. The benefits likely outweigh the risks and can be recommended. HA vaccine may be administered, if indicated, to women who are breastfeeding.
Immunocompromised (by medical condition or long-term medication)	Serum immune globulin and hepatitis A vaccine	IG should only be given if exposure was <14 days. Unknown efficacy of IG beyond 14 days.
Chronic liver disease	Serum immune globulin and hepatitis A vaccine	IG should only be given if exposure was <14 days. Unknown efficacy of IG beyond 14 days.

Table adapted from Public Health Ontario: <https://www.publichealthontario.ca/-/media/documents/ga-hepatitis-a-management.pdf?la=en>

* Hepatitis A immune globulin PEP advice from the Provincial Infectious Diseases Advisory Committee on Immunization (PIDAC-I) (IG plus hepatitis A vaccine for individuals 50 years of age and over) differs from that of the National Advisory Committee on Immunization (IG may be provided in addition to hepatitis A vaccine for those 60 years of age and over). However, when the exposure source is a food handler, those who are ≥ 50 years of age may receive HAV vaccine alone, unless they are a household/close contact of a case in which case they should also receive IG.

For Those Previously Vaccinated with Hepatitis A Vaccine:

- If two previous doses were provided, no additional doses are recommended.
- If only one dose was provided and it was less than six months ago, no additional doses are recommended until at least six months from the last dose.
- If only one dose was provided and it was greater than six months ago, one additional dose is recommended.

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 Persons Who Meet the Following High-risk Criteria:

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

Clinicians are asked to remain vigilant in monitoring for hepatitis A infection. Please continue to offer pre-exposure prophylaxis to high risk groups.

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 (Monday to Friday 8:30 a.m. – 4:30 p.m.) or after hours at 1-888-225-7851.