



OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

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 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). Technical Notes (Appendix B) are also provided for this report because they have been updated since Report BOH15024.

PROGRAM HIGHLIGHTS (January 1 – June 30, 2017)

Infectious Diseases Prevention and Control

Infection Prevention and Control Lapse Investigation

PHS is required to investigate all infection prevention and control (IPAC) complaints, including those about regulated health professionals. In June 2017, PHS investigated

three regulated health professionals' offices. The most significant investigation is summarized below. Details of all IPAC lapse investigations are available at: <https://www.hamilton.ca/public-health/health-inspection-results/infection-prevention-and-control>

PHS conducted an IPAC audit inspection at a local physician's office in response to a referral from the College of Physicians and Surgeons of Ontario (CPSO). The initial inspection by PHS found only non-critical IPAC concerns, and subsequent follow-up inspections indicated that corrective measures recommended by PHS had been implemented.

As further information was received from the CPSO, PHS assessed that there was a low potential risk of blood-borne infections (hepatitis B, hepatitis C and HIV) to patients who received minor office-based surgical procedures at the physician's offices in Hamilton as they may have been exposed to improperly cleaned and sterilized instruments used for procedures. In order to notify patients of the need for testing in a timely fashion, PHS issued a media release, posted publicly on the City website, and alerted local health professionals to the recommendations for testing. In response, Hamilton PHS prepared letters for clients and physicians to communicate the risk and necessary testing, and established a hotline to respond to concerned patients. A report of the IPAC lapse, Q&A for the public, as well as letters and facts sheets were posted as an alert to the City's website. Approximately 75 people contacted PHS for further information. As of July 21, 2017, there is no evidence of an outbreak associated with this IPAC lapse; the investigation is ongoing.

While the investigation of IPAC complaints and lapses in Hamilton is an important public health role, it has significant resource implications due to the intensity of work with investigations, increasing number of complaints since June 2017, and large number of offices and businesses about which the community might make complaints. Staff will monitor the situation and advise the Board of Health should challenges develop in sustaining this program with the current allocated resources.

Vaccine Preventable Diseases

Immunization Connect Ontario Application

The PHS Vaccine Program piloted the MOHLTC's Immunization Connect Ontario (ICON) web application. ICON is a public facing web application for the public to report immunization data to our public health unit as well as securely look up their immunization records. The pilot project was successful and will now continue to be utilized by the general public within the City of Hamilton.

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Vaccine Record Screening-Only Process

PHS also initiated the vaccine record screening-only process. This involves the screening of 26,320 school aged records to ensure they are up to date with immunizations required under the Immunization School Pupils Act (ISPA). This screening-only process was implemented to proactively notify students out of compliance for vaccines prior to the 2017-2018 school year. This important work protects the community by protecting people from vaccine preventable diseases and allowing students to remain in school during outbreaks of vaccine preventable diseases.

Food Safety

Food Handler Certification and Training

Starting in the fall of 2017, Hamilton's Food Handler Certification, Training course and Exam will be using the standardized, provincial Food Handler Training Manual developed by the MOHLTC. The manual will be available in English, French and Arabic. In addition to these languages, the written exam will also be available in Simple Chinese, Farsi (Persian), Italian, Korean, Polish and Vietnamese.

Safe Water

Arsenic in Drinking Water

Arsenic is a naturally-occurring substance that can cause cancer in humans. On January 1, 2018, the Ontario Drinking Water Standard for Arsenic in Drinking Water is being lowered from 0.025 mg/L to 0.010 mg/L. This will bring the maximum allowable concentration of arsenic in drinking water in-line with recommendations from Health Canada and the World Health Organization. There are four Small Drinking Water Systems within Hamilton that that will likely have an arsenic concentration above the new maximum allowable concentration. PHS has informed the potentially affected Small Drinking Water Systems owners/operators about the regulatory change, so that they can take any appropriate action to be compliant with the new regulation.

Lead in Drinking Water

Lead is a toxic metal which has health effects for all, but particularly impacts fetuses and young children. In children, even low levels of lead exposure can lead to problems with intellectual development. Regulation 243 (Lead in Schools, Private Schools, and Child Care Centres), under the Safe Drinking Water Act, is being updated. Changes to the regulation require the rotation of drinking water sample collection locations as well as changes to corrective actions when lead is detected above the acceptable limit. There are 419 schools, private schools, and child care centres in Hamilton to which this

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drinking water regulation applies. It is anticipated that there will be an increase in the number of drinking water samples with excessive lead concentrations. Whenever a drinking water sample has excessive lead concentrations detected, this must be reported to local public health services. PHS staff assess the report and require further corrective actions when the prescribed corrective actions are perceived to not fully address the situation. PHS will continue to work with schools and child care centres in order to ensure compliance with the regulation and to promote the optimal conditions for health for children.

Health Hazard Prevention and Management

Bay Area Climate Change Partnership

Since 2016, the Health Hazards program has been instrumental in working with multiple stakeholders, including the City of Hamilton, the City of Burlington, and Mohawk College, towards the establishment of the Bay Area Climate Change Partnership in June 2017. The Partnership is a critical step in forming a coordinated approach to climate change actions, reducing greenhouse gas emissions, and moving towards a low carbon economy in Hamilton and Burlington.

The City of Hamilton is committing municipal staff to support:

- Development of the Bay Area Climate Change Council which will act as an advisory and oversight Council;
- Development of the Bay Area Climate Change Implementation Team which will be comprised of subject matter experts from municipal, provincial and federal government agencies, for-profit and not-for-profit organizations and utilities;
- Coordination of project identification and implementation that align with the Province's goals and objectives towards transitioning to a low carbon economy; and,
- Other activities including member recruitment, community engagement, administrative and project support, and annual reporting of progress to funders and the community.

Vector Borne Diseases Control

Ticks and Lyme Disease

Lyme disease is a bacterial infection that can be passed from blacklegged ticks to humans through the bite of an infected tick. PHS monitors ticks in order to understand how common blacklegged ticks are in Hamilton and the percent that are positive for *Borrelia burgdorferi*, the bacteria that causes Lyme disease. This helps to inform Hamiltonians about the risk of Lyme disease.

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In the first half of 2017, the number of ticks submitted to PHS by members of the public surpassed submissions for all of 2016. Potential reasons for this increase include an increase in public awareness about ticks, concerns about Lyme disease in Ontario, and an actual increase in the number of ticks in Hamilton. The majority of ticks (96%) submitted were American dog ticks, which cannot transmit Lyme disease.

Based on criteria established by provincial guidance documents, Hamilton is not an identified risk area for Lyme disease. To be identified as a risk area, blacklegged ticks must be found in both spring and fall of the same season. Since 2016, PHS and Public Health Ontario have purposefully collected ticks from their natural habitats (tick dragging). In 2016, no ticks were found in spring and one blacklegged tick was found in the fall. In the spring of 2017, 3 blacklegged ticks were found. Tick dragging will occur again this fall and the local risk for Lyme disease will be assessed based on the results.

APPENDICES ATTACHED

Appendix A to Report BOH17029 – Infectious Disease and Environmental Health
Report: January – June, 2017

Appendix B to Report BOH17029 – Infectious Disease and Environmental Health:
January – June, 2017 (Technical Notes)