

INFORMATION REPORT

TO:	Mayor and Members Board of Health
COMMITTEE DATE:	March 20, 2017
SUBJECT/REPORT NO:	Infectious Disease and Environmental Health Semi-Annual Report (BOH17003) (City Wide)
WARD(S) AFFECTED:	City Wide
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Council Direction:

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

Information:

This is a summary report covering the period from July 1, 2016 to December 31, 2016 (Q3 and Q4, 2016). 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.

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 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, 2016)

Infectious Diseases Prevention and Control

Community Outbreak of Food Borne Illness

In December, the Infectious Disease Prevention and Control Program was notified of cases of gastrointestinal illness among persons who had attended a holiday party and turkey dinner hosted at a local banquet hall. An outbreak investigation was initiated, involving interviewing attendees of the event for illness, collection of clinical and food specimens for testing and an onsite food safety inspection at the banquet hall. Although

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not all attendees were reached for interview, among those interviewed, PHS identified 18 cases of gastrointestinal illness, diarrhea and nausea were the primary symptoms reported; onsets of illness were 6 to 21 hours following the holiday party. Clinical specimens from ill attendees, along with testing of turkey, identified *Clostridium perfringens* as the likely causative agent for the outbreak. *Clostridium perfringens* is one of the most common bacterial causes of food borne illness and infections often occur when foods are prepared in large quantities and are then kept at improper temperatures for an extended time before serving. A Food Safety investigation at the banquet hall identified concerns related to improper cooking and hot holding of foods and food handler hygiene. Education was provided to the operator to address these issues and a follow-up inspection confirmed recommendations had been implemented.

Food Safety

New Environmental Inspection System

Food Safety Zone is a highly used Public Health website that allows residents to review food safety inspection results. In order to increase efficiency and the frequency with which the website is updated, Hamilton Public Health Services (HPS) implemented an Environmental Inspection System (Hedgehog.Net). Formerly updated twice weekly, food safety inspection results are now updated daily. Inspection results can be viewed at: <http://www.foodsafetyzone.ca/>

Health Hazard Prevention and Management

Heat Warning and Information System 2016

In 2016, there were 26 heat alert days for the City of Hamilton. Extreme heat puts everyone at risk of heat-related illnesses. People at increased risk include those age 65 and older, young children, people with chronic medical conditions and people who work outdoors. It is important to inform the public about extreme heat events to ensure they can better understand how to protect themselves from conditions that can happen during a heat event, like sun stroke and heat exhaustion.

In May 2016, Environment and Climate Change Canada implemented a new *Heat Warning and Information System* for all of Ontario that harmonizes warnings across several jurisdictions. The new heat warning system was developed after extensive engagement with several health stakeholders including Health Canada, the Ontario Ministry of Health and Long-Term Care (MOHLTC), and local public health units. This Heat Warning and Information System aims to reduce heat health risks by increasing the consistency of heat warnings and heat-related messaging to the public in the province. It is based on a combination of the latest in health science, Ontario-specific health evidence, and a detailed analysis of weather patterns in Ontario.

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As part of this new heat warning system, Environment and Climate Change Canada provides HPHS early heat notifications for Heat Warnings and Extreme Heat Warnings. HPHS is also continuing to issue a forecasted one-day Heat Advisory notification at the request of community heat response agencies. The triggers for the three response stages are:

- **Heat Advisory** - one day with a forecasted temperature of 31°C or more and humidex of 40°C or more.
- **Heat Warning** - two or more consecutive days with daytime highs greater than or equal to 31°C and nighttime lows greater than or equal to 20°C or humidex of 40°C or greater.
- **Extended Heat Warning** - three or more consecutive days with daytime highs greater than or equal to 31°C and nighttime lows greater than or equal to 20°C or Humidex of 40°C or greater.

