

# INFORMATION REPORT

<b>TO:</b>	Mayor and Members Board of Health
<b>COMMITTEE DATE:</b>	March 19, 2018
<b>SUBJECT/REPORT NO:</b>	Infectious Disease and Environmental Health Semi-Annual Report (BOH18004) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
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<b>SUBMITTED BY:</b>	Michelle Baird Director, Planning and Business Improvement Division Public Health Services Department
<b>SIGNATURE:</b>	

## Council Direction:

This report fulfils the Board of Health policy on communication between the Medical Officer of Health and the Board of Health, as outlined in Report PH06038.

## Information:

This is a summary report covering the period from July 1, 2017 to December 31, 2017 (Q3 and Q4, 2017). The Ontario Public Health Standards (OPHS) are the guidelines for the provision of mandatory health programs and services for Boards of Health in Ontario. Investigations completed by program areas for Infectious Diseases and Environmental Health in the OPHS are the focus for this report. These program areas are as follows:

### **Infectious Diseases:** (Includes Reportable Diseases under the Health Protection and Promotion Act)

- Infectious Diseases Prevention and Control;
- Rabies Prevention and Control;
- Sexual Health, Sexually Transmitted Infections, and Blood-borne Infections (including HIV);
- Tuberculosis Prevention and Control; and,
- Vaccine Preventable Diseases.

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**Environmental Health:**

- Food Safety;
- Safe Water;
- Health Hazard Prevention and Management;
- Vector Borne Diseases Control; and,
- Tobacco Control.

Reportable disease cases are from people who reside in the City of Hamilton at the time of their diagnosis. Information in Appendix A has been extracted from the Ontario Ministry of Health and Long-term Care (MOHLTC) integrated Public Health Information System (iPHIS) database, and databases maintained by Public Health Services (PHS), and are subject to change due to case follow-up procedures and/or delayed diagnosis.

Appendix A provides information to the Board of Health (BOH) in a summarized format based on issues brought commonly to staff by BOH members. Appendix A includes data for three prior years, as well as the current year, which allows for trend monitoring. It is also organized to delineate information for routine monitoring of infectious diseases and environmental health issues (Part 1 and 2, respectively), workload (Part 3), and a section that may be used for unusual occurrences of interest to the BOH (Part 4).

**PROGRAM HIGHLIGHTS (July 1 – December 31, 2017)****Infectious Diseases**Food Borne Illness Outbreak Investigation

In July 2017, the Infectious Disease Program was notified of possible cases of foodborne illness following a local dinner cruise event, held aboard a ship at the Hamilton waterfront. An outbreak investigation was initiated, including interviewing attendees, analysis of food histories, and collecting clinical specimens. A Food Safety inspection was conducted both at the location of the event and the food premises of a local caterer for the event.

While not all attendees were reached for interview, Public Health Services (PHS) identified 26 cases of gastrointestinal illness. Cases had symptoms of diarrhea, lethargy, and abdominal cramps occurring within 24 hours of the event with symptoms resolving within 24 hours of onset. Due to the quick resolving and self-limiting nature of the illness, very few clinical specimens were collected and a causative organism was not identified.

The Food Safety investigation did not identify any concerns with the caterer. However, it was found that some food items were provided by the owner of the ship. These foods

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were prepared in an unlicensed, uninspected, home-based kitchen. An Order under the Health Protection and Promotion Act was issued to the owner of the ship, directing they are not permitted to serve food from uninspected sources. Education was provided to the owner to address these issues and follow-up inspections were conducted to verify that food provided for future events was prepared safely, and in licensed, inspected facilities.

#### TB Contact Investigation in a School Setting

In late September, the Infectious Disease Program investigated a case of active tuberculosis (TB) (which is able to spread to others) in a school-aged individual. Contact identification was initiated to determine if others in prolonged, close proximity to the case had been infected with latent TB (which is not able to spread to others), as those persons can receive treatment to prevent the development of active TB.

Staff worked closely with the local school and school board to provide information to staff and students, as well as tuberculin skin testing for a group of people who spent more time with the individual with active TB, in accordance with guidelines. In addition to onsite information sessions, approximately 250 information letters were distributed to staff and students and over 70 people were identified as needing skin testing for latent TB infection. To facilitate the testing, PHS worked with the school to hold skin testing clinics onsite over lunch periods. The contract tracing and provision of health education was a large, but very successful undertaking by Infectious Disease Program staff with collaboration and support of the school and school board.

