



Hamilton

COVID-19 Situation Report & Organizational Update

Board of Health

May 2, 2022

Overview

1. Overall Status
2. COVID-19 Situation Report
3. Scarsin Forecast
4. COVID-19 Vaccine Update

Overall Status

- Seeing signs that Hamilton is nearing or has reached the peak in COVID-19 transmission of current wave
 - Reported cases & test positivity have plateaued since mid-April 2022
 - Wastewater indicators remain heightened, but recent sample dates are decreasing
- Updated forecast indicates that COVID-19 hospital admissions are anticipated to peak in early May 2022 and decline to pre-Omicron levels by July 2022

Overall Status

- Vaccination Status (As of April 28, 2022):
 - 90.5% of 12 yrs+ with one dose, 88.2% with two doses
 - 53.4% of 5-11yrs with one dose, 38.1% with two doses
 - 57.7% of 18 yrs+ with a 3rd dose, 67.0% of 40 yrs+
 - 64.8% of eligible 60 yrs+ with a 4th dose

- Make sure you are up-to-date with your vaccines

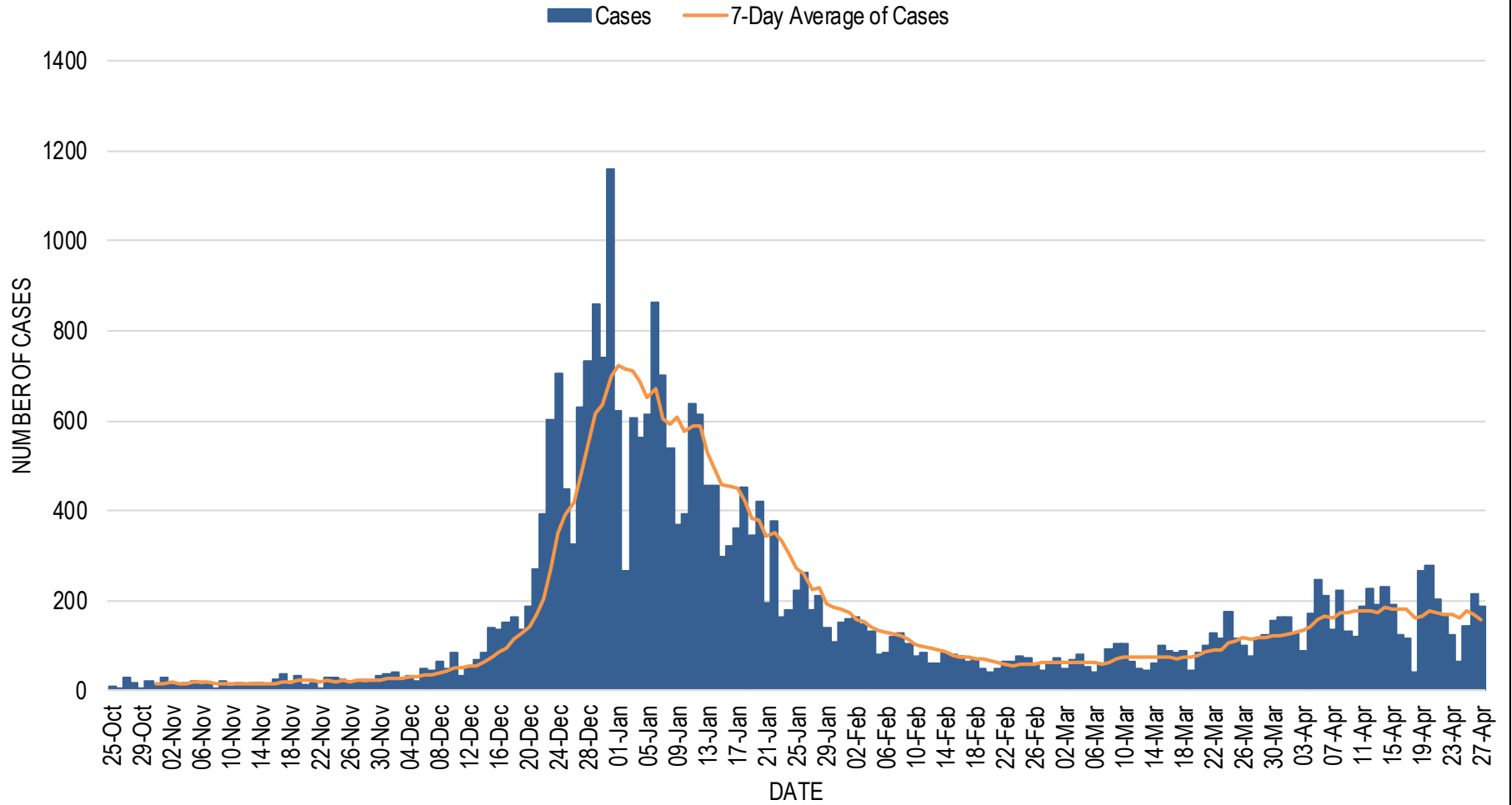
Overall Status

- Hamiltonians are encouraged to use protective measures to reduce serious health consequences from COVID-19 infections
 - Get vaccinated and stay up-to-date with your vaccines
 - Wear a mask when indoors and/or when unable to distance
 - Stay home if you have COVID-19 symptoms
 - Speak to your healthcare provider, know in advance if you're eligible for treatment and where to access
 - Practice physical distancing

