

Weekly Epidemiologic Summary

COVID-19 in Ontario: Focus on November 22, 2020 to November 28, 2020

This report includes the most current information available from CCM and other case management systems (CCM plus) as of **December 1, 2020**.

Please visit the interactive [Ontario COVID-19 Data Tool](#) to explore recent COVID-19 data by public health unit, age group, sex, and trends over time.

A [daily summary](#) is available and provides an epidemiologic summary of recent COVID-19 activity in Ontario. This weekly report provides an epidemiologic summary of COVID-19 activity in Ontario over time.

Highlights

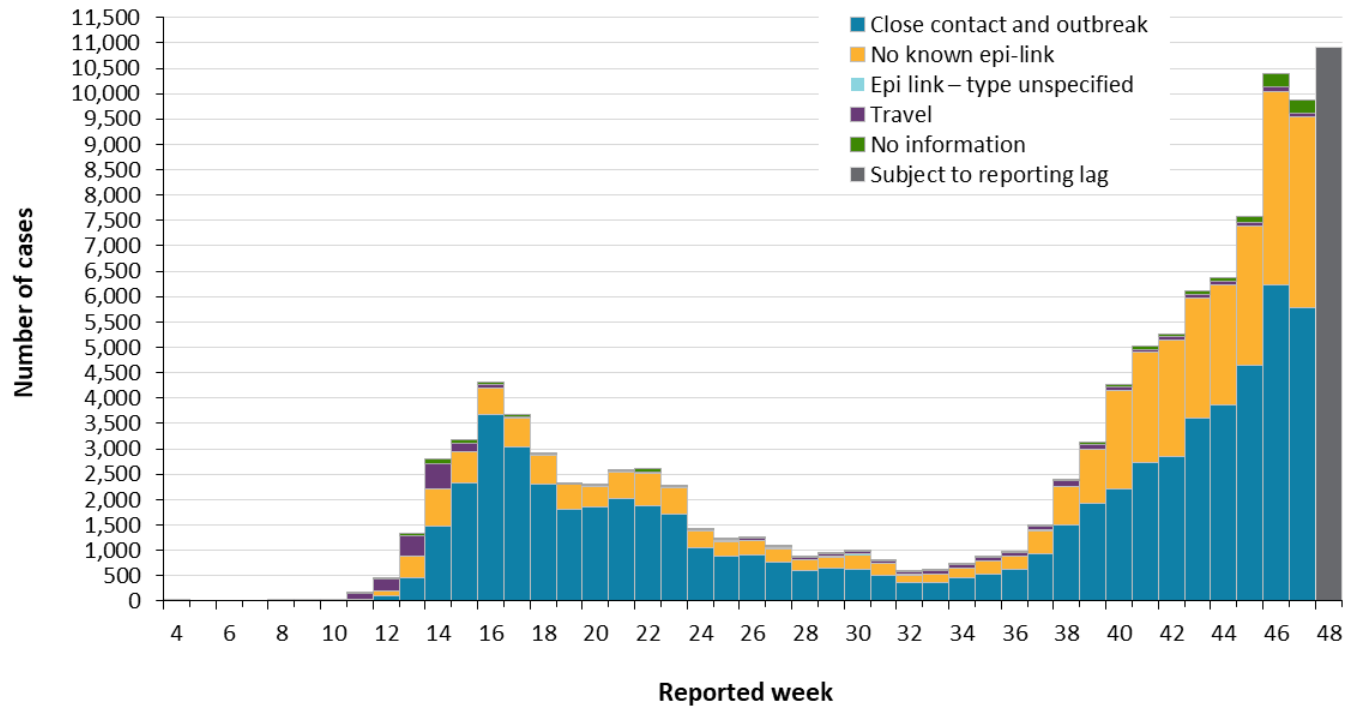
- There are a total of 116,064 confirmed cases of COVID-19 in Ontario with a public health unit reported date up to November 28, 2020.
- For the period with a public health unit reported date between November 22 and 28, 2020 (week 48):
 - A total of 10,912 cases were reported to public health compared to 9,873 cases the previous week (November 15 to 21).
 - Over three-quarters (76.5%) of public health units reported an increase in the rate of disease in the current week compared to the previous week.
 - There continues to be a relationship of increasing rates of COVID-19 with increasing levels of neighbourhood diversity, with the most diverse neighbourhoods having rates that are almost 10 times higher than rates in the least diverse neighbourhoods.

The term public health unit reported date in this document refers to the date local public health units were first notified of the case.

Data corrections or updates can result in case records being removed and or updated from past reports. Thus comparisons of case counts by public health unit reported date may not align with daily change in cases publicly reported by the province for the same time period, which reflects the difference in cumulative counts between one day and the next.

Cases Over Time

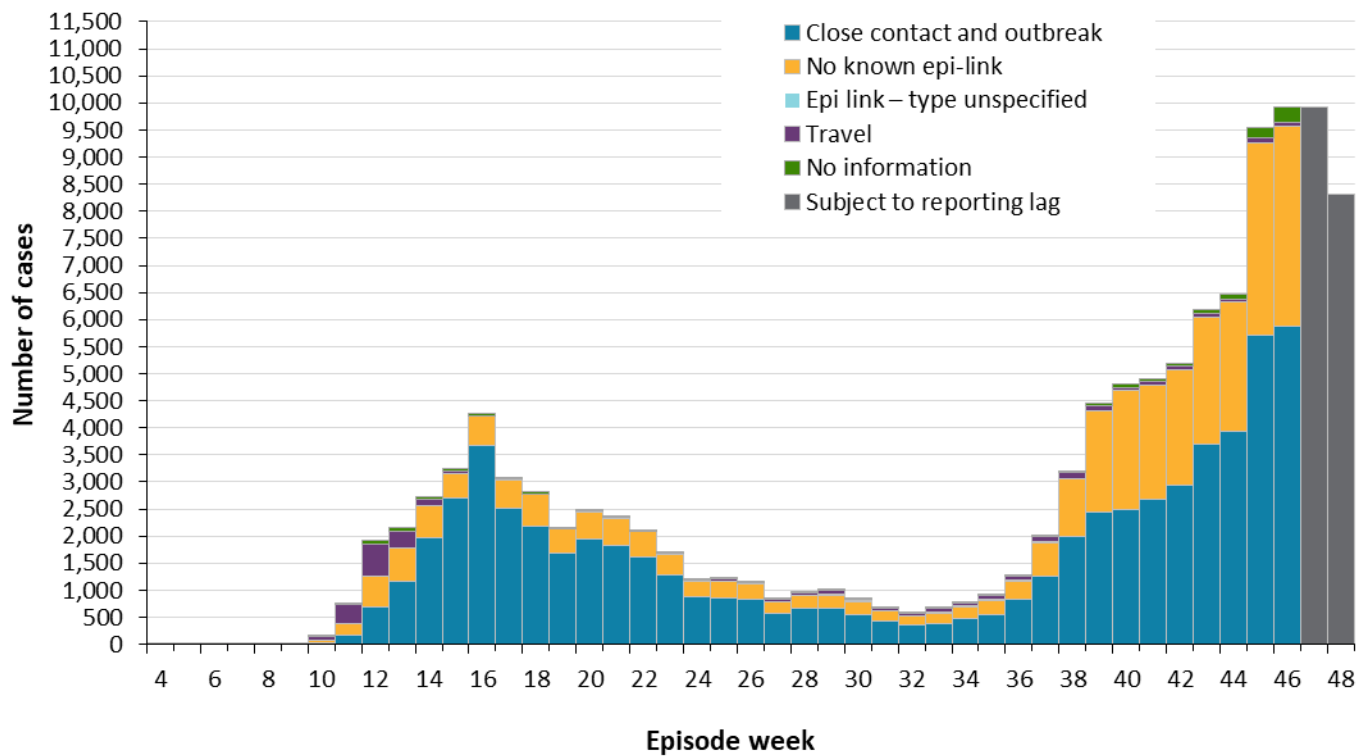
Figure 1. Confirmed cases of COVID-19 by likely source of acquisition and public health unit reported week: Ontario



Note: Include cases with reported dates ranging from week 4 (January 19 and 25, 2020) to week 48 (November 22 and 28, 2020). See [Table 1A](#) in Appendix A for a list of the weeks and corresponding start and end dates.

