

COVID-19 Windsor and Essex County: March 20, 2020 to July 31, 2020

Purpose

- Providing an epidemiologic summary of COVID-19 activity in Windsor and Essex County (WEC) to date

Source

- Windsor-Essex County Health Unit (WECHU), Infectious Disease Prevention (IDP) databases, extracted by Windsor-Essex County Health Unit [2020/07/30].
- Ontario Ministry of Health, integrated Public Health Information System (iPHIS) database, extracted by Windsor-Essex County Health Unit [2020/07/30].
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Epidemiologic Summary: COVID-19 in Ontario – January 15, 2020 to July 29, 2020). Toronto, ON: Queen's Printer for Ontario; 2020.
- Chung H, Fung K, Ishiguro L, Paterson M, et al. Characteristics of COVID-19 diagnostic test recipients, Applied Health Research Questions (AHRQ) # 2021 0950 080 000. Toronto: Institute for Clinical Evaluative Sciences; 2020.

Highlights

- At the time of reporting, there are 2,285 confirmed cases of COVID-19 in WEC between March 20th and July 30th.
- The majority of cases in July have been from the agri-farm sector but the recent week has shown an increase in cases outside of this sector.
- Emergency department visits at Erie Shores HealthCare for symptoms associated with COVID-19 has increased dramatically in the past two week.
- The current percent positivity, as of July 25th, is 4.5%. This displayed by the number of individuals and not tests, as one individual could have multiple tests.
 - However, there is a reporting lag for the most recent week.
 - The percent positivity in WEC was higher compared to Ontario for the same time period.
- Based on the 7-day moving average, WEC remains high when looking at all cases in WEC.
 - If agri-farm workers are excluded, the 7-day moving average has increased from 6 cases to 15 cases.
- Windsor and Essex County has the highest incidence rate in the province and is higher than the Ontario rate.
- Locally, Leamington has the highest COVID-19 incidence rate in Windsor-Essex followed by Kingsville and the City of Windsor.
- The distribution of cases per 1,000 residents show a higher rates of cases in parts of Kingsville and Leamington in the county.
 - In Windsor, rates per 1,000 were higher in certain pockets across the city.
- A higher proportion of individuals 20 to 39 years of age have COVID-19 in Leamington and Kingsville due to the agri-farm workers who are of the working age.

- Tecumseh has a higher proportion of individuals 80 years or older with COVID-19
 - Amherstburg reported a higher proportion of children 0 to 19 years of age with COVID-19.
- In the last two weeks, 66% of the cases reported were among males and 34% were among females.
 - 51% of the cases during this time period were among adults 20 to 39 years of age.
 - During this same time period, an increase in cases among those 0 to 19 was observed
- Overall, the majority of the cases are from Leamington (36%), followed by Windsor (32%) and Kingsville (24%)
 - In the past 30 days, however, 38% of the cases have been from Kingsville, 30% from Leamington, and 26% from Windsor
 - In the past 7 days, 38% of the cases have been from Kingsville, 34% from Leamington, and 24% from Windsor.
- The majority of cases identified are due to close contacts with individuals that were positive for COVID-19.
 - This is similarly found among the agri-farm worker population
 - Outside of the agri-farm workers, most cases are exposed to the virus through close contact with another confirmed case.
- Coughing (62%) was the most commonly reported symptom among cases with COVID-19 followed by headache (49%), fever (48%) and fatigue (40%).
- COVID-19 cases that are hospitalized and in the ICU has increased since the last two weeks.
- Approximately 32% of cases are still in self-isolation while 63% of cases have resolved.
- The overall case fatality rate in WEC is 3.1%, lower than the province (7.1%).
- The day-over-day doubling time has been trending positively in Canada and in Ontario.
 - In Windsor-Essex, the day-over-day doubling time has varied due to the number of agri-farm cases.
- The mean R_0 (effective) value is 0.55 and has decreased from last week.
 - However, for the past two months we have seen fluctuations with this number.



COVID-19 *LIVE UPDATE*

July 31, 2020

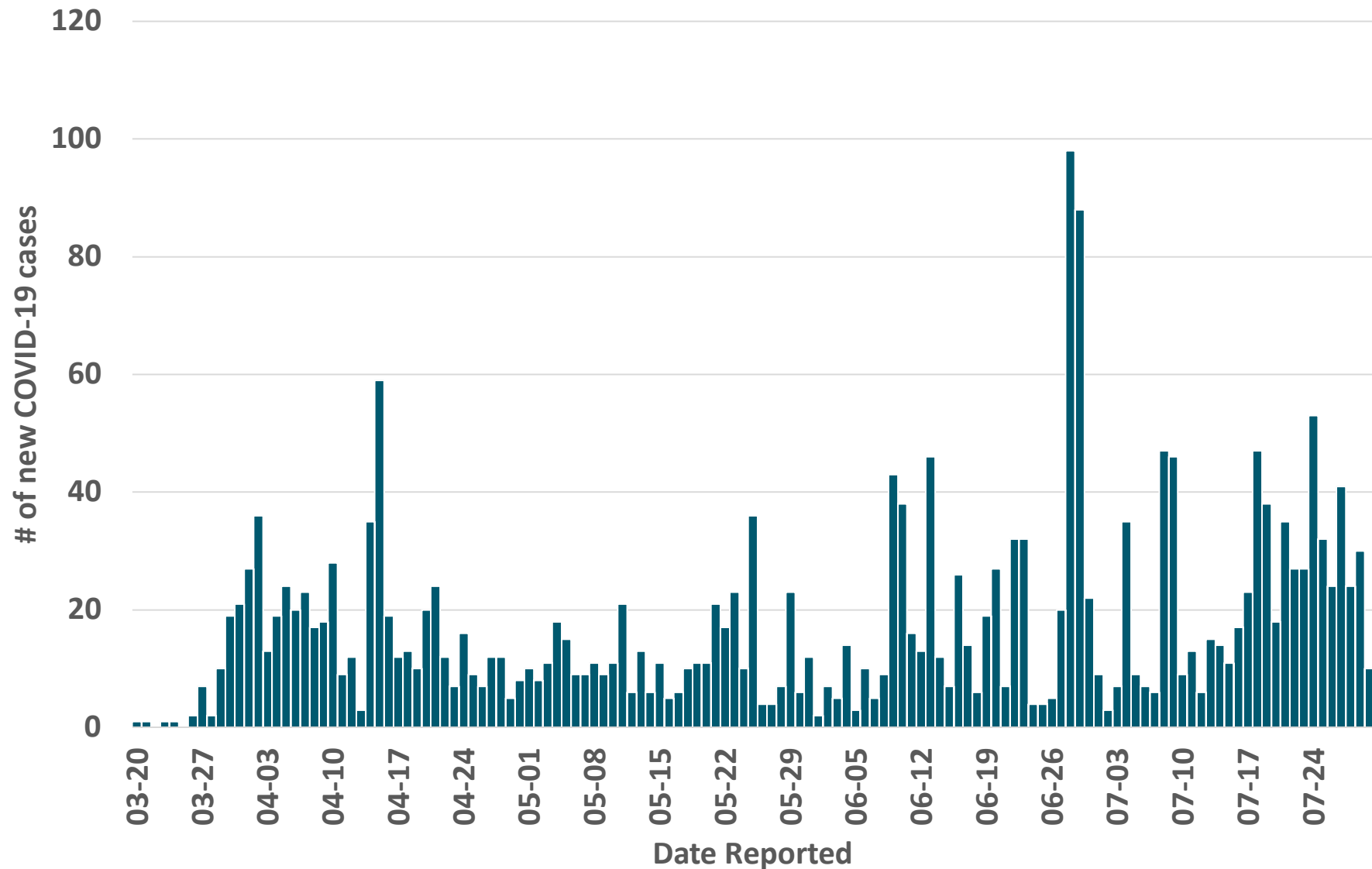
FOR UP-TO-DATE
CASE NUMBERS
VISIT
wechu.org

COVID-19 Epidemiological Summary

Content covered:

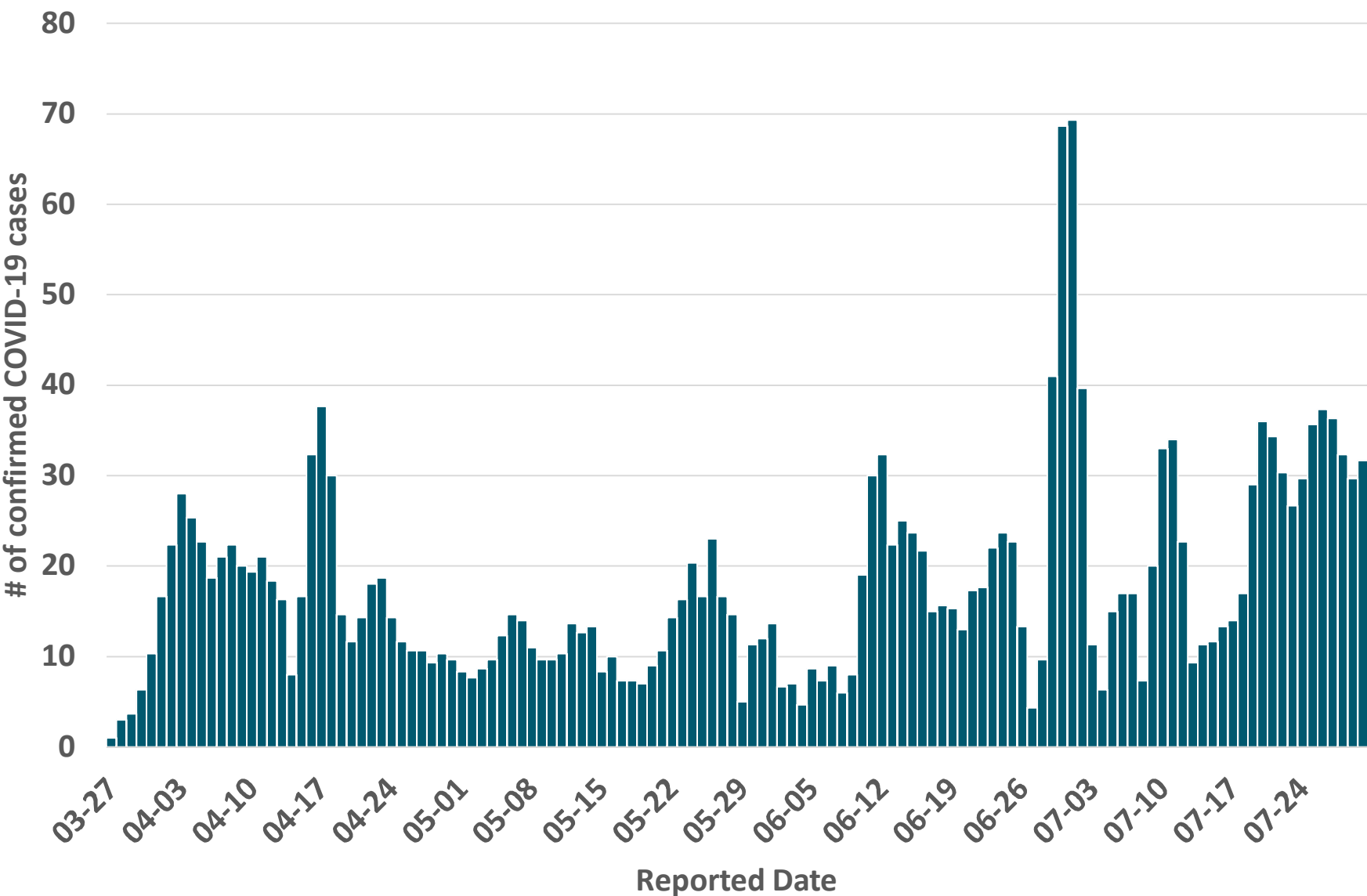
- Epidemic curves
- Syndromic surveillance
- Regional & provincial rates
- Percent positivity
- Positive test turnaround time
- Case investigation time
- Age & sex distribution
- Geographical rates & distribution of cases
- Exposure history
- Healthcare worker status
- Underlying conditions
- Top symptoms
- Hospitalizations & ICU
- Healthcare system capacity
- Current outcomes
- Breakdown by deaths
- Doubling time
- Mean R_0 (effective)

Epidemic Curve by Reported Date

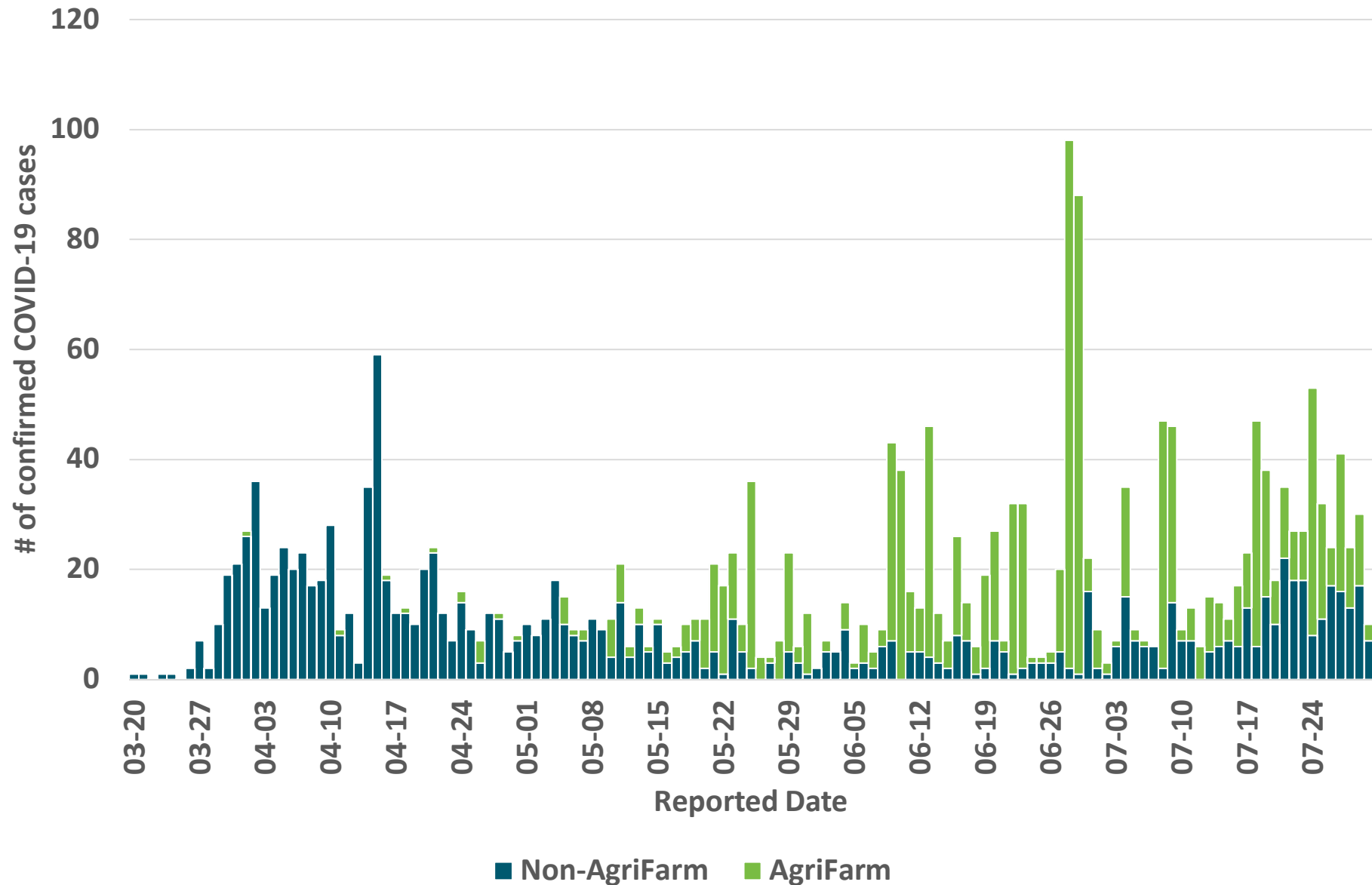


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Epidemic Curve by 3-Day Moving Average by Reported Date

