

# INFORMATION REPORT

<b>TO:</b> Mayor and Members Board of Health	<b>WARD(S) AFFECTED:</b> CITY WIDE
<b>COMMITTEE DATE:</b> April 16, 2012	
<b>SUBJECT/REPORT NO:</b> Communicable Disease and Health Hazard Investigations Quarterly Report (Q3) (July 1, 2011 to September 30, 2011) BOH11019(b) (City Wide)	
<b>SUBMITTED BY:</b> Elizabeth Richardson, MD, MHSc, FRCPC Medical Officer of Health Public Health Services Department	<b>PREPARED BY:</b> Nancy Greaves (905) 546-2424 ext. 5542 Matt Lawson (905) 546-2424 ext. 5823
<b>SIGNATURE:</b>	

## 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 July 1, 2011 to September 30, 2011 summarizing investigations for the third 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 of 2011 and recommendations will be brought forward for consideration in May 2012.

## Reportable Communicable Diseases Summary:

- During the third quarter of 2011, 783 confirmed or probable reports of communicable disease were received by the PHS. These are summarized in Appendix A.
- 11 outbreaks were investigated between July 1, 2011 and September 30, 2011.
- 64 % (7) of the outbreaks occurred in Long-Term Care Homes and Residential Care Facilities; and 9 % (1) occurred in Hospitals. Of the 8 institutional outbreaks, one was caused by *Clostridium difficile* during this quarter and occurred in a Long-Term Care Home. The institutional outbreak results are summarized in Tables 1 and 2.
- 27 % (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 July 1, 2011 and September 30, 2011**

<b>Outbreak Type</b>	<b>Outbreak Count</b>
<b>Enteric/Foodborne/Waterborne</b>	0
<b>Influenza</b>	0
<b>Other Respiratory/Direct Contact</b>	3
<b>Other</b>	4
<b>Clostridium difficile</b> (Details in Table 2)	1
<b>Total</b>	8

**Table 2:**  
***Clostridium difficile* outbreaks declared between July 1, 2011 and September 30, 2011**

<b>Institution</b>	<b>Description</b>
IDLEWYLD MANOR	An outbreak of <i>Clostridium difficile</i> infection occurred involving 5 confirmed cases in one affected area.

**Table 3:**  
**Community Outbreaks Declared Between July 1, 2011 and September 30, 2011**

<b>Event</b>	<b>Description</b>
DAYCARE CENTRE	An enteric outbreak occurred involving 7/14 children. No causative agent was identified.
WEDDING	An enteric outbreak occurred when 14/114 wedding attendants became ill with gastroenteritis. An inspection and investigation of the facility was completed reviewing food supply and food preparation processes. The causative agent was identified as <i>Clostridium perfringens</i> , a bacterium known for causing food poisoning when food is not thoroughly reheated before serving.
LEGIONELLOSIS INVESTIGATION	An investigation was conducted when above expected numbers of pneumonia caused by <i>Legionella pneumophila</i> were reported in the latter half of September. A total of 8 cases plus 1 Niagara case with a Hamilton exposure were reported as part of this investigation. Legionella infection is acquired from inhaling contaminated water from sources such as showers, air conditioning systems and cooling towers.

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

**SUBJECT: Communicable Disease and Health Hazard Investigations Quarterly  
Report (Q3) (July 1, 2011 to September 30, 2011) BOH11019(b) (City  
Wide)**

**Page 4 of 5**

HEALTH HAZARD ABATEMENT	2010 (Q3)		2011 (Q3)	
	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	1	5	1
Bed bugs	184	71	152	26
Cockroaches	64	9	30	3
Other Insects	4	1	7	0
Diogenes (recluse response)	1	2	6	2
General sanitation	6	2	1	1
Housing	6	2	15	0
Marijuana Grow Operations	3	0	5	0
Mice	25	1	37	2
Mould	142	14	27	4
Odour	17	1	25	0
Other	35	9	20	9
Rats	23	3	14	1
Sewage	3	0	3	0
Sharps	17	2	21	1
<b>Total</b>	<b>533</b>	<b>118</b>	<b>368</b>	<b>50</b>
<b>FOOD SAFETY</b>				
Adulteration	24	0	23	0
Education	0	1	1	5
Emergency Fire/Flood	1	0	0	2
Garbage	8	0	3	0
General Food Inquiry	1	11	0	0
Other	43	18	21	12
Request For Inspection	31	0	14	20
Sanitation	22	1	22	0
Suspect Illness	6	0	12	4
<b>Total</b>	<b>136</b>	<b>31</b>	<b>96</b>	<b>43</b>
<b>WNV</b>				
Standing Water Complaints	62	0	62	0
<b>Total</b>	<b>62</b>	<b>0</b>	<b>62</b>	<b>0</b>
<b>TOBACCO CONTROL under Smoke Free Ontario Act</b>				
Sales Related	8	3	2	0
Smoking Related	13	9	25	27
<b>Total</b>	<b>21</b>	<b>12</b>	<b>27</b>	<b>27</b>
<b>WATER QUALITY</b>				
General Inquiries	3	63	8	123
Adverse Water Quality Events <sup>1</sup>	20	0	20	1
Boil/Drinking Water Advisories	1	0	4	0
Recreational Water Postings	61	3	40	0
<b>Total</b>	<b>85</b>	<b>66</b>	<b>72</b>	<b>124</b>

