

INFORMATION REPORT

TO: Mayor and Members Board of Health	WARD(S) AFFECTED: CITY WIDE
COMMITTEE DATE: February 22, 2010	
SUBJECT/REPORT NO: Communicable Disease and Health Hazard Investigations Quarterly Report (Q3) (July 1, 2009 – September 30, 2009)- BOH09012(b) (City Wide)	
SUBMITTED BY: Elizabeth Richardson Public Health Services	PREPARED BY: Nancy Greaves 546-2424 Ext 5542 Bob Hart 546-2424 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 July 1 to September 30, 2009, summarizing investigations for the third quarter of 2009 (3 months).

Reportable Communicable Diseases

SUMMARY

- During the third quarter of 2009, 911 confirmed or probable reports of communicable disease were received by the City of Hamilton Public Health Services (PHS). These are summarized in Appendix A.
- 24 outbreaks declared between July 1 to September 30, 2009 were investigated.
- 54% (13) of outbreaks occurred in Long Term Care Homes and Residential Care Facilities; and 21% (5) occurred in Hospitals. There were no outbreaks caused by *Clostridium difficile* in a hospital during this quarter. The institutional outbreak results are summarized in Table 1.
- 25% (6) 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 July 1 and September 30, 2009.**

Outbreak Type	Outbreak Count
Enteric/Foodborne/Waterborne	1
Influenza	1
Other Respiratory/Direct Contact	12
Other	4
Clostridium difficile	0
Total	18

**Table 2:
Community Outbreaks Declared between July 1 and September 30, 2009.**

Event	Description
CHILD CARE CENTRE OUTBREAKS	<p>Centre A: An enteric outbreak occurred at this centre at the end of July affecting 10 out of the 81 children attending. No causative agent was identified in the investigation but based on symptoms, viral gastroenteritis is suspected.</p> <p>Centre B: An enteric outbreak occurred at this centre in early September affecting 5 out of 13 children attending. Again, no causative agent was identified in the investigation and based on symptoms, viral gastroenteritis is suspected.</p>
RESTAURANT MEAL	Three co-workers suffering from suspected viral gastroenteritis reported consumption of a meal at a local food premises as one possible source of illness. An inspection of the food premises found no adverse food safety conditions.
ELEMENTARY SCHOOL OUTBREAKS	<p>School A: Two Influenza A outbreaks occurred in this private residential school; the first occurred in July and the second in September.</p> <p>School B: An Influenza A outbreak occurred in this public elementary school in September.</p> <p>These 3 outbreaks were all laboratory confirmed to be Pandemic (H1N1) Influenza A.</p>

Health Hazard Investigations

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

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- (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 third quarter of 2009 and grouped together based on the Mandatory Program area each would fall into.

HEALTH HAZARD ABATEMENT	2008 (Q3)		2009 (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	1	1	3	2
Bed bugs	65	11	108	21
Cockroaches	49	1	30	3
Diogenes (recluse response)	10	0	8	2
General sanitation	7	0	3	0
Housing	28	4	9	8
Insects (other by in Property Standards By-law #03-117)	0	2	5	5
Marijuana Grow Operations (Bill 128)	0	7	5	1
Mice	40	0	28	2
Mould	155	18	122	10
Odour	29	1	38	1
Other	26	8	23	12
Rats	20	0	18	0
Sewage	10	1	24	6
Sharps	23	0	18	2
Total	463	54	442	75
FOOD SAFETY				
Adulteration	47	3	40	2
Education	0	3	1	2
Emergency Fire/Flood	4	0	0	2

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HEALTH HAZARD ABATEMENT	2008 (Q3)		2009 (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
Food Sample Testing	0	0	0	0
Garbage	4	0	7	0
General Food Inquiry	2	16	0	17
Other	14	10	23	11
Request For Inspection	14	6	2	36
Sanitation	9	0	20	0
Special Event	0	5	0	2
Suspect Illness	12	0	6	1
Total	106	43	99	73
WNV				
Standing Water Complaints	104	0	77	0
Dead Bird Complaints ¹	43	432	0	85
Total	147	432	77	85
TOBACCO CONTROL under Smoke Free Ontario Act				
Sales Related	5	5	21	6
Smoking Related	32	26	22	13
Total	37	31	43	19
WATER QUALITY				
General Inquiries	7	87	6	63
Adverse Water Quality Events ²	47	0	23	0
Boil/Drinking Water Advisories	2	0	5	0
Recreational Water Postings	20	0	46	0
Total	76	87	80	63
INFECTION CONTROL/INJURY PREVENTION				
Potential Human Exposure To Rabies	866	0	561	0
Rabies Vaccine Deliveries	57	0	80	0
Compliance With Childcare, Public Pool, Personal Service Setting Regulation/Guidelines	10	23	6	7
Total	933	23	647	7