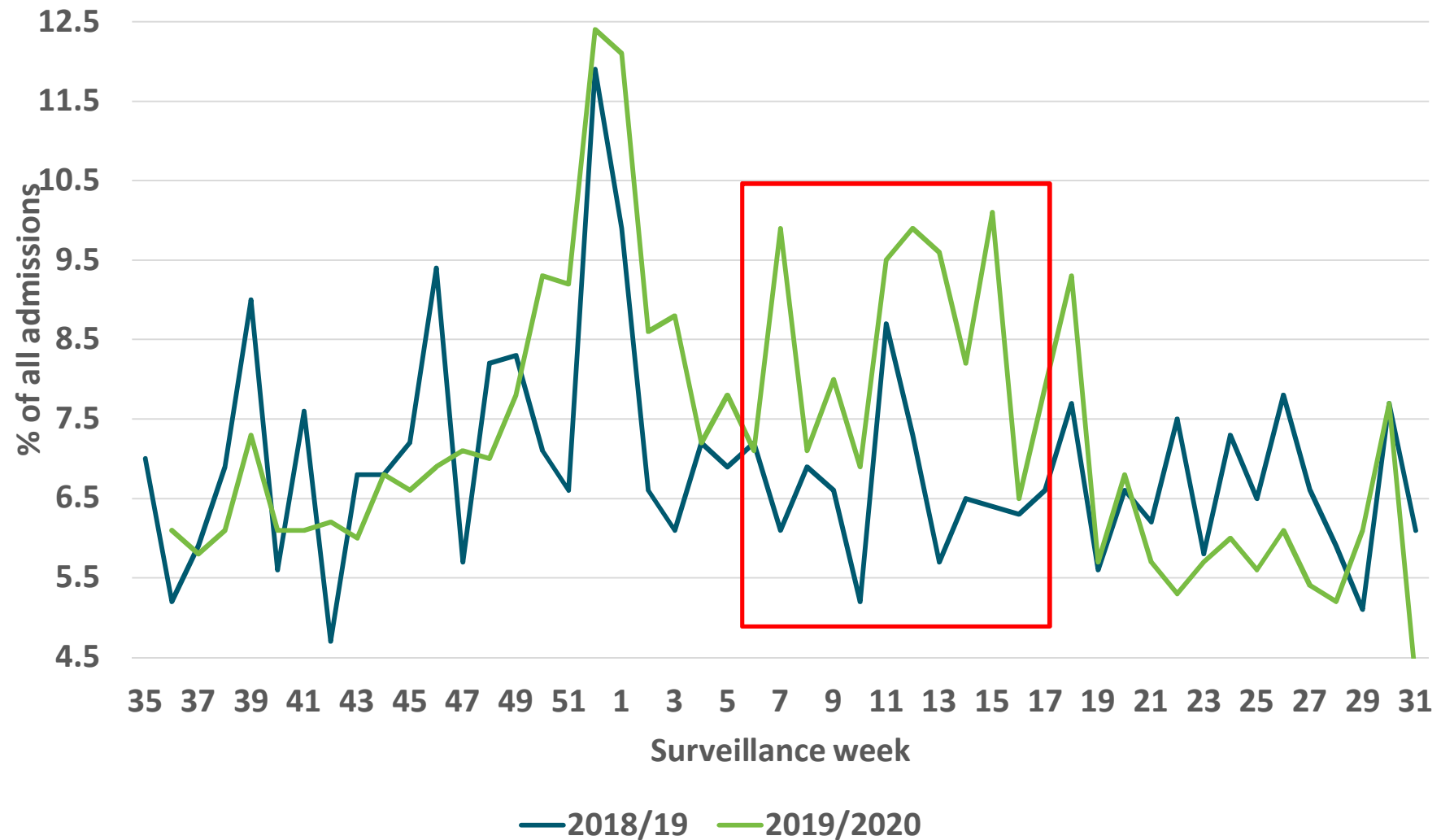


Epidemic Curve by Agri-Farms Versus Non-Agri-Farm Cases by Reported Date



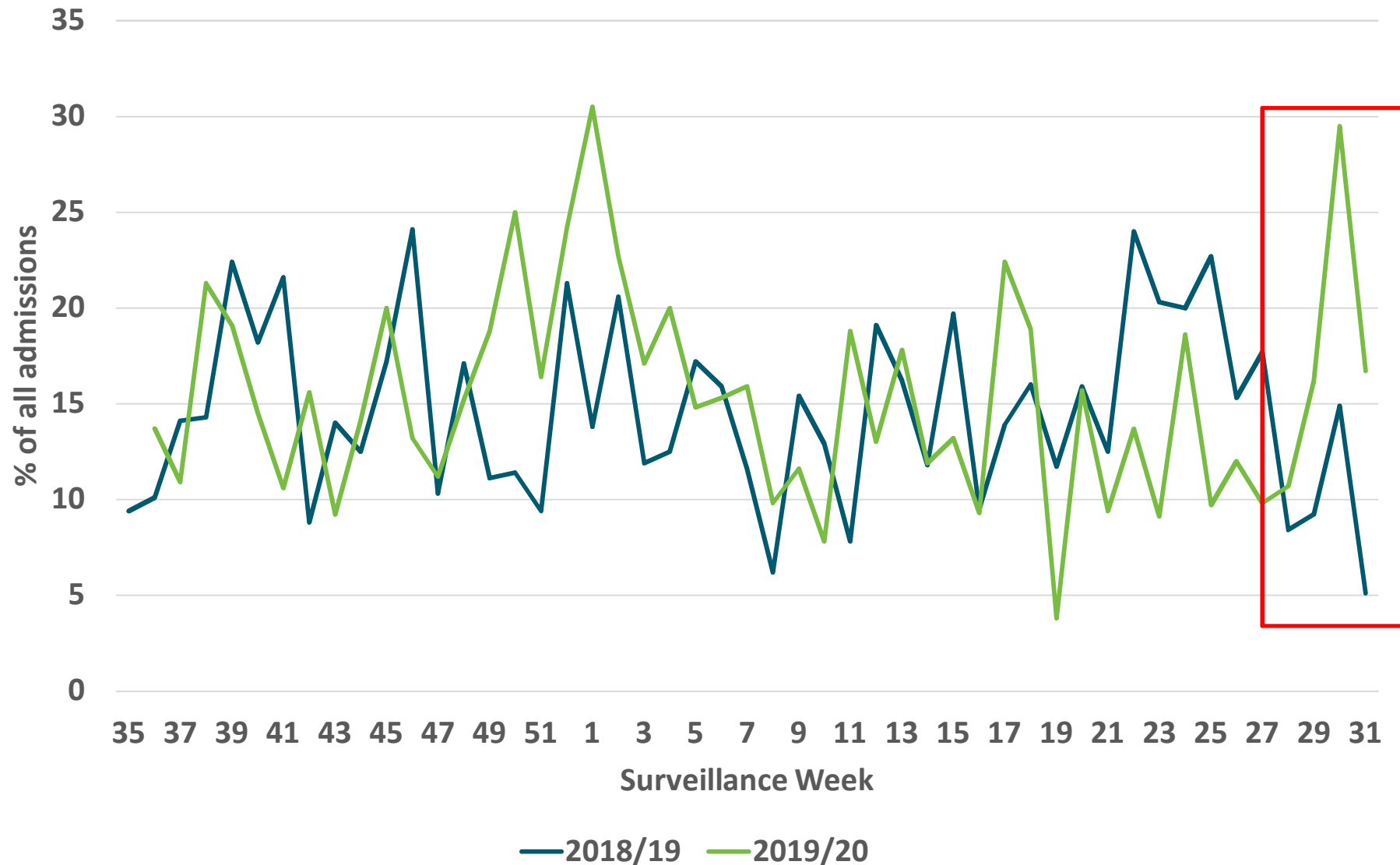
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Emergency Department Visits By Syndromes



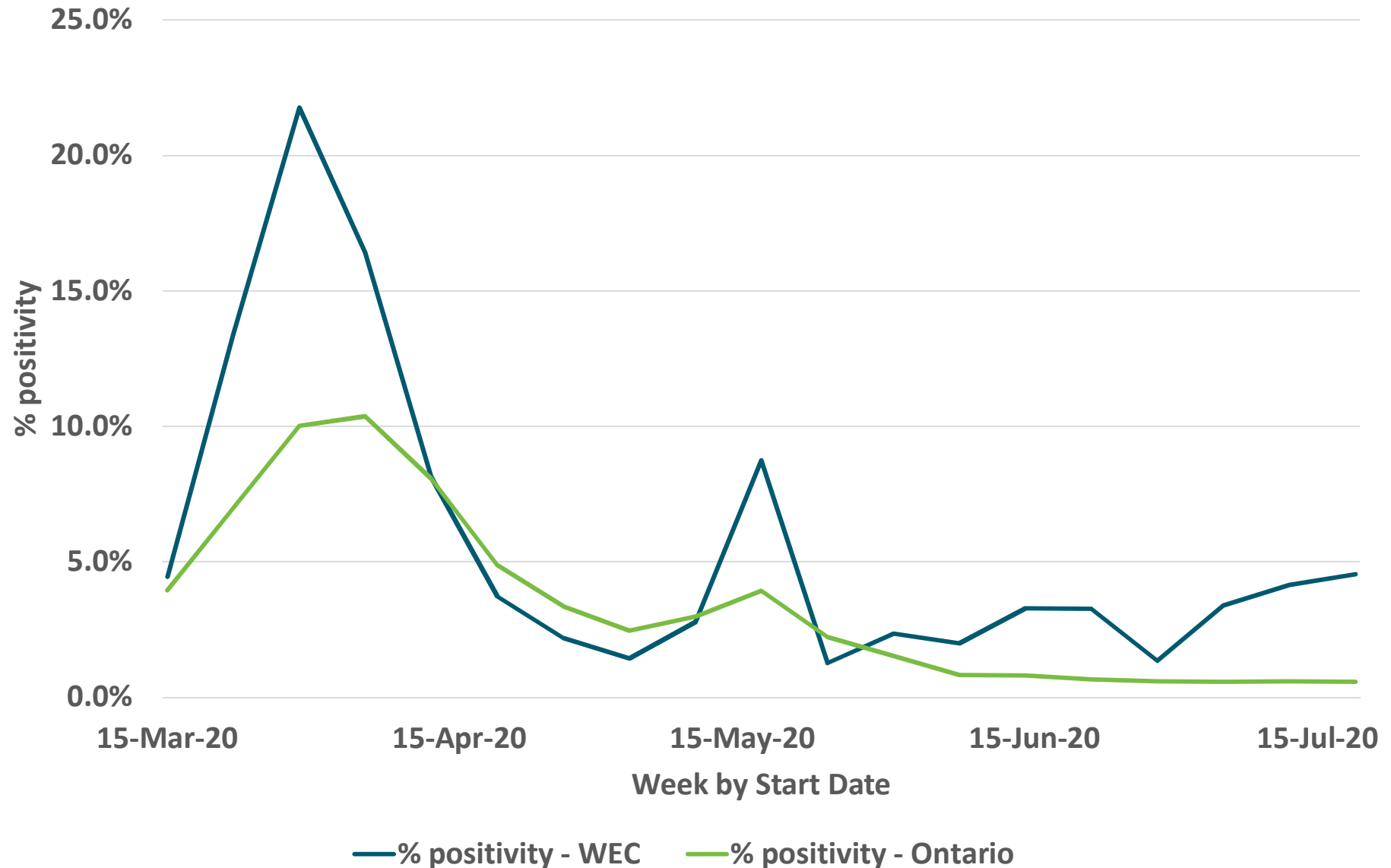
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Emergency Department Visits by Syndromes For Erie Shores HealthCare

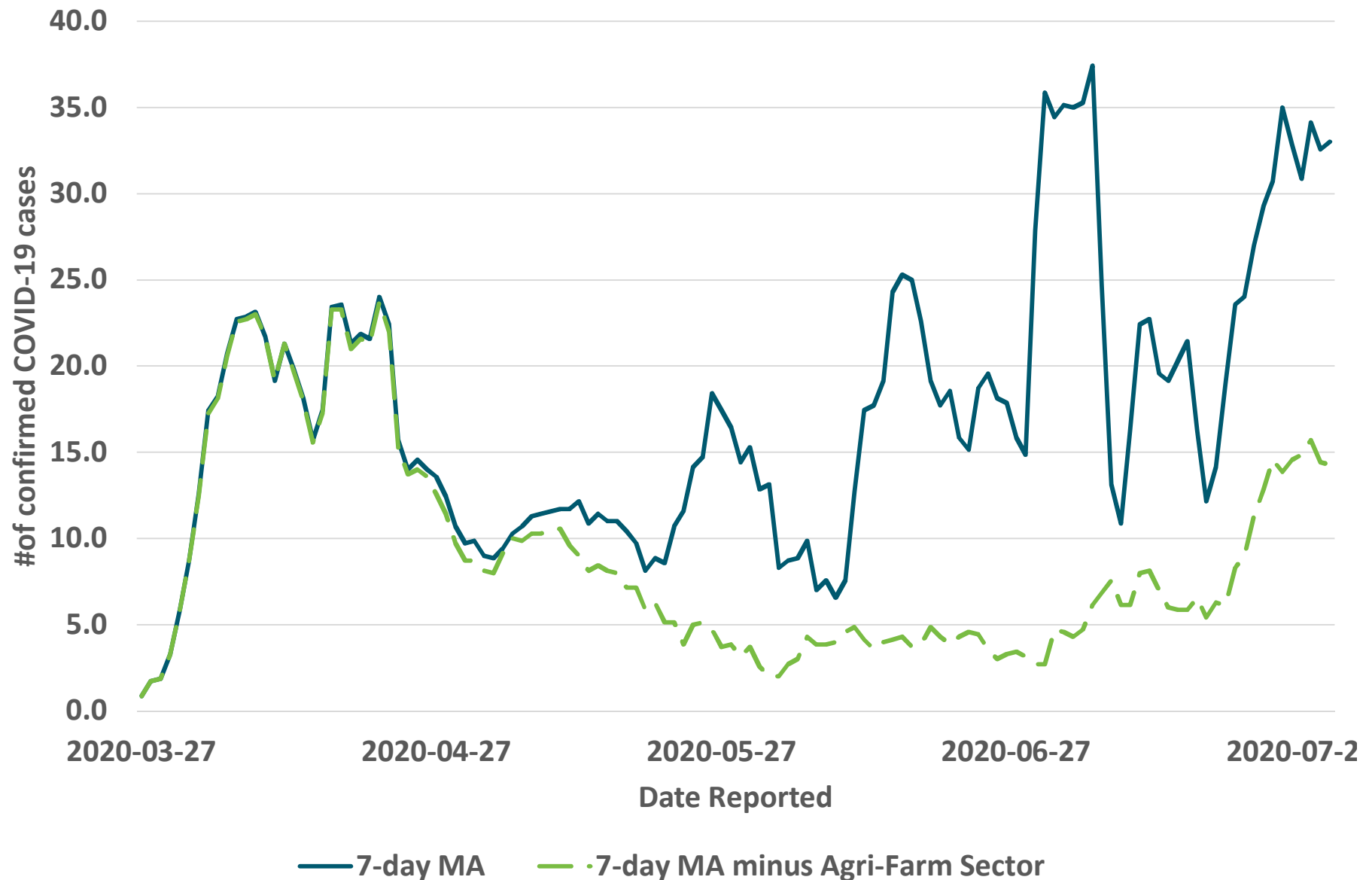


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Percent Positivity by Week Among Unique Individuals