Data Source: CCM plus

Figure 2. Confirmed cases of COVID-19 by likely source of acquisition and approximation of symptom onset week: Ontario



Note: Not all cases have an episode date. Cases without an episode date are not included in the figure. The definition for how episode date is defined is available in the technical notes. Include cases with episode dates ranging from week 4 (January 19 and 25, 2020) to week 48 (November 22 and 28, 2020). See [Table 1A](#) in Appendix A for a list of the weeks and corresponding start and end dates.

Data Source: CCM plus.

Case Characteristics

Table 1. Summary of confirmed cases of COVID-19 by public health unit reported date: Ontario

	Reported week 47 (November 15 to 21)	Reported week 48 (November 22 to 28)	Cumulative case count up to November 28	Cumulative rate per 100,000 population
Total number of cases	9,873	10,912	116,064	780.8
Gender: Male	4,904	5,459	56,461	771.4
Gender: Female	4,889	5,326	58,931	781.0
Ages: 19 and under	1,510	1,550	13,871	442.2
Ages: 20-39	3,703	4,054	42,355	1,019.1
Ages: 40-59	2,819	3,203	33,135	841.5
Ages: 60-79	1,387	1,506	16,883	571.3
Ages: 80 and over	453	598	9,810	1,444.2
Number resolved	N/A	N/A	101,608	N/A

Note: Not all cases have an age or gender reported.

Interpret information for the most recent week with caution due to reporting lags.

Data Source: CCM plus

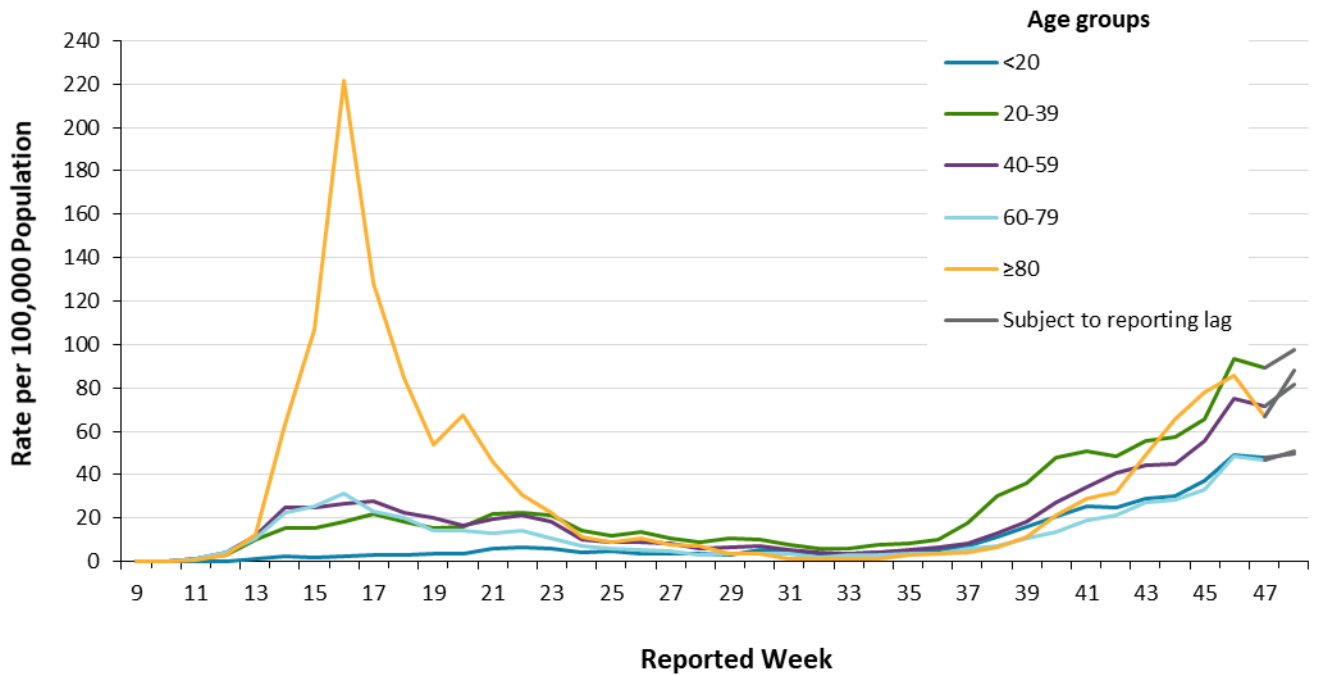
Figure 3. Percentage of confirmed cases of COVID-19 by gender and public health unit reported week: Ontario



Note: Not all cases have a gender reported. The denominator for calculating weekly percentages includes all cases. Only weeks with more than 10 cases by public health unit reporting date are included (starting in week 9). Include cases with reported dates ranging from Week 9 (February 23 and 29, 2020) to week 48 (November 22 and 28, 2020). See [Table 1A](#) in Appendix A for a list of the weeks and corresponding start and end dates.

Data Source: CCM plus

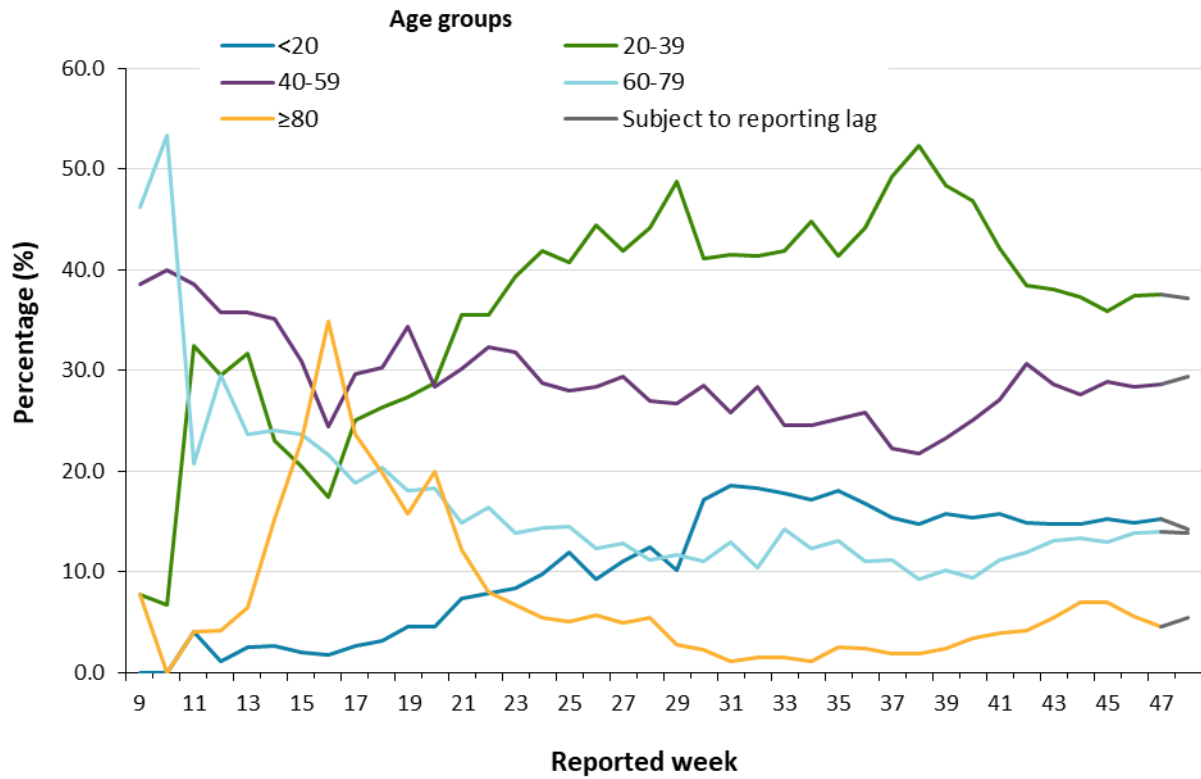
Figure 4a. Rate of confirmed cases of COVID-19 per 100,000 population by age group and public health unit reported week: Ontario



Note: Not all cases have an age reported. Only weeks with more than 10 cases by public health unit reporting date are included (starting in week 9). Include cases with reported dates ranging from week 9 (February 23 and 29, 2020) to week 48 (November 22 and 28, 2020). See [Table 1A](#) in Appendix A for a list of the weeks and corresponding start and end dates.

