Public Health Ontario | Santé publique Ontario

MONTHLY INFECTIOUS DISEASES SURVEILLANCE REPORT

Diseases of Public Health Significance cases for January to October 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 disease (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. – Oct. 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. – Oct. 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	-	-	1	0.1	7	0.5
AIDS	5	5	3	3	8	4	4	8	3	7	-	-	50	3.4	58	4.1
Amebiasis	46	40	47	32	25	40	57	46	32	31	-	-	396	27.1	627	44.7
Blastomycosis	7	6	4	6	8	7	12	8	3	4	-	-	65	4.4	n/a	n/a
Botulism	0	0	0	0	0	1	0	0	1	0	-	-	2	0.1	2	0.1
Brucellosis	3	1	0	2	0	0	0	0	0	0	-	-	6	0.4	3	0.2
Campylobacter enteritis	200	193	207	239	222	315	465	435	316	293	-	-	2885	197.1	3024	215.6
Carbapenemase-Producing *Enterobacteriaceae* (CPE)	22	17	33	46	37	34	27	20	27	34	-	-	297	20.3	n/a	n/a
Chlamydial Infections	4565	3767	4487	4187	4254	3785	4478	4387	4611	4648	-	-	43169	2949.9	34883	2486.9

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Cholera	0	0	1	0	0	1	0	0	0	0	-	-	2	0.1	1	0.1
Cryptosporidiosis	49	76	69	42	43	40	109	132	83	59	-	-	702	48.0	419	29.9
Cyclosporiasis	4	3	4	10	27	90	277	24	2	4	-	-	445	30.4	243	17.3
Echinococcus multilocularis Infection	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	1	2	-	-	31	2.1	28	2.0
Encephalitis/Meningitis	7	6	12	6	11	19	12	32	24	28	-	-	157	10.7	154	11.0
Food Poisoning, All Causes	6	7	11	3	1	0	0	1	0	0	-	-	29	2.0	33	2.4
Giardiasis	106	95	119	98	89	96	111	136	122	95	-	-	1067	72.9	1180	84.1
Gonorrhoea (All Types)	1023	752	946	853	847	778	1029	1023	1013	1092	-	-	9356	639.3	6100	434.9
Group A Streptococcal Disease, Invasive	98	81	114	89	100	75	79	85	82	90	-	-	893	61.0	679	48.4
Group B Streptococcal Disease, Neonatal	9	1	3	5	0	1	4	4	1	0	-	-	28	1.9	42	3.0
Haemophilus Influenzae Disease, All Types, Invasive	32	19	26	24	24	23	22	20	19	34	-	-	243	16.6	n/a	n/a
Hepatitis A	25	16	12	22	16	19	15	18	22	10	-	-	175	12.0	99	7.1
Hepatitis B (Acute)	13	3	15	8	8	12	12	11	8	15	-	-	105	7.2	77	5.5
Hepatitis B (Chronic)	182	135	142	133	158	104	127	112	121	118	-	-	1332	91.0	1651	117.7
Hepatitis C	444	341	408	418	428	455	388	382	360	414	-	-	4038	275.9	3947	281.4
HIV	74	71	65	49	75	73	78	85	83	95	-	-	748	51.1	682	48.6

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Influenza	3914	2361	2020	1508	421	76	15	24	28	48	-	-	10415	711.7	11191	797.8
Legionellosis	8	15	6	12	24	34	37	74	55	43	-	-	308	21.0	162	11.5
Leprosy	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	5	6	-	-	68	4.6	56	4.0
Lyme Disease	5	4	6	8	57	177	398	229	85	56	-	-	1025	70.0	521	37.1
Measles[#]	0	2	4	1	4	2	0	0	0	0	-	-	13	0.9	13	0.9
Meningitis	17	7	14	11	19	17	17	19	27	18	-	-	166	11.3	158	11.3
Meningococcal Disease, Invasive	3	5	4	1	5	1	3	5	2	4	-	-	33	2.3	27	1.9
Mumps	9	6	2	3	4	4	9	8	5	8	-	-	58	4.0	81	5.8
Ophthalmia neonatorum	0	0	0	0	0	0	0	0	0	0	-	-	0	0.0	2	0.1
Paralytic Shellfish Poisoning	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	-	-	43	2.9	28	2.0
Pertussis (Whooping Cough)	23	15	26	32	32	51	66	65	29	32	-	-	371	25.4	410	29.2
Pneumococcal Disease, Invasive	152	109	109	117	129	88	52	48	69	100	-	-	973	66.5	891	63.5
Q Fever	1	0	0	1	1	2	1	2	1	0	-	-	9	0.6	9	0.6
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	0.0	0	0.0
Rubella, Congenital Syndrome[#]	0	0	0	0	0	0	0	0	0	0	-	-	0	0.0	0	0.0
Salmonellosis	203	213	230	205	209	173	209	254	205	164	-	-	2065	141.1	2501	178.3

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Shigellosis	38	23	31	23	26	16	35	20	26	17	-	-	255	17.4	247	17.6
Syphilis, Early Congenital	1	0	0	1	0	0	0	1	0	0	-	-	3	0.2	1	0.1
Syphilis, Infectious	222	174	211	189	174	161	216	167	189	182	-	-	1885	128.8	1149	81.9
Syphilis, Other	85	78	85	77	84	81	88	83	94	93	-	-	848	57.9	609	43.4
Tetanus	0	0	0	0	0	1	0	0	0	0	-	-	1	0.1	2	0.1
Tuberculosis	70	57	62	64	67	59	67	63	63	59	-	-	631	43.1	530	37.8
Tularemia	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	14	15	8	-	-	105	7.2	70	5.0
Verotoxin Producing *E. coli* Including HUS	8	11	11	14	13	25	40	32	23	12	-	-	189	12.9	138	9.8
West Nile Virus Illness	0	0	1	0	0	0	3	5	11	1	-	-	21	1.4	80	5.7
Yersiniosis	18	23	39	31	24	16	29	26	26	16	-	-	248	16.9	218	15.5

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 [2019/12/11].
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 Infectious Disease Trends in Ontario reports.

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