Public Health Ontario | Santé publique Ontario

MONTHLY INFECTIOUS DISEASES SURVEILLANCE REPORT

Diseases of Public Health Significance cases for January to August 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. – Aug. 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. – Aug. 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	-	-	-	-	1	0.1	2	0.1
AIDS	5	5	3	2	7	4	4	9	-	-	-	-	39	2.7	47	3.4
Amebiasis	46	39	46	32	25	39	54	46	-	-	-	-	327	22.3	520	37.1
Blastomycosis	7	6	4	6	7	6	12	9	-	-	-	-	57	3.9	n/a	n/a
Botulism	0	0	0	0	0	1	0	0	-	-	-	-	1	0.1	1	0.1
Brucellosis	3	1	0	2	0	0	0	0	-	-	-	-	6	0.4	3	0.2
Campylobacter enteritis	200	193	206	239	222	310	466	426	-	-	-	-	2262	154.6	2317	165.2
Carbapenemase-Producing *Enterobacteriaceae* (CPE)	22	17	33	46	37	34	27	15	-	-	-	-	231	15.8	n/a	n/a
Chlamydial Infections	4563	3768	4484	4184	4253	3778	4472	4368	-	-	-	-	33870	2314.4	27324	1948.0

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Cholera	0	0	1	0	0	0	0	0	-	-	-	-	1	0.1	1	0.1
Cryptosporidiosis	49	76	69	42	42	40	106	129	-	-	-	-	553	37.8	314	22.4
Cyclosporiasis	4	3	4	10	26	90	270	31	-	-	-	-	438	29.9	230	16.4
Echinococcus multilocularis Infection	0	0	0	0	0	0	0	0	-	-	-	-	0	0.0	n/a	n/a
Encephalitis	3	3	3	6	3	5	3	1	-	-	-	-	27	1.8	21	1.5
Encephalitis/Meningitis	7	6	12	6	12	20	12	27	-	-	-	-	102	7.0	114	8.1
Food Poisoning, All Causes	6	7	11	3	1	0	0	1	-	-	-	-	29	2.0	28	2.0
Giardiasis	104	93	118	96	87	92	110	121	-	-	-	-	821	56.1	913	65.1
Gonorrhoea (All Types)	1023	752	945	853	846	777	1027	1019	-	-	-	-	7242	494.9	4683	333.9
Group A Streptococcal Disease, Invasive	98	81	114	90	100	76	77	85	-	-	-	-	721	49.3	580	41.3
Group B Streptococcal Disease, Neonatal	9	1	3	5	0	1	4	4	-	-	-	-	27	1.8	33	2.4
Haemophilus Influenzae Disease, All Types, Invasive	32	19	26	24	24	23	22	21	-	-	-	-	191	13.1	n/a	n/a
Hepatitis A	25	16	12	22	16	19	15	17	-	-	-	-	142	9.7	68	4.8
Hepatitis B (Acute)	13	3	18	9	7	12	10	9	-	-	-	-	81	5.5	65	4.6
Hepatitis B (Chronic)	176	127	130	125	151	103	125	98	-	-	-	-	1035	70.7	1314	93.7
Hepatitis C	438	341	408	416	425	451	378	367	-	-	-	-	3224	220.3	3147	224.4
HIV	74	70	64	47	74	72	76	81	-	-	-	-	558	38.1	534	38.1

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Influenza	3914	2361	2020	1508	421	76	15	24	-	-	-	-	10339	706.5	11102	791.5
Legionellosis	8	15	7	12	24	33	35	67	-	-	-	-	201	13.7	110	7.8
Leprosy	0	0	0	0	0	0	0	0	-	-	-	-	0	0.0	3	0.2
Listeriosis	8	6	5	2	9	7	12	8	-	-	-	-	57	3.9	45	3.2
Lyme Disease	5	4	6	8	49	154	335	192	-	-	-	-	753	51.5	441	31.4
Measles[#]	0	2	4	1	4	2	0	0	-	-	-	-	13	0.9	13	0.9
Meningitis	17	7	14	11	18	15	14	13	-	-	-	-	109	7.4	113	8.1
Meningococcal Disease, Invasive	3	5	4	2	4	1	3	5	-	-	-	-	27	1.8	21	1.5
Mumps	9	6	2	3	4	4	9	7	-	-	-	-	44	3.0	65	4.6
Ophthalmia neonatorum	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
Paratyphoid Fever	6	8	4	6	2	5	1	3	-	-	-	-	35	2.4	24	1.7
Pertussis (Whooping Cough)	23	15	26	32	32	51	66	61	-	-	-	-	306	20.9	319	22.7
Pneumococcal Disease, Invasive	152	109	108	117	129	88	52	45	-	-	-	-	800	54.7	719	51.3
Q Fever	1	0	0	1	1	2	1	1	-	-	-	-	7	0.5	7	0.5
Rabies	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
Rubella, Congenital Syndrome[#]	0	0	0	0	0	0	0	0	-	-	-	-	0	0.0	0	0.0
Salmonellosis	203	213	229	204	208	174	203	251	-	-	-	-	1685	115.1	2017	143.8

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Shigellosis	38	23	31	23	26	16	35	17	-	-	-	-	209	14.3	192	13.7
Syphilis, Early Congenital	1	0	0	0	0	0	0	1	-	-	-	-	2	0.1	1	0.1
Syphilis, Infectious	219	172	209	183	172	154	199	132	-	-	-	-	1440	98.4	901	64.2
Syphilis, Other	88	78	82	75	82	78	85	78	-	-	-	-	646	44.1	479	34.1
Tetanus	0	0	0	0	0	1	0	0	-	-	-	-	1	0.1	2	0.1
Tuberculosis	70	57	64	64	68	59	66	60	-	-	-	-	508	34.7	426	30.4
Tularemia	0	0	0	0	0	0	0	0	-	-	-	-	0	0.0	0	0.0
Typhoid Fever	10	18	13	14	9	2	2	11	-	-	-	-	79	5.4	57	4.1
Verotoxin Producing *E. coli* Including HUS	8	11	11	14	13	23	39	31	-	-	-	-	150	10.2	110	7.8
West Nile Virus Illness	0	0	0	0	0	0	3	5	-	-	-	-	8	0.5	52	3.7
Yersiniosis	17	23	39	31	24	16	28	24	-	-	-	-	202	13.8	184	13.1

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 [2019/10/09].
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 Reportable 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 Reportable Disease Trends in Ontario reports.

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