

INFORMATION REPORT

TO: Mayor and Members Board of Health

WARD(S) AFFECTED: CITY WIDE

COMMITTEE DATE: October 21, 2013

SUBJECT/REPORT NO:

Infectious Disease and Health Hazard Semi-Annual Report - Q1 and Q2 (January 1, 2013 to June 30, 2013) (BOH13038) (City Wide)

SUBMITTED BY:

Elizabeth Richardson, MD, MHSc, FRCPC Medical Officer of Health Public Health Services Department

SIGNATURE:

PREPARED BY:

Michelle Baird (905) 546-2424 Ext. 3529

Council Direction:

This report is provided in keeping with 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 January 1, 2013 to June 30, 2013.

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 the program areas for Infectious Diseases and Environmental Health within the OPHS are the focus for this report. These program areas are as follows:

Infectious Diseases (which includes the 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
- Vaccine Preventable Diseases

Environmental Health

- Food Safety
- Safe Water
- Health Hazard Prevention and Management

Reportable disease cases are reported among individuals who reside within the City of Hamilton at the time of their diagnosis. The figures in Appendix A have been extracted from the Ontario Ministry of Health and Long-term Care (MOHLTC) integrated Public Health Information System (iPHIS) database and are subject to change due to case follow-up procedures and/or delayed diagnosis.

Significant Program Activities Completed During Q1 and Q2, 2013:

Infectious Diseases

- In June 2013, the Infectious Disease program managed two exposure sites identified in the Halton Measles Outbreak. One hundred and thirteen Hamiltonians were identified, assessed by Public Health Services (PHS)for their risk of exposure, with some receiving prophylactic treatment to prevent infection and subsequent transmission to others. This required significant collaboration with our hospital and health care sector partners. There were no secondary measles cases from the Hamilton exposure sites.
- The Tuberculosis Control program has initiated a new process in the management of Latent Tuberculosis Infection (LTBI) cases. The new process includes additional phone follow up by the Public Health Nurse with the intent to increase prophylaxis uptake rates.
- In early 2013, Public Health Ontario established new guidelines for testing and treating gonorrhea, which has become increasingly resistant to antibiotics and challenging to treat. PHS staff ensured that community physicians implement these new guidelines during their case follow up. PHS Sexual Health clinics also implemented these new guidelines which include an injection instead of oral antibiotics and the use of swabs for testing clients with specific risk rather than urine testing.

Environmental Health

- The Food Safety program has begun developing a new food safety disclosure program to be implemented in January 2014. Under this new program, when a Public Health Inspector inspects a food establishment, the operator will receive one of three coloured Hamilton Food Safety Certificates of Inspection: Pass (Green), Conditional Pass (Yellow) or Closed (Red) to be posted at the entrance of the establishment.
- The Health Hazards program is participating on the Air Quality Task Force (AQTF).
 At the request of Council, this task force was formed as a sub-group of Clean Air Hamilton. At the December 2013 Board of Health meeting, the AQTF will be reporting back to Council with recommendations on actions that can be taken at the municipal level to improve air quality.
- The Health Hazards program is also planning a pilot project for extreme weather notification with Environment Canada. This project is piloting the use of an electronic billboard sign that provides public health messaging related to weather conditions (i.e.: UV index, Air Quality Health Index, extreme heat notifications, etc.). This project is being piloted in Hamilton prior to the 2015 Pan Am Games.
- Tobacco Control Enforcement has witnessed an increase in the issuance of MOHLTC Automatic Prohibitions against tobacco vendors for non-compliance with the Smoke-Free Ontario Act youth access/sales to minors regulation. In the first half of 2013, a total of seven Automatic Prohibitions have been successfully applied to tobacco product vendors operating in the City of Hamilton. Further Automatic Prohibition Orders are expected in Q4 2013.
- In Q1 of 2013, the Vector Borne Disease (VBD) team successfully assumed the pest by-law investigation and enforcement work from the Health Hazards team in the Health Protection Division. Staff had to learn the legislation, understand the issues related to the pest by-law and discuss and work out process changes as a group. The Health Hazards team supported the VBD throughout this change.

Further details and trend information is included in the attached Appendix A.

Infectious Disease and Environmental Health Report: Q1 & Q2 2013

Number of reportable diseases investigations* conducted by report quarter, City of Hamilton, 2012 and Q1-Q2 2013.

Program	Туре		R	eported 20	Reported 2013*				
		Q1	Q2	Q3	Q4	Annual Total	Q1	Q2	Annual Total
Infectious Diseases (ID)	Cases	536	279	251	501	1567	569	100	669
Tuberculosis (TB)	Active TB	11	13	7	5	36	11	7	18
	Latent TB	143	141	133	120	537	124	30	154
Sexually Transmitted Infections	Cases	478	508	427	459	1872	445	121	566
Column Total		1168	941	818	1085	4022	1149	258	1407

Most frequently reported IDs this year:

- Influenza A
- Hepatitis C
- Influenza B
- Campylobacter enteritis
- Salmonellosis

Emerging trends in Sexually Transmitted Infections:

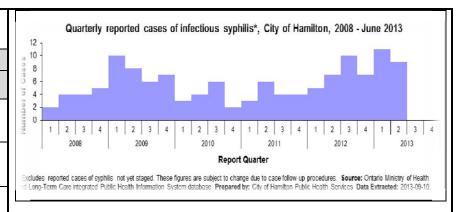
- Gonorrhea
- syphillis

	Reported 2012*					Reported 2013*			
		Q1	Q2	Q3	Q4	Annual Total	Q1	Q2	Annual Total
Outbreak Activity	Community Outbreaks	9	2	0	6	17	0	0	0
	Institutional Outbreaks †	42	10	10	39	101	76	18	94
Column Total		51	12	10	45	118	76	18	94

^{*} Note: These figures are subject to change due to case follow-up procedures. Data Source: Ontario Ministry of Health and Long-Term Care Integrated Public Health Information System database. Prepared by: City of Hamilton Public Health Services. Data Extracted: 2013-09-05. † Institutional: hospitals, long term care homes, residential care facilities, detention centre.

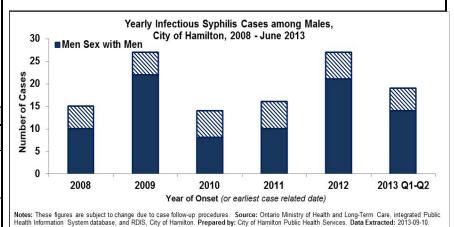
Most significant infectious disease incident:

2013 Influenza Season



Interpretation: In Hamilton, there have been more cases of infectious syphilis reported since 2012 than in 2010-2011.

Program Impacts: PHS staff are diligent in following up cases of infectious syphilis as quickly as possible to prevent spread to others. Given a resurgence of syphilis in Canada and serious implications to infants, universal screening of all pregnant women continues to be important. The Associate Medical Officer of Health is working closely with community physicians and infectious disease specialists to ensure that pregnant women with suspected syphilis infection are treated appropriately during pregnancy.



Interpretation: In Hamilton, majority infectious syphilis cases among males are due to men sex with men.

Program Impacts Staff are working with community partners to promote awareness of syphilis, condom use and testing, particularly in men who have sex with men. PHS has increased the distribution of free antibiotic treatment for syphilis to community physicians and hospitals to ensure prompt medical treatment.

Infectious Disease and Environmental Health Report: Q1 & Q2 2013

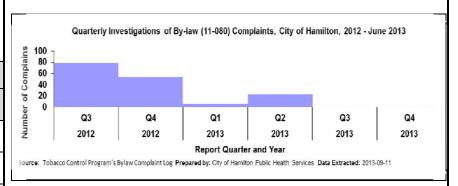
Environmental Health investigation responses by site visit, telephone call or email, 2012 and Q1-Q2 2013.

	Reported 2012*					Reported 2013*			
	Q1	Q2	Q3	Q4	Annual Total	Q1	Q2	Annual Total	
Food Safety	172	191	162	150	675	159	154	313	
Water Quality	114	120	194	95	523	93	111	204	
Health Hazard Abatement	340	314	477	284	1415	227	278	505	
Tobacco Control under Smoke Free Ontario Act	94	74	64	53	285	69	94	163	
By-law 11-080*	-	-	79	54	133	6	23	29	
West Nile Virus	0	52	83	3	138	1	51	52	
Infection Control/Injury Prevention	278	223	206	178	885	164	137	301	
Rabies Potential Exposure Investigations	224	379	621	225	1449	245	357	602	
Column Total	1222	1353	1886	1042	5503	964	1205	2169	

Top 3 food safety issues identified upon routine inspection January until December:

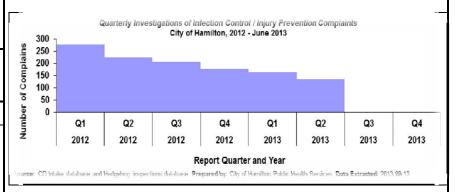
- Test kits and/or thermometers not readily available to verify dishwashing sanitizer concentration or temperature
- 2. Thermometers not provided for food storage temperature validation
- 3. Equipment and/or non-food contact surfaces not cleaned or maintained in good repair

*By-law 11-080 came into force and effect on May 31, 2012.



Interpretation: City of Hamilton By-law No. 11-080 Prohibiting Smoking within City Parks and Recreation Properties came into effect on May 31, 2012. Complaints were highest in the 3rd Quarter of 2012 and thereafter decreased during the fall (Q4) and winter months (Q1). Complaints increased in the spring months of 2013 (Q2).

Impact: Tobacco Control Enforcement investigation responses included in this report do not incorporate proactive inspections carried out in conjunction with PHS' Smoke-Free Ontario Act Agreement with the MOHLTC nor inspections for By-law 11-080. Combined the above two enforcement programs witness annually upwards of (n=2000) mandated and strategic inspections in addition to the reported responses included here.



Interpretation: The number of Infection Control/Injury Prevention complaints has steadily decreased since 2012.

Program impact: Overall the decrease in infection control complaints has not had significant impact on the Infectious Disease program resources, as the resources required to appropriately respond to infection control complaints are traditionally less time-intensive than are needed for infectious disease case investigations and outbreak response. The reduced number of incoming complaints has been timely however, as improved guidance and tools from the MOHLTC and Public Health Ontario have resulted in more detailed and time-intensive investigations of each incident.