

SURVEILLANCE REPORT

Monthly Infectious Diseases Surveillance Report (February 2019)

Reportable disease cases by month in Ontario, 2018

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

Reportable disease	2018 Case counts by month												2018 Total		2013-2017 avg Total	
	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	1	2	15	1.0	n/a	n/a
AIDS	8	5	4	5	8	13	4	12	2	4	11	2	78	5.4	76.4	5.5
Amebiasis	38	43	46	34	40	57	44	44	36	32	25	33	472	32.7	794.2	57.3
Blastomycosis~	4	3	3	5	4	4	9	5	4	6	3	4	54	3.7	n/a	n/a
Botulism	1	0	0	2	0	0	0	0	0	0	0	0	3	0.2	1.0	0.1
Brucellosis	0	0	2	0	0	2	0	1	0	0	2	1	8	0.6	4.4	0.3
Campylobacter enteritis	163	166	177	199	234	330	505	502	381	312	260	183	3412	236.3	3589.6	259.2
Carbapenemase-Producing Enterobacteriaceae (CPE)~	-	-	-	-	41	28	26	23	20	25	22	16	201	13.9	n/a	n/a
Chlamydial Infections	4076	3470	4050	3784	3760	3734	3861	4311	4169	4623	4484	3507	47829	3312.5	39247.6	2833.7
Cholera	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1.4	0.1
Cryptosporidiosis	32	30	42	40	35	55	125	184	98	54	29	21	745	51.6	375.6	27.1
Cyclosporiasis	3	3	7	8	44	120	58	14	1	3	6	2	269	18.6	211.4	15.3
Echinococcus multilocularis Infection~	-	-	-	-	0	0	0	0	0	0	0	1	1	0.7	n/a	n/a
Encephalitis	4	2	3	1	0	1	3	6	6	4	1	5	36	2.5	30.0	2.2
Encephalitis/Meningitis	5	12	10	9	13	11	21	26	21	21	11	7	167	11.6	183.2	13.2
Food Poisoning, All Causes	12	2	5	2	1	1	0	1	1	5	0	18	48	3.3	68.2	4.9
Giardiasis	125	121	131	111	135	111	170	154	126	107	104	76	1471	101.9	1332.8	96.2
Gonorrhoea (All Types)	711	666	665	747	836	898	994	1064	972	1053	977	830	10413	721.2	6189.6	446.9
Group A Streptococcal Disease, Invasive	138	121	95	126	106	83	72	75	61	69	101	91	1138	78.8	716.6	51.7

Reportable disease	2018 Case counts by month												2018 Total		2013-2017 avg Total	
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Group B Streptococcal Disease, Neonatal	5	6	10	2	4	4	5	2	4	4	11	2	59	4.1	50.8	3.7
Haemophilus Influenzae Disease, All Types, Invasive*	0	0	0	10	25	15	32	10	22	23	30	30	197	13.6	n/a	n/a
Hepatitis A	4	8	5	8	18	16	27	31	26	30	22	22	217	15.0	96.8	7.0
Hepatitis B (Acute)	7	11	8	8	12	5	6	9	6	5	9	6	92	6.4	97.6	7.0
Hepatitis B (Chronic)	158	137	146	143	122	131	120	123	123	148	139	99	1589	110.0	n/a	n/a
Hepatitis C	435	410	474	437	473	469	454	424	398	475	354	281	5084	352.1	4426.6	319.6
HIV	68	67	59	81	68	89	71	69	74	90	72	73	881	61.0	783.0	56.5
Influenza	6074	5727	3049	1243	171	12	12	14	15	69	286	2456	19128	1324.7	11109.4	802.1
Legionellosis	11	12	7	6	9	18	38	78	51	57	31	14	332	23.0	173.0	12.5
Leprosy	0	1	0	1	0	0	1	0	0	0	0	0	3	0.2	3.4	0.2
Listeriosis	4	7	8	2	7	6	5	8	10	6	9	4	76	5.3	62.2	4.5
Lyme Disease	6	6	5	3	59	141	149	99	77	44	19	4	612	42.4	485.8	35.1
Measles	0	2	2	0	2	1	1	0	0	0	0	1	#	#	#	#
Meningitis	14	9	17	10	11	17	13	35	20	32	25	22	225	15.6	170.6	12.3
Meningococcal Disease, Invasive	7	3	3	2	3	1	3	1	1	3	2	4	33	2.3	28.6	2.1
Mumps	18	24	20	4	10	8	2	2	1	2	1	1	93	6.4	73.2	5.3
Ophthalmia neonatorum	1	0	0	0	0	0	0	0	0	0	0	0	1	0.1	3.2	0.2
Paralytic Shellfish Poisoning	0	0	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	1	3	26	1.8	35.4	2.6
Pertussis (Whooping Cough)	40	27	21	21	38	51	32	43	36	36	21	18	384	26.6	461.6	33.3
Q Fever	0	0	0	2	0	0	2	0	0	2	1	0	7	0.5	12.0	0.9
Rabies	0	0	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	#	#	#	#
Rubella, Congenital Syndrome	0	0	0	0	0	0	0	0	0	0	0	0	#	#	#	#
Salmonellosis	237	197	230	181	230	214	295	272	249	200	172	175	2652	183.7	2859.0	206.4
Shigellosis	26	23	28	22	18	13	30	27	27	33	31	33	311	21.5	292.8	21.1
Streptococcus Pneumoniae, Invasive	145	149	139	141	104	63	63	44	73	125	78	162	1286	89.1	1073.0	77.5
Syphilis, Early Congenital	0	0	1	0	0	0	0	0	0	0	0	0	1	0.1	1.2	0.1
Syphilis, Infectious	141	125	167	158	167	146	153	151	159	166	144	123	1800	124.7	1157.6	83.6
Syphilis, Other	82	62	85	69	77	75	53	85	66	83	94	69	900	62.3	660.4	47.7

Reportable disease	2018 Case counts by month												2018 Total		2013-2017 avg Total	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Count	Rate ‡	Count	Rate ‡
Tetanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	2.4	0.2
Tuberculosis	42	31	65	48	51	62	65	74	48	61	62	50	659	45.6	626.6	45.2
Tularemia	0	0	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	1	11	107	7.4	74.0	5.3
Verotoxin Producing E. coli Including HUS	7	5	7	13	12	21	31	31	14	15	11	6	173	12.0	149.2	10.8
West Nile Virus Illness	0	0	0	0	1	0	11	75	47	3	0	1	138	9.6	63.8	4.6
Yersiniosis	30	26	38	30	19	20	39	24	23	22	12	14	297	20.6	219.2	15.8

‡ 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).
- Blastomycosis, Carbapenemase-Producing Enterobacteriaceae, and *Echinococcus multilocularis* Infection, first designated in May 2018.
- *Haemophilus influenzae*, 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 [2019/02/13].

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.