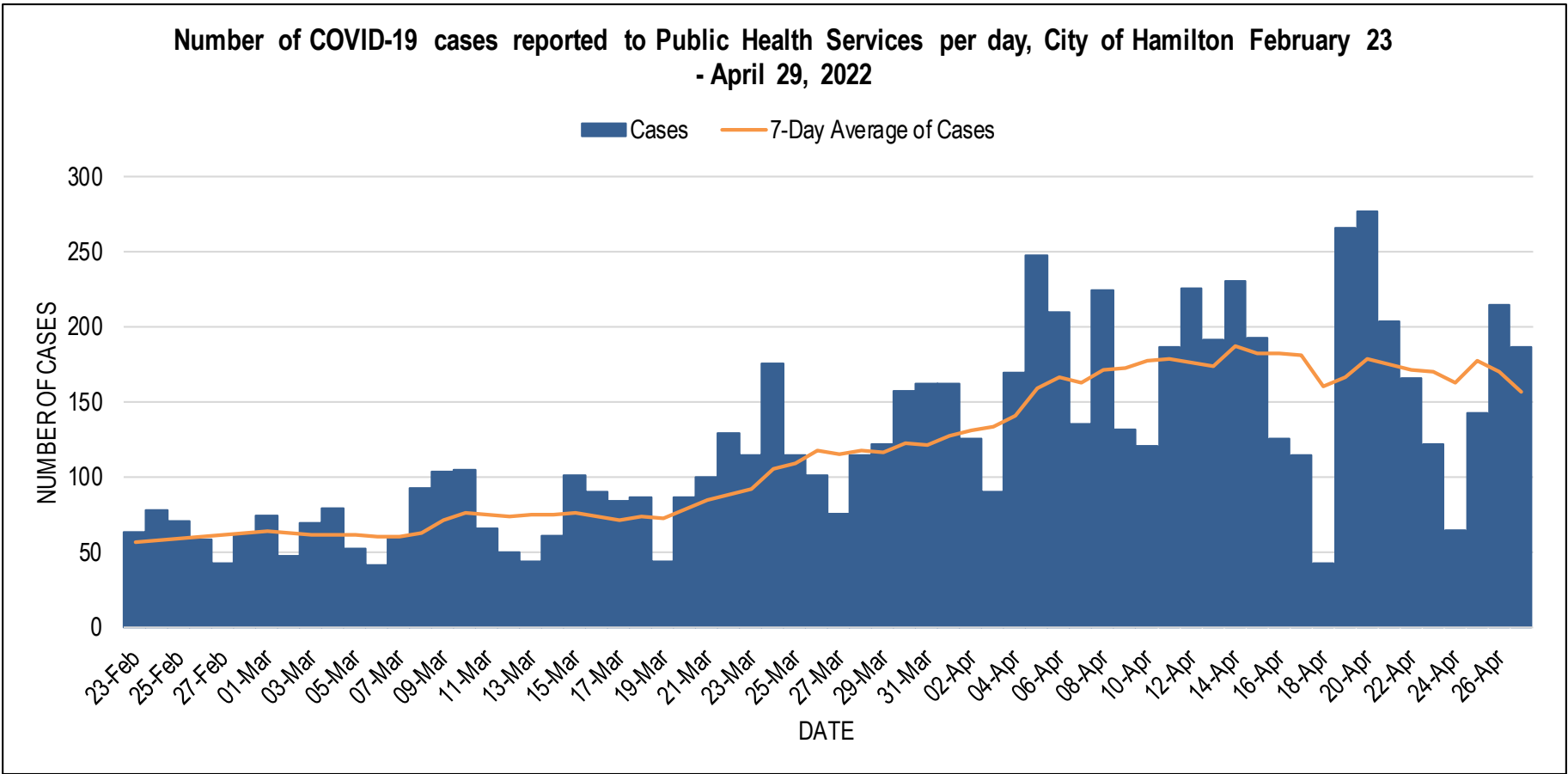
SITUATION REPORT

Erin Rodenburg, Epidemiologist

Number of COVID-19 cases reported to Public Health Services per day, City of Hamilton November 1, 2021 - April 29, 2022



Number of COVID-19 cases reported to Public Health Services per day, City of Hamilton February 23 - April 29, 2022

