



INFORMATION REPORT

TO: Mayor and Members Board of Health	WARD(S) AFFECTED: CITY WIDE
COMMITTEE DATE: September 26, 2011	
SUBJECT/REPORT NO: Communicable Disease and Health Hazard Investigations Quarterly Report (Q2) (April 1, 2011 to June 30, 2011) BOH11019(a) (City Wide)	
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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, 2011 to June 30, 2011 summarizing investigations for the second quarter of 2011 (3 months).

Public Health Services (PHS) has been providing this report in this form since 2006. In order to improve this report to ensure that it continues to align with Board members' needs, PHS solicited feedback from Board members over the summer and recommendations will be incorporated into subsequent reporting.

Reportable Communicable Diseases

SUMMARY

- During the second quarter of 2011, 662 confirmed or probable reports of communicable disease were received by the PHS. These are summarized in Appendix A.
- 402 reports of Chlamydia were received in this quarter. Chlamydia, a sexually transmitted infection, continues to be highlighted in this report as in previous ones as it has been steadily increasing over time in Hamilton and reports were above

expected again this quarter. PHS is collaborating as a partner in a study to determine the most effective ways to prevent and control this disease in Canadian communities.

- 18 outbreaks were investigated between April 1, 2011 to June 30, 2011.
- 66 % (12) of the outbreaks occurred in Long Term Care Homes and Residential Care Facilities; and 17 % (3) occurred in Hospitals. Of the three hospital outbreaks, one was caused by *Clostridium difficile* during this quarter. The institutional outbreak results are summarized in Tables 1 and 2.
- 17 % (3) of the outbreaks occurred in community settings and are listed in Table 3.

Under the *Health Protection and Promotion Act*, laboratories and physicians are required to report the occurrence of 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, 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, 2011 to June 30, 2011**

Outbreak Type	Outbreak Count
Enteric/Foodborne/Waterborne	5
Influenza	0
Other Respiratory/Direct Contact	8
Other	1
Clostridium difficile (Details in Table 2)	1
Total	15

**Table 2:
Clostridium difficile outbreaks declared between April 1, 2011 to June 30, 2011**

Institution	Description
JURAVINSKI HOSPITAL	An outbreak of <i>Clostridium Difficile</i> infection occurred involving 6 confirmed cases in one affected area. There were no fatalities associated with this outbreak.

**Table 3:
Community Outbreaks Declared Between April 1, 2011 to June 30, 2011**

Event	Description
DAYCARE CENTRE	An enteric outbreak occurred involving 12/50 children. No causative agent was identified.
DAYCARE CENTRE	An outbreak of respiratory illness occurred affecting 7/15 children. No causative agent was identified.
FOOD PREMISE	Enteric illness was reported among guests who attended a wedding. No causative agent was determined through the investigation although based on history and symptoms, the outbreak was classified to be caused by viral gastroenteritis.

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 staffs are often involved in investigations led by other agencies (e.g. Ministry of Environment) or the Infectious Disease team within PHS.

Water Quality

A significant increase in the number of site visits and inquiries for General Inquiries is attributed to work related to well and pond water sampling as part of a PFOS and Glycol investigation in the Mt. Hope area. PHS staff collected water samples from 25 wells, 11 ponds, and 1 swimming area. Additional site visits were made to properties to find well owners and pond owners in the study area who wanted their well or pond water tested for PFOS and Glycols.

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A decrease in the number of recreational water postings can mostly be attributed to a decrease in the recreational water postings at Bayfront Beach and Confederation Park Beach in the 2nd Quarter of 2011. Bayfront Beach was posted for 14 days in the 2nd Quarter of 2010 VS 8 days in 2011; Confederation Park Beach was posted 9 days in the 2nd Quarter of 2010 VS 0 days in 2011.

The following table is a summary of the number and types of complaints and enquiries investigated in the second quarter of 2011 and grouped together based on the Mandatory Program area each would fall into.

HEALTH HAZARD ABATEMENT	2010 (Q2)		2011 (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	5	5	6	2
Bed bugs	80	34	107	26
Cockroaches	9	0	22	1
Other Insects	1	2	2	3
Diogenes (recluse response)	0	1	6	1
General sanitation	0	1	3	0
Housing	5	7	10	0
Marijuana Grow Operations	0	1	0	6
Mice	17	0	37	3
Mould	54	10	33	5
Odour	12	4	13	2
Other	31	20	28	3
Rats	13	2	17	1
Sewage	2	1	2	0
Sharps	6	0	10	2
Total	235	88	296	55
FOOD SAFETY				
Adulteration	29	0	38	1
Education	0	8	0	1
Emergency Fire/Flood	1	0	1	0
Garbage	5	0	2	0
General Food Inquiry	0	19	2	22
Other	28	9	20	25
Request For Inspection	0	21	3	19
Sanitation	12	0	17	0
Suspect Illness	7	1	10	0
Total	82	58	93	68
WNV				
Standing Water Complaints	94	0	63	0
Total	94	0	63	0
TOBACCO CONTROL under Smoke Free Ontario				

