



INFORMATION REPORT

TO: Mayor and Members Board of Health	WARD(S) AFFECTED: CITY WIDE
COMMITTEE DATE: March 29, 2011	
SUBJECT/REPORT NO: Communicable Disease and Health Hazard Investigations Quarterly Report (Q4 October 1 to December 31, 2010) BOH10017(d) (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 October 1 to December 31, 2010, summarizing investigations for the fourth quarter of 2010.

Reportable Communicable Diseases

SUMMARY

- During the fourth quarter of 2010, 789 confirmed or probable reports of communicable disease were received by the PHS. These are summarized in Appendix A.
- 405 reports of Chlamydia were received in this quarter. Chlamydia is a sexually transmitted infection which has been steadily increasing over time in Hamilton. PHS is collaborating as a partner in a study to determine the most effective ways to prevent and control this disease in Canadian communities.
- 22 outbreaks declared between October 1 and December 31, 2010 were investigated.
- 68% (15) of the outbreaks occurred in Long Term Care Homes (LTCHs); and 14%

(3) occurred in Hospitals. There were 3 outbreaks caused by *Clostridium difficile* during this quarter; 2 occurring in LTCHs and 1 in a Hospital. The institutional outbreak results are summarized in Table 1.

- 18% (4) of the outbreaks occurred in a community setting 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, 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 October 1 to December 31, 2010**

Outbreak Type	Outbreak Count
Enteric/Foodborne/Waterborne	1
Influenza	7
Other Respiratory/Direct Contact	6
Other	1
Clostridium difficile	3
Total	18

**Table 2:
Community Outbreaks Declared Between October 1 to December 31, 2010**

Event	Description
DAYCARE	Twelve out of 20 children (no staff) became ill with enteric symptoms. Four stool samples tested positive for Norovirus confirming it as the causative organism.
FOOD PREMISE	Eighty-five people became ill with enteric symptoms. Norovirus and <i>Staphylococcus aureus</i> were both identified as causative organisms. The source of the infection was an ill food handler. The food premise was closed for terminal cleaning as part of the investigation.
DAYCARE	Ten out of 92 children and 3 staff became ill with enteric symptoms consistent with viral gastroenteritis. No causative organism was identified from stool samples collected.

Event	Description
DAYCARE	Eight out of 17 children and 1 staff became ill with enteric symptoms consistent with viral gastroenteritis. No samples were collected for testing so no causative organism was identified.

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.

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

HEALTH HAZARD ABATEMENT	2009 (Q4)		2010 (Q4)	
	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	3	6	4	1
Bed bugs	81	21	115	46
Cockroaches	32	5	60	4
Other Insects	8	4	1	4
Diogenes (recluse response)	1	0	2	1
General sanitation	3	0	2	1
Housing	6	3	10	2
Marijuana Grow Operations	1	0	2	1

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HEALTH HAZARD ABATEMENT	2009 (Q4)		2010 (Q4)	
	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
Mice	38	3	33	1
Mould	86	9	39	8
Odour	13	0	8	3
Other	17	19	13	9
Rats	7	5	7	0
Sewage	5	2	2	0
Sharps	9	0	11	0
Total	310	77	309	81
FOOD SAFETY				
Adulteration	23	1	24	4
Education	0	4	1	1
Emergency Fire/Flood	2	1	2	1
Garbage	0	0	2	6
General Food Inquiry	1	26	2	14
Other	23	13	18	8
Request For Inspection	7	14	11	0
Sanitation	11	1	15	0
Suspect Illness	9	4	2	0
Total	76	62	77	34
WNV				
Standing Water Complaints	4	0	4	0
Total	4	0	4	0
TOBACCO CONTROL under Smoke Free Ontario Act				
Sales Related	3	3	2	0
Smoking Related	46	24	14	11
Total	49	27	16	11
WATER QUALITY				
General Inquiries	2	47	6	65
Adverse Water Quality Events ¹	7	0	17	0
Boil/Drinking Water Advisories	3	0	4	0
Recreational Water Postings	0	0	0	0
Total	12	47	27	65
INFECTION CONTROL/INJURY PREVENTION				
Potential Human Exposure To Rabies ²	190	40	191	35
Rabies Vaccine Deliveries	13	0	12	0

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HEALTH HAZARD ABATEMENT	2009 (Q4)		2010 (Q4)	
	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
Compliance With Childcare, Public Pool, Personal Service Setting Regulation/Guidelines	5	3	1	1
Total	208	43	104	36

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 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 FOURTH 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 24/1/2011.

