

INFORMATION REPORT

TO: Mayor and Members Board of Health	WARD(S) AFFECTED: CITY WIDE
COMMITTEE DATE: September 27, 2010	
SUBJECT/REPORT NO: Communicable Disease and Health Hazard Investigations Quarterly Report Q2 (April 1, 2010 – June 30, 2010) (BOH10017(b)) (City Wide)	
SUBMITTED BY: Elizabeth Richardson, MD, MHSc, FRCPC Medical Officer of Health Public Health Services	PREPARED BY: Nancy Greaves Ext 5542 Bob Hart Ext 5428
SIGNATURE:	

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 April 1 to June 30, 2010, summarizing investigations for the second quarter of 2010 (3 months).

Reportable Communicable Diseases

SUMMARY

- During the second quarter of 2010, 647 confirmed or probable reports of communicable disease were received by the City of Hamilton Public Health Services (PHS). These are summarized in Appendix A.
- 14 outbreaks declared between April 1 and June 30, 2010 were investigated.
- 43% (6) of outbreaks occurred in Long Term Care Homes and Residential Care Facilities; and 36% (5) occurred in Hospitals. There were two outbreaks caused by *Clostridium difficile* during this quarter, one in a Hospital and one in a Long Term Care Home. The institutional outbreak results are summarized in Table 1.
- 21% (3) of the outbreaks occurred in community settings and are listed in Table 2.

Under the *Health Protection and Promotion Act*, laboratories and physicians are required to report the occurrence of 55 specified communicable diseases to the local public health unit. Due to the presence of a provincial public health laboratory and tertiary care hospitals in Hamilton, City of Hamilton Public Health Services (PHS) receives many reports for persons tested or hospitalized in Hamilton who reside in other health unit jurisdictions. These reports are forwarded to the health unit where the tested person resides for investigation and follow-up by the relevant health unit and are not included with the numbers presented here.

**Table 1:
Institutional Outbreaks Declared between April 1 and June 30, 2010**

Outbreak Type	Outbreak Count
Enteric/Foodborne/Waterborne	2
Influenza	0
Other Respiratory/Direct Contact	5
Other	2
Clostridium difficile	2
Total	11

**Table 2:
Community Outbreaks Declared between April 1 to June 30, 2010**

Event	Description
CHILD CARE CENTRE OUTBREAK	An outbreak of Group A Streptococcus occurred in a child care centre identified when 2 children had laboratory confirmed respiratory tract and throat infections. Antibiotic prophylaxis was recommended for children and staff. Parents were notified and provided with education.
SCHOOL OUTBREAK	An outbreak of enteric illness occurred in an elementary school affecting 15/20 students in a primary class. Viral gastroenteritis was the suspected causative organism.
BANQUET CENTRE EVENT	An outbreak of enteric illness was reported related to a wedding. At the time of reporting, symptoms of illness in individuals had already resolved so laboratory specimens could not be collected for identification of a causative organism. An inspection of the food premises found no adverse food safety conditions.

SUBJECT: Communicable Disease and Health Hazard Investigations Quarterly Report (Q2) (April 1, 2010 – June 30, 2010) (BOH10017(b)) (City Wide) – Page 3 of 5

Health Hazard Investigations

The Health Protection and Promotion Act defines a health hazard as;

- (a) a condition of a premises,
- (b) a substance, thing, plant or animal other than man, or
- (c) a solid, liquid, gas or combination of any of them,

that has or that is likely to have an adverse effect on the health of any person.

PHS initiates investigations based on information received from the public, other Provincial Agencies or City Departments that relate to existing properties or facilities that, through the nature of the business or the site conditions, could fall under the definition of a health hazard.

To determine if a health hazard exists, PHS responds to complaints and enquiries from the public, by conducting on site inspections or providing advice through phone contact, email or letters.

Most of the investigations arise from complaints received from individual members of the public. In addition, PHS staff are often involved in investigations led by other agencies (e.g. Ministry of Environment) or the Infectious Disease team within PHS.

The following is a summary of the number and types of complaints and enquiries investigated in the second quarter of 2010 and grouped together based on the Mandatory Program area each would fall into.