7-Day Moving Average by Reported Date



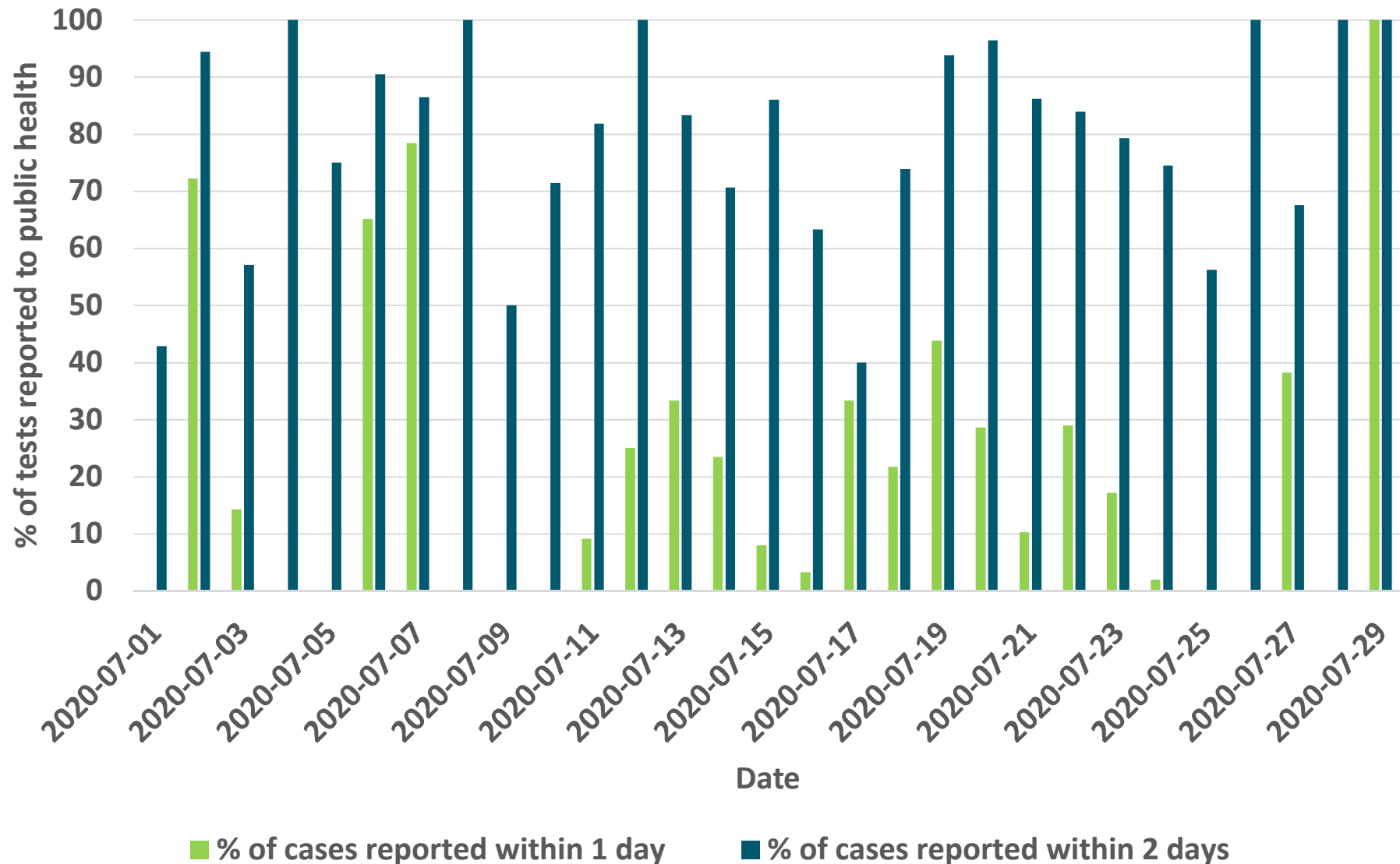
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Windsor-Essex Rate by Reported Week



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Percentage of positive tests reported in one and two days of test date



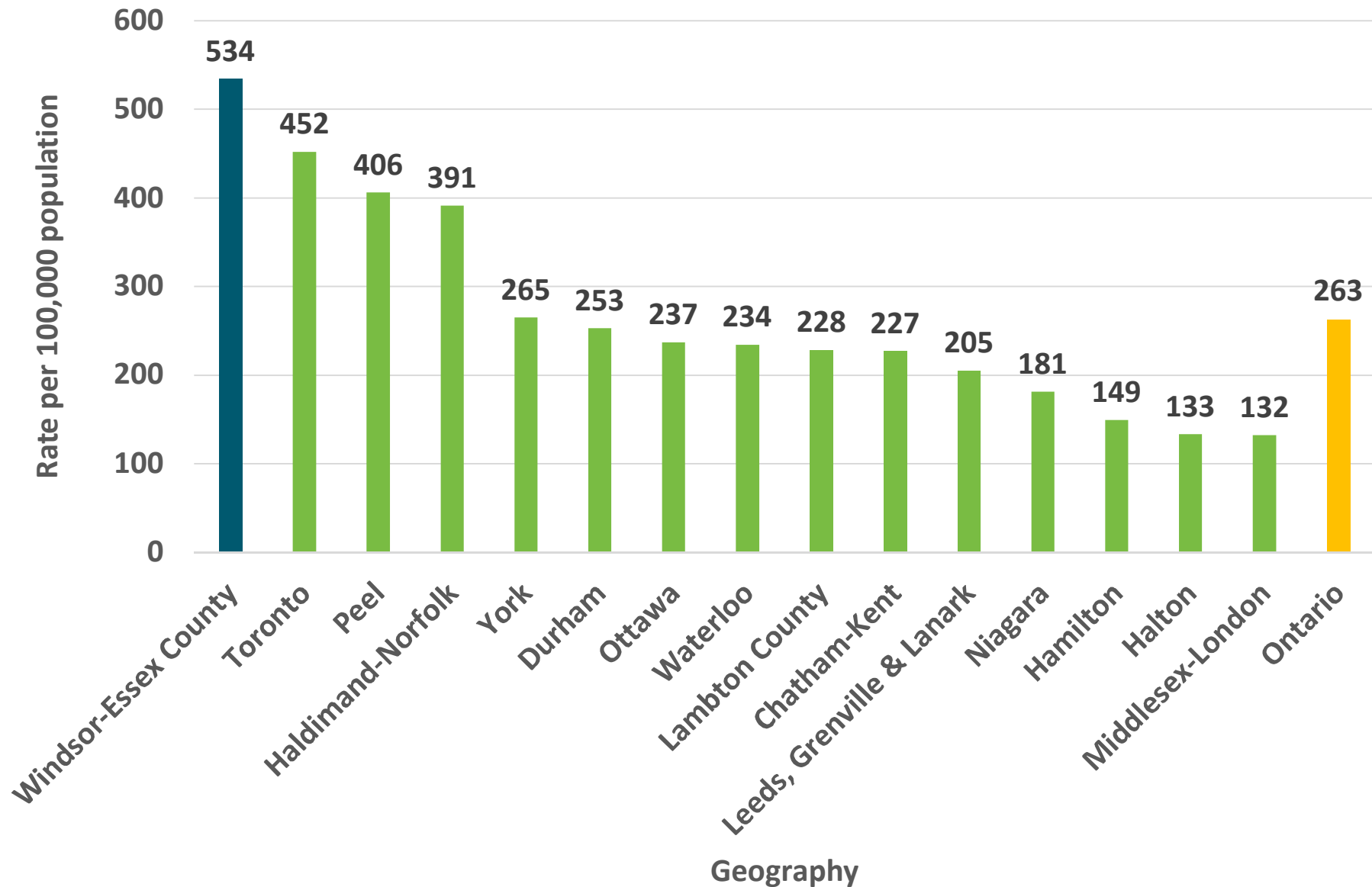
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Percent of New Cases Investigated Within 24 Hours of Reported Date

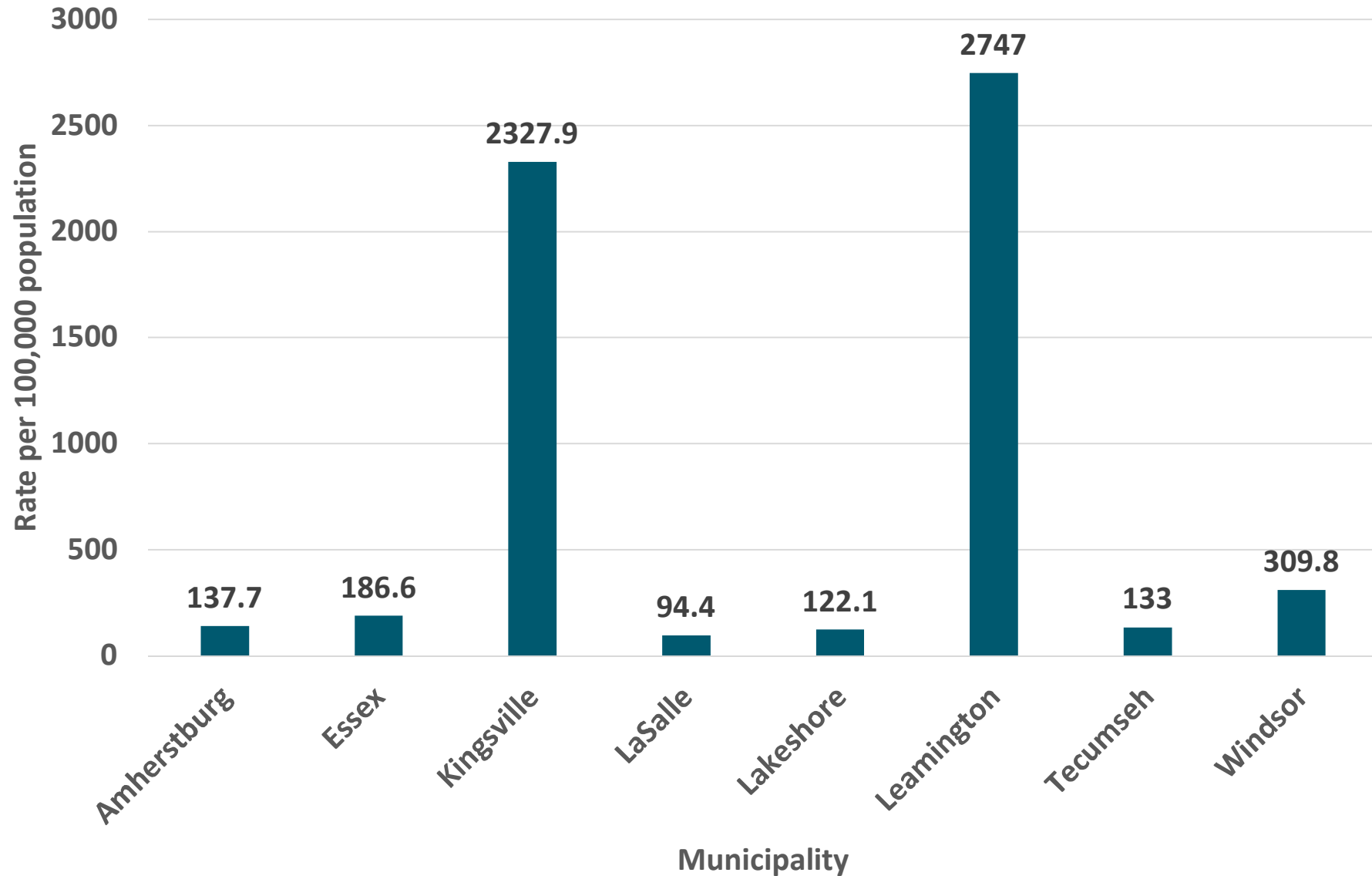


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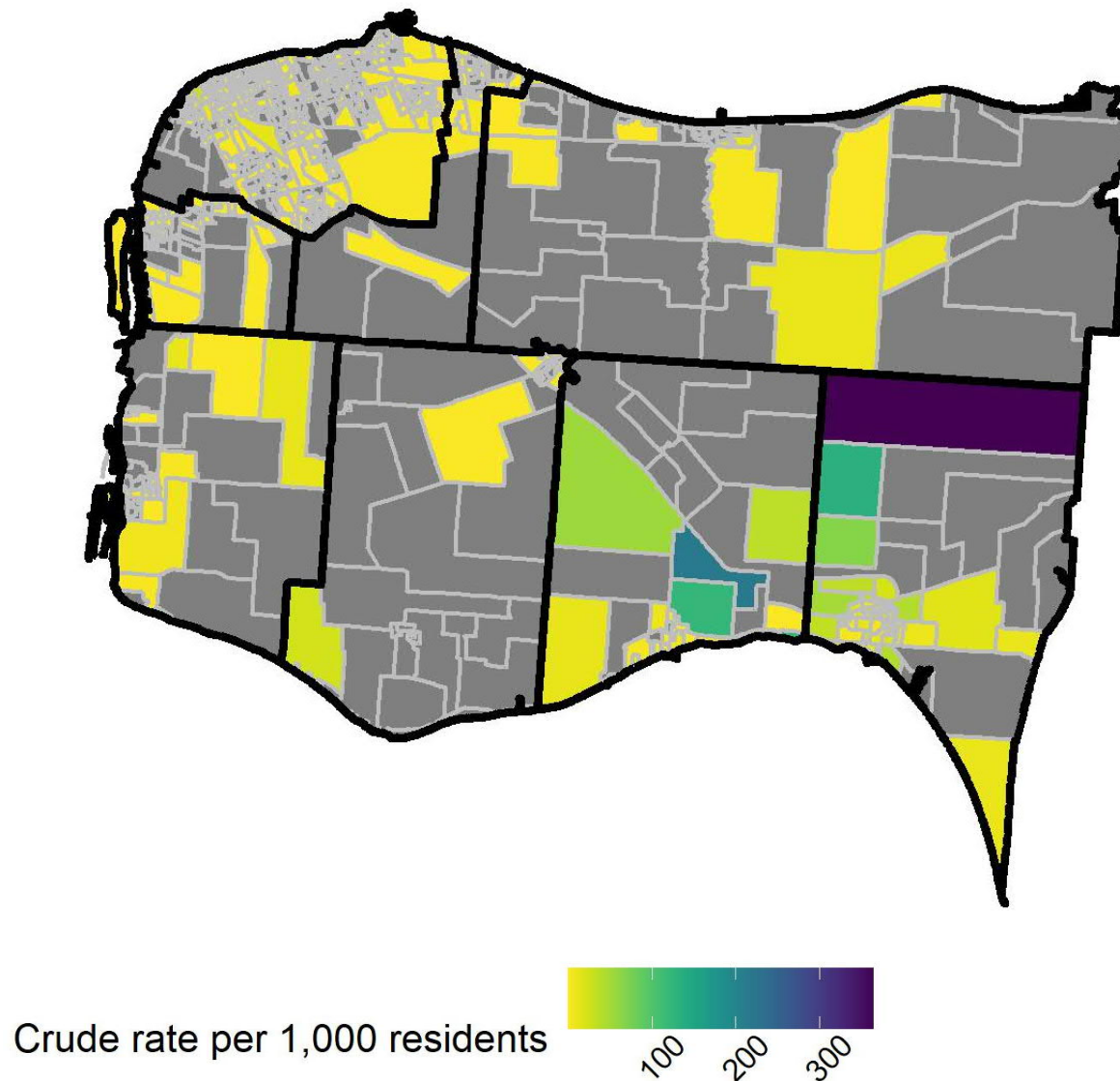
Regional & Provincial Rates



