

Windsor-Essex County COVID-19 Weekly Epidemiologic Update

January 5th, 2022

“Due to the recent surge in Omicron cases and changes in eligibility for testing, testing capacity is limited and case, contact, and outbreak management has been modified to focus on high-risk settings. As a result, case counts in this report are an underestimate of the true number of individuals with COVID-19 in Windsor-Essex and may impact data completeness. Please interpret these data accordingly.”

Data Highlights (week of December 27, 2021 – January 2, 2022)

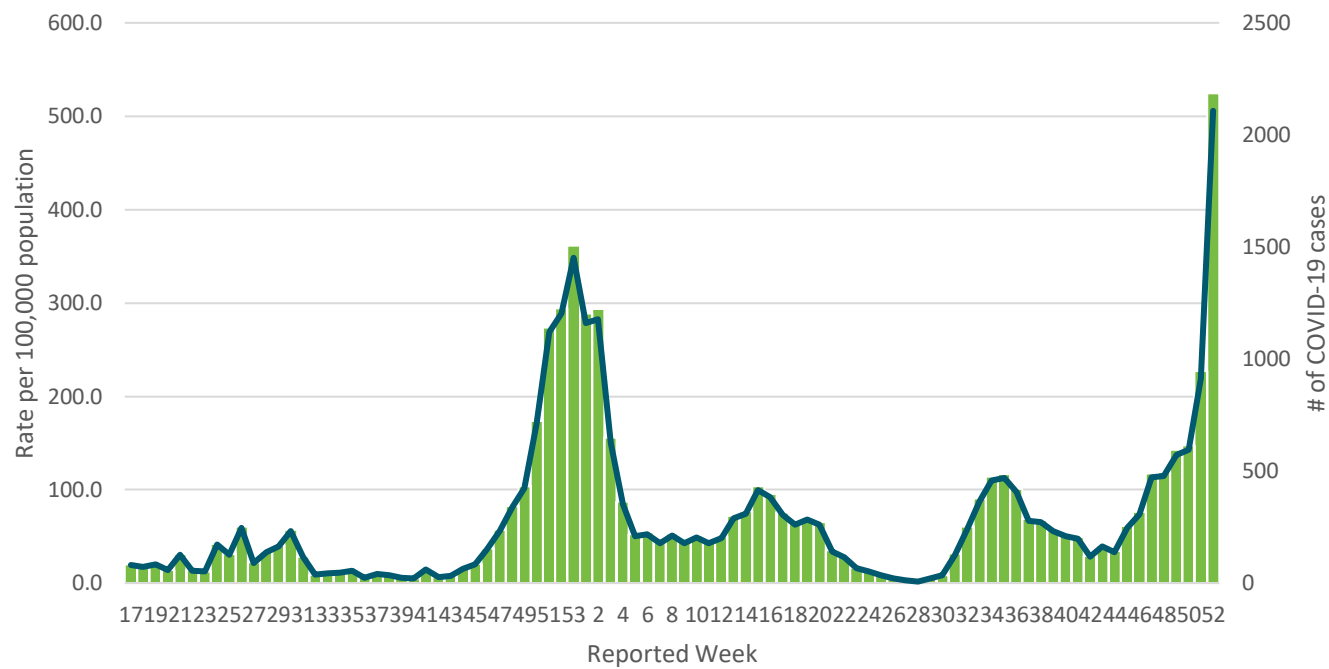
- For the week of December 27, 2021 – January 2, 2022, the case rate is 505.8 per 100,000 individuals, an increase of 287.2 compared to the previous week.
- Case rate is similar to the Southwest region (501.3 cases per 100,000), and 1.29 times lower than Ontario (653.0 cases per 100,000).
- Increase of 4.3% in percent positivity was observed this week, as it slightly increased from 7.6% (December 20 - 26, 2021) to 11.9% (December 27, 2021 – January 2, 2022).
- Highest number of cases (26%) were seen among 20-29 year olds in the past two weeks.
- Essex had the highest weekly case rate of 125.9 cases per 100,000 population, followed by Amherstburg (107.6 cases per 100,000) and Lakeshore (104.7 cases per 100,000 population).
- Hospitalizations have increased locally and across Ontario but ICU numbers remain low in Windsor-Essex.
- Wastewater surveillance highlights an increase in viral signal of COVID-19 within Windsor-Essex County for the last week of December.

