Public Health Ontario | Santé publique Ontario

MONTHLY INFECTIOUS DISEASES SURVEILLANCE REPORT

Diseases of Public Health Significance cases for January to September 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. – Sep. 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. – Sep. 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	-	-	-	1	0.1	5	0.4
AIDS	5	5	3	3	7	4	4	10	3	-	-	-	44	3.0	52	3.7
Amebiasis	46	39	47	32	25	40	57	46	31	-	-	-	363	24.8	572	40.8
Blastomycosis	7	6	4	6	8	7	12	8	3	-	-	-	61	4.2	n/a	n/a
Botulism	0	0	0	0	0	1	0	0	0	-	-	-	1	0.1	2	0.1
Brucellosis	3	1	0	2	0	0	0	0	0	-	-	-	6	0.4	3	0.2
Campylobacter enteritis	200	193	207	239	222	312	467	434	315	-	-	-	2589	176.9	2699	192.4
Carbapenemase-Producing *Enterobacteriaceae* (CPE)	22	17	33	46	37	34	27	20	25	-	-	-	261	17.8	n/a	n/a
Chlamydial Infections	4563	3768	4485	4186	4253	3783	4476	4382	4600	-	-	-	38496	2630.5	31045	2213.3

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
Cholera	0	0	1	0	0	1	0	0	0	-	-	-	2	0.1	1	0.1
Cryptosporidiosis	49	76	69	42	42	40	107	134	78	-	-	-	637	43.5	383	27.3
Cyclosporiasis	4	3	4	10	27	90	277	24	2	-	-	-	441	30.1	238	17.0
Echinococcus multilocularis Infection	0	0	0	0	0	0	0	0	0	-	-	-	0	0.0	n/a	n/a
Encephalitis	3	3	3	6	3	5	3	1	1	-	-	-	28	1.9	25	1.8
Encephalitis/Meningitis	7	6	12	6	11	20	12	31	23	-	-	-	128	8.7	136	9.7
Food Poisoning, All Causes	6	7	11	3	1	0	0	1	0	-	-	-	29	2.0	31	2.2
Giardiasis	106	94	119	98	89	94	110	133	114	-	-	-	957	65.4	1061	75.6
Gonorrhoea (All Types)	1023	752	945	853	847	778	1027	1023	1015	-	-	-	8263	564.6	5383	383.8
Group A Streptococcal Disease, Invasive	98	81	114	90	100	76	79	85	82	-	-	-	805	55.0	626	44.6
Group B Streptococcal Disease, Neonatal	9	1	3	5	0	1	4	4	1	-	-	-	28	1.9	38	2.7
Haemophilus Influenzae Disease, All Types, Invasive	32	19	26	24	24	23	22	20	19	-	-	-	209	14.3	n/a	n/a
Hepatitis A	25	16	12	22	16	19	15	18	23	-	-	-	166	11.3	84	6.0
Hepatitis B (Acute)	13	3	15	8	7	12	11	10	8	-	-	-	87	5.9	70	5.0
Hepatitis B (Chronic)	180	131	139	130	153	104	125	109	107	-	-	-	1178	80.5	1478	105.4
Hepatitis C	440	342	405	418	427	454	382	377	355	-	-	-	3600	246.0	3542	252.5
HIV	74	71	65	49	74	74	75	83	76	-	-	-	641	43.8	605	43.1

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
Influenza	3914	2361	2020	1508	421	76	15	24	28	-	-	-	10367	708.4	11132	793.6
Legionellosis	8	15	6	12	24	33	37	73	55	-	-	-	263	18.0	135	9.6
Leprosy	0	0	0	0	0	0	0	0	0	-	-	-	0	0.0	3	0.2
Listeriosis	8	6	5	2	9	7	12	8	5	-	-	-	62	4.2	53	3.8
Lyme Disease	5	4	6	8	54	172	390	227	65	-	-	-	931	63.6	492	35.1
Measles[#]	0	2	4	1	4	2	0	0	0	-	-	-	13	0.9	13	0.9
Meningitis	17	7	14	11	19	16	17	18	24	-	-	-	143	9.8	135	9.6
Meningococcal Disease, Invasive	3	5	4	1	5	1	3	5	2	-	-	-	29	2.0	24	1.7
Mumps	9	6	2	3	4	4	9	8	5	-	-	-	50	3.4	73	5.2
Ophthalmia neonatorum	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
Paratyphoid Fever	6	8	4	6	2	5	2	3	4	-	-	-	40	2.7	27	1.9
Pertussis (Whooping Cough)	23	15	26	32	32	51	66	64	27	-	-	-	336	23.0	356	25.4
Pneumococcal Disease, Invasive	152	109	109	117	129	88	52	45	67	-	-	-	868	59.3	785	56.0
Q Fever	1	0	0	1	1	2	1	1	1	-	-	-	8	0.5	8	0.6
Rabies	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
Rubella, Congenital Syndrome[#]	0	0	0	0	0	0	0	0	0	-	-	-	0	0.0	0	0.0
Salmonellosis	203	213	230	204	208	173	209	255	196	-	-	-	1891	129.2	2293	163.5

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
Shigellosis	38	23	31	23	26	16	35	20	25	-	-	-	237	16.2	217	15.5
Syphilis, Early Congenital	1	0	0	1	0	0	0	1	0	-	-	-	3	0.2	1	0.1
Syphilis, Infectious	221	174	209	186	173	156	209	158	177	-	-	-	1663	113.6	1024	73.0
Syphilis, Other	86	78	84	77	83	80	87	82	83	-	-	-	740	50.6	539	38.4
Tetanus	0	0	0	0	0	1	0	0	0	-	-	-	1	0.1	2	0.1
Tuberculosis	70	57	63	63	68	59	67	63	63	-	-	-	573	39.2	478	34.1
Tularemia	0	0	0	0	0	0	0	0	0	-	-	-	0	0.0	0	0.0
Typhoid Fever	10	18	13	14	9	2	2	13	15	-	-	-	96	6.6	66	4.7
Verotoxin Producing *E. coli* Including HUS	8	11	11	14	13	25	40	31	23	-	-	-	176	12.0	128	9.1
West Nile Virus Illness	0	0	1	0	0	0	3	5	11	-	-	-	20	1.4	77	5.5
Yersiniosis	18	23	39	31	24	16	29	25	25	-	-	-	230	15.7	203	14.5

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 [2019/11/13].
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.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Monthly infectious diseases surveillance report: Diseases of Public Health Significance cases for January to September 2019. Toronto, ON: Queen's Printer for Ontario; 2019.

Disclaimer

Public Health Ontario

Public Health Ontario is a Crown corporation dedicated to protecting and promoting the health of all Ontarians and reducing inequities in health. Public Health Ontario links public health practitioners, front-line health workers and researchers to the best scientific intelligence and knowledge from around the world.

For more information about PHO, visit publichealthontario.ca.

Public Health Ontario acknowledges the financial support of the Ontario Government.

Ontario
Agency for Health Protection and Promotion
Agence de protection et de promotion de la santé