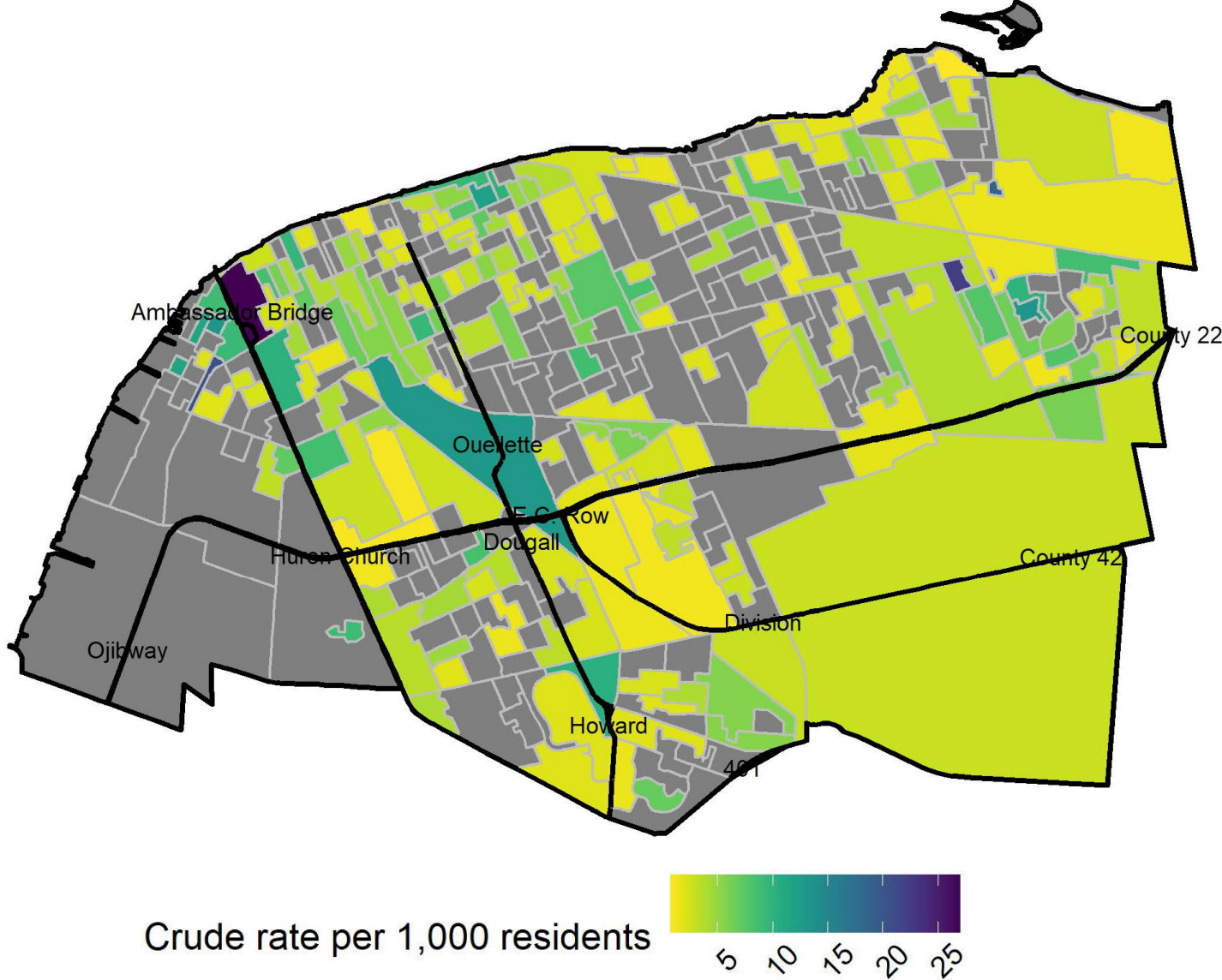
Rate per 100,000 by Municipality



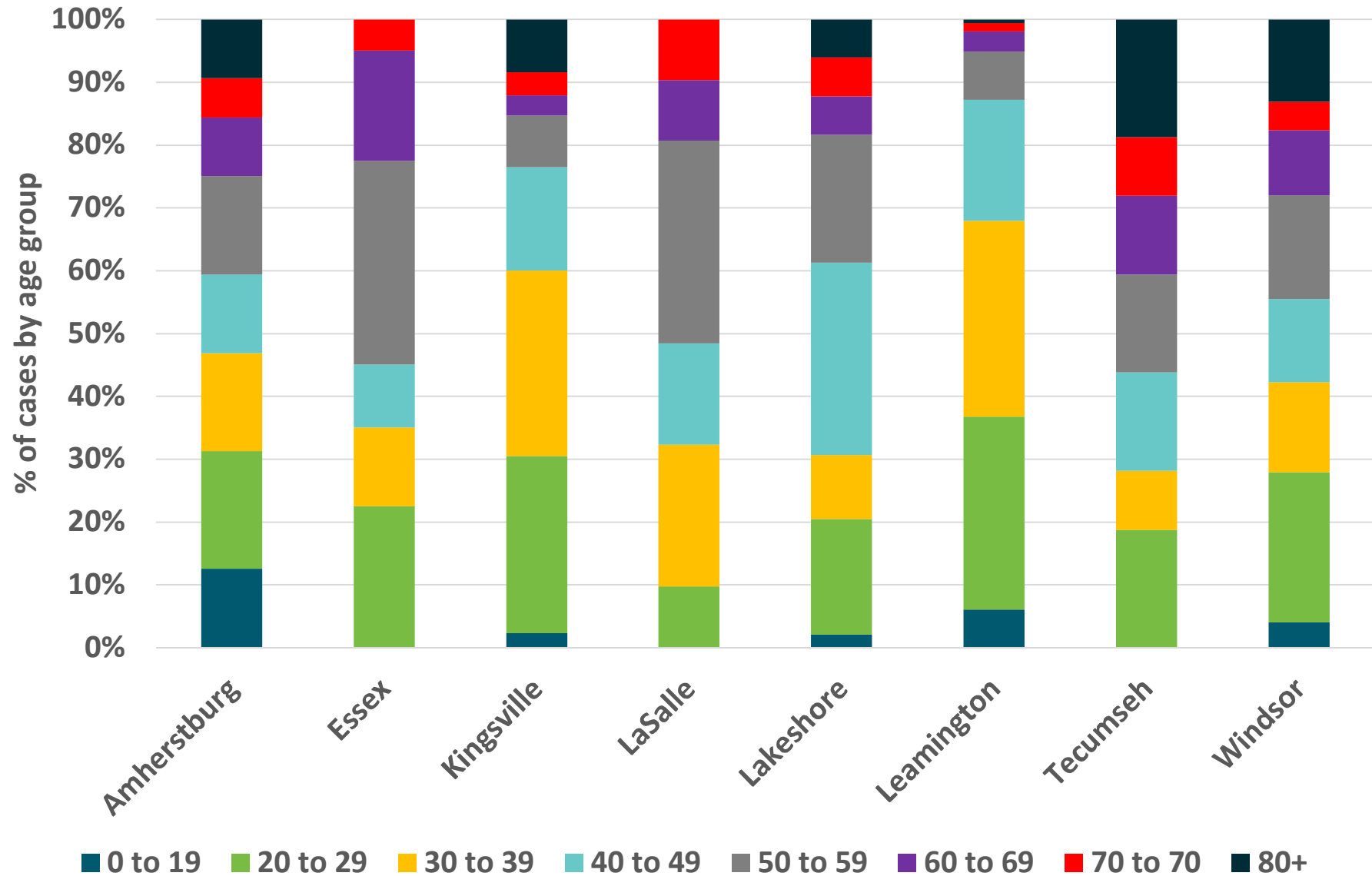
Geographical Distribution of Cases in WEC



Geographical Distribution of Cases in Windsor

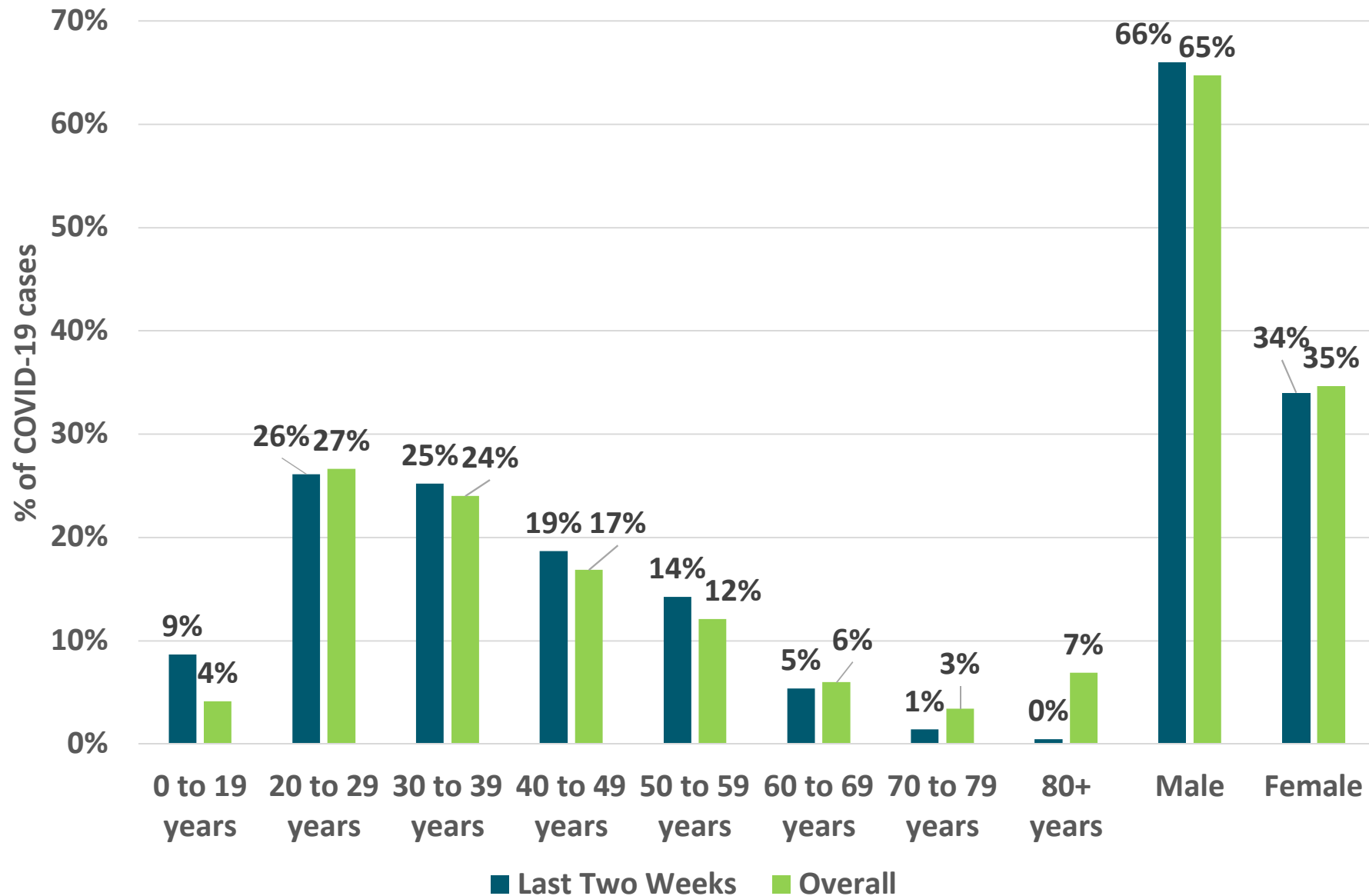


Age Breakdown by Municipality



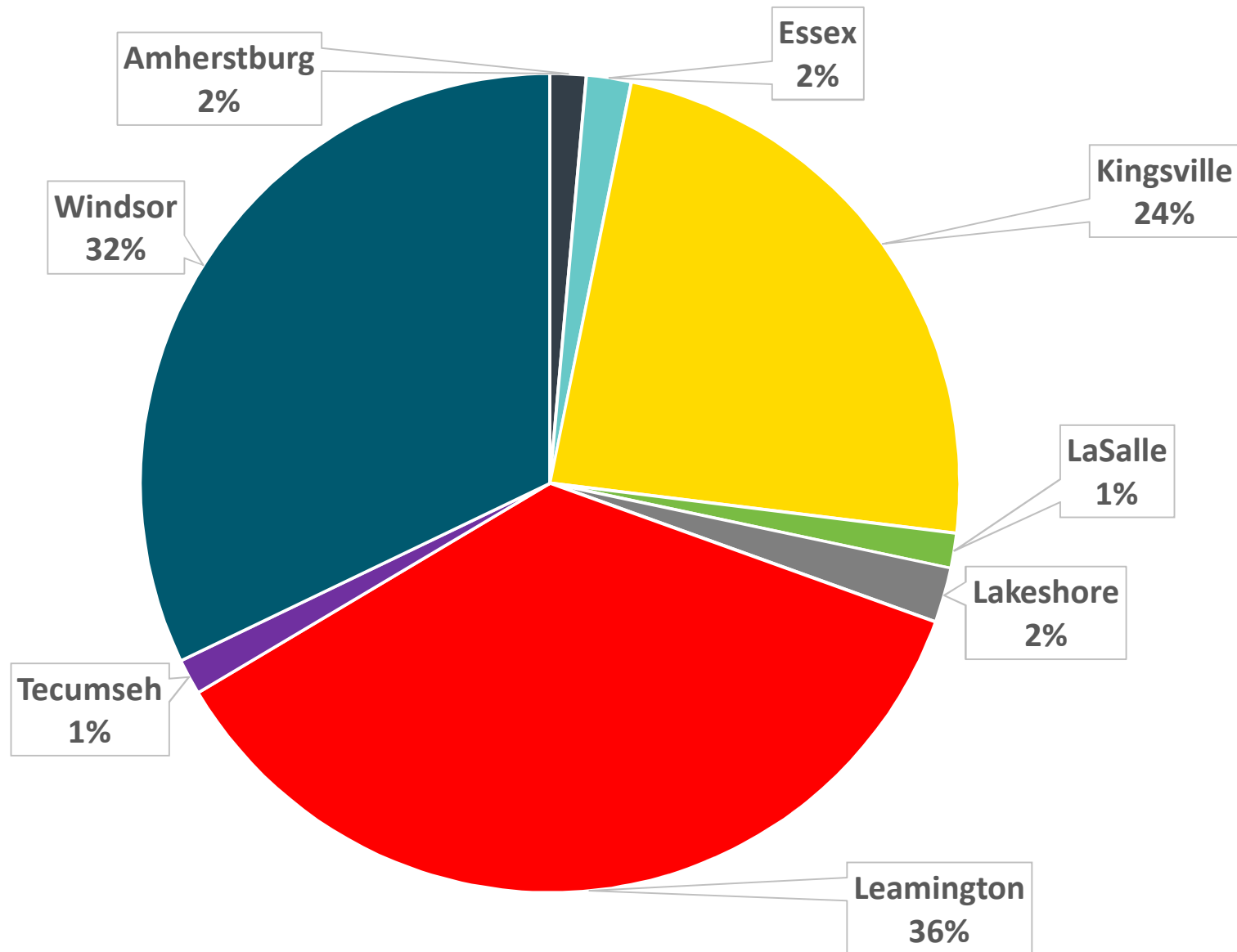
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Age & Sex Distribution



