

MONTHLY INFECTIOUS DISEASES SURVEILLANCE REPORT

Diseases of Public Health Significance cases for January to September 2020

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 2020 to date (i.e., Jan. – Sept. 2020). 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. – Sept. counts based on data from 2015 to 2019).

Disease of Public Health Significance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2020 to date COUNT	2020 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	0	0	0	0	0				0	0.0	3	0.2
AIDS	4	3	7	5	7	6	4	9	6				51	3.4	51	3.6
Amebiasis	47	29	23	20	15	22	25	20	19				220	14.8	532	37.4
Blastomycosis	5	0	5	4	2	2	5	3	1				27	1.8	n/a	n/a
Botulism	0	0	0	0	0	0	0	0	0				0	0.0	2	0.1
Brucellosis	0	0	2	0	1	0	0	0	1				4	0.3	4	0.3
Campylobacter enteritis	181	155	110	66	100	217	309	293	226				1657	111.5	2638	185.6
Carbapenemase-Producing <i>Enterobacteriaceae</i> (CPE)	42	35	31	19	7	10	22	17	21				204	13.7	n/a	n/a
Chlamydial Infections	4867	4222	3164	1637	1806	2382	2885	3195	3433				27591	1856.2	33392	2349.5

Disease of Public Health Significance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2020 to date COUNT	2020 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	0	0	0	0	1	0	0				1	0.1	1	0.1
Cryptosporidiosis	45	43	20	9	21	35	96	97	52				418	28.1	455	32.0
Cyclosporiasis	2	0	2	3	24	135	129	40	9				344	23.1	300	21.1
<i>Echinococcus multilocularis</i> Infection	0	0	0	0	0	0	0	0	0				0	0.0	n/a	n/a
Encephalitis	3	3	2	0	2	2	5	0	0				17	1.1	28	2.0
Encephalitis/Meningitis	11	7	10	2	12	11	7	6	8				74	5.0	136	9.6
Food Poisoning, All Causes	1	0	3	1	11	0	1	0	0				17	1.1	33	2.3
Giardiasis	86	94	67	31	21	62	79	104	91				635	42.7	1060	74.6
Gonorrhoea (All Types)	1104	865	734	394	461	653	725	738	839				6513	438.2	6173	434.3
Group A Streptococcal Disease, Invasive	126	114	111	82	93	60	73	79	55				793	53.3	669	47.1
Group B Streptococcal Disease, Neonatal	1	2	2	3	0	1	4	0	2				15	1.0	35	2.5
<i>Haemophilus Influenzae</i> Disease, All Types, Invasive	26	24	14	11	6	5	2	5	4				97	6.5	n/a	n/a
Hepatitis A	17	18	10	7	5	3	4	2	1				67	4.5	105	7.4
Hepatitis B (Acute)	9	15	8	3	2	7	11	6	7				68	4.6	74	5.2
Hepatitis B (Chronic)	137	107	66	24	46	55	49	94	55				633	42.6	1446	101.7
Hepatitis C	399	294	253	113	137	207	247	219	205				2074	139.5	3631	255.5
HIV	82	78	76	30	38	41	49	47	58				499	33.6	634	44.6

Disease of Public Health Significance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2020 to date COUNT	2020 to date RATE per 1,000,000 population	5-year average year-to-date COUNT	5-year average year-to-date RATE
Influenza	5579	2853	1256	51	30	4	7	5	4				9789	658.6	11622	817.7
Legionellosis	13	8	13	7	11	26	41	51	30				200	13.5	169	11.9
Leprosy	0	0	0	0	0	0	0	0	0				0	0.0	3	0.2
Listeriosis	3	1	6	5	2	1	5	11	8				42	2.8	57	4.0
Lyme Disease	16	9	9	24	54	155	172	109	69				617	41.5	657	46.2
Measles [#]	0	0	0	0	0	0	0	0	0				0	0.0	11	0.8
Meningitis	15	8	6	9	10	10	10	7	2				77	5.2	147	10.3
Meningococcal Disease, Invasive	2	6	4	2	1	0	1	2	0				18	1.2	26	1.8
Mumps	16	17	10	4	1	0	0	2	0				50	3.4	82	5.8
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	7	10	6	0	1	1	0	1	1				27	1.8	31	2.2
Pertussis (Whooping Cough)	47	25	17	5	2	7	1	1	1				106	7.1	390	27.4
Pneumococcal Disease, Invasive	155	106	79	40	46	33	17	22	23				521	35.1	807	56.8
Q Fever	1	1	1	2	0	0	0	0	0				5	0.3	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	176	154	129	48	57	119	222	182	134				1221	82.1	2186	153.8

Disease of Public Health Significance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2020 to date COUNT	2020 to date RATE per 1,000,000 population	5-year average year-to-date COUNT	5-year average year-to-date RATE
Shigellosis	35	41	11	6	6	11	14	8	9				141	9.5	223	15.7
Syphilis, Early Congenital	0	0	0	0	0	0	0	1	0				1	0.1	2	0.1
Syphilis, Infectious	239	201	191	108	114	144	155	177	174				1503	101.1	1260	88.7
Syphilis, Other	92	96	73	24	46	44	94	75	71				615	41.4	601	42.3
Tetanus	1	0	0	0	0	0	0	0	1				2	0.1	1	0.1
Trichinosis	0	0	0	1	0	0	0	0	0				1	0.1	6	0.4
Tuberculosis	59	55	57	45	48	53	54	66	62				499	33.6	503	35.4
Tularemia	0	1	0	0	0	0	0	0	0				1	0.1	0	0.0
Typhoid Fever	10	12	9	3	2	0	1	6	2				45	3.0	74	5.2
Verotoxin Producing <i>E. coli</i> Including HUS	8	10	9	3	4	19	21	23	14				111	7.5	142	10.0
West Nile Virus Illness	1	0	1	1	0	4	5	47	15				74	5.0	80	5.6
Yersiniosis	26	17	27	6	9	17	12	15	23				152	10.2	223	15.7

Ontario Cases: Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2020/11/11].

Ontario Population: Population Projections [2018-2020] and Estimates [2015-2017], Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario, Dates Extracted [2019/11/26].

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).

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, and smallpox.
 - 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.
 - Counts of coronaviruses causing severe acute respiratory illness are no longer included, because COVID-19 cases are now reported through several other systems in addition to iPHIS. Visit [COVID-19 data and surveillance](#) for detailed, up-to-date reporting on COVID-19 activity in Ontario.

- 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](#).

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 2020. Toronto, ON: Queen's Printer for Ontario; 2020.

©Queen's Printer for Ontario, 2020

Disclaimer

This document was developed by Public Health Ontario (PHO). PHO provides scientific and technical advice to Ontario's government, public health organizations and health care providers. PHO's work is guided by the current best available evidence at the time of publication.

The application and use of this document is the responsibility of the user. PHO assumes no liability resulting from any such application or use.

This document may be reproduced without permission for non-commercial purposes only and provided that appropriate credit is given to PHO. No changes and/or modifications may be made to this document without express written permission from PHO.

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.