Data Source: CCM plus

Figure 4b. Percentage of confirmed cases of COVID-19 by age group and public health unit reported week: Ontario

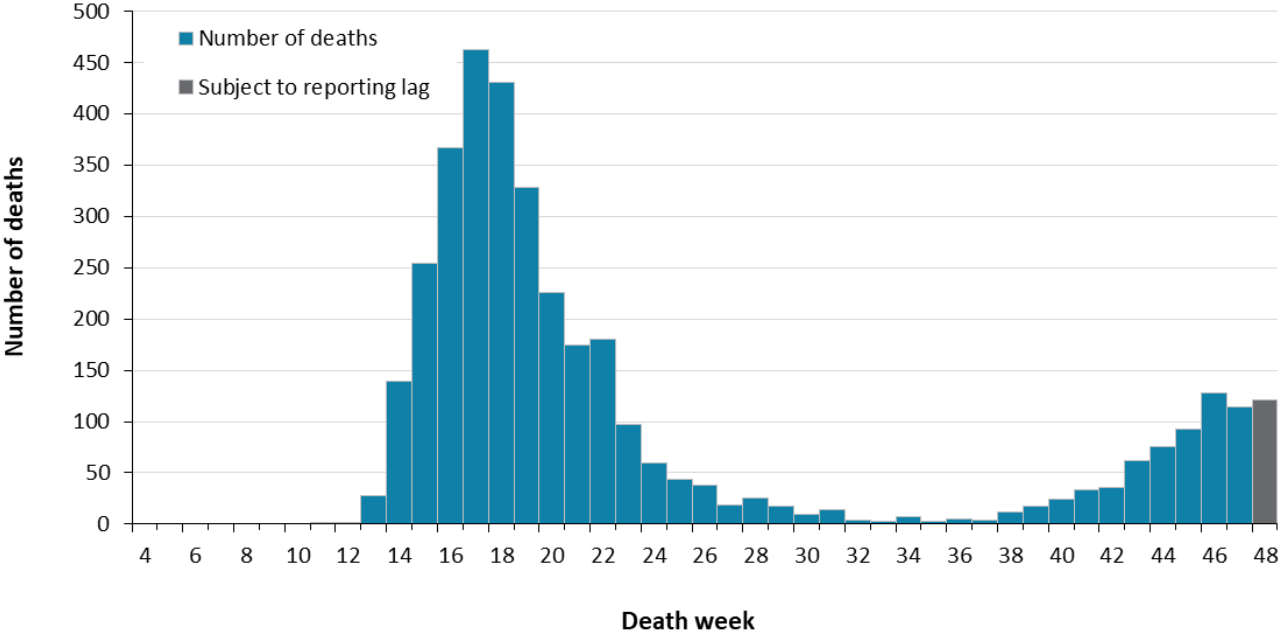


Note: Only weeks with more than 10 cases by public health unit reporting date are included (starting in week 9). Include cases with reported dates ranging from week 9 (February 23 and 29, 2020) to week 48 (November 22 and 28, 2020). See [Table 1A](#) in Appendix A for a list of the weeks and corresponding start and end dates.

Data Source: CCM plus

Deaths

Figure 5. Deaths among confirmed cases of COVID-19 by week of death: Ontario



Note: Cases without a death date are not included in the figure. Include cases with date of death ranging from week 4 (January 19 and 25, 2020) to week 48 (November 22 and 28, 2020). See [Table 1A](#) in Appendix A for a list of the weeks and corresponding start and end dates.

Data Source: CCM plus

Table 2. Summary of deaths among confirmed cases of COVID-19 by public health unit reported week: Ontario

Deaths	Reported week 47 (November 15 to 21)	Reported week 48 (November 22 to 28)	Cumulative case count up to November 28	Cumulative rate per 100,000 population
Number of deaths	61	38	3,694	24.9
Gender: Male	28	19	1,717	23.5
Gender: Female	32	16	1,944	25.8
Ages: 19 and under	0	0	1	0.0
Ages: 20-39	0	1	12	0.3
Ages: 40-59	4	2	150	3.8
Ages: 60-79	17	10	967	32.7
Ages: 80 and over	40	25	2,564	377.5

Note: Age and gender may not be reported for all cases. Reported week is the week the case was reported to the public health unit. This is different than the “week of death” presented in Figure 5 which reflects the week the case was reported to have a ‘Fatal’ outcome.

Interpret information for the most recent week with caution due to reporting lags.

Data Source: CCM plus

Exposure

Table 3. Confirmed cases of COVID-19 by likely source of acquisition and public health unit reported week: Ontario

	Reported week 47 (November 15 to 21)	Percentage	Reported week 48 (November 22 to 28)	Percentage	Cumulative case count up to November 28	Cumulative percentage
Travel	75	0.8%	68	0.6%	3,185	2.7%
Outbreak-associated or close contact of a confirmed case	5,782	58.6%	5,953	54.6%	73,183	63.1%
Epidemiological link – type unspecified	0	0.0%	2	0.0%	187	0.2%
No known epidemiological link	3,759	38.1%	4,005	36.7%	37,012	31.9%
Information missing or unknown	257	2.6%	884	8.1%	2,497	2.2%
Total	9,873		10,912		116,064	

Note: Information for how cases are grouped within each category is available in the technical notes. Interpret information for the most recent week with caution due to reporting lags.

Data Source: CCM plus.

Sub-populations of interest

Table 4. Summary of cases of COVID-19 among health care workers: Ontario

Health care workers	Reported week 47 (November 15 to 21)	Reported week 48 (November 22 to 28)	Cumulative case count up to November 28
Number of cases	389	499	9,855
Ever hospitalized*	N/A	N/A	N/A
Ever in ICU*	N/A	N/A	N/A

Note: Interpret information for the most recent week with caution due to reporting lags.*Data for hospitalizations and ICU are unavailable at this time due to a reporting error.

Data Source: CCM plus

Table 5. Summary of cases of COVID-19 associated with long-term care home outbreaks: Ontario

Long-term care home associated cases	Reported week 47 (November 15 to 21)	Reported week 48 (November 22 to 28)	Cumulative case count up to November 28
Residents	237	418	8,570
Deaths among residents	26	14	2,330
Health care workers	67	98	3,357
Deaths among health care workers	0	0	8

Note: Information on how long-term care home residents and health care workers are identified is available in the technical notes. Interpret information for the most recent week with caution due to reporting lags.

Data Source: CCM plus

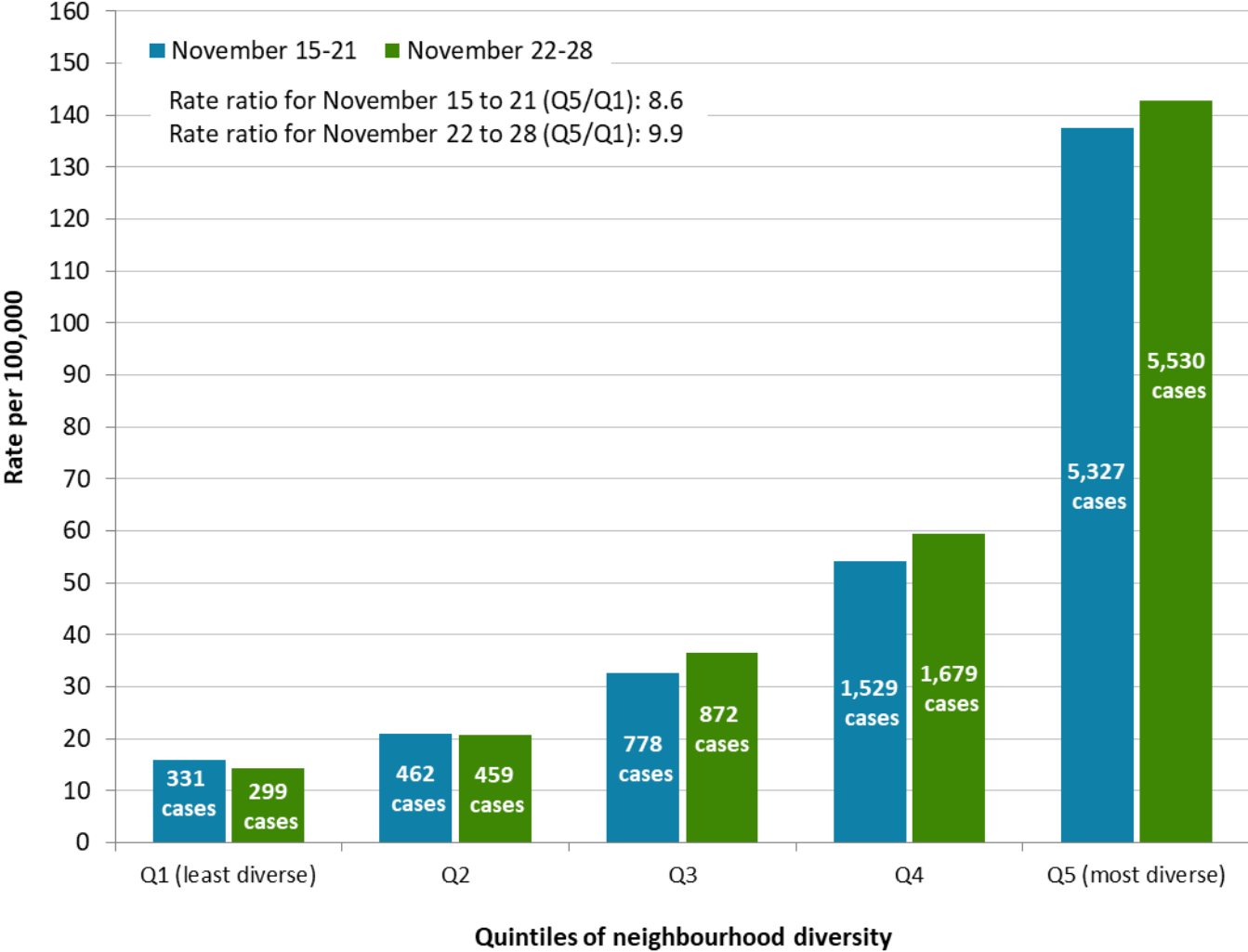
Table 6: Summary of cases of COVID-19 among school aged children by age group: Ontario

