

SURVEILLANCE REPORT

Monthly Infectious Diseases Surveillance Report (December 2018)

Reportable disease cases by month in Ontario, 2018

Table 1. Confirmed cases of reportable diseases, and probable cases of select reportable diseases, by month: October, 2018

Reportable disease	2018 Case counts by month												2018 Year-to-month (October)		2013-2017 avg Year-to-month (October)	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Count	Rate †	Count	Rate †
Acute Flaccid Paralysis	0	0	0	0	0	1	0	1	4	6			12	0.8	n/a	n/a
AIDS	8	5	3	5	8	13	4	12	3	4			65	4.5	64.0	4.6
Amebiasis	38	43	46	34	39	57	42	43	33	30			405	28.0	688.0	49.7
Blastomycosis~	4	3	3	5	4	4	8	3	4	5			43	3.0	n/a	n/a
Botulism	1	0	0	2	0	0	0	0	0	0			3	0.2	1.0	0.1
Brucellosis	0	0	2	0	0	2	0	1	0	0			5	0.3	3.6	0.3
Campylobacter enteritis	163	166	177	198	234	329	506	502	378	309			2962	205.1	3114.8	224.9
Carbapenemase-Producing Enterobacteriaceae (CPE)~	-	-	-	-	38	28	26	23	19	24			158	10.9	n/a	n/a
Chlamydial Infections	4074	3468	4048	3784	3760	3732	3859	4306	4165	4593			39789	2755.7	32783.2	2367.0
Cholera	0	0	0	0	0	0	0	0	0	0			0	0.0	1.2	0.1
Cryptosporidiosis	32	30	42	40	35	55	123	184	98	52			691	47.9	335.0	24.2
Cyclosporiasis	3	3	7	8	44	120	58	14	1	3			261	18.1	207.8	15.0
Echinococcus multilocularis Infection~	-	-	-	-	0	0	0	0	0	0			0	0	n/a	n/a
Encephalitis	4	2	3	1	0	1	3	6	5	3			28	1.9	25.6	1.8
Encephalitis/Meningitis	7	12	9	9	13	12	21	28	21	23			155	10.7	152.8	11.0
Food Poisoning, All Causes	12	2	5	2	1	1	0	0	1	5			29	2.0	62.6	4.5
Giardiasis	125	119	131	109	134	112	165	154	121	101			1271	88.0	1146.4	82.8
Gonorrhoea (All Types)	710	665	665	747	836	898	991	1063	972	1050			8597	595.4	5125.0	370.0
Group A Streptococcal Disease, Invasive	137	121	95	126	106	83	72	74	60	69			943	65.3	587.8	42.4

