

MONTHLY INFECTIOUS DISEASES SURVEILLANCE REPORT

Diseases of Public Health Significance cases for January to December 2019

This report publishes recent data on Diseases of Public Health Significance (DOPHS) in Ontario, as reported through the integrated Public Health Information System (iPHIS). The presented case counts and rates include confirmed cases for all diseases, and probable cases for select diseases (refer to the 'Data Caveats and Notes' section for details).

The following table provides case counts by month, followed by the total counts and rates per 1,000,000 population for 2019 to date (i.e., Jan. – Dec. 2019). The last two columns of the table provide the comparison historical data of 5-year counts and rates per 1,000,000 population for an average year-to-date (i.e., average of Jan. – Dec. counts based on data from 2014 to 2018).

Disease of Public Health Significance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2019 to date COUNT	2019 to date RATE per 1,000,000 population	5-year average year-to-date COUNT	5-year average year-to-date RATE
Acute Flaccid Paralysis	0	0	0	0	1	0	0	0	0	0	0	0	1	0.1	9	0.6
AIDS	5	5	3	3	9	5	4	7	4	8	4	4	61	4.2	71	5.1
Amebiasis	47	40	48	32	26	40	58	46	29	33	42	28	469	32.0	725	51.7
Blastomycosis	8	6	4	6	8	7	14	8	3	4	9	4	81	5.5	n/a	n/a
Botulism	0	0	0	0	0	1	0	0	1	0	0	0	2	0.1	2	0.1
Brucellosis	2	1	0	2	0	0	0	0	0	0	0	0	5	0.3	4	0.3
Campylobacter enteritis	200	193	207	239	222	316	467	437	320	299	187	183	3270	223.4	3488	248.7
Carbapenemase-Producing Enterobacteriaceae (CPE)	22	17	34	46	37	34	30	21	33	48	34	28	384	26.2	n/a	n/a
Chlamydial Infections	4564	3768	4489	4188	4254	3784	4480	4388	4620	4655	4395	3828	51413	3513.2	41895	2986.8

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Cholera	0	0	1	0	0	1	0	0	0	0	1	0	3	0.2	1	0.1
Cryptosporidiosis	49	76	70	42	43	40	113	131	83	58	67	38	810	55.3	465	33.2
Cyclosporiasis	4	3	4	10	27	90	279	24	2	4	2	0	449	30.7	247	17.6
Echinococcus multilocularis Infection	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	n/a	n/a
Encephalitis	3	3	3	6	3	5	3	2	2	2	2	4	38	2.6	34	2.4
Encephalitis/Meningitis	6	7	11	6	10	19	12	32	25	26	22	10	186	12.7	181	12.9
Food Poisoning, All Causes	6	7	11	3	1	0	0	1	0	0	1	5	35	2.4	41	2.9
Giardiasis	106	95	119	98	90	101	114	143	129	101	83	61	1240	84.7	1371	97.7
Gonorrhoea (All Types)	1022	752	947	853	847	778	1028	1022	1015	1095	963	800	11122	760.0	7367	525.2
Group A Streptococcal Disease, Invasive	99	81	116	89	99	75	79	85	81	90	100	112	1106	75.6	821	58.5
Group B Streptococcal Disease, Neonatal	9	1	3	5	0	1	4	4	1	1	4	1	34	2.3	50	3.6
Haemophilus Influenzae Disease, All Types, Invasive	32	19	26	25	24	23	22	20	19	33	24	36	303	20.7	n/a	n/a
Hepatitis A	26	16	16	19	16	19	15	19	22	9	9	14	200	13.7	121	8.6
Hepatitis B (Acute)	13	3	15	8	7	10	12	10	8	11	8	6	111	7.6	94	6.7
Hepatitis B (Chronic)	187	139	152	139	168	115	134	115	128	130	115	93	1615	110.4	1981	141.2
Hepatitis C	444	344	409	419	430	454	388	385	374	435	358	308	4748	324.4	4667	332.7
HIV	73	70	65	49	77	72	80	86	82	94	73	59	880	60.1	821	58.5