COVID-19 Cases in Windsor-Essex County

Trends

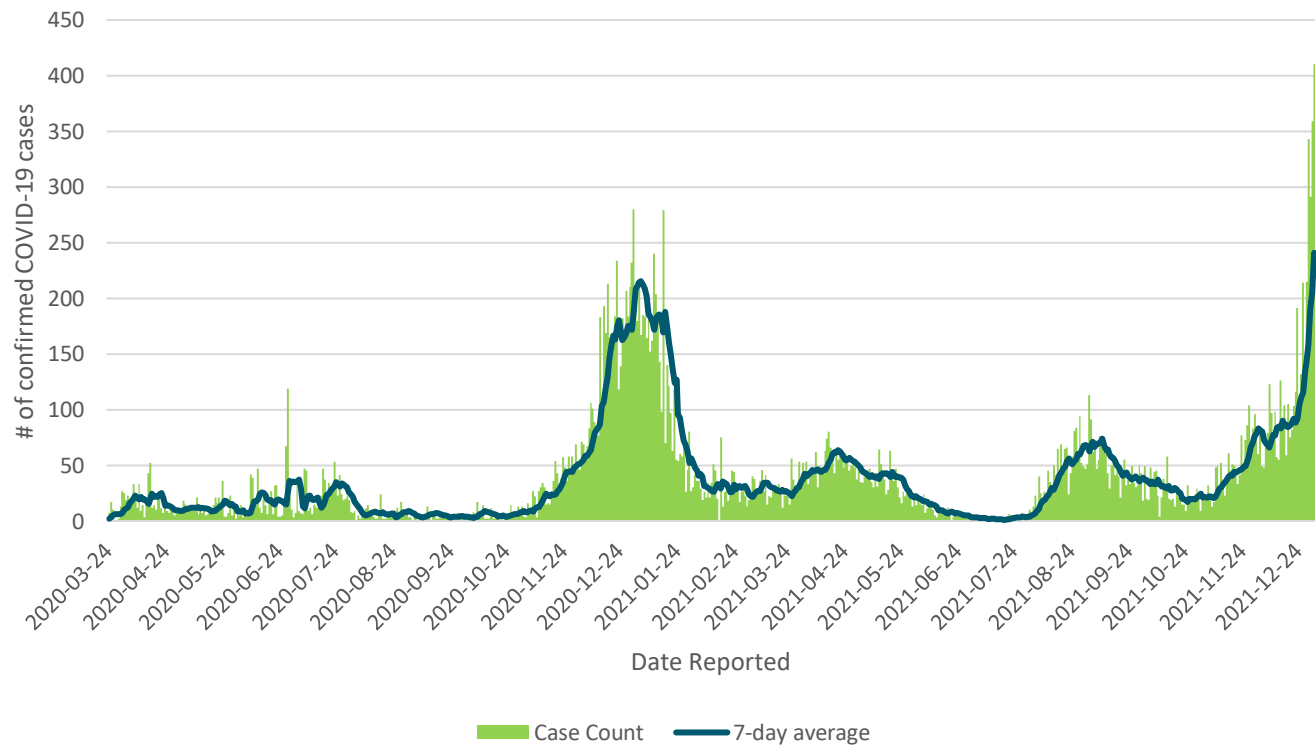
As of January 2nd, 2022, 26,611 confirmed cases of COVID-19 were reported in Windsor-Essex County (WEC). For the most completed week December 27, 2021 – January 2, 2022, the case rate was 505.8 cases per 100,000 population, which is higher than the previous week's rate (December 20– 26, 2021; 218.6 cases per 100,000 population; **Figure 1**). The current 7-day moving average of cases in WEC is 280.6 cases per day (**Figure 2**). Compared to the previous report, the 7-day average of daily cases was at 115 cases.

Figure 1. Confirmed COVID-19 case rates in Windsor-Essex County by reported week: Week 17, 2020 to Week 52, 2021).



Source: Ontario Ministry of Health, Public Health Case and Contact Management Solution (CCM), extracted by the Windsor-Essex County Health Unit [05/Jan/2022] at 1:00 pm

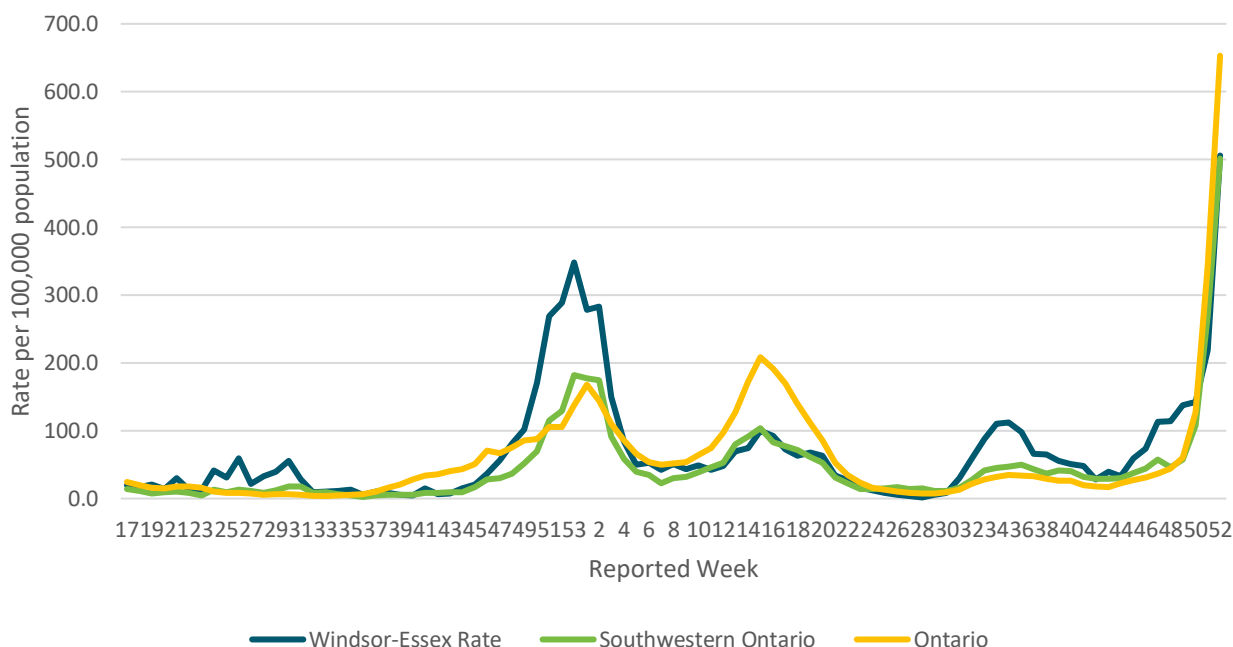
Figure 2. Confirmed COVID-19 cases in Windsor-Essex County by date: March 1, 2020 to January 2, 2022.