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Group B Streptococcal Disease, Neonatal	5	5	10	2	4	4	5	2	3	4			44	3.0	43.0	3.1
Haemophilus Influenzae Disease, All Types, Invasive*	0	0	0	10	25	15	32	10	22	23			137	9.5	n/a	
Hepatitis A	4	8	5	8	18	15	28	31	25	30			172	11.9	81.0	5.8
Hepatitis B (Acute)	6	10	7	8	11	4	5	8	5	6			70	4.8	78.6	5.7
Hepatitis B (Chronic)	148	132	139	126	112	116	112	121	118	124			1248	86.4	n/a	n/a
Hepatitis C	429	407	474	439	472	458	451	407	387	448			4372	302.8	3714.0	268.2
HIV	67	67	58	81	68	89	70	69	73	89			731	50.6	651.6	47.0
Influenza	6056	5727	3048	1243	170	12	12	14	15	68			16365	1133.4	8948.8	646.1
Legionellosis	11	12	7	6	9	18	37	79	48	58			285	19.7	153.4	11.1
Leprosy	0	1	0	1	0	0	1	0	0	0			3	0.2	2.8	0.2
Listeriosis	4	7	8	2	7	6	5	7	11	6			63	4.4	51.0	3.7
Lyme Disease	6	6	5	3	57	136	145	97	67	36			558	38.6	455.4	32.9
Measles	0	2	2	0	2	1	1	0	0	0			8	0.6	#	#
Meningitis	12	8	17	10	11	17	13	34	20	31			173	12.0	140.6	10.2
Meningococcal Disease, Invasive	7	3	3	2	3	1	3	1	1	3			27	1.9	25.4	1.8
Mumps	18	24	20	4	10	8	2	2	1	2			91	6.3	66.2	4.8
Ophthalmia neonatorum	1	0	0	0	0	0	0	0	0	0			1	0.1	2.6	0.2
Paralytic Shellfish Poisoning	0	0	0	0	0	0	0	0	0	0			0	0.0	n/a	n/a
Paratyphoid Fever	2	1	2	4	5	2	1	4	1	0			22	1.5	31.8	2.3
Pertussis (Whooping Cough)	40	27	21	21	38	51	32	42	35	37			344	23.8	389.0	28.1
Q Fever	0	0	0	1	0	0	2	0	0	1			4	0.3	10.8	0.8
Rabies	0	0	0	0	0	0	0	0	0	0			0	0.0	0.0	0.0
Rubella	0	0	0	0	0	0	0	0	0	0			0	0.0	#	#
Rubella, Congenital Syndrome	0	0	0	0	0	0	0	0	0	0			0	0.0	#	#
Salmonellosis	237	197	230	181	230	214	295	270	242	201			2297	159.1	2469.0	178.3
Shigellosis	26	23	28	22	18	13	30	27	29	33			249	17.2	239.4	17.3
Streptococcus Pneumoniae, Invasive	142	149	139	141	105	63	63	44	73	120			1039	72.0	848.0	61.2
Syphilis, Early Congenital	0	0	1	0	0	0	0	0	0	0			1	0.1	1.2	0.1
Syphilis, Infectious	139	124	166	156	163	138	151	146	136	130			1449	100.4	955.0	69.0

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Syphilis, Other	83	62	86	69	76	80	53	81	67	78			735	50.9	555.4	40.1
Tetanus	0	0	0	0	0	0	0	0	0	0			0	0.0	2.4	0.2
Tuberculosis	42	30	65	48	51	60	64	74	48	55			537	37.2	527.8	38.1
Tularemia	0	0	0	0	0	0	0	0	0	0			0	0.0	0.4	0.0
Typhoid Fever	8	9	19	12	10	9	6	8	11	3			95	6.6	61.2	4.4
Verotoxin Producing E. coli Including HUS	7	5	7	13	12	20	32	30	14	15			155	10.7	133.0	9.6
West Nile Virus Illness	0	0	0	0	1	0	11	75	48	4			139	9.6	63.2	4.6
Yersiniosis	30	26	38	30	19	20	39	23	23	21			269	18.6	193.6	14.0

‡ Rates are for cases per 1,000,000 population.

* Prior to May 1, 2018, only *Haemophilus influenzae* (Hi) serotype b was reportable. As of May 1, 2018, all serotypes (a, b, c, d, e, f, non-typeable, and undifferentiated) became designated under diseases of public health significance under Hi. As of May 1, 2018, cases of non-type b Hi were reported in iPHIS, some with accurate episode dates in April. All serotypes of Hi with reported dates as of May 1, 2018, regardless of the episode date, are included in Table 1. Two of the ten cases of Hi with accurate episode dates in April were serotype b.

~ 2018 YTM counts and rates only represent a partial year for Blastomycosis, Carbapenemase-Producing Enterobacteriaceae (CPE), and *Echinococcus multilocularis* Infection, which first became designated under diseases of public health significance in Ontario on May 1, 2018. Note: Blastomycosis cases with episode dates for any time in 2018 are included in this monthly report, whereas only cases with episode dates from May 1 onwards are included for CPE (no cases reported for *Echinococcus multilocularis* Infection to date).

n/a Five-year historical data are not yet available for these diseases (n/a):

- Acute Flaccid Paralysis and Paralytic Shellfish Poisoning, which became reportable in Ontario in December 2013.
- Hepatitis B (Chronic), which became reportable in December 2014.
- Blastomycosis, Carbapenemase-Producing Enterobacteriaceae, and *Echinococcus multilocularis* Infection, first designated in May 2018.
- Hi, due to the changes in reporting in May 2018.