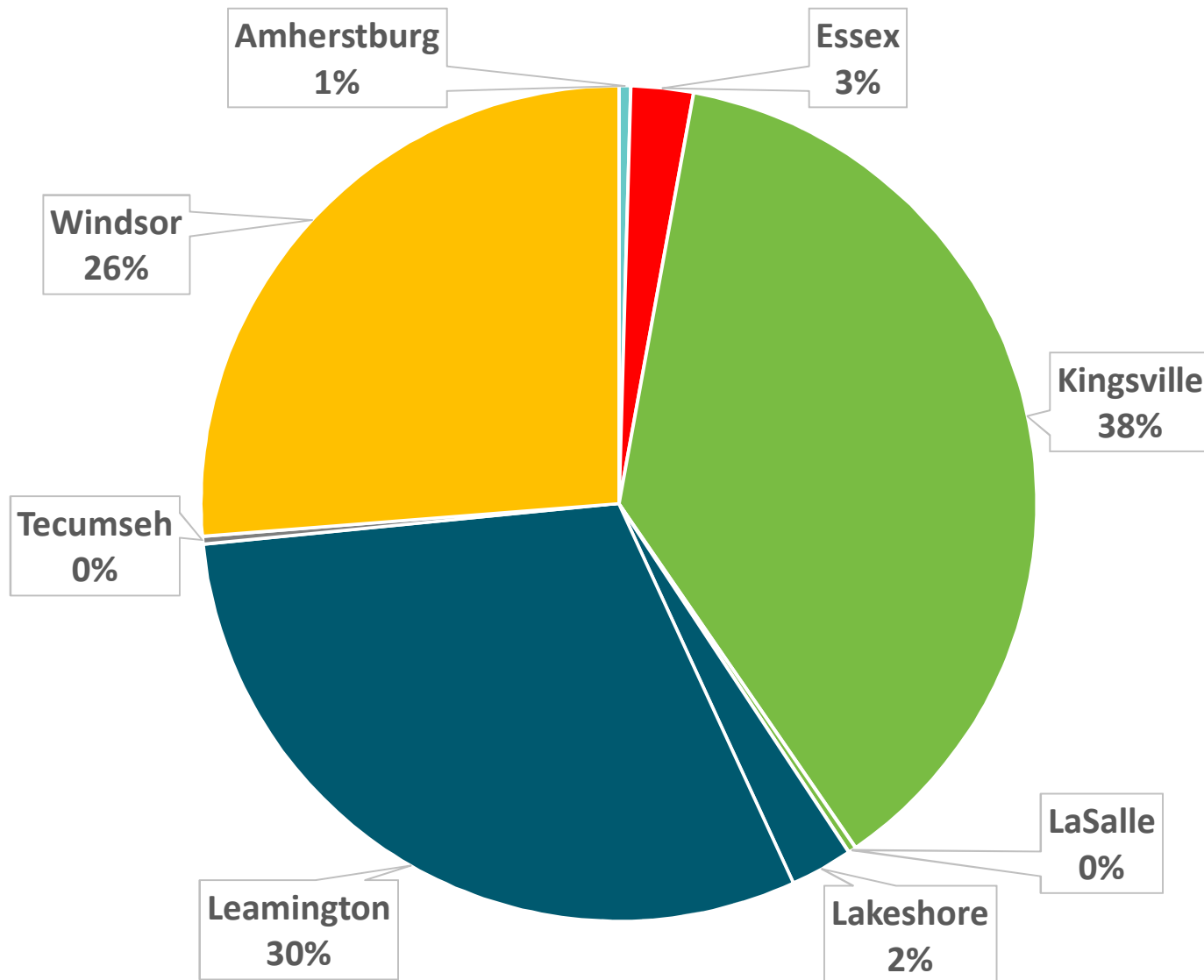
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Distribution of COVID-19 Cases by Municipality



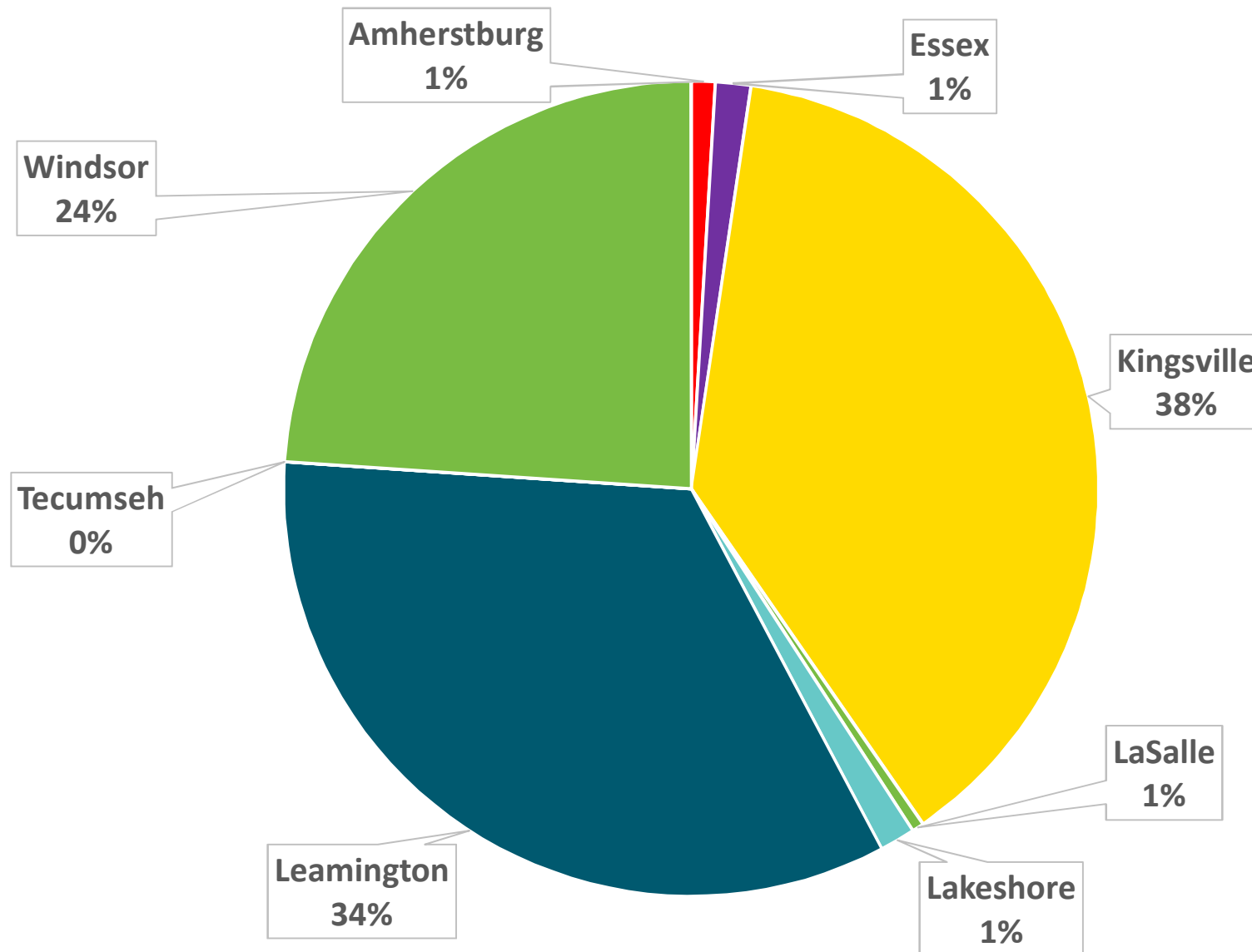
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Distribution of COVID-19 Cases by Municipality in last 30 days (June 30 to July 29)



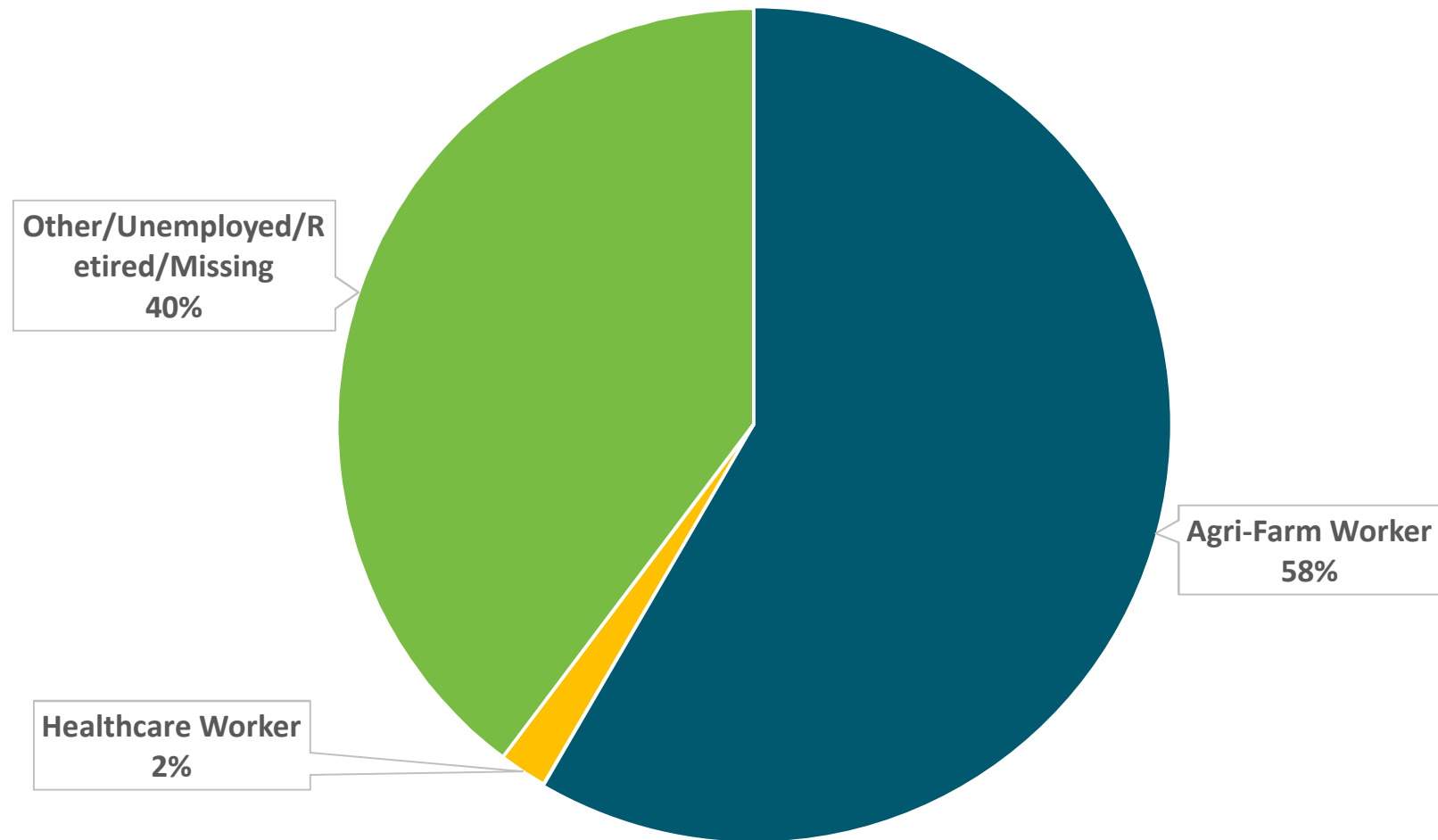
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Distribution of COVID-19 Cases by Municipality in last 7 days (July 23 to July 29)

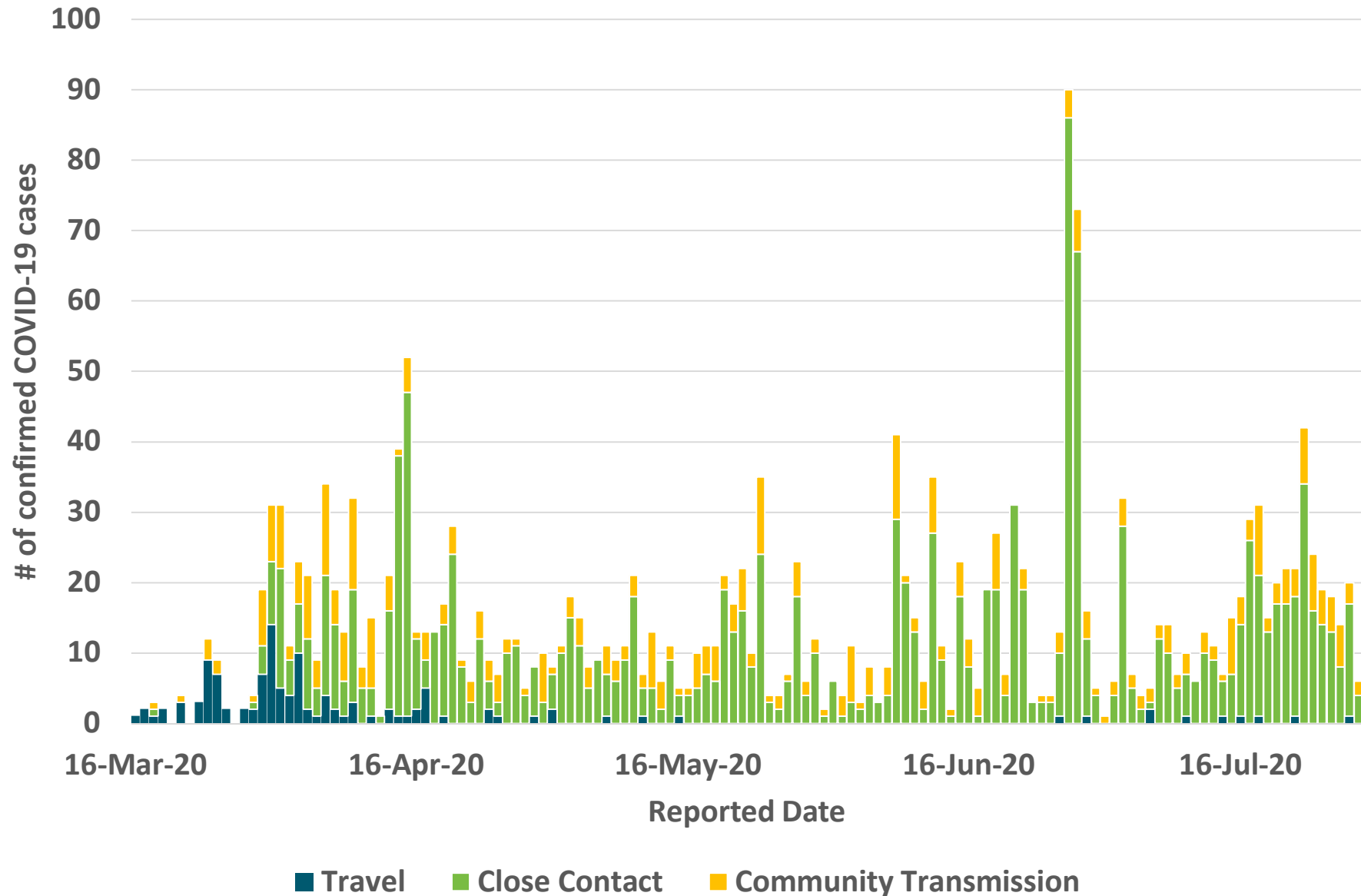


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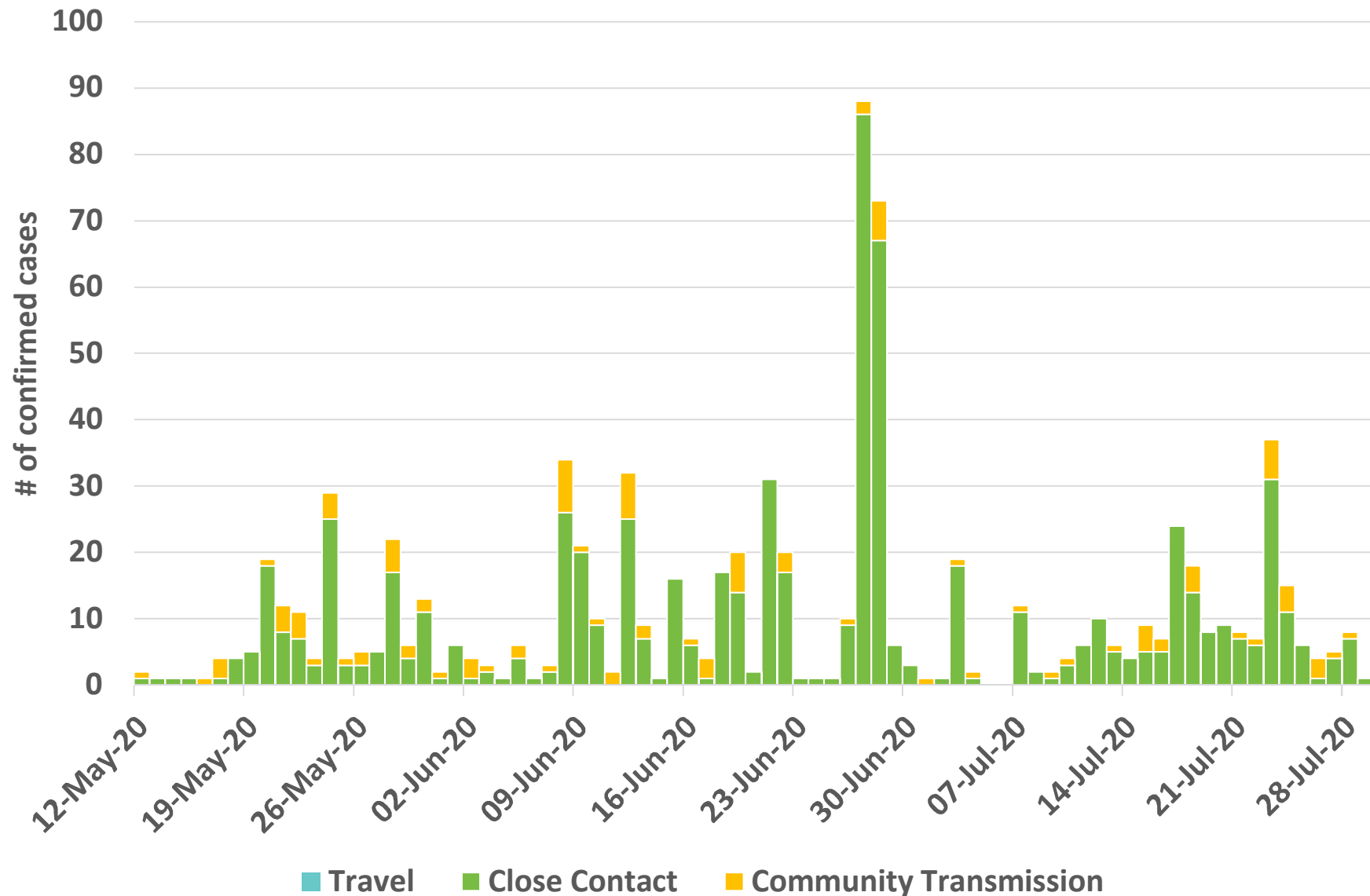
Distribution of COVID-19 Cases by Occupation in the last 7 days (July 23rd to July 29th)