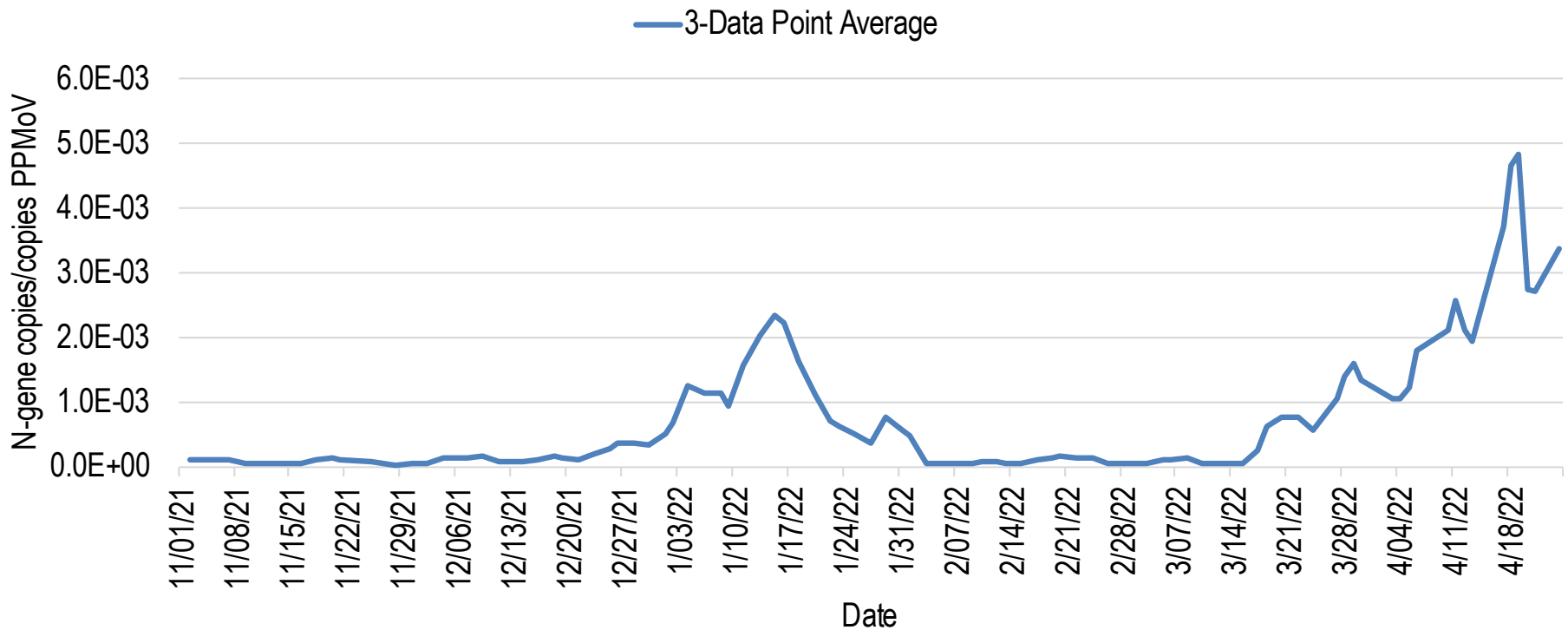


Key Messages

- COVID-19 Case data is known to be underestimated due to Polymerase Chain Reaction (PCR) test eligibility, however it remains an important measure to determine the trends of COVID-19 transmission in our community
- As of April 29, 2022, the 7-day average of reported cases is **157**

Wastewater Surveillance

COVID-19 Wastewater Signal, City of Hamilton (November 1, 2021 - April 25, 2022)