	Reported week 47 (November 15 to 21)	Reported week 48 (November 22 to 28)	Cumulative case count from August 30 up to November 28
Ages: 4-8	276	295	2,007
Ages: 9-13	409	453	2,776
Ages: 14-17	377	380	2,745

Note: Interpret information for the most recent week with caution due to reporting lags. Includes all confirmed cases of COVID-19 for specified ages, regardless of school attendance. Cumulative counts include cases of COVID-19 reported starting week 36 (August 30 to September 5, 2020).

Data Source: CCM plus

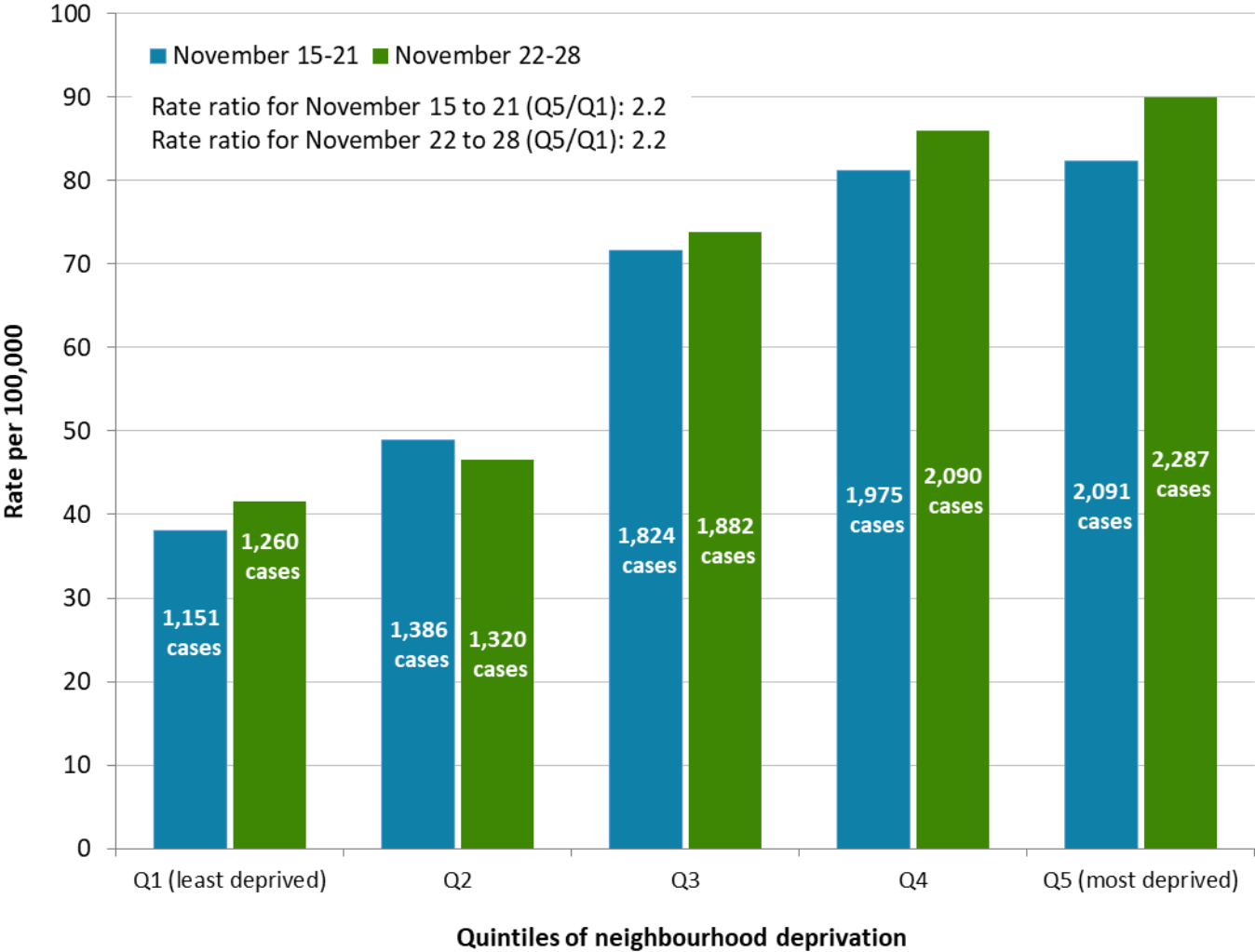
Figure 6. Rate and number of confirmed cases of COVID-19 for each quintile of neighbourhood diversity: Ontario, week 47 (November 15 to 21, 2020) and week 48 (November 22 to 28, 2020).



Note: Neighbourhood diversity is measured using the ethnic concentration dimension of the Ontario Marginalization Index. The ethnic concentration dimension is based on the proportion of non-white and non-Indigenous residents and/or the proportion of immigrants that arrived in Canada within the past five years.

Data Source: CCM plus, Ontario Marginalization Index

Figure 7. Rate and number of confirmed cases of COVID-19 for each quintile of neighbourhood deprivation: Ontario, week 47 (November 15 to 21, 2020) and week 48 (November 22 to 28, 2020).