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Influenza	3919	2360	2021	1508	421	76	15	24	28	48	290	3096	13806	943.4	13499	962.4
Legionellosis	8	15	6	13	24	34	38	78	54	43	31	29	373	25.5	187	13.3
Leprosy	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	4	0.3
Listeriosis	8	6	5	2	9	7	12	8	6	6	2	2	73	5.0	69	4.9
Lyme Disease	6	4	6	9	58	180	408	241	93	67	44	17	1133	77.4	555	39.6
Measles [#]	0	2	4	1	4	2	0	0	0	0	1	0	14	1.0	13	0.9
Meningitis	17	7	14	11	19	17	17	19	28	21	5	13	188	12.8	195	13.9
Meningococcal Disease, Invasive	3	5	4	1	5	1	3	5	2	4	1	2	36	2.5	30	2.1
Mumps	9	6	2	3	4	4	9	8	5	8	13	6	77	5.3	88	6.3
Ophthalmia neonatorum	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	3	0.2
Paralytic Shellfish Poisoning	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
Paratyphoid Fever	6	8	4	6	2	5	2	4	4	2	2	3	48	3.3	32	2.3
Pertussis (Whooping Cough)	23	15	25	32	32	51	66	65	30	33	39	43	454	31.0	485	34.6
Pneumococcal Disease, Invasive	153	109	109	117	129	88	51	48	69	106	113	168	1260	86.1	1123	80.1
Q Fever	2	0	0	1	1	2	1	2	1	2	0	1	13	0.9	10	0.7
Rabies	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	0	0.0	0	0.0
Rubella, Congenital Syndrome [#]	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
Salmonellosis	203	213	231	205	209	176	208	252	207	170	178	125	2377	162.4	2894	206.3

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Shigellosis	38	23	31	23	26	16	35	19	25	18	19	19	292	20.0	306	21.8
Syphilis, Early Congenital	1	0	0	1	0	0	0	1	0	0	0	0	3	0.2	1	0.1
Syphilis, Infectious	223	173	212	191	178	164	227	182	204	223	176	139	2292	156.6	1393	99.3
Syphilis, Other	85	79	87	76	83	86	89	83	91	99	74	68	1000	68.3	731	52.1
Tetanus	0	0	0	0	0	1	0	0	0	0	0	0	1	0.1	2	0.1
Tuberculosis	68	57	62	64	67	58	71	64	64	63	49	49	736	50.3	633	45.1
Tularemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
Typhoid Fever	10	18	13	14	9	2	2	16	14	8	2	12	120	8.2	83	5.9
Verotoxin Producing <i>E. coli</i> Including HUS	8	11	11	14	13	25	41	31	23	14	21	15	227	15.5	155	11.1
West Nile Virus Illness	0	0	1	0	0	0	3	5	12	1	1	1	24	1.6	80	5.7
Yersiniosis	18	23	40	30	24	17	29	25	26	19	17	17	285	19.5	244	17.4

[#] Although measles, rubella, and congenital rubella syndrome have been eliminated in Canada, these diseases remain endemic in other countries and therefore, imported and import-related cases continue to occur in Ontario.

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

- Blastomycosis, carbapenemase-producing Enterobacteriaceae, and Echinococcus multilocularis Infection, first designated under diseases of public health significance in May 2018.
- Invasive Haemophilus influenzae (all types), due to changes in reporting. As of May 1, 2018, all serotypes became reportable (prior to which only serotype b was reportable).

Ontario Cases: Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2020/02/12].

Ontario Population: Population Projections [2017-2019] and Estimates [2014-2016], 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's confirmed and/or probable surveillance case definitions in place at the time that the case was reported. Refer to the Factors Affecting Reportable Diseases in Ontario report for additional information on case definition changes and associated trends from 1991 to 2016. Note that 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, and 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 Diseases of Public Health Significance (DOPHS) in Ontario.
 Historical annual counts and rates for most diseases designated under DOPHS are available in the Infectious Disease Trends in Ontario reports. The following designated diseases/outbreaks are omitted from the table:
 - Counts of Creutzfeldt-Jakob disease 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 gastroenteritis and respiratory infection outbreaks in institutions and public hospitals.
- Detailed reporting on respiratory infection outbreaks in institutions and public hospitals is available in the Ontario Respiratory Pathogen Bulletin.
- Information on CDI outbreaks in public hospitals is available in the <u>Infectious Disease Trends in</u> Ontario reports.

Citation

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