HEALTH HAZARD ABATEMENT	2009 (Q2)		2010 (Q2)	
	Complaints/ Investigations requiring a site visit	Telephone/ e-mail Inquiries not requiring a site visit	Complaints/ Investigations requiring a site visit	Telephone/ e-mail Inquiries not requiring a site visit
Asbestos	1	1	5	5
Bed bugs	45	8	80	34
Cockroaches	21	1	9	0
Other Insects	4	10	1	2
Diogenes (recluse response)	3	0	0	1
General sanitation	7	1	0	1
Housing	21	2	5	7
Marijuana Grow Operations	2	6	0	1
Mice	24	0	17	0
Mould	76	1	54	10
Odour	24	1	12	4
Other	25	9	31	20
Rats	10	0	13	2

SUBJECT: Communicable Disease and Health Hazard Investigations Quarterly Report (Q2) (April 1, 2010 – June 30, 2010) (BOH10017(b)) (City Wide) – Page 4 of 5

HEALTH HAZARD ABATEMENT	2009 (Q2)		2010 (Q2)	
	Complaints/ Investigations requiring a site visit	Telephone/ e-mail Inquiries not requiring a site visit	Complaints/ Investigations requiring a site visit	Telephone/ e-mail Inquiries not requiring a site visit
Sewage	4	2	2	1
Sharps	10	2	6	0
Total	277	44	235	88
FOOD SAFETY				
Adulteration	26	1	29	0
Education	0	6	0	8
Emergency Fire/Flood	0	0	1	0
Garbage	4	1	5	0
General Food Inquiry	1	20	0	19
Other	13	3	28	9
Request For Inspection	11	13	0	21
Sanitation	16	0	12	0
Suspect Illness	2	0	7	1
Total	73	44	82	58
WNV				
Standing Water Complaints	45	0	94	0
Total	45	0	94	0
TOBACCO CONTROL under Smoke Free Ontario Act				
Sales Related	9	24	2	1
Smoking Related	34	6	36	24
Total	43	30	38	25
WATER QUALITY				
General Inquiries	8	20	7	69
Adverse Water Quality Events ¹	29	0	19	0
Boil/Drinking Water Advisories	1	0	3	0
Recreational Water Postings	5	0	37	0
Total	43	20	66	69
INFECTION CONTROL/INJURY PREVENTION				
Potential Human Exposure To Rabies ²	300	0	290	86
Rabies Vaccine Deliveries	11	0	9	15
Compliance With Childcare, Public Pool, Personal Service Setting Regulation/Guidelines	7	11	0	7
Total	318	11	299	108

¹ The adverse drinking water incidents pertain to lab reports that indicate the drinking quality did not meet the prescribed drinking water standards for the Province of Ontario for samples collected from regulated drinking water systems and did not warrant a B/DWA. These adverse events did not warrant a B/DWA because subsequent Corrective Action and confirmation samples met the Ontario drinking water standards; and the initial risk

SUBJECT: Communicable Disease and Health Hazard Investigations Quarterly Report (Q2) (April 1, 2010 – June 30, 2010) (BOH10017(b)) (City Wide) – Page 5 of 5

assessment and public health protocols did not indicate a need to issue a BWA without first taking Corrective Action and follow-up samples to confirm the adverse drinking water condition. All affected users are notified directly in writing about the existence of a Boil Water Advisory and about precautions they need to take and/or keep in place until the BWA is lifted. BWA Notices are also posted in public locations at the affected locations.

² Complaint and inquiry data for rabies exposures were combined in 2009

REPORTABLE DISEASE CASES REPORTED TO THE CITY OF HAMILTON, PUBLIC HEALTH SERVICES IN THE SECOND QUARTER OF 2010

Cases are reported among individuals who resided within the City of Hamilton at the time of their diagnosis. These figures are preliminary. Figures are subject to change due to case follow-up procedures and/or delayed diagnosis. Source: Ontario Ministry of Health and Long-Term Care integrated Public Health Information System (iPHIS) database, extracted 9/8/2010.