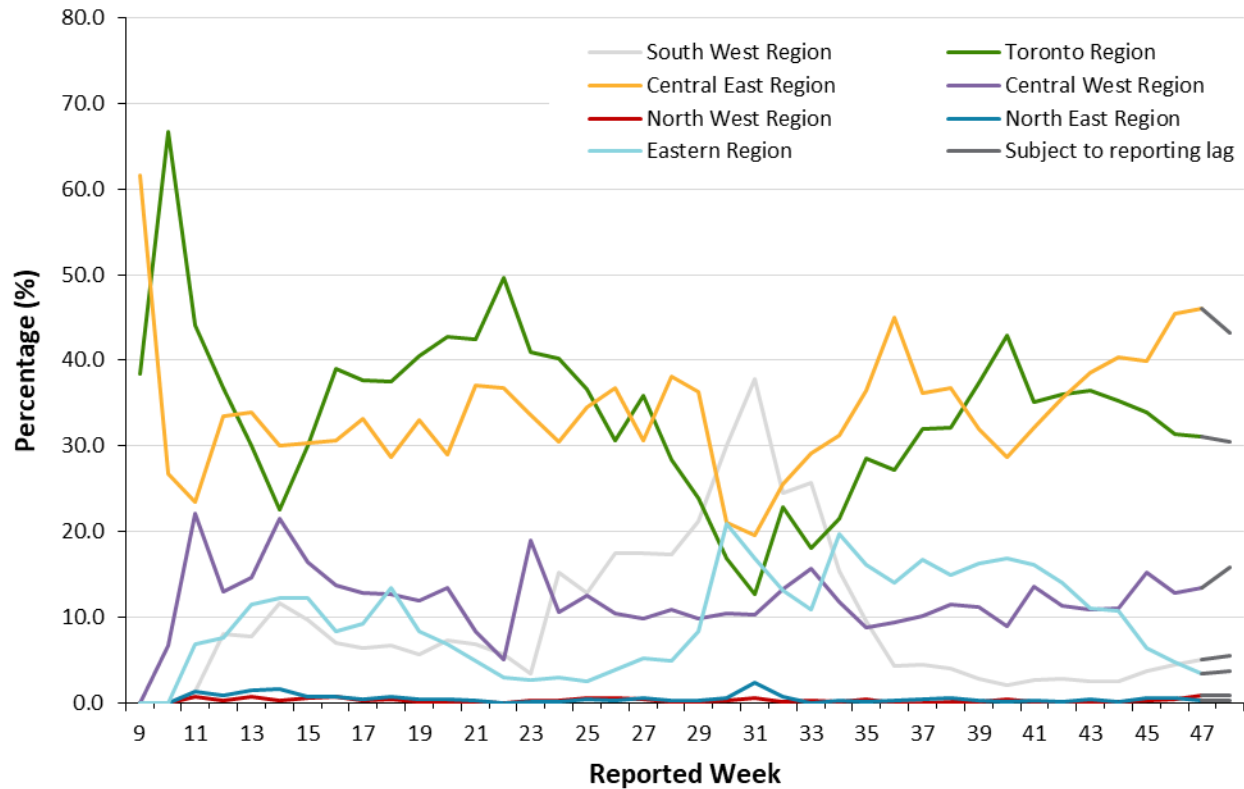


Note: Neighbourhood deprivation is measured using the material deprivation dimension of the Ontario Marginalization Index. The material deprivation dimension uses Canadian census data on income, quality of housing, educational attainment and family structure characteristics to assess the ability of individuals and communities to access and attain basic material needs.

Data Source: CCM plus, Ontario Marginalization Index

Geography

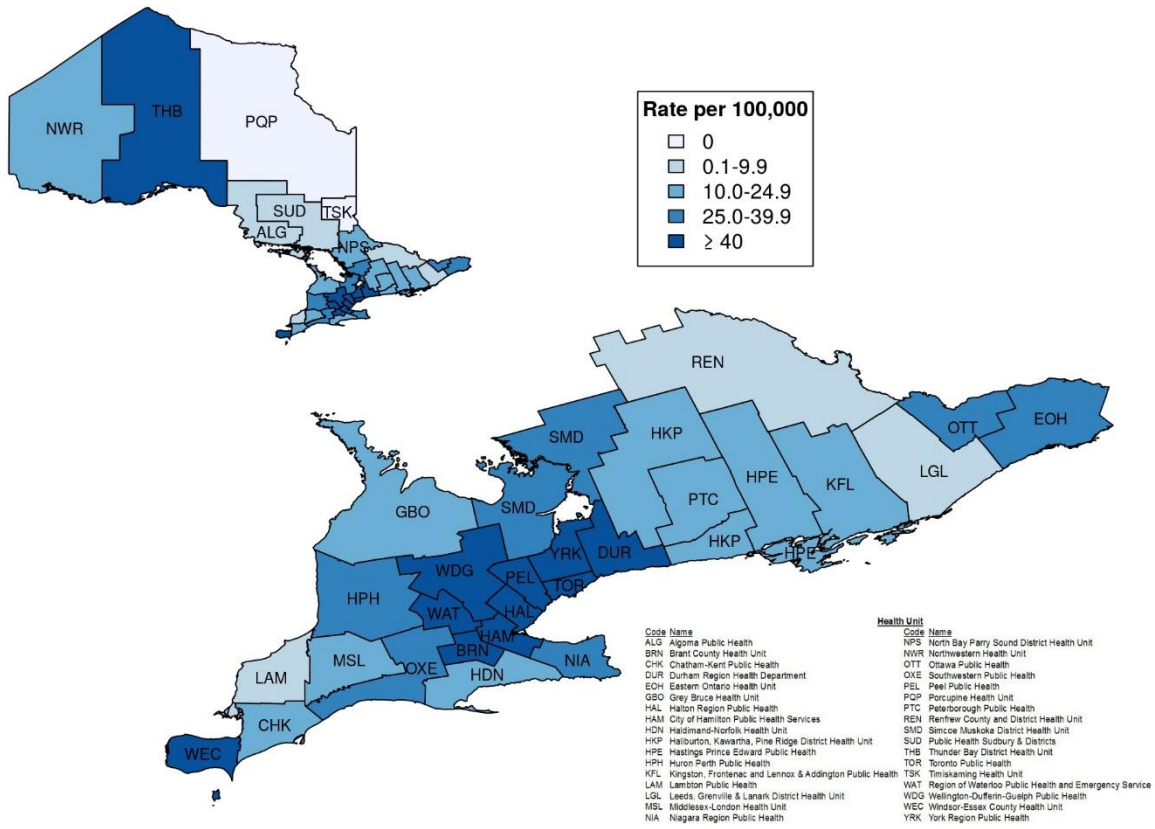
Figure 8. Percentage of COVID-19 cases by geographic region and public health unit reported week: Ontario



Note: Only weeks with more than 10 cases by public health unit reporting date are included (starting in week 9). Include cases with reported dates ranging from week 9 (February 23 and 29, 2020) to week 48 (November 22 and 28, 2020). Table 2A in [Appendix A](#) has a listing of public health units by region.

Data Source: CCM plus

Figure 9. Rate of confirmed cases of COVID-19 in public health reported week 48 (November 22 to 28, 2020) by public health unit: Ontario



Note: The provincial rate of confirmed cases of COVID-19 reported in week 48 was 73.4 cases per 100,000 population.
Data Source: CCM plus

Outbreaks

Table 7. Number of public health unit declared COVID-19 outbreaks by setting type: Ontario

Setting Type	Reported week 48 (November 22 to 28)	Number of ongoing outbreaks	Cumulative number of outbreaks reported to November 28
Congregate Care	55	213	1,212
Long-term care homes	30	117	698
Retirement homes	8	54	341
Hospitals	17	42	173
Congregate Living	22	75	333
Correctional facility	1	4	11
Shelter	0	12	72
Group Home/supportive Housing	14	43	219
Short-term accommodations	0	2	4
Congregate other	7	14	27
Education	35	169	467
Child care	6	49	188
School – Elementary*	19	83	199
School – Elementary/secondary*	2	6	15
School – Secondary*	8	30	60
School – Post-secondary*	0	1	5
Other settings	87	298	946
Bar/restaurant/nightclub	6	20	91
Medical/health services	6	13	42

Setting Type	Reported week 48 (November 22 to 28)	Number of ongoing outbreaks	Cumulative number of outbreaks reported to November 28
Personal service settings	1	1	8
Recreational fitness	2	15	41
Retail	7	27	90
Other recreation	4	23	52
Workplace - Farm	1	6	41
Workplace - Food processing	5	20	76
Other types of workplaces	49	162	492
Other	4	6	4
Unknown	2	5	9
Total number of outbreaks	199	755	2,958

Note: Reported week is based on the outbreak reported date, and if unavailable, the date the public health unit created the outbreak. Ongoing outbreaks includes all outbreaks that are 'Open' in CCM plus without a 'Declared Over Date' recorded. Interpret information for the most recent week with caution due to reporting lags. Outbreak categories are mutually exclusive. Retail includes settings such as grocery stores, pharmacies, malls, etc. Other types of workplaces include settings such as offices as well as warehousing, shipping and distribution, construction, etc. Other recreation includes settings such as entertainment and event venues, gatherings (e.g., weddings), religious facilities, etc. Medical/health services refer to settings such as doctor's office or clinic, wellness clinics, etc., and excludes categories listed in the congregate care setting group.

*Cumulative counts include COVID-19 school outbreaks reported starting week 36 (August 30 to September 5, 2020). Ongoing re-classification of settings for reported outbreaks can result in outbreak counts that may differ from previously reported counts.

