

SURVEILLANCE REPORT

Monthly Infectious Diseases Surveillance Report (November 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: September, 2018

Reportable disease	2018 Case counts by month												2018 Year-to-month (September)		2013-2017 avg Year-to-month (September)	
	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	2				4	0.3	n/a	n/a
AIDS	8	5	3	5	8	13	3	12	3				60	4.2	56.6	4.1
Amebiasis	38	43	46	34	38	56	42	42	32				371	25.7	626.8	45.3
Blastomycosis~	4	3	3	5	3	4	8	3	3				36	2.5	n/a	n/a
Botulism	1	0	0	2	0	0	0	0	0				3	0.2	1.0	0.1
Brucellosis	0	0	2	0	0	1	0	1	0				4	0.3	3.6	0.3
Campylobacter enteritis	163	166	177	198	234	329	505	502	367				2641	182.9	2776.2	200.4
Carbapenemase-Producing Enterobacteriaceae (CPE)~	-	-	-	-	38	28	26	22	17				131	9.1	n/a	n/a
Chlamydial Infections	4074	3468	4047	3785	3759	3732	3858	4306	4156				35185	2436.8	29247.2	2111.7
Cholera	0	0	0	0	0	0	0	0	0				0	0.0	1.0	0.1
Cryptosporidiosis	32	30	41	40	35	55	122	184	99				638	44.2	305.2	22.0
Cyclosporiasis	3	3	7	8	44	120	58	14	0				257	17.8	202.8	14.6
Echinococcus multilocularis Infection~	-	-	-	-	0	0	0	0	0				0	0	n/a	n/a
Encephalitis	4	2	3	1	0	1	3	6	4				24	1.7	22.2	1.6
Encephalitis/Meningitis	7	12	9	9	13	12	21	27	21				131	9.1	134.8	9.7
Food Poisoning, All Causes	12	2	5	2	1	1	0	0	1				24	1.7	60.4	4.4
Giardiasis	124	119	131	109	134	111	159	149	108				1144	79.2	1027.4	74.2
Gonorrhoea (All Types)	710	665	663	746	836	898	989	1063	973				7543	522.4	4528.4	327.0
Group A Streptococcal Disease, Invasive	137	121	95	126	106	83	72	74	58				872	60.4	540.0	39.0

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Group B Streptococcal Disease, Neonatal	5	5	10	2	4	4	5	2	3				40	2.8	37.8	2.7
Haemophilus Influenzae Disease, All Types, Invasive*	0	0	0	10	25	15	32	10	20				112	7.8	n/a	n/a
Hepatitis A	4	8	5	8	18	15	28	31	25				142	9.8	71.2	5.1
Hepatitis B (Acute)	7	11	7	8	11	5	5	8	6				68	4.7	71.2	5.1
Hepatitis B (Chronic)	148	129	131	121	106	108	111	117	107				1078	74.7	n/a	n/a
Hepatitis C	427	408	469	436	466	451	445	400	372				3874	268.3	3335.4	240.8
HIV	67	67	58	81	69	88	66	65	70				631	43.7	579.2	41.8
Influenza	6056	5727	3048	1243	170	12	12	13	16				16297	1128.7	8897.2	642.4
Legionellosis	11	12	7	7	9	18	36	78	47				225	15.6	131.4	9.5
Leprosy	0	1	0	0	0	0	1	0	0				2	0.1	2.4	0.2
Listeriosis	4	7	8	2	7	6	5	7	11				57	3.9	48.2	3.5
Lyme Disease	6	6	5	3	56	135	140	85	66				502	34.8	432.4	31.2
Measles	0	2	2	0	2	1	1	0	0				8	0.6	#	#
Meningitis	12	8	17	10	11	17	13	34	19				141	9.8	121.4	8.8
Meningococcal Disease, Invasive	7	3	3	2	3	1	3	1	1				24	1.7	22.8	1.6
Mumps	18	24	20	4	10	8	2	2	1				89	6.2	58.6	4.2
Ophthalmia neonatorum	1	0	0	0	0	0	0	0	0				1	0.1	2.2	0.2
Paralytic Shellfish Poisoning	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				22	1.5	30.2	2.2
Pertussis (Whooping Cough)	40	27	21	21	38	51	32	40	32				302	20.9	335.8	24.2
Q Fever	0	0	0	1	0	0	2	0	0				3	0.2	10.2	0.7
Rabies	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	#	#
Rubella, Congenital Syndrome	0	0	0	0	0	0	0	0	0				0	0.0	#	#
Salmonellosis	237	197	230	181	230	214	295	267	243				2094	145.0	2264.0	163.5
Shigellosis	26	23	28	22	18	13	30	27	29				216	15.0	213.6	15.4
Streptococcus Pneumoniae, Invasive	142	149	139	141	105	63	63	44	72				918	63.6	747.6	54.0
Syphilis, Early Congenital	0	0	1	0	0	0	0	0	0				1	0.1	1.2	0.1
Syphilis, Infectious	139	124	167	156	161	136	148	144	130				1305	90.4	853.8	61.6

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Syphilis, Other	82	62	87	67	74	80	49	74	64				639	44.3	493.0	35.6
Tetanus	0	0	0	0	0	0	0	0	0				0	0.0	2.2	0.2
Tuberculosis	42	30	65	47	50	60	64	74	48				480	33.2	478.2	34.5
Tularemia	0	0	0	0	0	0	0	0	0				0	0.0	0.2	0.0
Typhoid Fever	8	9	19	12	10	9	6	8	11				92	6.4	56.8	4.1
Verotoxin Producing E. coli Including HUS	7	5	7	13	12	20	32	30	13				139	9.6	124.0	9.0
West Nile Virus Illness	0	0	0	0	1	0	11	74	46				132	9.1	61.2	4.4
Yersiniosis	30	26	38	30	19	20	38	23	23				247	17.1	180.8	13.1

‡ 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 [2018/11/20].

**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.