Disease	Confirmed/ probable case count	Suspect case count	Min - Max count per quarter 2005 - 2009
Amebiasis <i>The case definition for reportable Amebiasis changed in Ontario effective April 28, 2009. Accrual of the 5-year history will commence January 1, 2010.</i>	8	0	Unavailable
Anthrax	0	0	0 - 0
Botulism	0	0	0 - 0
Brucellosis	0	0	0 - 0
Campylobacter Enteritis	23	0	14 – 29
Chancroid	0	0	0 – 0
Chickenpox (Varicella), Laboratory or clinically confirmed; hospitalized or cases with complications <i>The case definition for reportable Chicken Pox changed in Ontario effective April 28, 2009. Accrual of the 5-year history will commence January 1, 2010.</i>	13	0	Unavailable
Chlamydial Infections	381	0	230 – 337
Cholera	0	0	0 – 0
Creutzfeldt-Jakob Disease	0	0	0 – 1
Cryptosporidiosis	0	0	0 – 2
Cyclosporiasis	1	0	0 – 3
Cytomegalovirus Infection, Congenital	0	1	0 - 0
Diphtheria	0	0	0 - 0
Encephalitis/Meningitis	2	0	1 – 6
Giardiasis	10	1	10 - 16
Gonorrhoea	52	0	36 – 56
Group A Streptococcal Disease, Invasive	14	0	9 – 17
Group B Streptococcal Disease, Neonatal	0	0	0 - 1
Haemophilus Influenzae B Disease, Invasive	0	0	0 - 0

Disease	Confirmed/ probable case count	Suspect case count	Min - Max count per quarter 2005 - 2009
Hantavirus Pulmonary Syndrome	0	0	0 - 0
Hemorrhagic Fevers	0	0	0 - 0
Hepatitis A	1	0	0 - 1
Hepatitis B, Acute	1	0	1 - 3
Hepatitis C	65	0	42- 58
Hepatitis D	0	0	0 - 0
Herpes, Neonatal	0	0	0 - 1
HIV/AIDS Infection <i>These numbers include newly recognized laboratory-confirmed HIV infections and include persons diagnosed with AIDS without previous HIV infection.</i>	9	1	5 - 12
Influenza, Institutional Outbreak Cases	0	0	0 - 110
Influenza, Laboratory Confirmed Community Cases			
Lassa Fever	0	0	0 - 0
Legionellosis <i>A change in testing occurred in September 2005 when the Ontario Public Health Laboratory began using the Binax NOW Legionella Urinary Antigen Test Kits. Accrual of the 5-year history commenced January 1, 2006.</i>	4	0	Unavailable
Leprosy	0	0	0 - 0
Listeriosis	0	0	0 - 2
Lyme Disease	0	0	0 - 0
Malaria	4	0	0 - 2
Measles	0	1	0 - 0
Meningococcal Disease, Invasive	2	0	0 - 1
Mumps	3	0	0 - 2
Ophthalmia Neonatorum	0	0	0 - 0
Paratyphoid Fever	0	0	0 - 1
Pertussis (Whooping Cough)	0	0	2 - 13
Plague	0	0	0 - 0
Poliomyelitis, Acute	0	0	0 - 0
Psittacosis/Ornithosis	0	0	0 - 0

Disease	Confirmed/ probable case count	Suspect case count	Min - Max count per quarter 2005 - 2009
Q Fever	1	0	0 - 0
Rabies	0	0	0 - 0
Rubella	0	0	0 - 0
Rubella, Congenital	0	0	0 - 0
Salmonellosis	23	0	13 - 52
SARS	0	0	0 - 0
Shigellosis	2	0	1 - 3
Smallpox	0	0	0 - 0
Streptococcus Pneumoniae, Invasive	15	0	12 - 27
Syphilis, Early Congenital	0	0	Unavailable
Syphilis, Late Latent, Neurosyphilis	3	0	
Syphilis, Primary, Secondary, Early Latent	3	0	
Syphilis, Under Investigation/Unstaged	0	5	
Syphilis, Total <i>Testing changes in July 2006 and more recently in July 2008 for the detection of syphilis partly explain the increase in Syphilis, particularly in the non-infectious stage. Due to delays in determining the staging of infectious versus non-infectious syphilis, the 5-year history is unavailable.</i>	6	5	Unavailable
Tetanus	0	0	0 - 0
Transmissible Spongiform Encephalopathy	0	0	0 - 0
Trichinosis	0	0	0 - 0
Tuberculosis, Active <i>These numbers include only active cases of Tuberculosis. Through TB screening activities, 144 inactive TB cases were reported and include positive skin test results and individuals referred to Public Health for medical surveillance.</i>	3	3	2 - 6
Tularemia	0	0	0 - 0
Typhoid Fever	0	0	0 - 1
Verotoxin Producing E. Coli Including HUS	1	0	1 - 5
West Nile Virus Illness	0	0	0 - 1
Yellow Fever	0	0	0 - 0
Yersiniosis	3	0	2 - 4