Vectorborne Disease Control

Raccoon Rabies

HPHS continued to respond to raccoon rabies in Hamilton:

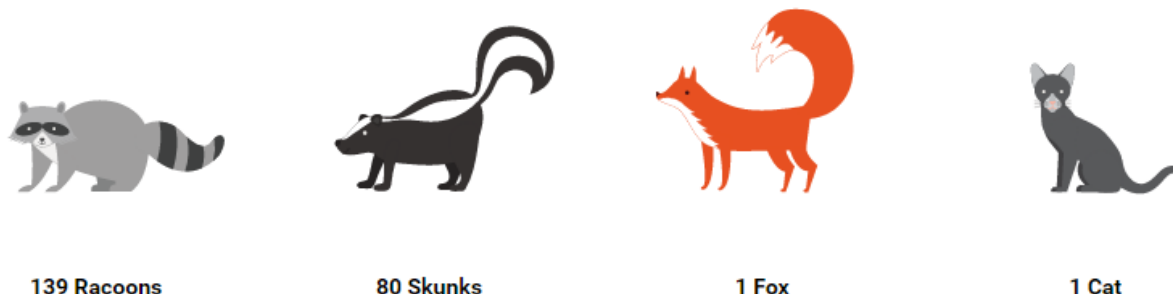
- In August 2016, in response to the first rabid cat reported in Hamilton since the mid-1990's, HPHS canvassed and delivered information to 1,000 homes in a 10 km radius in the Ancaster area to ensure no human exposures were unreported.
- On September 17, 2016, HPHS, in collaboration with local veterinarians, Animal Services and Hamilton/Burlington SPCA, hosted Hamilton's first public low cost rabies vaccine clinic in decades. A total of 363 cats and dogs were vaccinated.
- A public awareness campaign was launched in the fall about rabies risk. The campaign, "Rabies is Real" involving a fictional "Skox" and "Baccoon," was posted on billboards, transit shelters, local arenas, inside buses, and at Lime Ridge Mall.
- Other outreach activities are planned for 2017.

As of February 1, 2017, there were 221 animals positive for raccoon rabies found in Hamilton since 2015: 139 raccoons, 80 skunks, 1 cat and 1 fox. The City of Hamilton website www.hamilton.ca/rabies was also re-designed in the fall to include animal graphics (Figure 1).

Figure 1: Graphic from www.hamilton.ca/rabies showing the number of positive rabies results in Hamilton, as of February 1, 2017

Positive rabies results in the City of Hamilton

Total number of animals found positive for raccoon rabies in Hamilton from 2015 to date: **221**



Tobacco Control

Tobacco Inspections and Enforcement

HPHS checks for compliance with the provincial *Smoke-Free Ontario Act* (SFOA), *Electronic Cigarettes Act* (ECA) and City of Hamilton By-law #11-080 (Prohibiting Smoking within City Parks and Recreation Properties). These inspections and enforcement checks are done at tobacco retailers, schools, hospitals, long-term care facilities, public places and workplaces. Recent regulatory amendments to the SFOA and ECA have resulted in increased inspections and enforcement checks concerning age-restricted sales of electronic cigarettes to individuals nineteen years of age and older, 100% smoke-free hospital property and patios.

In the previous ID-EH Report for 2016 Q1 and Q2, HPHS Tobacco Enforcement forecasted commencing *Smoke-Free Ontario Act* inspections of businesses that offer waterpipe/hookah for the presence of tobacco and to gauge compliance with the provincial Act. Due to competing work demands, those inspections were rescheduled for Q1 and Q2 of 2017. Public Health Units across the province continue to await the MOHLTC's release of regulations associated with Bill 178 and the ECA. These legislative regulations and accompanying Ministry Enforcement Directives, including the anticipated display and promotion restrictions of e-cigarette products at the point of retail and the prohibition of the use of e-cigarettes in public places and work places, will also drive further inspections and enforcement activities moving forward during Q3 and Q4 of 2017.

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APPENDICES ATTACHED

Appendix A to Report BOH17003 – Infectious Disease and Environmental Health
Report: July – December, 2016