¹These numbers can not be compared with last year because, in response to new MOHLTC directives, community promotion of dead bird sightings and bird testing were not carried out this year.

²The 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 2009

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 14/01/2010.

Disease	Confirmed/ probable case count	Suspect case count	Min - Max count per quarter 2004 - 2008
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>	21	0	Unavailable
Anthrax	0	0	0 - 0
Botulism	0	0	0 - 0
Brucellosis	0	0	0 - 0
Campylobacter Enteritis	40	0	36 - 51
Chancroid	0	0	0 - 0
Chickenpox (Varicella), Laboratory-confirmed or cases hospitalized due to complications <i>The specific reporting of cases with severity began in May 2005. Accrual of the 5-year history commenced January 1, 2006.</i>	0	0	Unavailable
Chlamydial Infections	342	0	232 - 314
Cholera	0	0	0 - 0
Creutzfeldt-Jakob Disease	0	0	0 - 1
Cryptosporidiosis	4	0	3 - 10
Cyclosporiasis	0	0	0 - 3
Cytomegalovirus Infection, Congenital	0	0	0 - 0
Diphtheria	0	0	0 - 0
Encephalitis/Meningitis	4	0	2 - 11
Giardiasis	17	1	9 - 23
Gonorrhoea	45	0	30 - 60
Group A Streptococcal Disease, Invasive	7	0	4 - 6
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

Disease	Confirmed/ probable case count	Suspect case count	Min - Max count per quarter 2004 - 2008
Hemorrhagic Fevers	0	0	0 - 1
Hepatitis A	1	0	1 - 7
Hepatitis B, Acute	2	0	0 - 2
Hepatitis C	49	3	47 - 79
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>	10	0	3 - 5
Influenza, Institutional Outbreak Cases	231	0	0 - 0
Influenza, Laboratory Confirmed Community Cases	57	0	0 - 1
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>	5	0	Unavailable
Leprosy	0	0	0 - 0
Listeriosis	0	0	0 - 4
Lyme Disease	3	0	0 - 1
Malaria	3	0	0 - 5
Measles	0	0	0 - 0
Meningococcal Disease, Invasive	2	0	0 - 1
Mumps	0	0	0 - 0
Ophthalmia Neonatorum	0	0	0 - 0
Paratyphoid Fever	1	0	0 - 2
Pertussis (Whooping Cough)	2	0	1 - 18
Plague	0	0	0 - 0
Poliomyelitis, Acute	0	0	0 - 0
Psittacosis/Ornithosis	0	0	0 - 0
Q Fever	0	0	0 - 0

Disease	Confirmed/ probable case count	Suspect case count	Min - Max count per quarter 2004 - 2008
Rabies	0	0	0 - 0
Rubella	0	0	0 - 0
Rubella, Congenital	0	0	0 - 0
Salmonellosis	27	0	26 - 42
SARS	0	0	0 - 0
Shigellosis	4	0	0 - 2
Smallpox	0	0	0 - 0
Streptococcus Pneumoniae, Invasive	4	0	4 - 12
Syphilis, Early Congenital	0	0	Unavailable
Syphilis, Late Latent, Neurosyphilis	5	1	
Syphilis, Primary, Secondary, Early Latent	6	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>	15	6	Unavailable
Tetanus	1	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, 162 inactive TB cases were reported and include positive skin test results and individuals referred to Public Health for medical surveillance.</i>	2	0	2 - 13
Tularemia	0	0	0 - 0
Typhoid Fever	0	0	0 - 1
Verotoxin Producing E. Coli Including Hus	1	0	1 - 16
West Nile Virus Illness	0	0	0 - 3
Yellow Fever	0	0	0 - 0
Yersiniosis	0	0	2 - 7