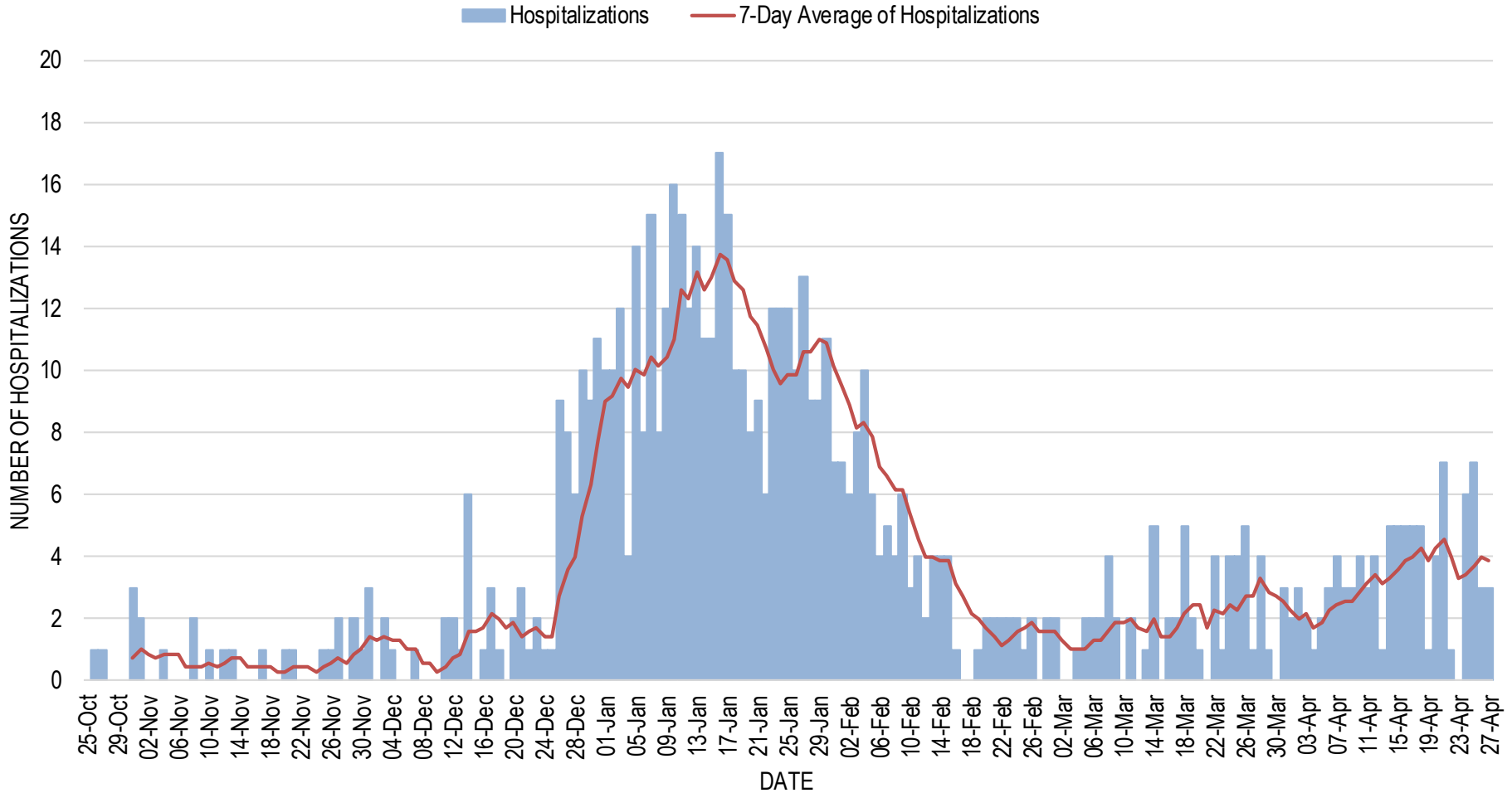


Key Messages

- COVID-19 Wastewater Surveillance is a new tool being used by Hamilton Public Health Services to understand community transmission
- The 3-point average of viral signal for detecting COVID-19 in wastewater samples has most recently fluctuated with an overall decrease

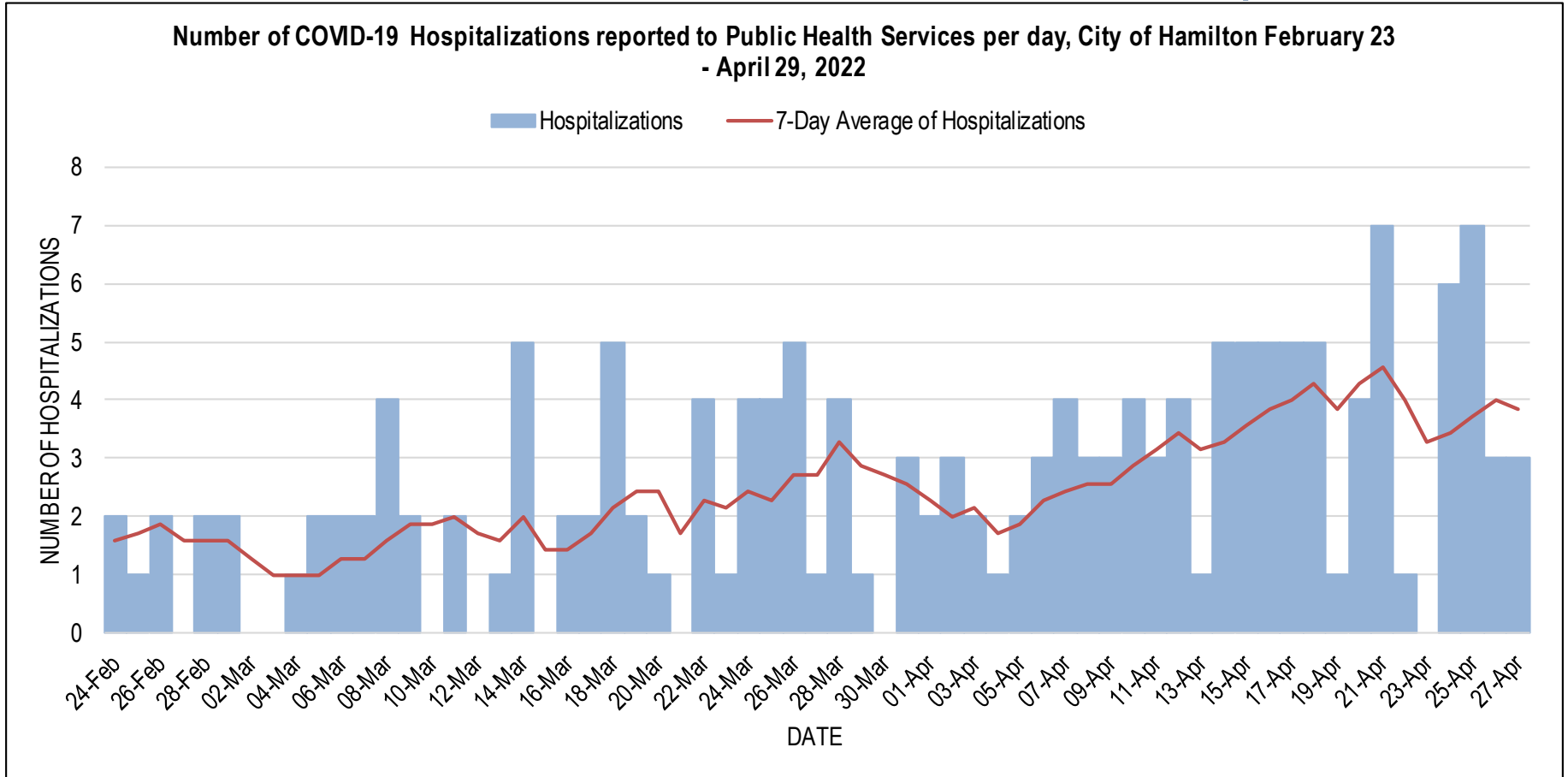
Hospitalizations

Number of COVID-19 Hospitalizations reported to Public Health Services per day, City of Hamilton November 1, 2021 - April 29, 2022



Hospitalizations

Number of COVID-19 Hospitalizations reported to Public Health Services per day, City of Hamilton February 23 - April 29, 2022