Exposure History by Reported Date

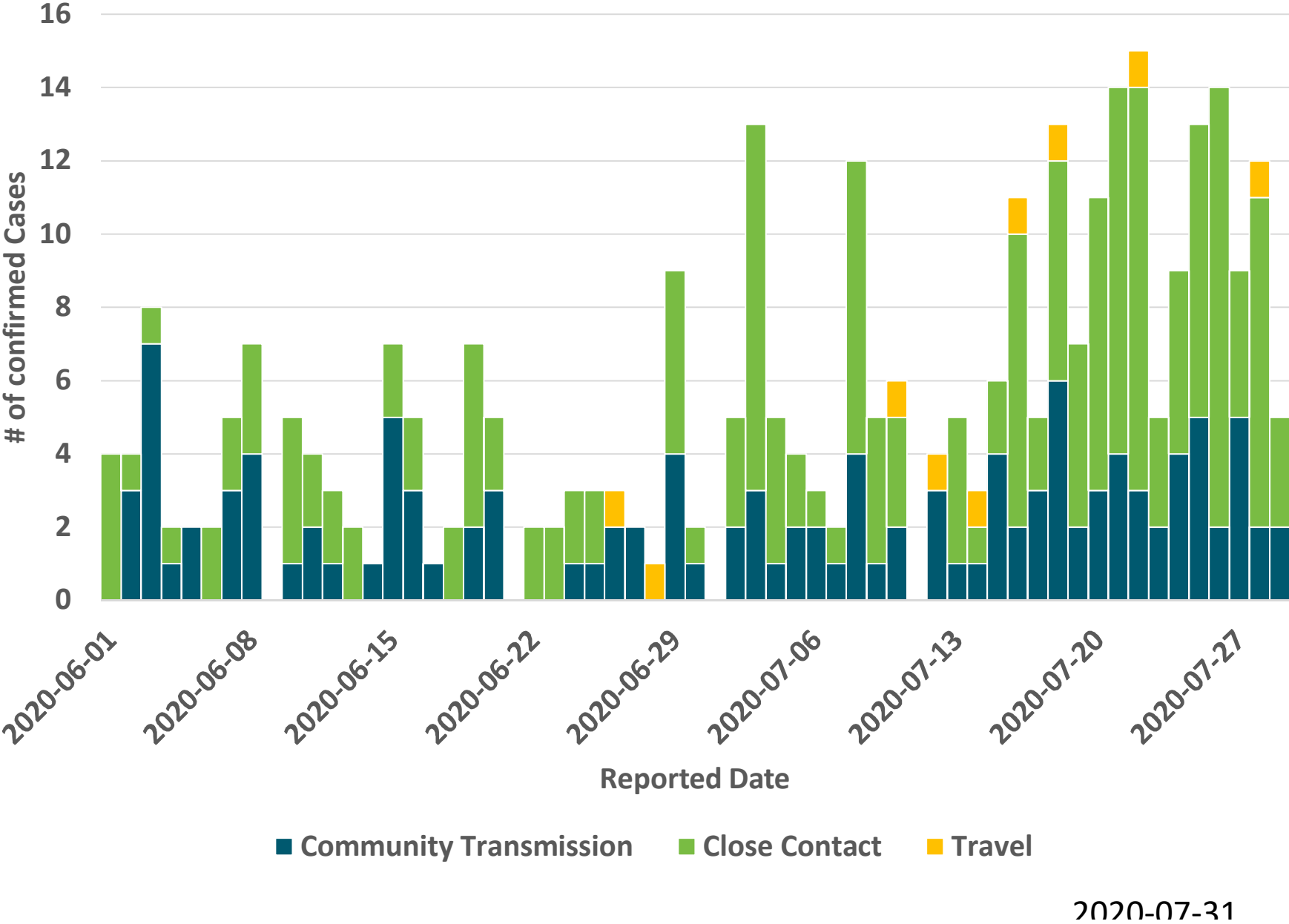


Exposure History by Reported Date Among Agri-Farm Workers

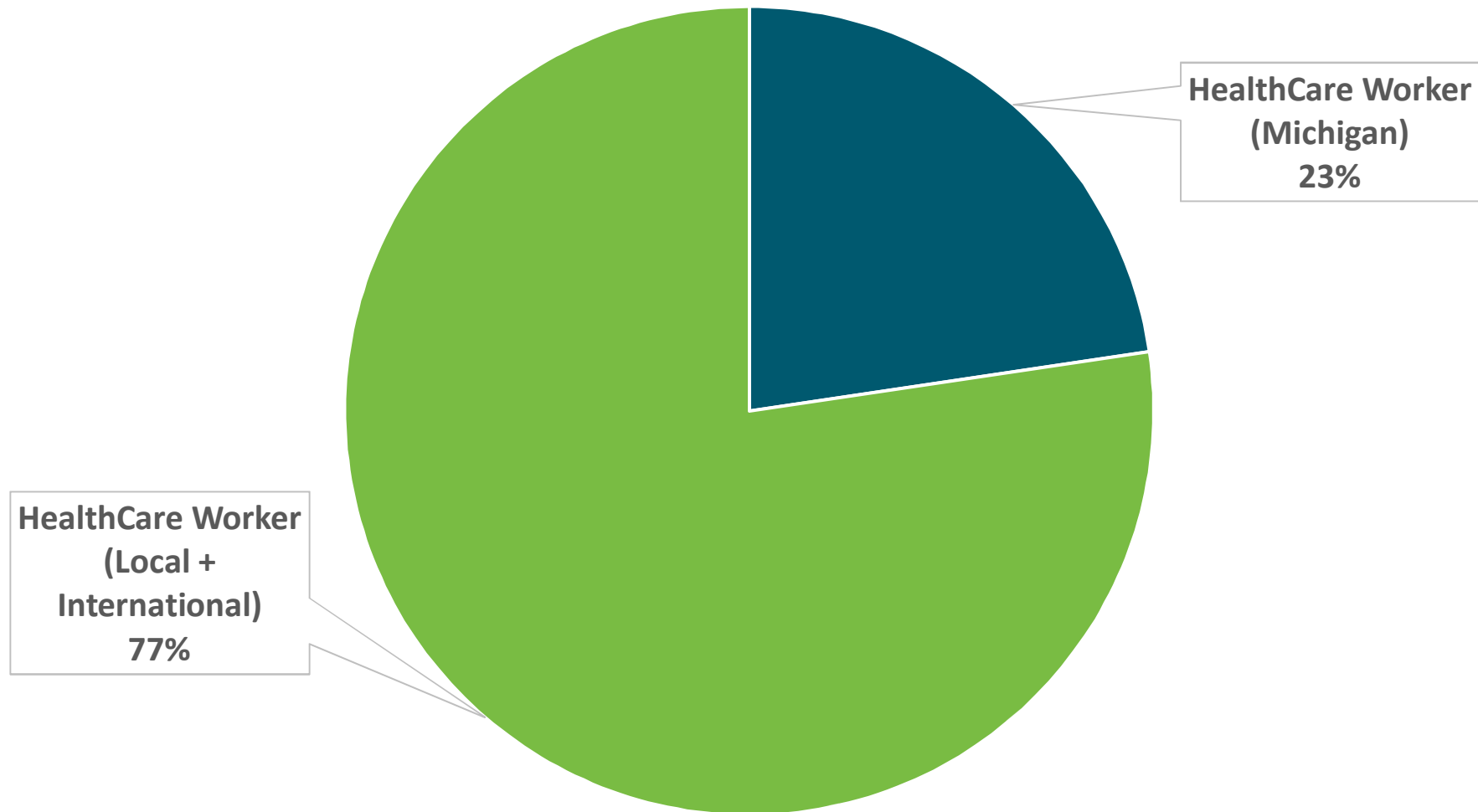


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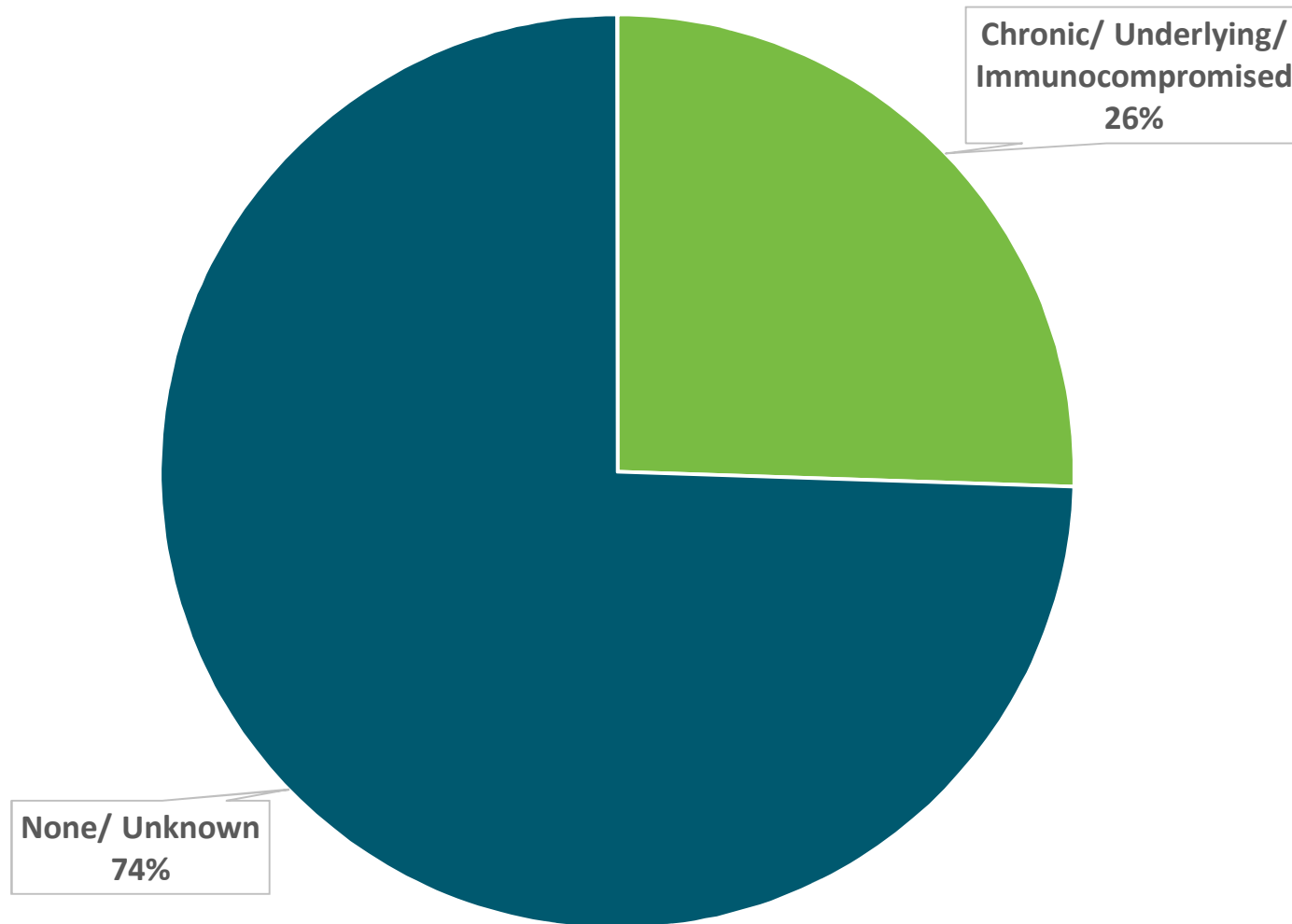
Exposure History by Reported Date Among Non-AgriFarm Cases