Source: Ontario Ministry of Health, Public Health Case and Contact Management Solution (CCM), extracted by the Windsor-Essex County Health Unit [05/Jan/2022] at 1:00 pm

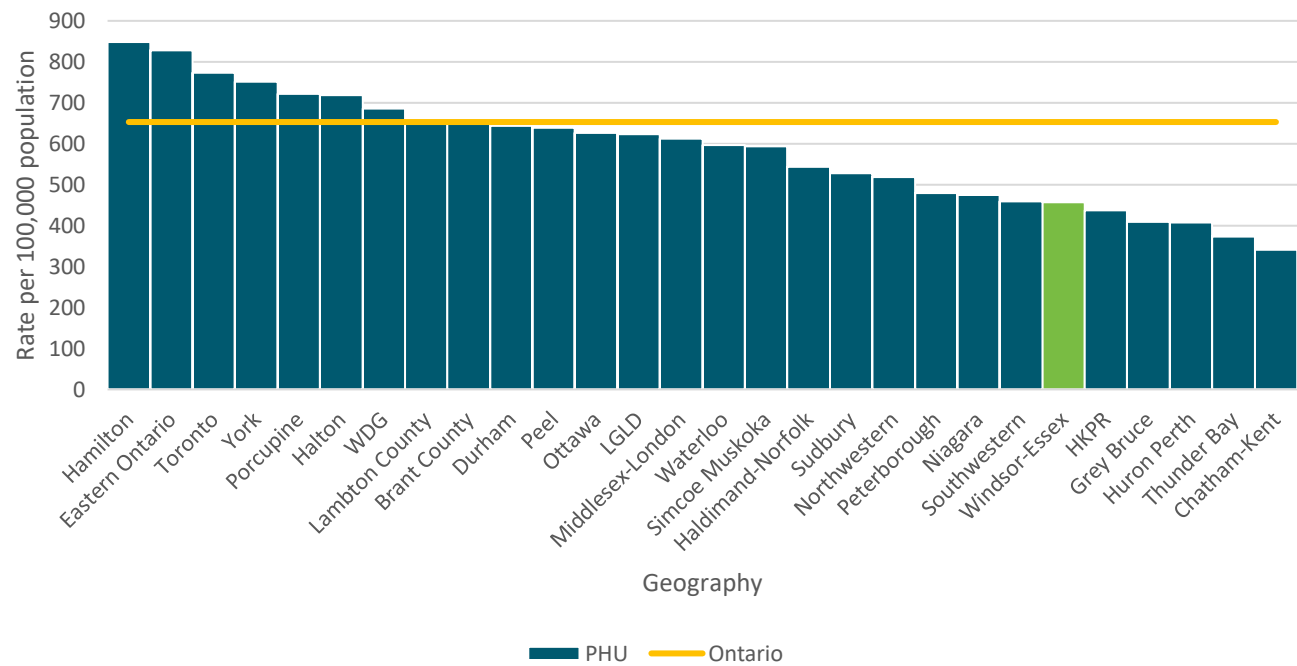
During the past week (December 27, 2021 – January 2, 2022), WEC had a case rate of 505.8 cases per 100,000, which was slightly higher than the Southwest regions (501.3 cases per 100,000) and 1.29 times lower than Ontario (653.0 cases per 100,000 in Ontario). As shown in **Figure 3a**, the case rate has been consistently increasing since November 8 (Week 44), and has more than doubled during the past week. Although our rates have increased, similar increases can be observed across the province (**Figure 3b**).

Figure 3a. Weekly COVID-19 case rates in Ontario: March 1, 2020 to January 2, 2022.



Source: Ontario Ministry of Health, Public Health Case and Contact Management Solution (CCM), extracted by the Windsor-Essex County Health Unit [5/Jan/2022] at 1:00 pm

Figure 3b. Weekly COVID-19 case rates across health units in Ontario: December 27, 2021 – January 2, 2022.

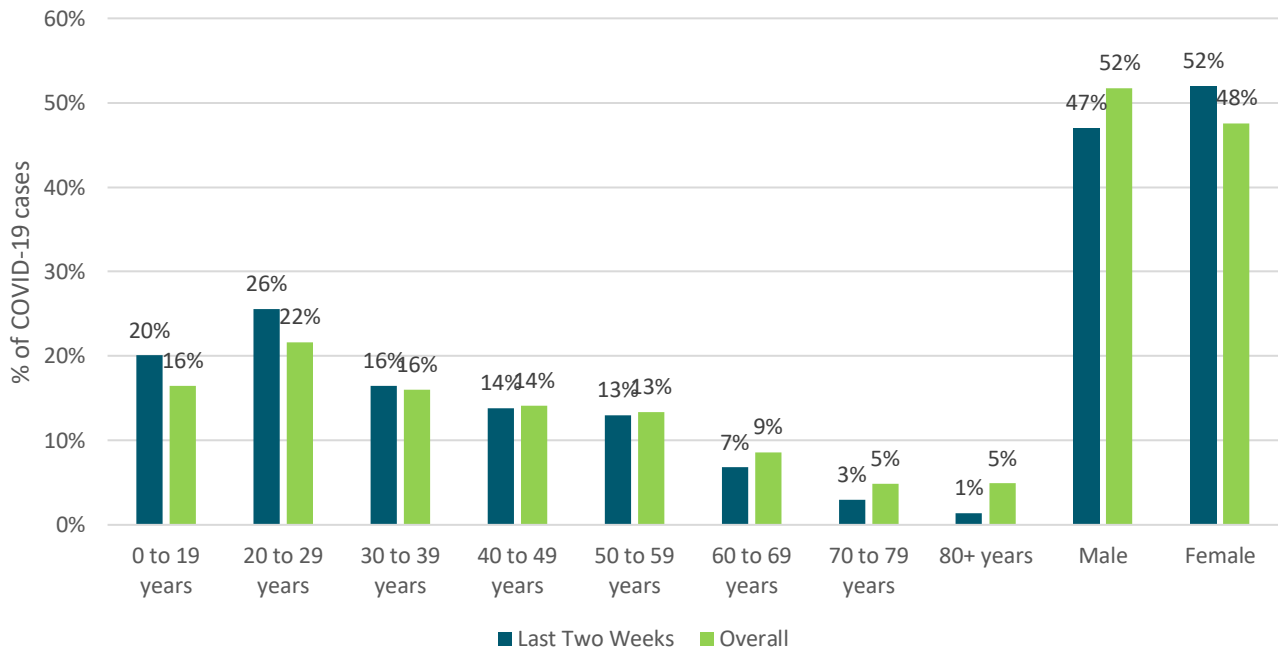


Source: Ontario Ministry of Health, Public Health Case and Contact Management Solution (CCM), extracted by the Windsor-Essex County Health Unit [2/Jan/2022] at 1:00 pm