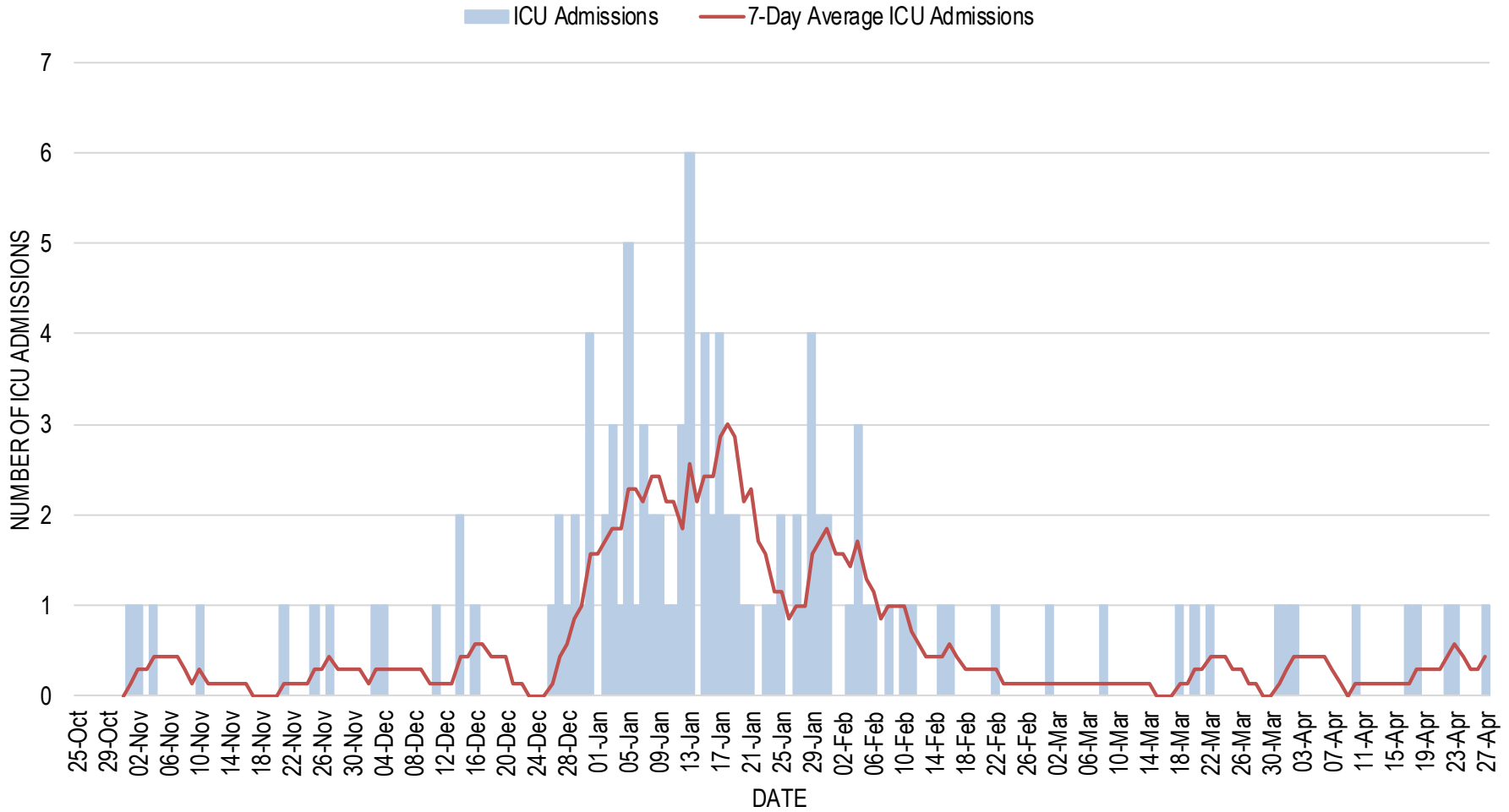


Key Messages

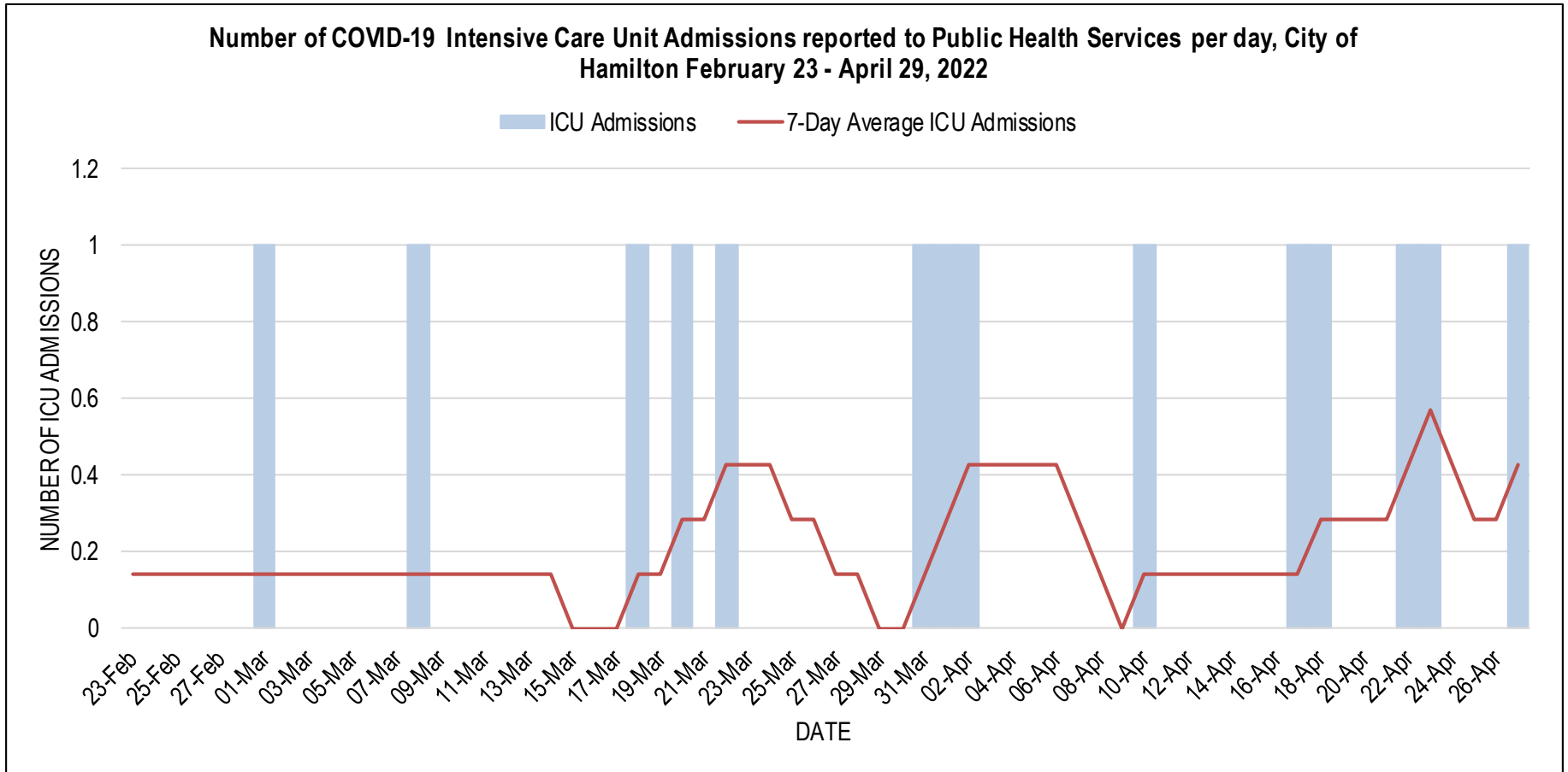
- COVID-19 Hospitalizations are fluctuating and remain heightened
- As of April 29, 2022, there were approximately **3.9** new COVID-19 hospitalizations per day reported to Hamilton Public Health

Intensive Care Unit (ICU) Admissions