HEALTH HAZARD ABATEMENT	2010 (Q3)		2011 (Q3)	
	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
INFECTION CONTROL/INJURY PREVENTION				
Potential Human Exposure To Rabies	480	0	510 (includes phone calls)	0
Rabies Vaccine Deliveries	38	0	27	0
Compliance With Childcare, Public Pool, Personal Service Setting Regulation/Guidelines	6	9	6	10
<b>Total</b>	<b>524</b>	<b>9</b>	<b>543</b>	<b>10</b>

<sup>1</sup> 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.

# **REPORTABLE DISEASE CASES REPORTED TO THE CITY OF HAMILTON, PUBLIC HEALTH SERVICES IN THE THIRD 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 13/03/2011.*

<b>Disease</b>	<b>Confirmed/ probable case count</b>	<b>Suspect case count</b>	<b>Min - Max count per quarter 2006 - 2010</b>
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>	6	0	Unavailable
Anthrax	0	0	0 – 0
Botulism	0	0	0 – 0
Brucellosis	0	0	0 – 0
Campylobacter Enteritis	46	0	39 – 51
Chancroid	0	0	0 – 0
Chickenpox (Varicella), Laboratory-confirmed or cases hospitalized due to complications	5	0	0 – 8
Chlamydial Infections	383	0	249 – 405
Cholera	0	0	0 – 0
Creutzfeldt-Jakob Disease	0	0	0 – 1
Cryptosporidiosis	5	0	3 – 10
Cyclosporiasis	1	0	0 – 3
Cytomegalovirus Infection, Congenital	0	0	0 – 0
Diphtheria	0	0	0 – 0
Encephalitis/Meningitis	7	0	2 – 9
Giardiasis	11	0	8 – 17
Gonorrhoea	53	0	37 – 55
Group A Streptococcal Disease, Invasive	7	0	4 – 7
Group B Streptococcal Disease, Neonatal	0	0	0 – 1
Haemophilus Influenzae B Disease, Invasive	0	0	0 – 0
Hantavirus Pulmonary Syndrome	0	0	0 – 0
Hemorrhagic Fevers	0	0	0 – 1

Disease	Confirmed/ probable case count	Suspect case count	Min - Max count per quarter 2006 - 2010
Hepatitis A	0	0	0 – 7
Hepatitis B, Acute	0	0	0 – 2
Hepatitis C	40	0	48 – 60
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>	6	0	3 – 11
Influenza, Institutional Outbreak Cases	0	0	0 – 231
Influenza, Laboratory Confirmed Community Cases	0	0	0 – 57
Lassa Fever	0	0	0 – 0
Legionellosis	3	0	1 – 11
Leprosy	0	0	0 – 0
Listeriosis	1	0	0 – 4
Lyme Disease	1	0	0 – 3
Malaria	3	0	0 – 6
Measles	0	0	0 – 0
Meningococcal Disease, Invasive	1	0	0 – 2
Mumps	2	0	0 – 0
Ophthalmia Neonatorum	0	0	0 – 0
Paratyphoid Fever	0	0	0 – 1
Pertussis (Whooping Cough)	10	0	1 – 4
Plague	0	0	0 – 0
Poliomyelitis, Acute	0	0	0 – 0
Psittacosis/Ornithosis	0	0	0 – 0
Q Fever	0	0	0 – 0
Rabies	0	0	0 – 0
Rubella	0	0	0 – 0
Rubella, Congenital	0	0	0 – 0
Salmonellosis	33	0	21 – 42

Disease	Confirmed/ probable case count	Suspect case count	Min - Max count per quarter 2006 - 2010
SARS	0	0	0 – 0
Shigellosis	4	0	0 – 4
Smallpox	0	0	0 – 0
Streptococcus Pneumoniae, Invasive	7	0	4 – 12
Syphilis, Early Congenital	0	0	Unavailable
Syphilis, Late Latent, Neurosyphilis	5	0	
Syphilis, Primary, Secondary, Early Latent	5	0	
Syphilis, Under Investigation/Unstaged	0	0	
<b>Syphilis, Total</b> <i>Due to delays in determining the staging of infectious versus non-infectious syphilis, the 5-year history is unavailable.</i>	10	0	Unavailable
Tetanus	0	0	0 – 1
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, 160 inactive TB cases were reported and include positive skin test results and individuals referred to Public Health for medical surveillance.</i>	1	0	2 – 13
Tularemia	0	0	0 – 0
Typhoid Fever	0	0	0 – 1
Verotoxin Producing E. Coli Including HUS	0	0	1 – 16
West Nile Virus Illness	2	0	0 – 3
Yellow Fever	0	0	0 – 0
Yersiniosis	0	0	0 – 4