Age and Sex

Overall, approximately 48% of the cases have been among females and 52% among males (**Figure 4**). In the past two weeks, a relatively higher number of cases were reported among 0-19 and 20 – 29 year olds. From the onset of the pandemic locally (March 1, 2020 to January 2, 2022), only 16% of our cases have been in the 0-19 age group.

Figure 4. Distribution of confirmed COVID-19 cases by age and sex by reported date: March 1, 2020 to January 2, 2022

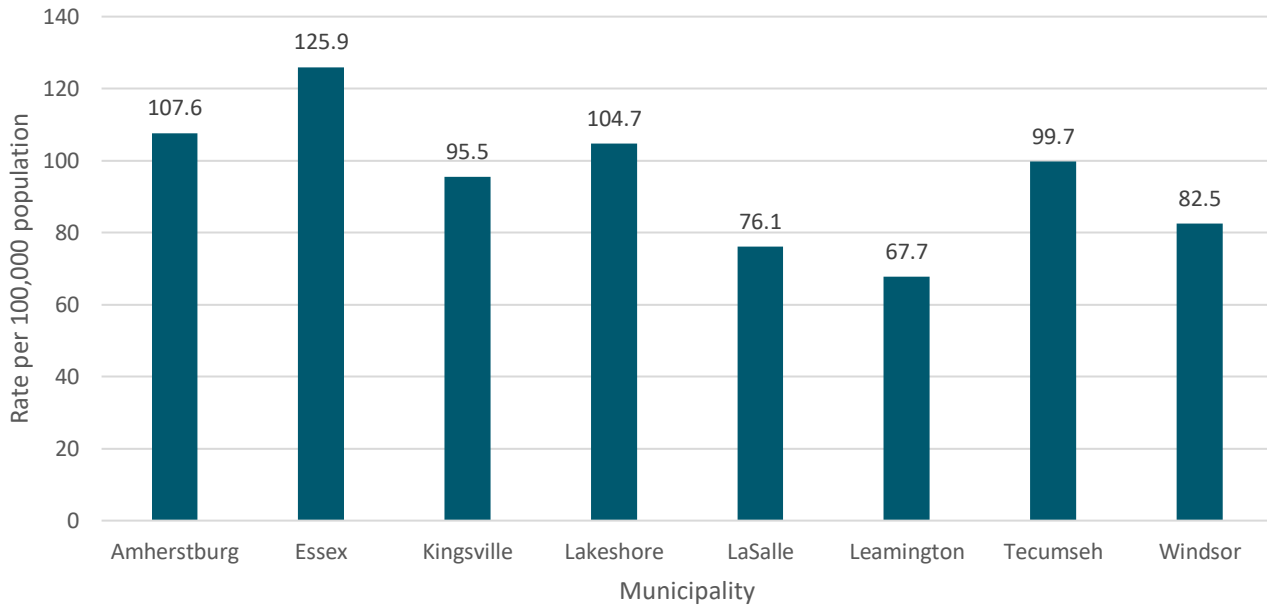


Source: Ontario Ministry of Health, Public Health Case and Contact Management Solution (CCM), extracted by the Windsor-Essex County Health Unit [05/Jan/2022] at 1:00 pm

Municipal Distribution

In the most recent completed week (December 27 – January 2, 2022), Essex had the highest case rates (125.9 cases per 100,000 population), followed by Amherstburg (107.6 cases per 100,000 population) and Lakeshore (104.7 cases per 100,000 population; **Figure 5**). Compared to the previous week (December 20 - 26, 2021), an increase is noted across all municipalities.

Figure 5. Distribution of confirmed COVID-19 cases by municipality: December 27, 2021 – January 2, 2022