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 commences January 1, 2010.</i>	5	1	Unavailable
Anthrax	0	0	0 - 0
Botulism	0	0	0 - 0
Brucellosis	0	0	0 - 0
Campylobacter Enteritis	26	0	17 – 38
Chancroid	0	0	0 – 0
Chickenpox (Varicella), Laboratory or clinically confirmed; hospitalized or cases with complications	13	0	1 - 5
Chlamydial Infections	405	0	261 – 294
Cholera	0	0	0 – 0
Creutzfeldt-Jakob Disease	0	0	0 – 0
Cryptosporidiosis	0	0	1 – 3
Cyclosporiasis	1	0	0 – 1
Cytomegalovirus Infection, Congenital	0	0	0 – 2
Diphtheria	0	0	0 – 0
Encephalitis/Meningitis	12	0	0 – 7
Giardiasis	4	0	8 – 14
Gonorrhoea	57	1	34 – 66
Group A Streptococcal Disease, Invasive	6	0	3 – 7
Group B Streptococcal Disease, Neonatal	0	1	0 – 1
Haemophilus Influenzae B Disease, Invasive	0	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 2005 - 2009
Hepatitis A	0	0	0 – 2
Hepatitis B, Acute	3	0	1 – 4
Hepatitis C	44	4	50- 63
Hepatitis D	0	0	0 – 0
Herpes, Neonatal	0	0	0 – 0
HIV/AIDS Infection <i>These numbers include newly recognized laboratory-confirmed HIV infections and include persons diagnosed with AIDS without previous HIV infection.</i>	4	1	4 – 10
Influenza, Institutional Outbreak Cases	100	0	0 – 2653
Influenza, Laboratory Confirmed Community Cases	65	0	2 – 346
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>	0	0	Unavailable
Leprosy	0	0	0 – 0
Listeriosis	0	0	0 – 0
Lyme Disease	1	0	0 – 1
Malaria	1	0	0 – 3
Measles	0	0	0 – 0
Meningococcal Disease, Invasive	1	0	0 – 1
Mumps	0	0	0 – 0
Ophthalmia Neonatorum	0	0	0 – 0
Paratyphoid Fever	0	0	0 – 1
Pertussis (Whooping Cough)	5	0	1 – 19
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

Disease	Confirmed/ probable case count	Suspect case count	Min - Max count per quarter 2005 - 2009
Rubella	0	0	0 - 0
Rubella, Congenital	0	0	0 - 0
Salmonellosis	19	0	10 - 39
SARS	0	0	0 - 0
Shigellosis	1	0	0 - 3
Smallpox	0	0	0 - 0
Streptococcus Pneumoniae, Invasive	18	0	8 - 20
Syphilis, Early Congenital	0	0	Unavailable
Syphilis, Late Latent, Neurosyphilis	0	0	
Syphilis, Primary, Secondary, Early Latent	1	0	
Syphilis, Under Investigation/Unstaged	1	12	
Syphilis, Total <i>Due to delays in determining the staging of infectious versus non-infectious syphilis, the 5-year history is unavailable.</i>	2	12	Unavailable
Tetanus	0	0	0 - 0
Transmissible Spongiform Encephalopathy	0	0	0 - 0
Trichinosis	0	0	0 - 0
Tuberculosis, Active <i>These numbers represent active cases of Tuberculosis only. Through TB screening activities, 172 inactive TB cases were reported and include positive skin test results and individuals referred to Public Health for medical surveillance.</i>	2	6	5 - 8
Tularemia	0	0	0 - 0
Typhoid Fever	0	0	0 - 1
Verotoxin Producing E. Coli Including HUS	0	0	0 - 5
West Nile Virus Illness	0	0	0 - 0
Yellow Fever	0	0	0 - 0
Yersiniosis	1	0	0 - 7