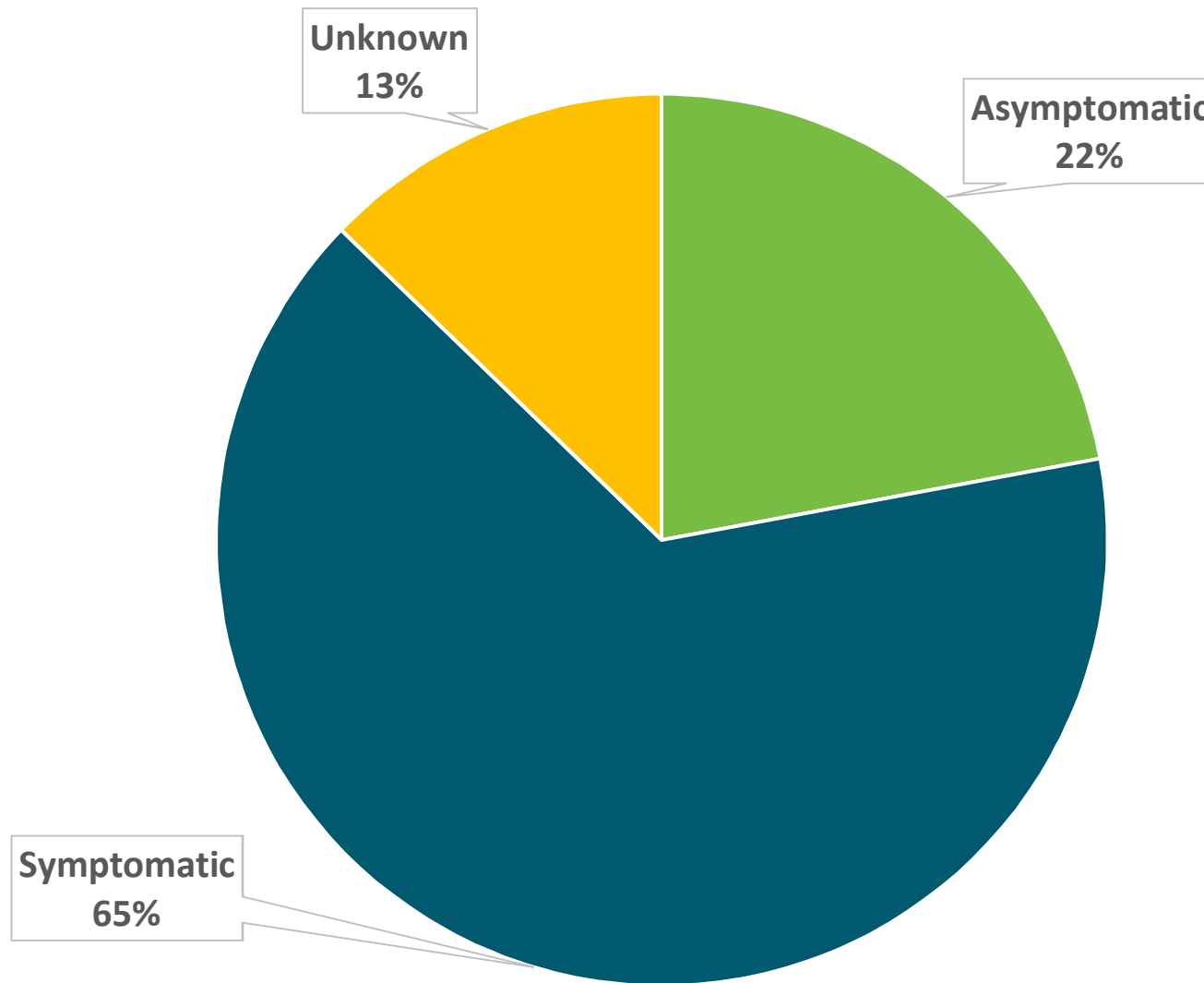
COVID-19 Cases by Healthcare Worker



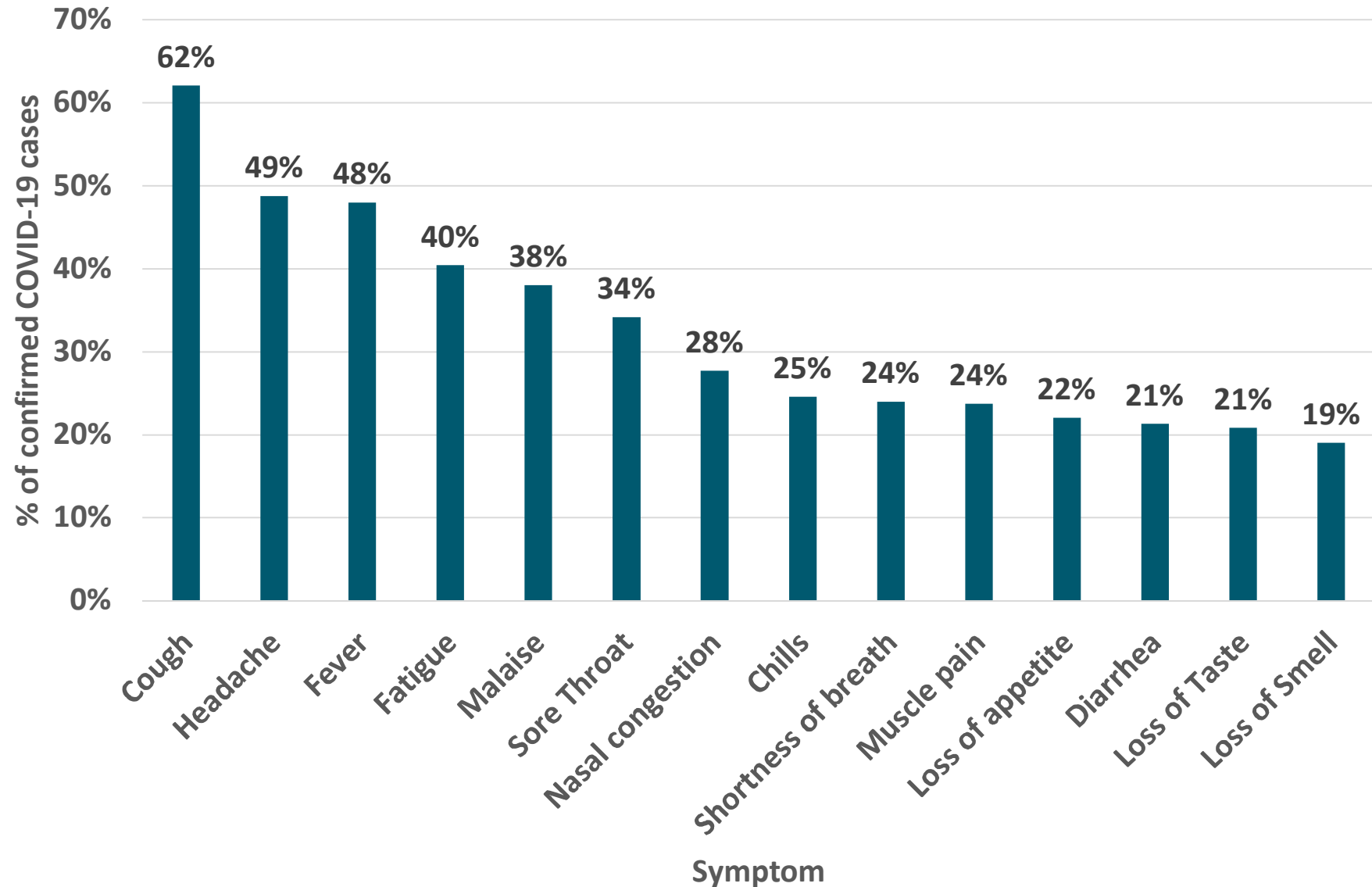
Underlying Health Conditions



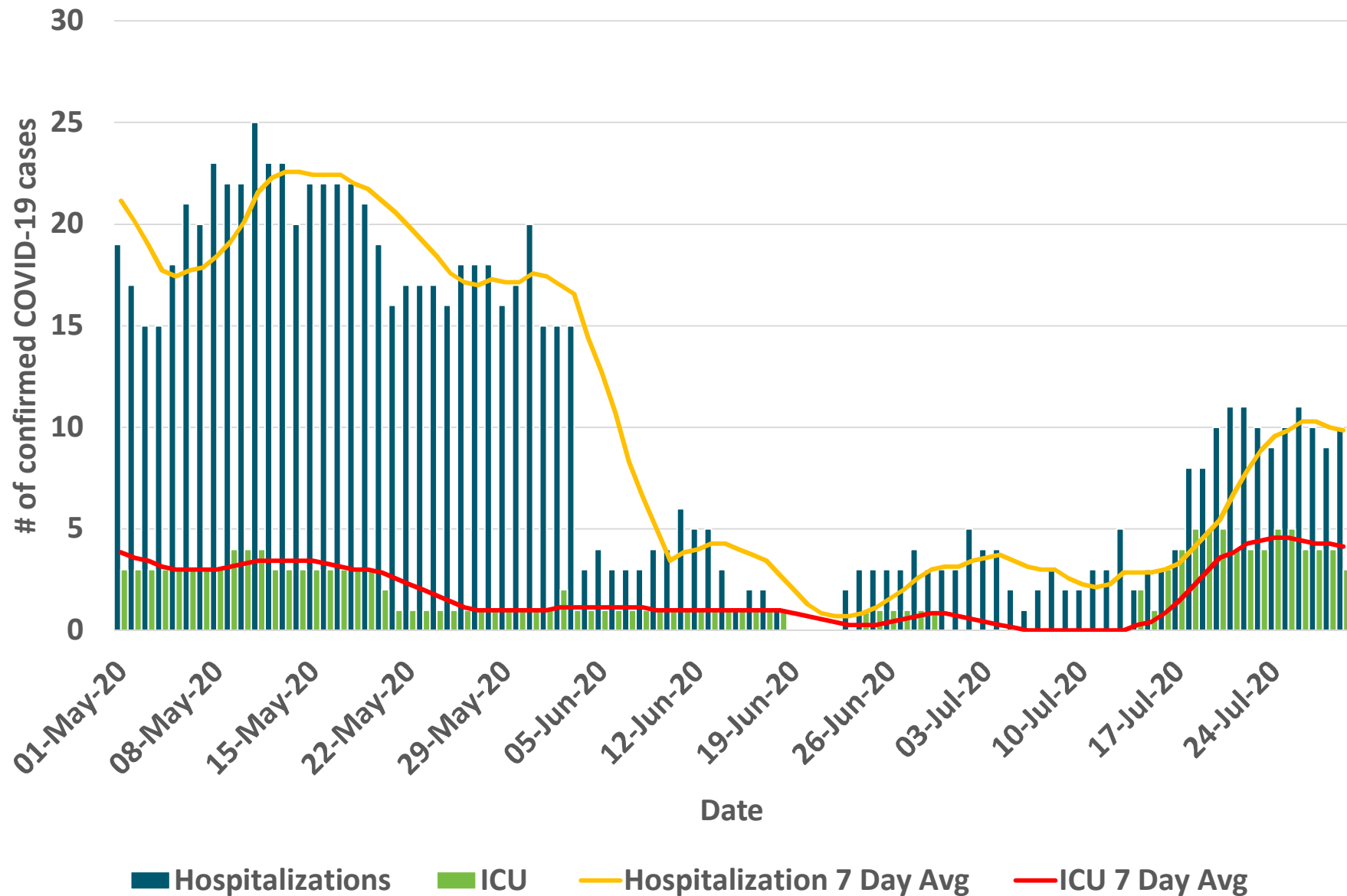
Symptomatic Versus Asymptomatic Cases



Most Common Symptoms

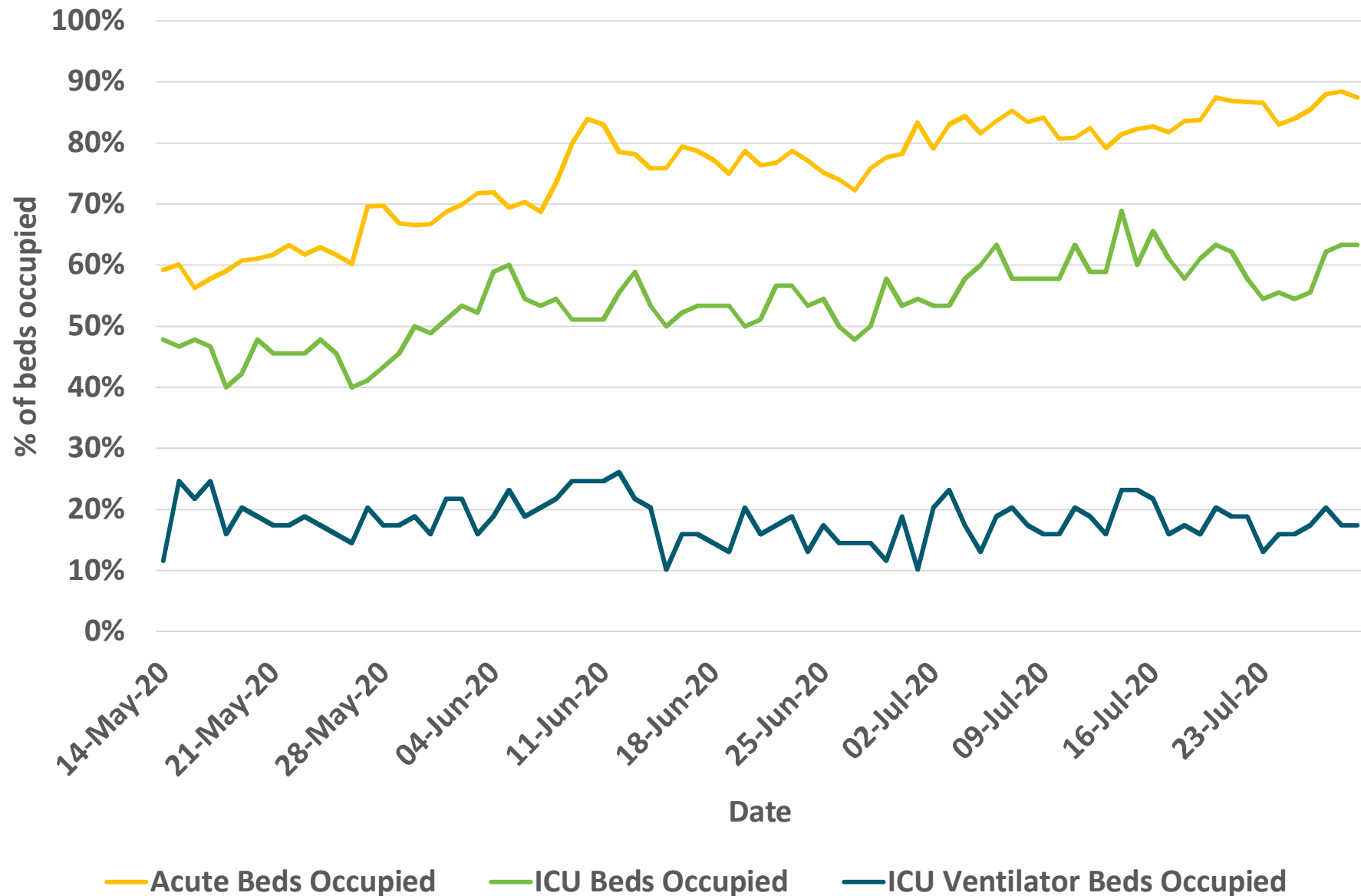


Hospitalizations & ICU for COVID-19



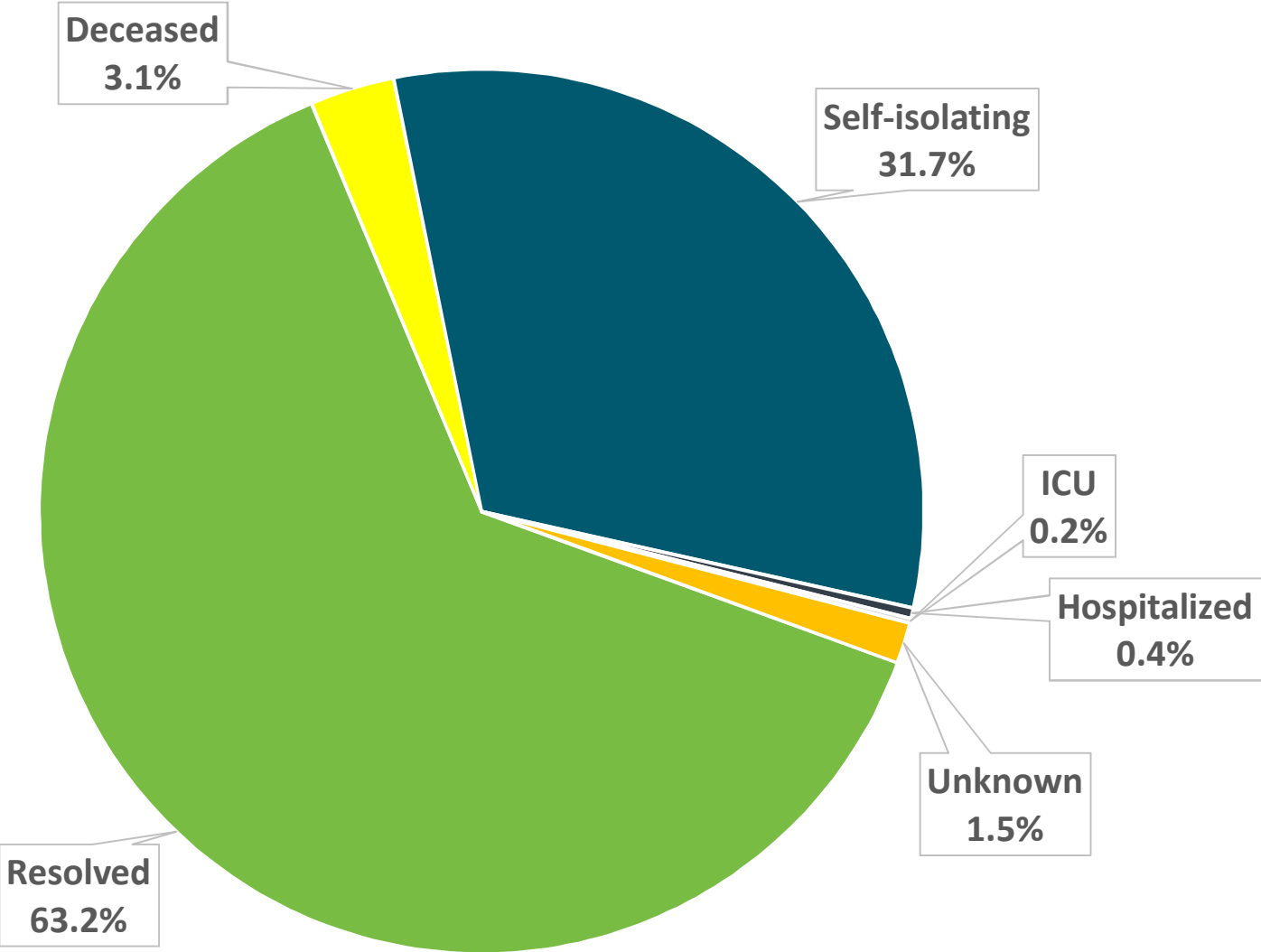
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Health Care System Capacity