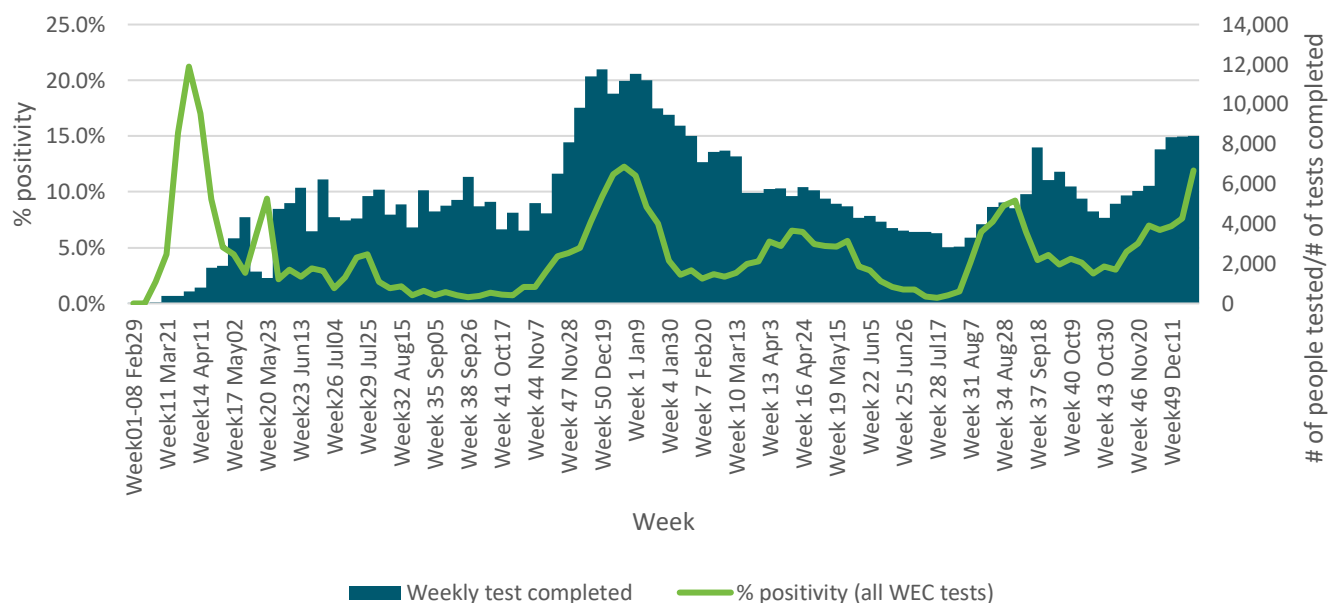


Source: Ontario Ministry of Health, Public Health Case and Contact Management Solution (CCM), extracted by the Windsor-Essex County Health Unit [05/Jan/2022] at 1:00 pm

Percent Positivity

The percent positivity for the most recent completed week (December 19 – 25, 2021) is 11.9%, an absolute increase of 4.3% compared to the previous week (7.6%; December 12 – 18, 2021; **Figure 6**). This increase is consistent with the increased community transmission of the Omicron variant.

Figure 6. Percent positivity of tests conducted in Windsor-Essex County for COVID-19: February 29 to December 25, 2021

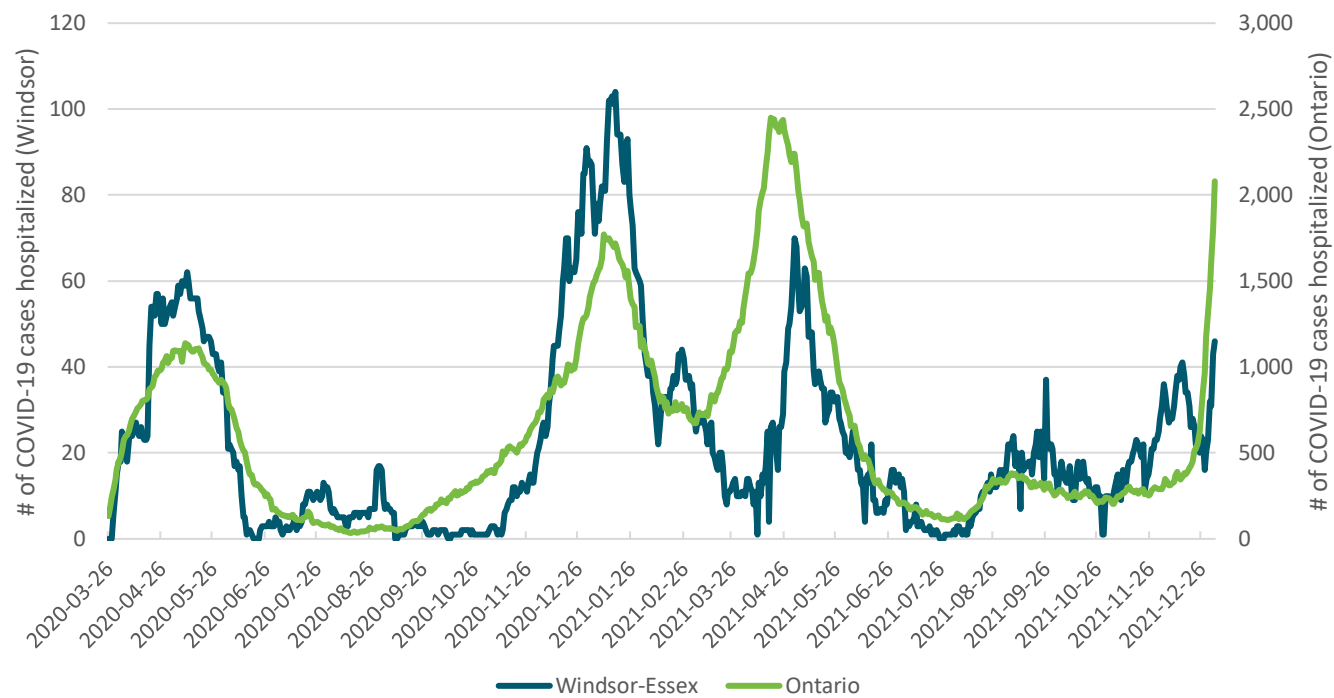


Source: COVID-19 Testing Report, SAS Visual Analytics Hub. Data extracted on January 5, 2022