Data Source: CCM plus

Table 8. Confirmed cases of COVID-19 associated with COVID-19 outbreaks by setting type and public health unit reported week: Ontario

Cases associated with the outbreak setting type	Reported week 47 (November 15 to 21)	Reported week 48 (November 22 to 28)	Cumulative number of cases
Congregate Care	425	703	16,893
Long-term care homes	288	529	12,702
Retirement homes	86	59	2,647
Hospitals	51	115	1,544
Congregate Living	79	81	1,971
Correctional facility	1	1	126
Shelter	4	1	643
Group Home/supportive Housing	27	44	978
Short-term accommodations	0	0	8
Congregate other	47	35	216
Education	192	127	1,273
Child care	15	3	291
School – Elementary*	137	85	658
School – Elementary/secondary*	11	5	84
School – Secondary*	28	33	225
School – Post-secondary*	1	1	15
Other settings	463	354	5,694
Bar/restaurant/nightclub	22	12	337
Medical/health services	23	20	134
Personal service settings	0	0	30

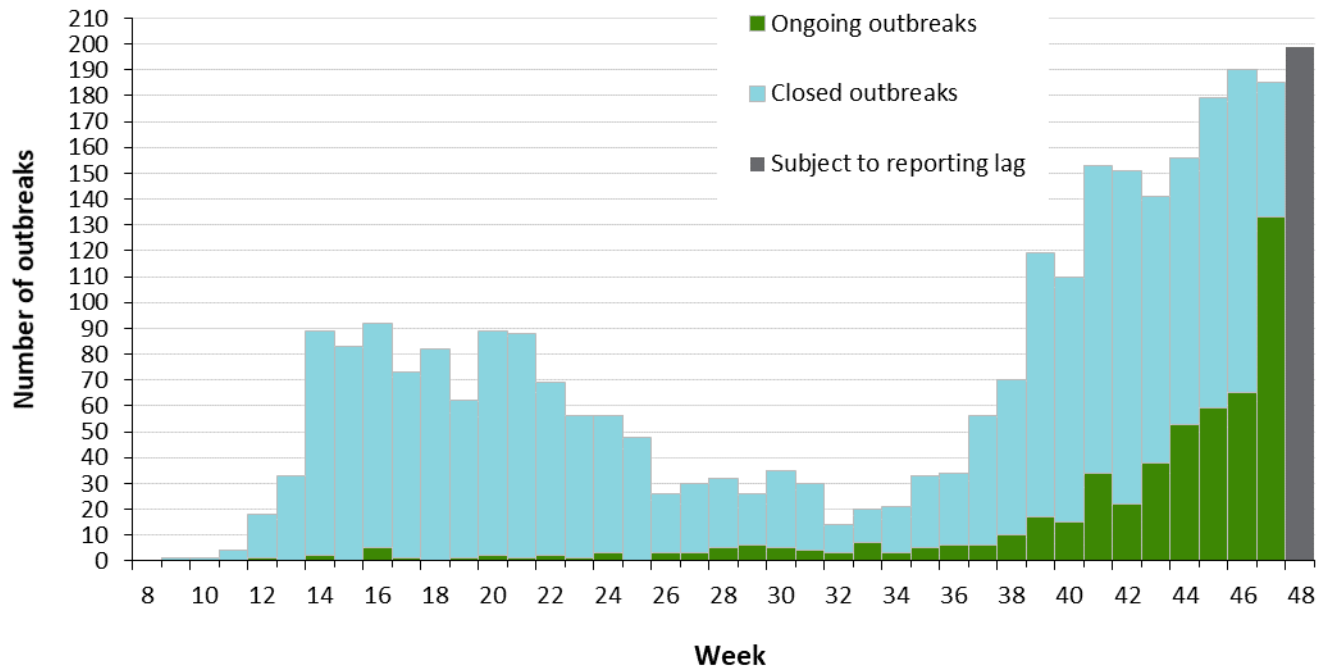
Cases associated with the outbreak setting type	Reported week 47 (November 15 to 21)	Reported week 48 (November 22 to 28)	Cumulative number of cases
Recreational fitness	64	34	337
Retail	11	50	190
Other recreation	30	3	408
Workplace - Farm	9	10	1,466
Workplace - Food processing	17	20	673
Other types of workplaces	285	198	2,045
Other	2	6	8
Unknown	0	1	66
Total number of cases	1,159	1,265	25,831

Note: Interpret case counts for the most recent week with caution due to reporting lags. Outbreak categories are mutually exclusive. Retail includes settings such as grocery stores, pharmacies, malls, etc. Other types of workplaces include settings such as offices as well as warehousing, shipping and distribution, construction, etc. Other recreation includes settings such as entertainment and event venues, gatherings (e.g., weddings), religious facilities, etc. Medical/health services refer to settings such as doctor's office or clinic, wellness clinics, etc., and excludes categories listed in the congregate care setting group.

*Cumulative counts include cases of COVID-19 associated with school outbreaks reported starting week 36 (August 30 to September 5, 2020). Ongoing re-classification of settings for reported outbreaks can result in case counts that may differ from previously reported counts.

Data Source: CCM plus

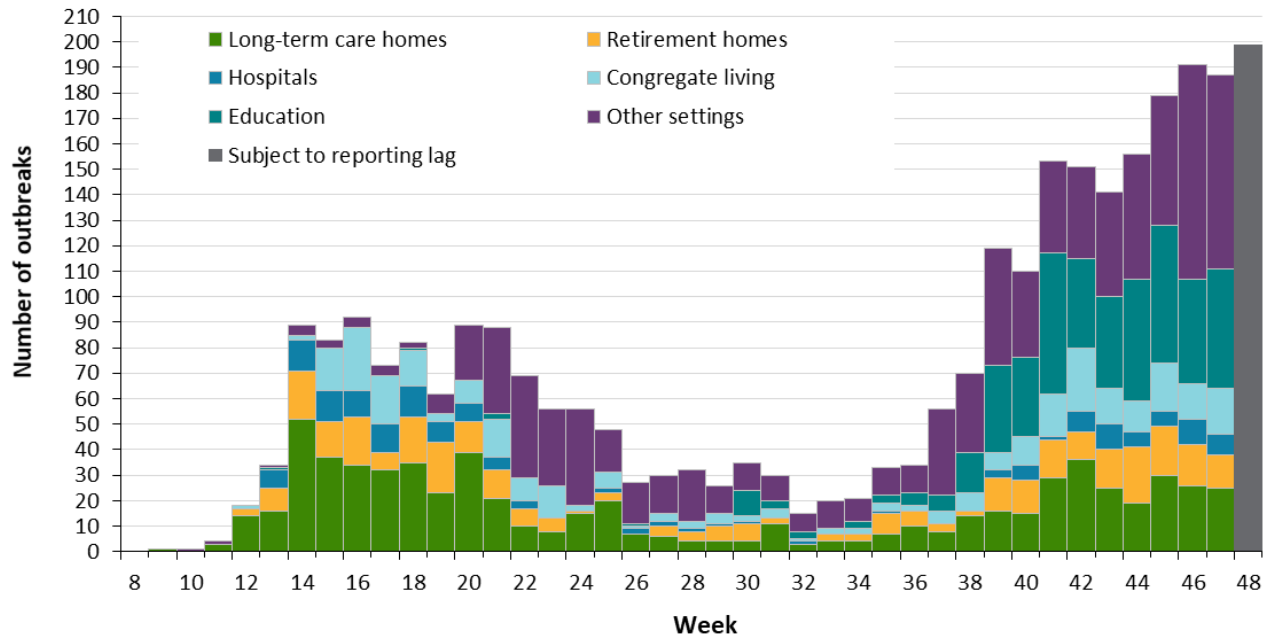
Figure 10. Public health unit declared COVID-19 outbreaks by status (ongoing or closed) and public health unit outbreak reported week: Ontario



Note: If public health unit outbreak reported date is unavailable, the date the public health unit created the outbreak is used. Ongoing outbreaks includes all outbreaks that are 'Open' in CCM plus without a 'Declared Over Date' recorded. Closed outbreaks are 'Closed' or have a 'Declared Over Date' recorded in CCM plus. Week 8 refers to February 16 and 22, 2020 and week 48 refers to November 22 and 28, 2020.

Data Source: CCM plus

Figure 11. Public health unit declared COVID-19 outbreaks by outbreak setting type and public health unit reported week: Ontario



Note: If public health unit outbreak reported date is unavailable, the date the public health unit created the outbreak is used. Week 8 refers to February 16 and 22, 2020 and week 48 refers to November 22 and 28, 2020. Congregate living include group homes, shelters, correctional facilities, etc. Other settings include outbreaks within workplaces, childcare, schools, restaurants, recreation etc.