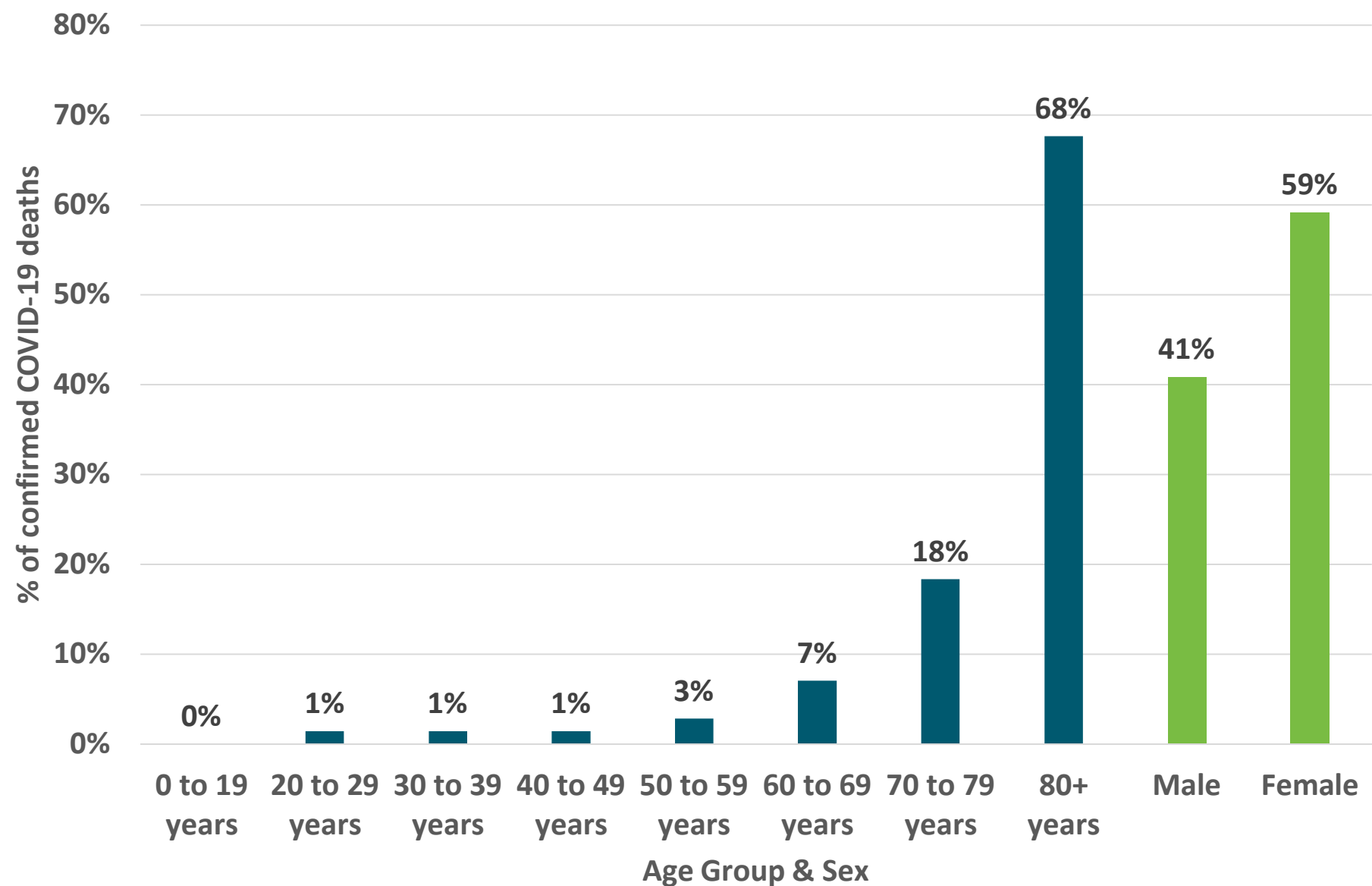


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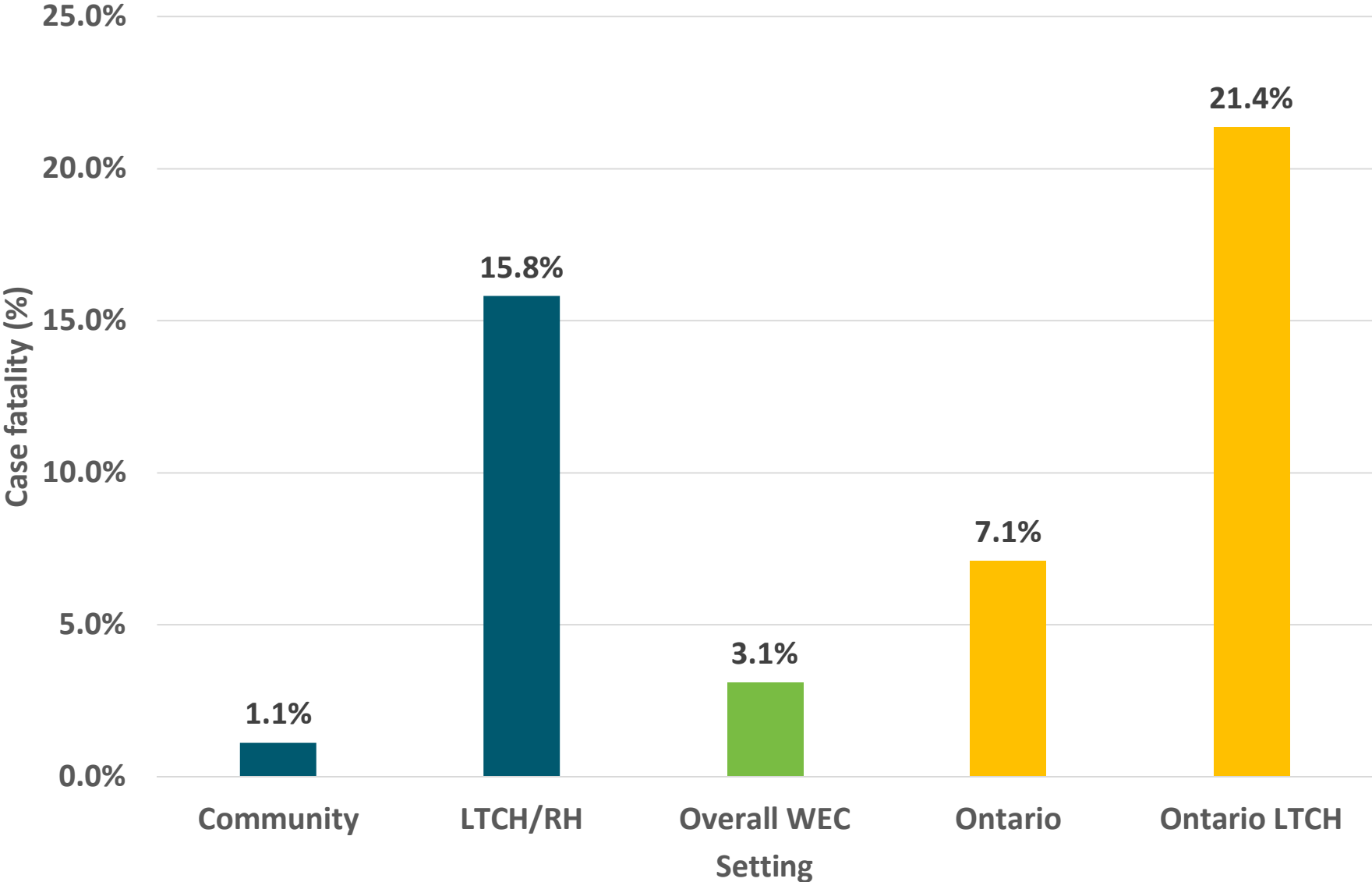
Current Outcomes



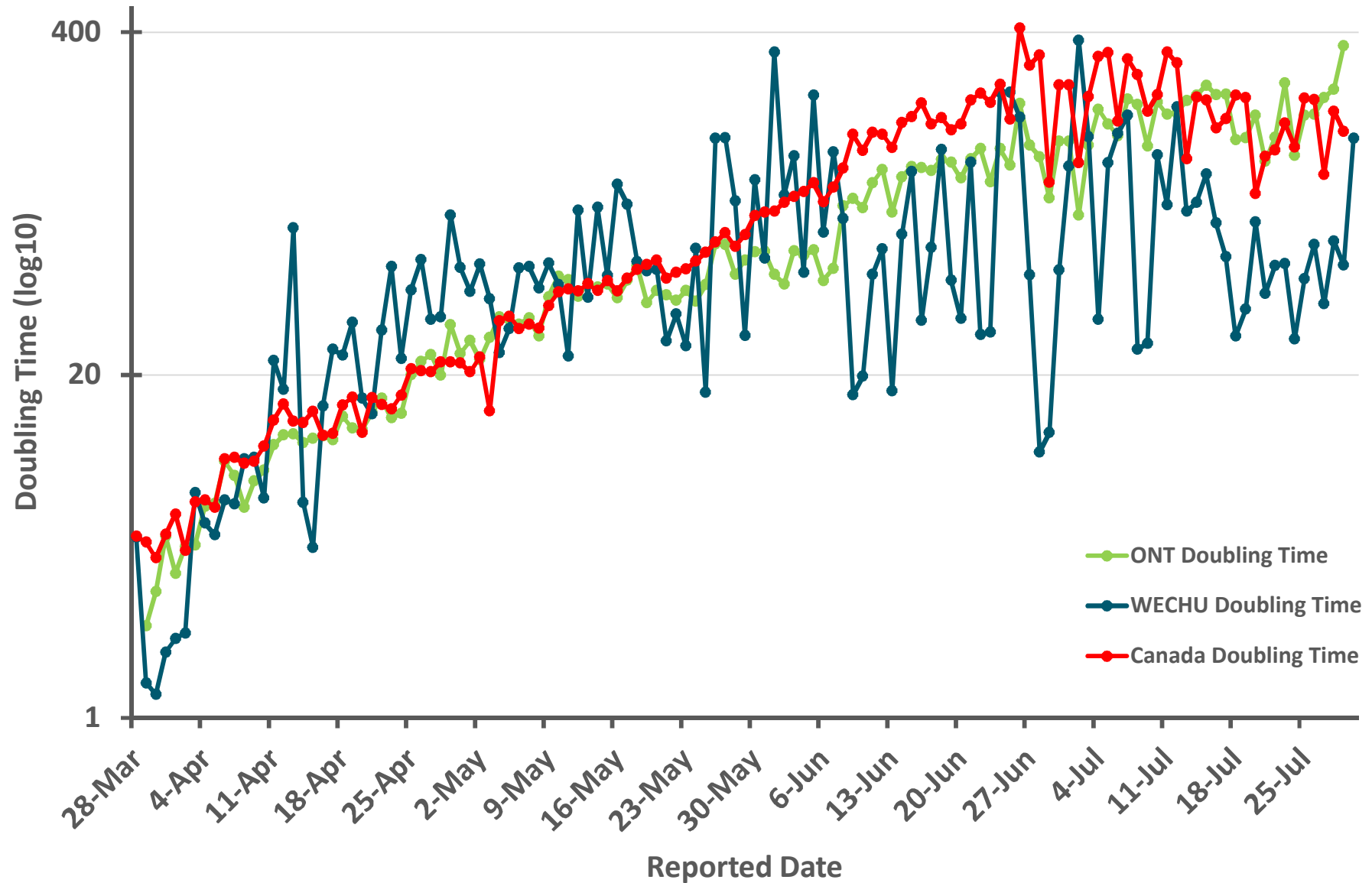
Age & Sex Breakdown of COVID-19 Deaths



Case Fatality Rate

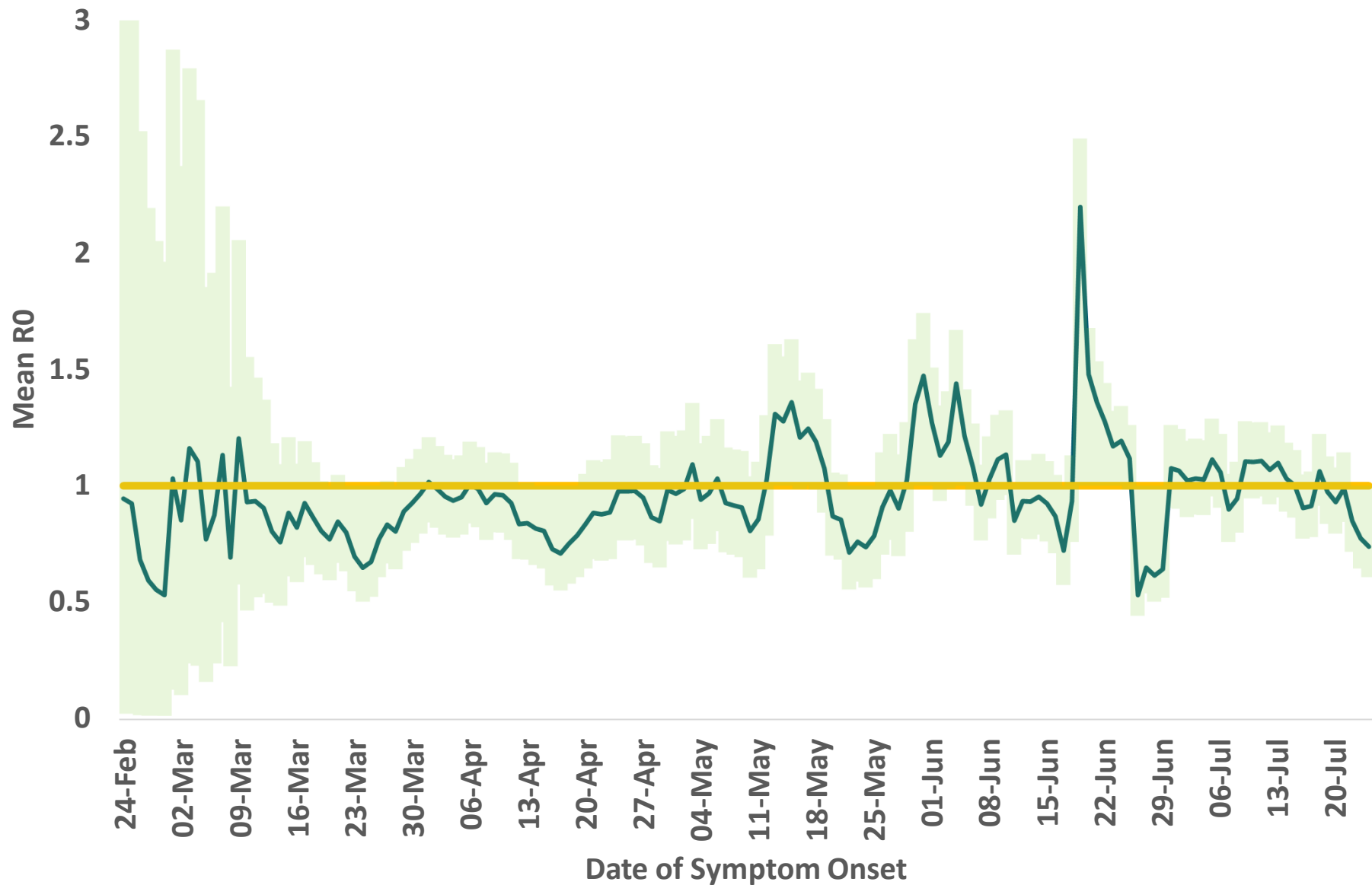


Doubling Time (Day over Day Comparison)



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Mean R0 (Effective)



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Summary

- Windsor-Essex is seeing more cases outside of the agri-farm sector
- The primary source of exposure is through close contact with a confirmed case
- COVID-19 related hospitalizations and ICU have increased in the last 14 days
- R_0 (effective) value is 0.55 indicating a decrease in transmission in Windsor-Essex
- BUT we have seen variations in the past 1.5 months