Historical comparison data are not provided for measles, rubella, and congenital rubella syndrome because these diseases have been eliminated in Canada. However, as these diseases remain endemic in other countries, imported and import-related cases continue to occur in Ontario.

Ontario Cases: Ontario Ministry of Health and Long-Term Care, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2018/12/12 for CPE, 2018/12/18 for all other diseases].

Ontario Population: Population Projections [2017-2018] and Estimates [2013-2016], Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario, Dates Extracted [2017/10/24] for Projections and [2017/10/19] for Estimates.

Data notes and caveats

- iPHIS is a dynamic reporting system which allows ongoing updates to data previously entered. As a result, data extracted from iPHIS represent a snap shot at the time of extraction and may differ from previous or subsequent reports. The data only represent cases reported to public health and recorded in iPHIS, that meet the Ontario Ministry of Health and Long-Term Care's confirmed and/or probable [surveillance case definitions](#) in place at the time that the case was reported. The potential for underreporting and unresolved duplicates exists.
- Case counts for amebiasis, invasive *Haemophilus influenzae* disease (all types), invasive meningococcal disease, Lyme disease, mumps, pertussis, and West Nile Virus illness are based on the sum of confirmed and probable cases as reported in iPHIS. All other diseases reported in the table are based on confirmed cases only.
- Chronic and acute hepatitis B case counts are not mutually exclusive and should not be added to obtain a total for hepatitis B cases in Ontario.
- A case is reported as encephalitis and/or meningitis when an agent is not specifically identified through laboratory testing or is not reportable.
- Case counts of Carbapenemase-Producing Enterobacteriaceae (CPE) include CPE – Infection, CPE – Colonization, CPE – Unspecified. Where multiple reports with the same carbapenemase are entered in iPHIS for a client, only the first report is included.
- Table 1 is not an exhaustive list of all reportable diseases in Ontario. Historical annual counts and rates for most reportable diseases are available in the [Reportable Disease Trends in Ontario reports](#). The following reportable diseases/outbreaks are omitted from the table:
 - Counts of Creutzfeldt-Jakob disease, which are not updated frequently enough for monthly publication as a result of an additional data reconciliation step that is required.
 - Diseases that are extremely rare or have zero incidence in recent years: anthrax, chancroid, diphtheria, hantavirus pulmonary syndrome, hemorrhagic fevers and Lassa fever, plague, acute poliomyelitis, psittacosis/ornithosis, severe acute respiratory syndrome (SARS), smallpox, and trichinosis.
 - Diseases that are only reportable in outbreak situations or as a combination of individual and aggregate counts: chickenpox (varicella), *Clostridium difficile* infection (CDI) outbreaks in public hospitals, and institutional outbreaks of gastroenteritis and respiratory infections.
- Detailed reporting on institutional outbreaks of respiratory infections is available in the [Ontario Respiratory Pathogen Bulletin](#).
- Information on CDI outbreaks in public hospitals is available in the [Reportable Disease Trends in Ontario reports](#).

- Cases that do not reside in Ontario or for whom the Disposition Status was reported as entered in error, does not meet definition, or as a duplicate record have been excluded.
- Case counts for tuberculosis and AIDS are based on diagnosis date, HIV case counts are based on encounter date, congenital rubella syndrome cases are based on the date of birth, CPE case counts are based on the earliest specimen collection date (cases with missing specimen collection dates are excluded), and case counts for all other diseases are based on episode date. The episode date is an estimate of the onset date of disease for a case. In order to determine this date, the following hierarchy is in place in iPHIS: Onset Date > Specimen Collection Date > Lab Test Date > Reported Date. If an onset date exists ,it will be used as the episode date. If not available, then the next available date in the hierarchy will be used.