Data Source: CCM plus

Technical Notes

Data Sources

- The data for this report were based on:
 - Information extracted from the Ontario Ministry of Health (Ministry) integrated Public Health Information System (iPHIS) database for Toronto Public Health as of **December 1, 2020 at 3 p.m.**
 - Information successfully uploaded to the Ministry from local systems: Toronto Public Health (Coronavirus Rapid Entry System) CORES and The Ottawa Public Health COVID-19 Ottawa Database (The COD) as of **December 1, 2020 at 2 p.m.**
 - Information successfully uploaded to the Ministry from the Public Health Case and Contact Management Solution (CCM) as of **December 1, 2020 at 11 a.m.**
- CCM plus (which includes CCM, iPHIS, CORES and The COD) are dynamic disease reporting systems, which allow ongoing updates to data previously entered. As a result, data extracted from CCM and the local systems represent a snapshot at the time of extraction and may differ from previous or subsequent reports.
- Ontario population projection data for 2020 were sourced from Ministry, IntelliHEALTH Ontario. Data were extracted on November 26, 2019.
- Statistics Canada Postal Code Conversion File (PCCF), reference date of May 2020.
- The health equity (neighbourhood-level diversity and deprivation) analyses use data from the 2016 Ontario Marginalization Index and population counts from the 2016 Canada Census:
 - Matheson FI; van Ingen T. 2016 Ontario marginalization index. Toronto, ON: Providence St. Joseph's and St. Michael's Healthcare; 2018. Joint publication with Public Health Ontario.
 - Statistics Canada. Census of Population, 2016: Profile for Canada, Provinces, Territories, Census Divisions, Census Subdivisions and Dissemination Areas. Retrieved from: https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/download-telecharger/comp/GetFile.cfm?Lang=E&FILETYPE=CSV&GEONO=044_ONTARIO.

Data Caveats and Methods: Case Data

- The data only represent cases reported to public health units and recorded in CCM plus. As a result, all counts are subject to varying degrees of underreporting due to a variety of factors, such as disease awareness and medical care seeking behaviours, which may depend on severity of illness, clinical practice, changes in laboratory testing, and reporting behaviours.
- Observed trends over time should be interpreted with caution for the most recent period due to reporting and/or data entry lags.

- All cases meeting the confirmed case classification as listed in the MOH [COVID-19 case definition](#) are included except where noted (e.g., analyses that describe the relationship between COVID-19 and marginalization). This includes persons with a positive detection of serum/plasma immunoglobulin G (IgG) antibodies to SARS-CoV-2, which was added to the confirmed case definition on **August 6, 2020**.
- COVID-19 cases from CCM plus for which the Classification and/or Disposition was reported as ENTERED IN ERROR, DOES NOT MEET DEFINITION, IGNORE, DUPLICATE, or any variation on these values have been excluded. The provincial case count for COVID-19 includes cases that are counted once across all systems from which the case data are obtained. Duplicate records may exist if these records were not identified and resolved prior to data upload to the Ministry.
- Reported date is the date the case was reported to the public health unit. This is different than the daily change in cases released by the Province for the same time period, which reflects the difference in cumulative counts reported to the Province between one day and the next.
- Reported weeks were created to align with the Public Health Agency of Canada (PHAC) influenza surveillance weeks.
- Case episode date is based on an estimate of the best date of disease onset. This date is calculated based on either the date of symptom onset, specimen collection/test date, or the date reported to the public health unit.
- Cases with unknown or missing ages were excluded from age-specific analyses.
- Health care worker includes cases that reported 'Yes' to any of the following occupations: health care worker, doctor, nurse, dentist, dental hygienist, midwife, other medical technicians, personal support worker, respiratory therapist, first responder.
- Resolved cases are determined only for COVID-19 cases that have not died. Cases that have died are considered fatal and not resolved. The following cases are considered resolved:
 - Cases that are reported as 'recovered' in CCM based on local public health unit assessment
 - Cases that are not hospitalized and are 14 days past their symptom onset date or specimen collection date (where symptom onset date is not known)
 - Cases that are currently hospitalized (no hospitalization end date entered) and have a case status of 'closed' indicating that public health follow up is complete and are 14 days past their symptom onset date or specimen collection date
- Data on hospital admissions, ICU admissions and deaths are likely under-reported as these events may occur after the completion of public health follow up of cases. Cases that were admitted to hospital or died after follow-up was completed may not be captured in CCM.
- Deaths are determined by using the outcome field in CCM plus. Any case marked 'Fatal' is included in the deaths data. The CCM field Type of Death is not used to further categorize the data.

- The date of death is determined using the outcome date field for cases marked as 'Fatal' in the outcome field.
- Hospitalization includes all cases for which a hospital admission date was reported at the time of data extraction. It includes cases that have been discharged from hospital as well as cases that are currently hospitalized. Emergency room visits are not included in the number of reported hospitalizations.
- ICU admission includes all cases for which an ICU admission date was reported at the time of data extraction. It is a subset of the count of hospitalized cases. It includes cases that have been treated or that are currently being treated in an ICU.
- Likely source of acquisition is determined by examining the epidemiologic link and epidemiologic link status fields in CCM and local systems. If no epidemiologic link is identified in those fields the risk factor fields are examined to determine whether a case travelled, was associated with a confirmed outbreak, was a contact of a case, had an Epidemiological link with type unspecified, had no known epidemiological link (sporadic community transmission) or was reported to have an unknown source/no information was reported. Some cases may have no information reported if the case is untraceable, was lost to follow-up or referred to FNIHB. Cases with multiple risk factors were assigned to a single likely acquisition source group which was determined hierarchically in the following order:
 - For cases with an episode date *on or after* April 1, 2020: Outbreak-associated > close contact of a confirmed case > travel > no known epidemiological link > information missing or unknown
 - For cases with an episode date *before* April 1, 2020: Travel > outbreak-associated > close contact of a confirmed case > no known epidemiological link > information missing or unknown
- 'Long-term care home residents' includes cases that reported 'Yes' to the risk factor 'Resident of a long-term care home'; or 'Yes' to the risk factor 'Resident of nursing home or other chronic care facility' and reported to be part of an outbreak assigned as a long-term care home (via the Outbreak number or case comments field); or were reported to be part of an outbreak assigned as a long-term care home (via the outbreak number or case comments field) with an age over 70 years and did not report 'No' to the risk factors 'Resident of long-term care home' or 'Resident of nursing home or other chronic care facility'. 'Long-term care home residents' excludes cases that reported 'Yes' to any of the health care worker occupational risk factors.
- 'Health care workers associated with long-term care outbreaks' includes 'health care workers' reported to be part of an outbreak assigned as a long-term care home (via the outbreak number or case comments field). Excludes cases that reported 'Yes' to risk factors 'Resident of long-term care home' or 'Resident of nursing home or other chronic care facility' and 'Yes' to the calculated 'health care workers' variable.
- 'Cases associated with school outbreaks' includes cases that are linked to an outbreak, by school classification type (Elementary, Elementary/Secondary, Secondary, Post-Secondary), that met the definition of a [school outbreak](#).

- School classification types are defined by the Ministry of Education.
 - Elementary/Secondary schools include public or private schools educating children in a combination of elementary and secondary grades (e.g., Kindergarten to Grade 8, Grades 9 to 12, and Kindergarten to Grade 12).
- Orientation of case counts by geography is based on the diagnosing health unit (DHU). DHU refers to the case's public health unit of residence at the time of illness onset and not necessarily the location of exposure. Cases for which the DHU was reported as MOH (to signify a case that is not a resident of Ontario) have been excluded from the analyses.
 - GTA health units include: Durham Region Health Department, Peel Public Health, Toronto Public Health and York Region Public Health
- Ongoing outbreaks are those that are reported in CCM plus as 'Open' and without a 'Declared Over Date' recorded.
- Outbreaks are declared by the local medical officer of health or their designate in accordance to the Health Protection and Promotion Act and criteria outlined in [Ministry guidance documents](#).
- School outbreaks include outbreaks declared on or after week 36 (August 30 to September 5, 2020).

Data Caveats and Methods: ON-Marg

- ON-Marg is a data tool that combines a wide range of demographic indicators into multiple distinct dimensions of marginalization. It is an area-based index which assigns a measure of marginalization based on neighbourhood versus individual characteristics. As such, the broader demographic trends of an area may not reflect all residents of a neighbourhood owing to the inherent heterogeneity of demographic characteristics which can vary substantially especially across large rural geographies. For more information, please visit [PHO's ON-Marg website](#).
- Neighbourhood diversity is defined using the ethnic concentration dimension of ON-Marg, which measures populations who may experience marginalization related to racism and discrimination. It is based on the proportion of non-white and non-Indigenous residents (visible minority) and/or the proportion of immigrants that arrived in Canada within the past five years. 'Visible minority' is a term used by Statistics Canada that, although is considered to be outdated, is used here to be consistent with the Canadian census.
- Neighbourhood deprivation is defined using the material deprivation dimension of ON-Marg, which is closely connected to poverty. It refers to the inability of individuals and communities to access and attain basic material needs. The indicators included in this dimension measure income, quality of housing, educational attainment and family structure characteristics.
- "Neighbourhoods" are considered to be Statistic Canada dissemination areas (DA). The Single Link Indicator Postal Code Conversion File (PCCF) was used to match individuals to a DA based on their postal code, which were subsequently assigned to a quintile of marginalization that contained 20% of Ontario neighbourhoods. The quintiles for the ethnic concentration and the material deprivation dimensions are ordered from quintiles 1 to 5, with quintile 1 having the

lowest level of marginalization (i.e., least diverse or least deprived) and quintile 5 having the highest level of marginalization (i.e., most diverse or most deprived).

