

MONTHLY INFECTIOUS DISEASES SURVEILLANCE REPORT

Diseases of Public Health Significance cases for January to March 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. – Mar. 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. – Mar. 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	0.0	0	0.0
AIDS	2	5	1	-	-	-	-	-	-	-	-	-	8	0.5	15	1.1
Amebiasis	45	36	41	-	-	-	-	-	-	-	-	-	122	8.3	186	13.3
Blastomycosis	5	4	2	-	-	-	-	-	-	-	-	-	11	0.8	n/a	n/a
Botulism	0	0	0	-	-	-	-	-	-	-	-	-	0	0.0	0	0.0
Brucellosis	3	1	0	-	-	-	-	-	-	-	-	-	4	0.3	1	0.1
Campylobacter enteritis	198	201	204	-	-	-	-	-	-	-	-	-	603	41.2	573	40.9
Carbapenemase-Producing <i>Enterobacteriaceae</i> (CPE)	22	16	29	-	-	-	-	-	-	-	-	-	67	4.6	n/a	n/a
Chlamydial Infections	4544	3746	4450	-	-	-	-	-	-	-	-	-	12740	870.6	10236	729.7

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	0	-	-	-	-	-	-	-	-	-	0	0.0	0	0.0
Cryptosporidiosis	48	75	64	-	-	-	-	-	-	-	-	-	187	12.8	69	4.9
Cyclosporiasis	4	3	2	-	-	-	-	-	-	-	-	-	9	0.6	9	0.6
<i>Echinococcus multilocularis</i> Infection	0	0	0	-	-	-	-	-	-	-	-	-	0	0.0	n/a	n/a
Encephalitis	3	3	3	-	-	-	-	-	-	-	-	-	9	0.6	9	0.6
Encephalitis/Meningitis	8	5	12	-	-	-	-	-	-	-	-	-	25	1.7	29	2.1
Food Poisoning, All Causes	6	7	11	-	-	-	-	-	-	-	-	-	24	1.6	19	1.4
Giardiasis	97	85	103	-	-	-	-	-	-	-	-	-	285	19.5	315	22.5
Gonorrhoea (All Types)	1023	744	937	-	-	-	-	-	-	-	-	-	2704	184.8	1583	112.9
Group A Streptococcal Disease, Invasive	98	80	109	-	-	-	-	-	-	-	-	-	287	19.6	257	18.3
Group B Streptococcal Disease, Neonatal	8	1	2	-	-	-	-	-	-	-	-	-	11	0.8	15	1.1
<i>Haemophilus Influenzae</i> Disease, All Types, Invasive	30	19	25	-	-	-	-	-	-	-	-	-	74	5.1	n/a	n/a
Hepatitis A	25	14	11	-	-	-	-	-	-	-	-	-	50	3.4	21	1.5
Hepatitis B (Acute)	13	5	19	-	-	-	-	-	-	-	-	-	37	2.5	27	1.9
Hepatitis B (Chronic)	153	112	114	-	-	-	-	-	-	-	-	-	379	25.9	505	36.0
Hepatitis C	422	328	381	-	-	-	-	-	-	-	-	-	1131	77.3	1180	84.1
HIV	66	63	64	-	-	-	-	-	-	-	-	-	193	13.2	188	13.4

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	3908	2360	2011	-	-	-	-	-	-	-	-	-	8279	565.7	9467	674.9
Legionellosis	8	13	7	-	-	-	-	-	-	-	-	-	28	1.9	20	1.4
Leprosy	0	0	0	-	-	-	-	-	-	-	-	-	0	0.0	1	0.1
Listeriosis	7	6	4	-	-	-	-	-	-	-	-	-	17	1.2	12	0.9
Lyme Disease	3	2	7	-	-	-	-	-	-	-	-	-	12	0.8	13	0.9
Measles [#]	0	2	4	-	-	-	-	-	-	-	-	-	6	0.4	9	0.6
Meningitis	18	8	11	-	-	-	-	-	-	-	-	-	37	2.5	32	2.3
Meningococcal Disease, Invasive	4	5	5	-	-	-	-	-	-	-	-	-	14	1.0	10	0.7
Mumps	9	5	2	-	-	-	-	-	-	-	-	-	16	1.1	38	2.7
Ophthalmia neonatorum	0	0	0	-	-	-	-	-	-	-	-	-	0	0.0	1	0.1
Paralytic Shellfish Poisoning	0	0	0	-	-	-	-	-	-	-	-	-	0	0.0	0	0.0
Paratyphoid Fever	6	8	3	-	-	-	-	-	-	-	-	-	17	1.2	11	0.8
Pertussis (Whooping Cough)	23	15	24	-	-	-	-	-	-	-	-	-	62	4.2	70	5.0
Pneumococcal Disease, Invasive	151	103	109	-	-	-	-	-	-	-	-	-	363	24.8	340	24.2
Q Fever	0	1	0	-	-	-	-	-	-	-	-	-	1	0.1	2	0.1
Rabies	0	0	0	-	-	-	-	-	-	-	-	-	0	0.0	0	0.0
Rubella [#]	0	0	0	-	-	-	-	-	-	-	-	-	0	0.0	0	0.0
Rubella, Congenital Syndrome [#]	0	0	0	-	-	-	-	-	-	-	-	-	0	0.0	0	0.0
Salmonellosis	196	206	211	-	-	-	-	-	-	-	-	-	613	41.9	698	49.8

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	39	24	28	-	-	-	-	-	-	-	-	-	91	6.2	77	5.5
Syphilis, Early Congenital	0	0	0	-	-	-	-	-	-	-	-	-	0	0.0	1	0.1
Syphilis, Infectious	201	145	159	-	-	-	-	-	-	-	-	-	505	34.5	331	23.6
Syphilis, Other	85	73	69	-	-	-	-	-	-	-	-	-	227	15.5	180	12.8
Tetanus	0	0	0	-	-	-	-	-	-	-	-	-	0	0.0	0	0.0
Tuberculosis	67	56	56	-	-	-	-	-	-	-	-	-	179	12.2	140	10.0
Tularemia	0	0	0	-	-	-	-	-	-	-	-	-	0	0.0	0	0.0
Typhoid Fever	10	18	10	-	-	-	-	-	-	-	-	-	38	2.6	25	1.8
Verotoxin Producing <i>E. coli</i> Including HUS	8	11	10	-	-	-	-	-	-	-	-	-	29	2.0	19	1.4
West Nile Virus Illness	0	0	0	-	-	-	-	-	-	-	-	-	0	0.0	0	0.0
Yersiniosis	14	20	35	-	-	-	-	-	-	-	-	-	69	4.7	66	4.7

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 and Long-Term Care, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2019/05/08].

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 and Long-Term Care'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, 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 March 2019. Toronto, ON: Queen's Printer for Ontario; 2019.

©Queen's Printer for Ontario, 2019

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.

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

