



TO: Chair and Members of the Board of Health

FROM: Christopher Mackie, Medical Officer of Health / CEO

DATE: 2019 October 17

HEPATITIS A OUTBREAK DECLARED OVER

Recommendation

It is recommended that the Board of Health receive Report No. 064-19 re: “Hepatitis A Outbreak Declared Over” for information.

Key Points

- In November 2018, MLHU declared a community hepatitis A outbreak in response to a high number of new, non-travel-related cases, most notably among people who use drugs or who were underhoused or homeless.
- From January 2018 to July 17, 2019, a total of 68 laboratory-confirmed hepatitis A cases were reported to MLHU. The average annual number of cases is 2–3. These are usually travel-related.
- In response, robust post-exposure immunization efforts, enhanced communications, and strong community partnerships were undertaken and proved critical in achieving control of the outbreak.
- The outbreak was declared over on July 17, 2019 – 100 days since the onset of the last related case, reported on April 7, 2019.

Background

Hepatitis A is an infection of the liver caused by the hepatitis A virus. Symptoms include fever, loss of appetite, nausea, abdominal discomfort, and yellowing of the skin and eyes (jaundice). Recovery often takes four to six weeks, but can also take months. It is transmitted fecal-orally and can be spread via contaminated food or drinking water, sharing of needles or drug-use equipment, or living in the same space as or having sex with an infected person.

There is a vaccine for the hepatitis A virus that is very effective for preventing the disease, although it is not universally publicly funded. If administered expediently, this vaccine can decrease the probability of an individual developing the disease despite already having been exposed. This “post-exposure prophylaxis” is publicly funded in Ontario.

Overview

In November 2018, in response to an increasing number of non-travel-related hepatitis A cases, MLHU declared a community hepatitis A outbreak (see [Report No. 076-18](#)). From January 2018 to July 17, 2019, there were 68 laboratory-confirmed hepatitis A cases reported. Between 2013 and 2017, the five-year annual average was 2.6 cases reported per year, most of which were travel-related. Among the cases reported during the outbreak, nearly all (97%, 66/68) were *not* travel-related. More than two-thirds (68.2%, 45/66) of the non-travel-related cases reported drug use, and more than one-third (39.4%, 26/66) reported using injection drugs. Being underhoused or homeless was reported by 36.4% (24/66) of non-travel-related cases.

All non-travel-related cases were of the same strain, or genotype, of hepatitis A virus (1A VRD_521_2016). This strain began circulating in Ontario in 2017 and has been linked to other outbreaks in the province.

Health Unit response

The MLHU's outbreak response strategy focused on:

- Enhanced surveillance to identify those at risk;
- Rapid and robust distribution of hepatitis A vaccine; and
- Creation and dissemination of targeted communications to enhance awareness and education among those at risk.

The Health Unit worked diligently to immunize close contacts and at-risk individuals through clinics held at shelters, community meal programs, and the Temporary Overdose Prevention Site (now known as Carepoint). In total, 978 immunizations were administered to contacts of known cases and other high-risk individuals. In addition to the diligent work of the Vaccine Preventable Disease team, the Outreach Team was an important part of this work, as pre-established relationships with clients facilitated high vaccine uptake.

Additional response measures included health-care provider alerts to facilitate appropriate diagnosis, notification of shelter staff members who work with homeless or underhoused clients, and public notification via a media release.

Conclusion

July 17, 2019, marked 100 days since the onset of the last case, on April 7, 2019, indicating that two full incubation periods of the virus had passed without any additional cases of illness. Therefore, the outbreak was declared to be over. Robust post-exposure immunization efforts, enhanced communications, and strong community partnerships were critical in achieving control of the outbreak.

Many cases were among people who are underhoused or homeless, and who use drugs. In recent years, this community has also experienced outbreaks of HIV, invasive group A strep, and opioid poisonings. To prevent or respond to these outbreaks in the future, the ongoing strengthening of the Health Unit's relationships with people with lived experience and with community partners will be critical.

This report was prepared by the Associate Medical Officer of Health, the Population Health Assessment and Surveillance team, and the Environmental Health and Infectious Diseases Division.



Christopher Mackie, MD, MHSc, CCFP, FRCPC
Medical Officer of Health / CEO