Number of COVID-19 Intensive Care Unit Admissions reported to Public Health Services per day, City of Hamilton November 1, 2021 - April 29, 2022



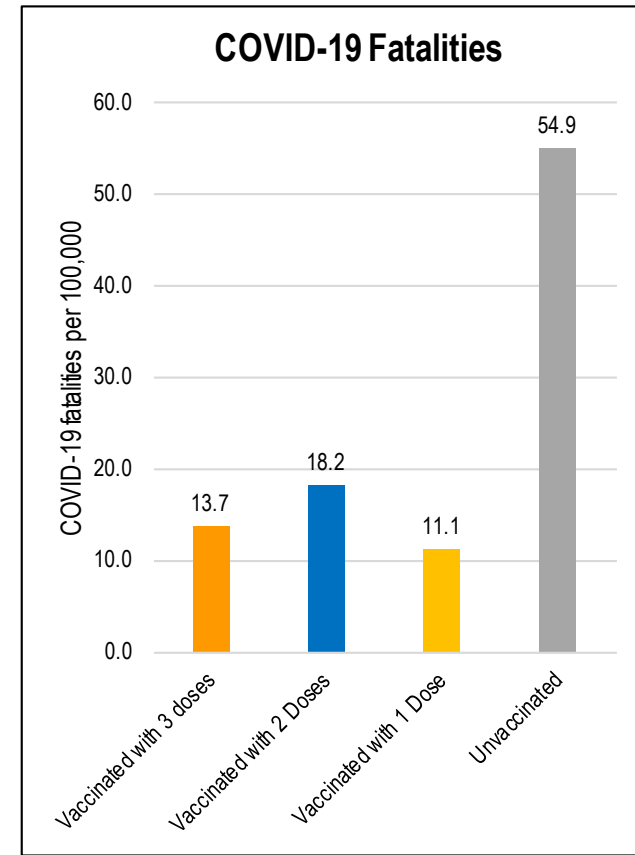
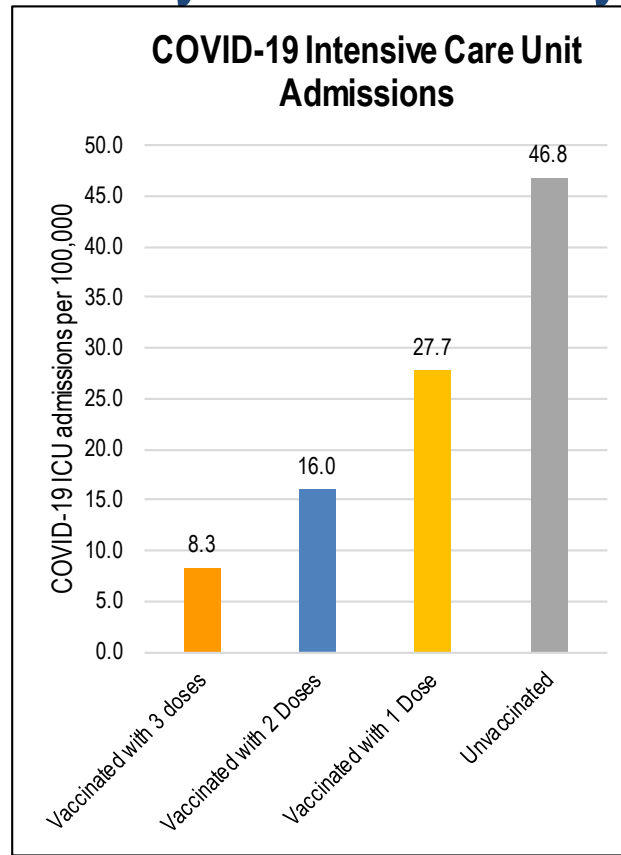
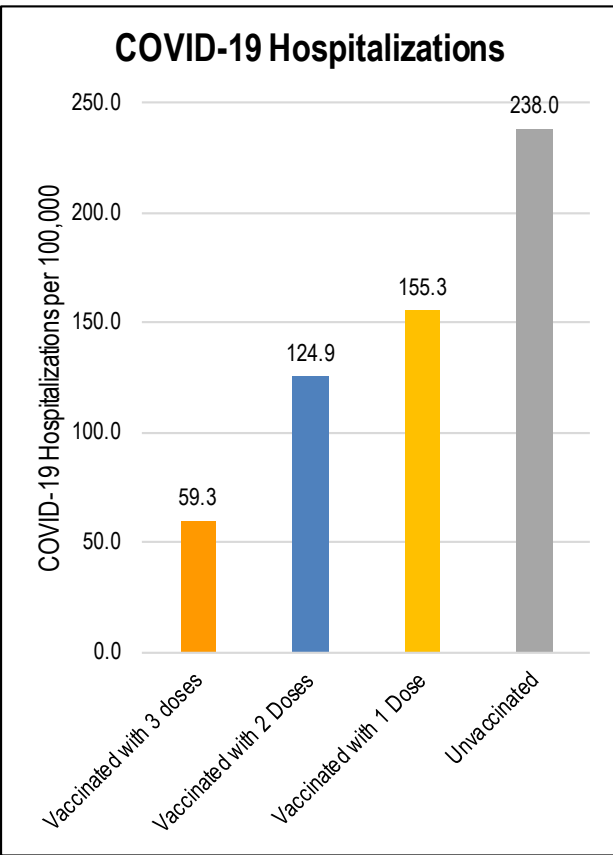
Intensive Care Unit (ICU) Admissions