SUBJECT: Communicable Disease and Health Hazard Investigations Quarterly Report (Q2) (April 1, 2011 to June 30, 2011) BOH11019(a) (City Wide)

HEALTH HAZARD ABATEMENT	2010 (Q2)		2011 (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
Act				
Sales Related	2	1	5	1
Smoking Related	36	24	49	17
Total	38	25	54	18
WATER QUALITY				
General Inquiries	7	69	53	92
Adverse Water Quality Events ¹	19	0	15	0
Boil/Drinking Water Advisories	3	0	4	0
Recreational Water Postings	37	0	14	0
Total	66	69	86	92
INFECTION CONTROL/INJURY PREVENTION				
Potential Human Exposure To Rabies ²	290	86	271	75
Rabies Vaccine Deliveries	9	15	11	0
Compliance With Childcare, Public Pool, Personal Service Setting Regulation/Guidelines	0	7	2	7
Total	299	108	284	82

¹The 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 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 2011

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 11/8/2011.

Disease	Confirmed/ probable case count	Suspect case count	Min - Max count per quarter 2006 - 2010
Amebiasis <i>The case definition for reportable Amebiasis changed in Ontario effective April 28, 2009. Accrual of the 5-year history commenced January 1, 2010.</i>	3	0	Unavailable
Anthrax	0	0	0 – 0
Botulism	0	0	0 – 0
Brucellosis	0	0	0 – 0
Campylobacter Enteritis	27	0	14 – 29
Chancroid	0	0	0 – 0
Chickenpox (Varicella), Laboratory-confirmed or cases hospitalized due to complications	17	1	1 – 13
Chlamydial Infections	402	0	230 – 381
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	0	0 – 1
Diphtheria	0	0	0 – 0
Encephalitis/Meningitis	0	0	2 – 6
Giardiasis	10	0	10 – 16
Gonorrhoea	42	0	35 – 56
Group A Streptococcal Disease, Invasive	11	0	9 – 17
Group B Streptococcal Disease, Neonatal	1	0	0 – 1
Haemophilus Influenzae B Disease, Invasive	1	0	0 – 0
Hantavirus Pulmonary Syndrome	0	0	0 – 0
Hemorrhagic Fevers	0	0	0 – 0

Disease	Confirmed/ probable case count	Suspect case count	Min - Max count per quarter 2006 - 2010
Hepatitis A	2	0	0 – 1
Hepatitis B, Acute	2	0	1 – 3
Hepatitis C	56	0	49- 65
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>	8	0	4 – 10
Influenza, Institutional Outbreak Cases	0	0	0 – 110
Influenza, Laboratory Confirmed Community Cases	14	0	0 – 119
Lassa Fever	0	0	0 – 0
Legionellosis	1	0	0 – 4
Leprosy	0	0	0 – 0
Listeriosis	0	0	0 -2
Lyme Disease	0	0	0 – 0
Malaria	0	0	0 – 4
Measles	0	0	0 – 0
Meningococcal Disease, Invasive	0	0	0 – 2
Mumps	0	0	0 – 2
Ophthalmia Neonatorum	0	0	0 – 0
Paratyphoid Fever	0	0	0 – 1
Pertussis (Whooping Cough)	0	0	0 – 4
Plague	0	0	0 – 0
Poliomyelitis, Acute	0	0	0 – 0
Psittacosis/Ornithosis	0	0	0 – 0
Q Fever	0	0	0 - 1
Rabies	0	0	0 – 0
Rubella	0	0	0 – 0
Rubella, Congenital	0	0	0 – 0
Salmonellosis	24	0	13 - 23

Disease	Confirmed/ probable case count	Suspect case count	Min - Max count per quarter 2006 - 2010
SARS	0	0	0 - 0
Shigellosis	1	0	1 - 3
Smallpox	0	0	0 - 0
Streptococcus Pneumoniae, Invasive	21	0	12 - 27
Syphilis, Early Congenital	0	0	Unavailable
Syphilis, Late Latent, Neurosyphilis	4	0	
Syphilis, Primary, Secondary, Early Latent	6	0	
Syphilis, Under Investigation/Unstaged	0	11	
Syphilis, Total <i>Due to delays in determining the staging of infectious versus non-infectious syphilis, the 5-year history is unavailable.</i>	10	11	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, 154 inactive TB cases were reported and include positive skin test results and individuals referred to Public Health for medical surveillance.</i>	3	2	2 - 6
Tularemia	0	0	0 - 0
Typhoid Fever	1	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