### **Harm Reduction**

#### Needle Exchange Van

The Mobile Needle Exchange Van provides new needle supplies, sharps containers and naloxone kits to persons who use injection drugs. In response to an observed increase in the requests for services provided by the Van, the Board of Health approved expanded service hours including a new Sunday shift, which was implemented in 2017. This means that this important service is now available seven nights a week. The feedback from clients with respect to increased availability of this service has been very positive.

#### Opioid Response

In September, there was a noted increase in 911 calls related to probable opioid overdoses. PHS responded immediately by expanding the hours that Naloxone training and refills were available in the community. Overall, the Naloxone program has had a marked increase in distribution of Naloxone kits. In the last quarter of 2017, 494 Naloxone kits were distributed, reviving 148 people; this surpassed the total number of kits distributed in all of 2016 (462).

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## **Safe Water**

### Lead in Drinking Water

To further protect children from lead in drinking water, revisions to Ontario Regulation 243 (Lead in Schools and Child Care Centres) under the Safe Drinking Water Act came into effect on July 1, 2017. Between July 1 and December 31, 2017, PHS received 68 lab test results for water samples with lead concentrations above the Ontario Drinking Water Quality Standard for lead in drinking water (Regulation 169 under the Safe Drinking Water Act). The Safe Water team receives, assesses and responds to these reports and implements corrective actions as necessary, in alignment with the revised regulation and guidance from the Ministry of the Environment and Climate Change.

### Arsenic in Drinking Water

A lower Ontario Drinking Water Quality Standard for arsenic in drinking water came into effect on January 1, 2018. To prepare for this change, PHS worked extensively with several small drinking water system owners in 2017 to prepare for the January 1 deadline. The most notable small drinking water system is the Ancaster Well on Sulphur Springs Road, owned and operated by the Hamilton Conservation Authority.

## **Health Hazards**

### Radon Awareness

Radon is a colourless, odourless and tasteless radioactive gas formed by the breakdown of uranium, a natural radioactive material found in soil, rock and groundwater. When radon seeps from the ground into an indoor space, such as a home, it can build up to unsafe levels that can increase risk of developing lung cancer.

Health Canada recommends that radon concentrations in a home do not exceed 200 Becquerels per cubic metre (Bq/m<sup>3</sup>) per year. In 2012, the Cross-Canada Survey of Radon Concentrations in Homes conducted by Health Canada [3] found that in Hamilton, 5% (5/100) of the homes tested for radon had concentrations above 200 Bq/m<sup>3</sup>. Furthermore, in 2013, Public Health Ontario [4] reported that 16% of lung cancer deaths in Hamilton can be attributed to radon exposure; this is greater than that found in Ontario at 13%.

Given the findings, PHS has supported promotional campaigns initiating in the month of November (National Radon Action Month) since 2014, focused on increasing radon awareness and encouraging radon testing in Hamilton homes via various promotional pathways including: Transit Shelters, Bus Ads, Radio Ads, Facebook, City Hall Digital Sign, Hamilton Community Newspaper, Neighbourhood Association Newsletters and offering free Radon Test Kits.

## **Tobacco Control**

Recent provincial amendments to the Smoke-Free Ontario Act in 2017 serve to harmonize the Regulations concerning tobacco and electronic cigarette products. Additionally, Public Health Units across Ontario are monitoring the potential impacts on enforcement related to legalized cannabis which is slated to become law in the first half of 2018. PHS will keep the City of Hamilton Board of Health apprised of any Regulatory changes and impacts resulting in service delivery changes and/or pressures.

## **REFERENCES**

- [1] TVO. (Oct 13, 2017). Ontario Hubs: Opioid Addiction. Accessed online at: <https://tvo.org/video/programs/the-agenda-with-steve-paikin/ontario-hubs-opioid-addiction>
- [2] TVO. (Oct 19, 2017). Ontario in Crisis. Accessed online at: <https://tvo.org/video/programs/ontario-hubs/ontario-in-crisis>
- [3] Health Canada. (2012). Cross-Canada Survey of Radon Concentrations in Homes Final Report. Accessed online at: [https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt\\_formats/pdf/radiation/radon/survey-sondage-eng.pdf](https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/pdf/radiation/radon/survey-sondage-eng.pdf)
- [4] Peterson E, Aker A, Kim J et al. (2013). Lung cancer risk from radon in Ontario, Canada: how many lung cancers can we prevent? Cancer Causes & Control 24: 2013-2020. Accessed online at: <https://doi.org/10.1007/s10552-013-0278-x>

## **APPENDICES ATTACHED**

Appendix A to Report BOH18004 – Infectious Disease and Environmental Health  
Report: July – December, 2017