Hospitalization and ICU Admissions

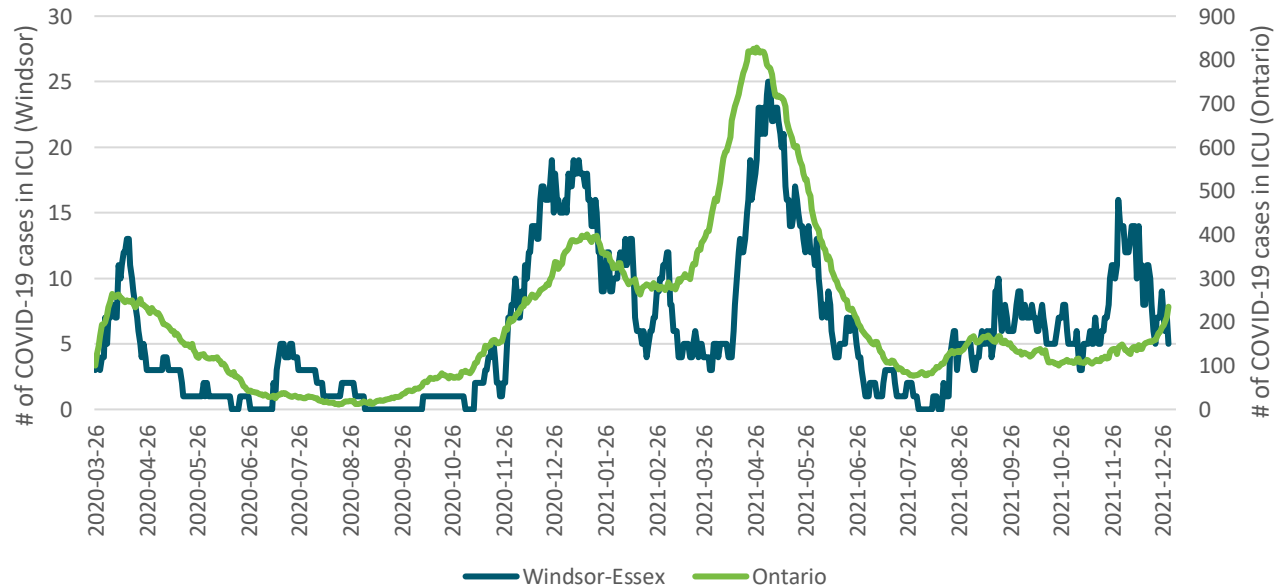
For the most recent week (December 27, 2021 – January 2, 2022), there have been 39 new hospital admissions compared to 24 new admissions seen three weeks ago (December 20 – December 26, 2021; **Figure 7 & 8**). There were 3 new COVID-19 patients were admitted to ICU for this week (December 27, 2021 – January 2, 2022), which is one less than the number of ICU admissions reported last week.

Figure 7. Confirmed COVID-19 case in-patient hospitalizations in Ontario and Windsor-Essex County: March 29, 2020 – January 2, 2022



Source: COVID-19 Regional Hospitals Report, SAS Visual Analytics Hub. Data extracted on January 5, 2022

Figure 8. Confirmed COVID-19 case ICU hospitalizations in Ontario and Windsor-Essex County: March 26, 2020 – January 2, 2022

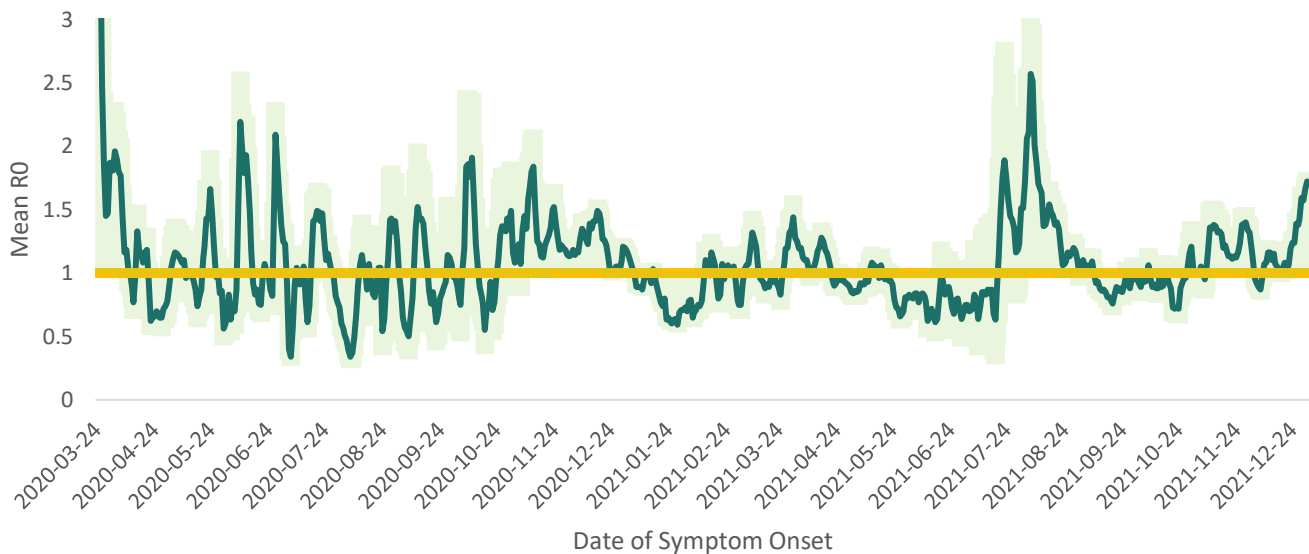


Source: COVID-19 Regional Hospitals Report, SAS Visual Analytics Hub. Data extracted on January 5, 2022

Effective Reproductive Number (R_t) for COVID-19

Compared to the previous week, the reproductive number for this week (December 27 – January 2, 2022) has shown a steady increase from 1.38 to 1.70 (**Figure 9**). During the current week, the highest reproductive number of 1.72 was observed on January 1, 2022.