Key Messages

- COVID-19 Intensive Care Unit admissions and fatalities remain low
- As of April 29, 2022, there were **0.4** new COVID-19 intensive care unit admissions and **0.1** new COVID-19 fatalities per day reported to Hamilton Public Health

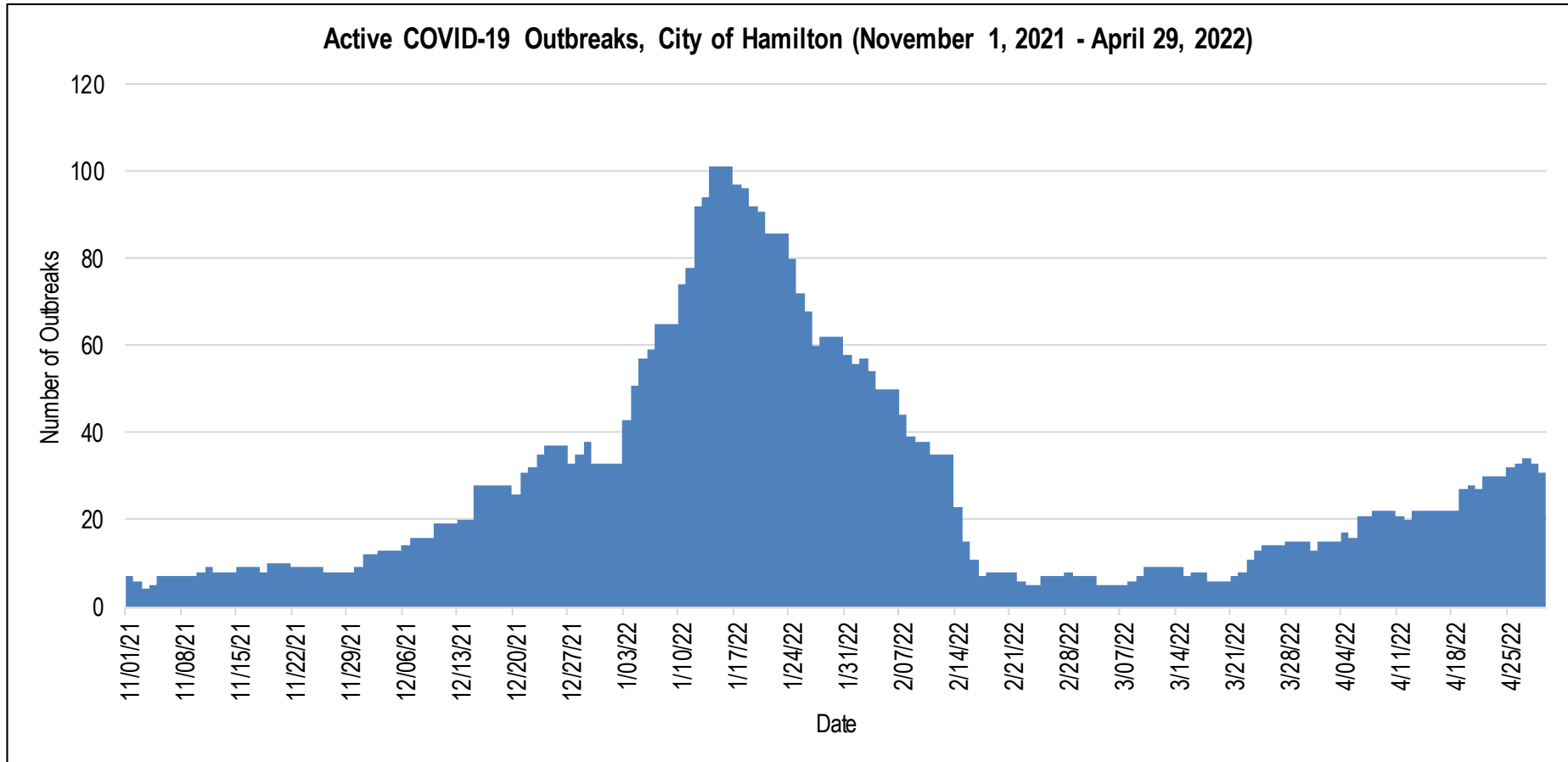
Severity Indicators by Vaccination Status