- The following were not included in analyses that summarize the impact of COVID-19 among Ontarians who may experience marginalization:
 - People who have tested positive for COVID-19 that reside in institutional and congregate settings are not included in the census data from which the marginalization indicators (ethnic concentration and material deprivation) are derived. Although these cases represent a large number of cases overall and deaths, their exclusion ensures appropriate comparisons since institutional and congregate setting residents are excluded from ON-Marg.
 - People who have tested positive for COVID-19 that reside in census dissemination areas where data has been suppressed, and cases that have missing or invalid postal codes could not be assigned to a quintile of marginalization.
 - Due to data suppression for some census indicators on Indian Reserves in Ontario, residents of Indian Reserves could not be included in ON-Marg and therefore people who have tested positive for COVID-19 and are living on Indian Reserves could not be assigned to a quintile of marginalization. While Indigenous individuals living off reserves are included in this analysis, Indigeneity data is not currently collected or captured in dimensions of ON-Marg.

Appendix A

Table 1A. Confirmed cases of COVID-19 by public health unit reported week: Ontario

Reported Week	Start date	End date	Number of cases	Cumulative count
2	January 5, 2020	January 11, 2020	0	0
3	January 12, 2020	January 18, 2020	0	0
4	January 19, 2020	January 25, 2020	3	3
5	January 26, 2020	February 1, 2020	0	3
6	February 2, 2020	February 8, 2020	0	3
7	February 9, 2020	February 15, 2020	0	3
8	February 16, 2020	February 22, 2020	1	4
9	February 23, 2020	February 29, 2020	13	17
10	March 1, 2020	March 7, 2020	15	32
11	March 8, 2020	March 14, 2020	145	177
12	March 15, 2020	March 21, 2020	448	625
13	March 22, 2020	March 28, 2020	1,326	1,951
14	March 29, 2020	April 4, 2020	2,797	4,748
15	April 5, 2020	April 11, 2020	3,169	7,917
16	April 12, 2020	April 18, 2020	4,310	12,227
17	April 19, 2020	April 25, 2020	3,667	15,894
18	April 26, 2020	May 2, 2020	2,908	18,802
19	May 3, 2020	May 9, 2020	2,332	21,134
20	May 10, 2020	May 16, 2020	2,292	23,426
21	May 17, 2020	May 23, 2020	2,579	26,005

Reported Week	Start date	End date	Number of cases	Cumulative count
22	May 24, 2020	May 30, 2020	2,622	28,627
23	May 31, 2020	June 6, 2020	2,267	30,894
24	June 7, 2020	June 13, 2020	1,432	32,326
25	June 14, 2020	June 20, 2020	1,232	33,558
26	June 21, 2020	June 27, 2020	1,253	34,811
27	June 28, 2020	July 4, 2020	1,085	35,896
28	July 5, 2020	July 11, 2020	866	36,762
29	July 12, 2020	July 18, 2020	929	37,691
30	July 19, 2020	July 25, 2020	998	38,689
31	July 26, 2020	August 1, 2020	800	39,489
32	August 2, 2020	August 8, 2020	596	40,085
33	August 9, 2020	August 15, 2020	613	40,698
34	August 16, 2020	August 22, 2020	725	41,423
35	August 23, 2020	August 29, 2020	857	42,280
36	August 30, 2020	September 5, 2020	966	43,246
37	September 6, 2020	September 12, 2020	1,502	44,748
38	September 13, 2020	September 19, 2020	2,382	47,130
39	September 20, 2020	September 26, 2020	3,128	50,258
40	September 27, 2020	October 3, 2020	4,263	54,521
41	October 4, 2020	October 10, 2020	5,020	59,541
42	October 11, 2020	October 17, 2020	5,272	64,813
43	October 18, 2020	October 24, 2020	6,107	70,920
44	October 25, 2020	October 31, 2020	6,370	77,290

Reported Week	Start date	End date	Number of cases	Cumulative count
45	November 1, 2020	November 7, 2020	7,588	84,878
46	November 8, 2020	November 14, 2020	10,401	95,279
47	November 15, 2020	November 21, 2020	9,873	105,152
48	November 22, 2020	November 28, 2020	10,912	116,064

Table 2A. Confirmed cases of COVID-19 by public health unit and region: Ontario

Public Health Unit Name	Cases reported week 47	Rate per 100,000 population Reported week 47	Cases reported week 48	Rate per 100,000 population Reported week 48
Northwestern Health Unit	13	14.8	19	21.7
Thunder Bay District Health Unit	71	47.3	77	51.3
TOTAL NORTH WEST	84	35.3	96	40.4
Algoma Public Health	1	0.9	2	1.7
North Bay Parry Sound District Health Unit	9	6.9	14	10.8
Porcupine Health Unit	2	2.4	0	0.0
Public Health Sudbury & Districts	8	4.0	13	6.5
Timiskaming Health Unit	1	3.1	0	0.0
TOTAL NORTH EAST	21	3.8	29	5.2
Ottawa Public Health	255	24.2	287	27.2
Eastern Ontario Health Unit	37	17.7	56	26.8
Hastings Prince Edward Public Health	13	7.7	30	17.8
Kingston, Frontenac and Lennox & Addington Public Health	15	7.1	23	10.8
Leeds, Grenville & Lanark District Health Unit	4	2.3	10	5.8
Renfrew County and District Health Unit	10	9.2	5	4.6
TOTAL EASTERN	334	17.3	411	21.3

Public Health Unit Name	Cases reported week 47	Rate per 100,000 population Reported week 47	Cases reported week 48	Rate per 100,000 population Reported week 48
Durham Region Health Department	349	49.0	399	56.0
Haliburton, Kawartha, Pine Ridge District Health Unit	16	8.5	25	13.2
Peel Public Health	2,979	185.5	2,973	185.1
Peterborough Public Health	14	9.5	20	13.5
Simcoe Muskoka District Health Unit	183	30.5	188	31.4
York Region Public Health	1,005	82.0	1,115	91.0
TOTAL CENTRAL EAST	4,546	101.5	4,720	105.3
Toronto Public Health	3,063	98.2	3,329	106.7
TOTAL TORONTO	3,063	98.2	3,329	106.7
Chatham-Kent Public Health	18	16.9	15	14.1
Grey Bruce Health Unit	63	37.1	41	24.1
Huron Perth Public Health	27	19.3	53	37.9
Lambton Public Health	15	11.5	7	5.3
Middlesex-London Health Unit	102	20.1	112	22.1
Southwestern Public Health	54	25.5	57	27.0
Windsor-Essex County Health Unit	220	51.8	318	74.9
TOTAL SOUTH WEST	499	29.5	603	35.7
Brant County Health Unit	61	39.3	64	41.2

Public Health Unit Name	Cases reported week 47	Rate per 100,000 population Reported week 47	Cases reported week 48	Rate per 100,000 population Reported week 48
City of Hamilton Public Health Services	292	49.3	447	75.5
Haldimand-Norfolk Health Unit	32	28.1	28	24.5
Halton Region Public Health	336	54.3	347	56.1
Niagara Region Public Health	151	32.0	152	32.2
Region of Waterloo Public Health and Emergency Services	311	53.2	517	88.5
Wellington-Dufferin-Guelph Public Health	143	45.8	169	54.2
TOTAL CENTRAL WEST	1,326	46.5	1,724	60.5
TOTAL ONTARIO	9,873	66.4	10,912	73.4

Note: Interpret information for the most recent week with caution due to reporting lags.

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Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Weekly epidemiologic summary: COVID-19 in Ontario – focus on November 22, 2020 to November 28, 2020. Toronto, ON: Queen's Printer for Ontario; 2020.

For Further Information

For more information, email cd@oahpp.ca.

Public Health Ontario

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