Figure 9. Median effective reproductive number for COVID-19 in Windsor-Essex County: March 25, 2020 – January 2, 2022



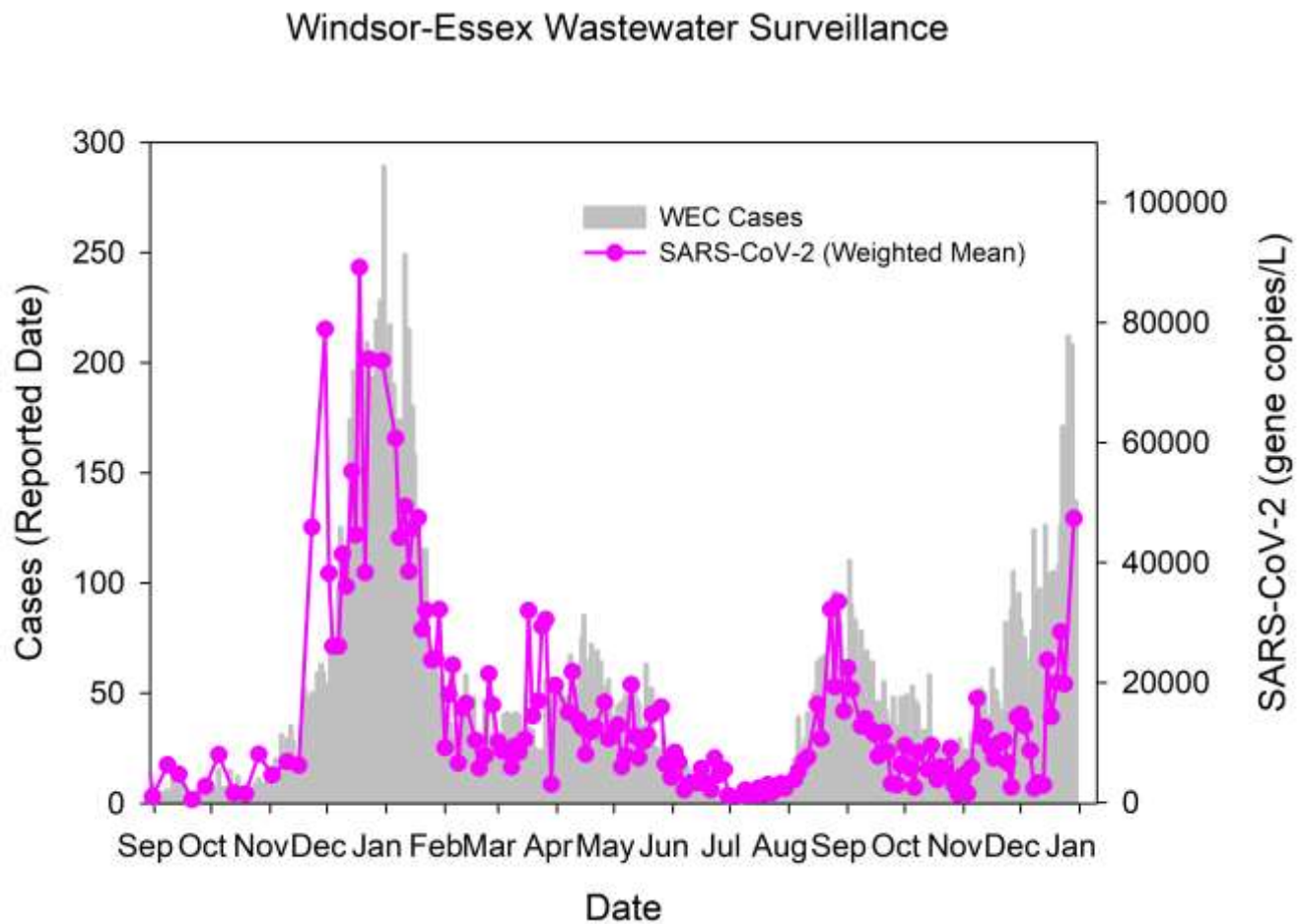
Source: Ontario Ministry of Health, Public Health Case and Contact Management Solution (CCM), extracted by the Windsor-Essex County Health Unit [05/Jan/2022] at 1:00 pm

Local Wastewater Surveillance

Research has shown that a significant proportion of individuals with COVID-19 infections shed the virus (SARS-CoV-2) in their stool, at times even before the onset of symptoms. The health unit has partnered with the Great Lakes Institute for Environmental Research at the University of Windsor which collects and treats wastewater for the WEC population.

Figure 10 depicts case counts in WEC by reported date alongside the weighted mean viral signal (gene copies/L) across the sampling plants in the region. We have seen a sharp increase in the viral signal in Windsor-Essex in late December with continued increases expected in the coming week of January.

Figure 10. COVID-19 wastewater viral signal in Windsor-Essex County: September 1, 2020 – December 29, 2021



Source: Great Lakes Institute for Environmental Research, University of Windsor. Data extracted on January 2, 2022.

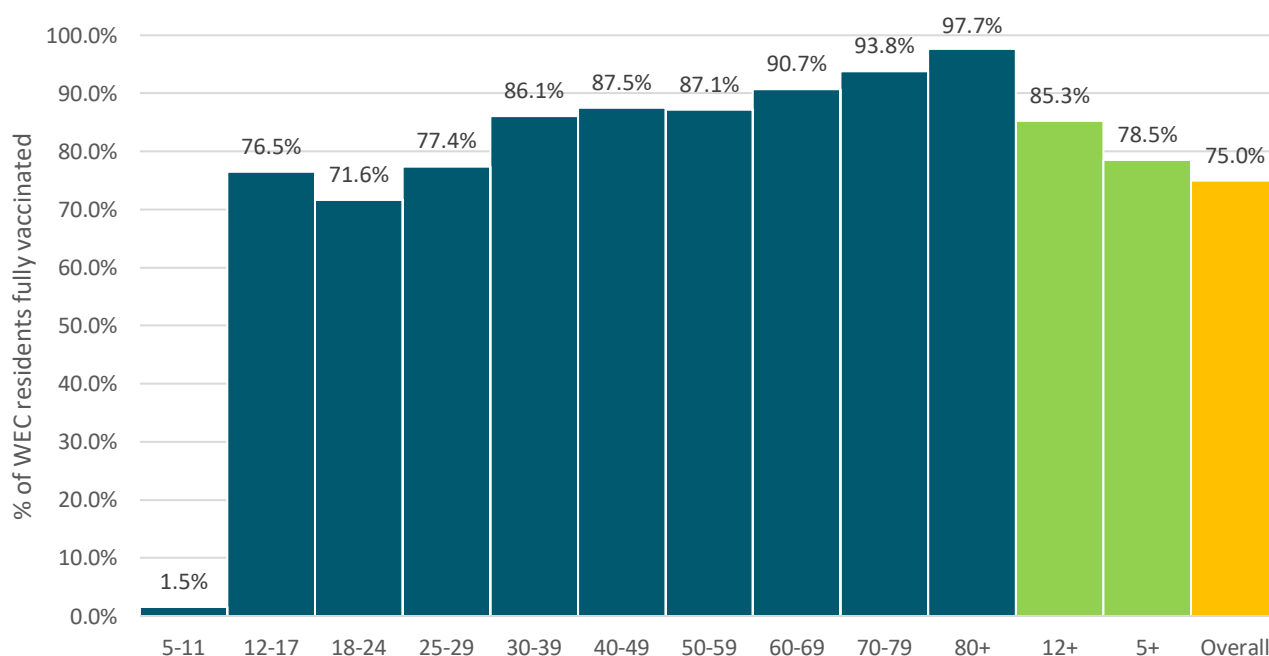
For more information on local COVID-19 statistics, please visit: <https://www.wechu.org/cv/local-updates>

COVID-19 Vaccination Status in Windsor-Essex County

Fully Vaccinated Coverage Rates by Age Group

The overall coverage rate, including those ineligible to receive the vaccine, in WEC is 75.0%. The 18-24 year age group has the lowest coverage rate in fully vaccinated individuals at 71.6%, followed by those in the 12-17 age group (76.5%) and adults 25-29 years of age (77.4%).

Figure 11. COVID-19 fully vaccinated coverage rates by age group in Windsor-Essex County: January 5, 2022

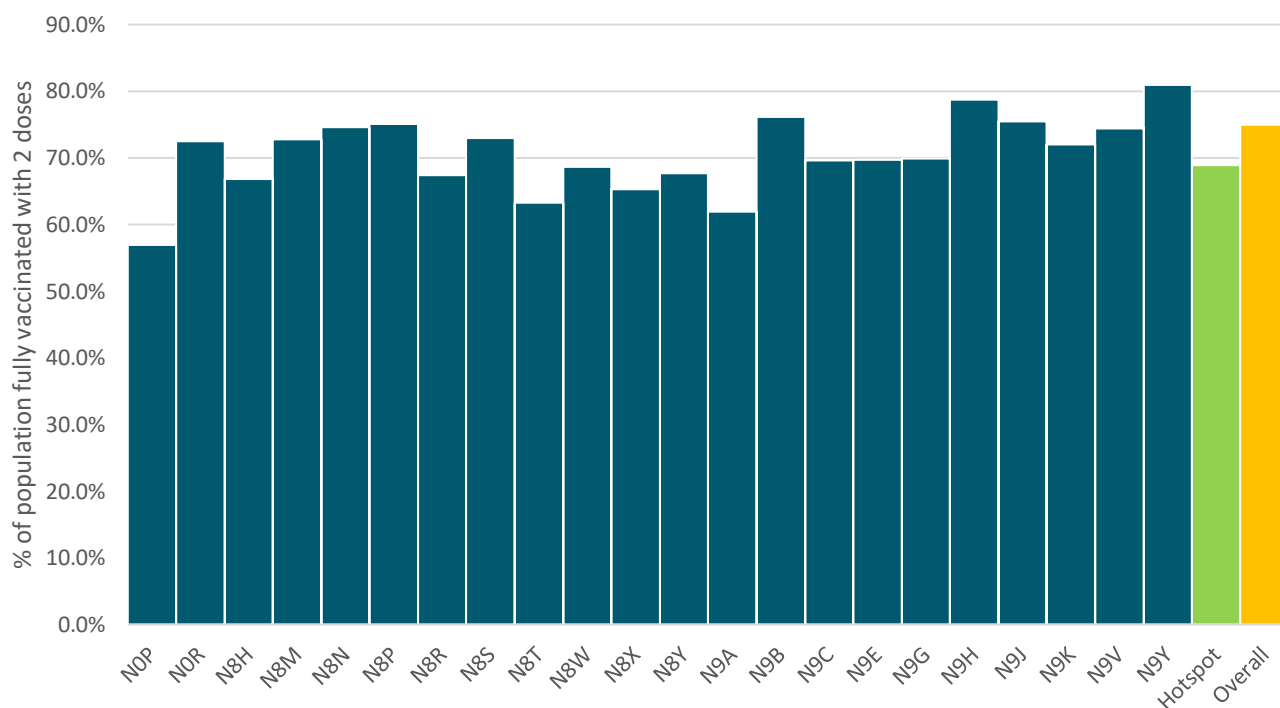


Source: Vaccine administration, Ontario Ministry of Health, IntelliHEALTH COVaxON. Data extracted on: January 5, 2022

Fully Vaccinated Coverage Rate by Forward Sortation Area (FSA)

Coverage by geography is depicted below in **Figure 12**. There are several FSAs that lower fully vaccinated coverage rates than the overall rate such as the N0P (56.9%), N8T (63.3%), N8X (65.3%) and N9A (61.9%) postal codes.

Figure 12. COVID-19 fully vaccinated coverage rate by Forward Sortation Area in Windsor-Essex County: January 5, 2022



Note: Coverage rates by FSA include all Windsor-Essex County residents including children 0 to 4 years of age who are not eligible to receive the vaccine

Source: Vaccine administration, Ontario Ministry of Health, IntelliHEALTH COVaxON. Data extracted on January 5, 2022

For more information on local COVID-19 vaccine statistics, please visit:

<https://www.wechu.org/cv/vaccination-stats>