Key Messages

- The risk of severe outcome due to COVID-19 continues to be significantly lower for those who are vaccinated compared to those unvaccinated
- A 3rd dose of a COVID-19 vaccine provides even more protection against these outcomes, highlighting the continued importance of vaccination

Active outbreaks



Key Messages

- The number of active COVID-19 outbreaks continues to increase. As of April 29, 2022 there were **31** active outbreaks
- Despite this rise in COVID-19 outbreaks, the severe outcomes associated with these outbreaks remain low

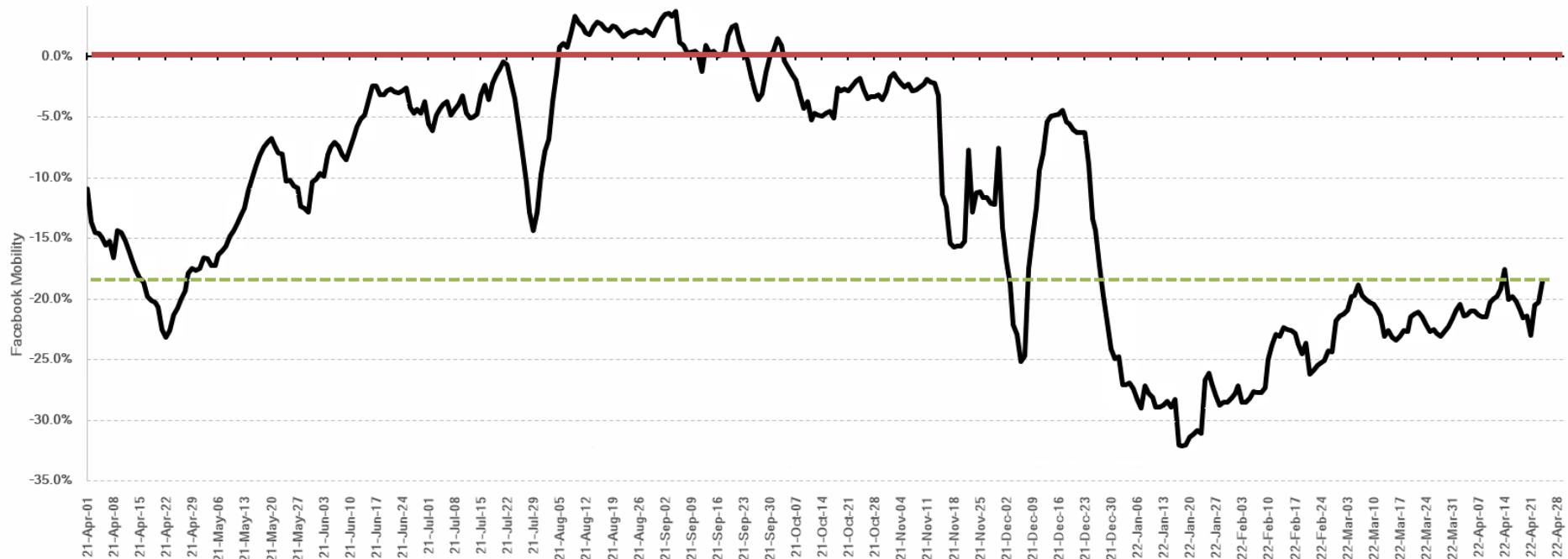
SCARSIN FORECAST

Ruth Sanderson, Epidemiologist

Scarsin Forecast Key Messages

- The forecast has been updated out until the end of August 2022 and includes:
 - The increased transmission impact of the Omicron subvariant BA.2
 - Planned 4th dose booster shots aligned with the recent government announcement
- Mobility continues at levels below pre-pandemic levels
- Forecast focuses on the impact of COVID-19 on more severe outcomes:
 - Hospital admissions due to COVID-19 are forecast to peak in early May 2022 and could reach approximately six new admissions per day among Hamiltonians
 - Higher hospital admission levels will likely be sustained to the end of June 2022 and then recede to pre-Omicron levels

Overall Mobility, Hamilton

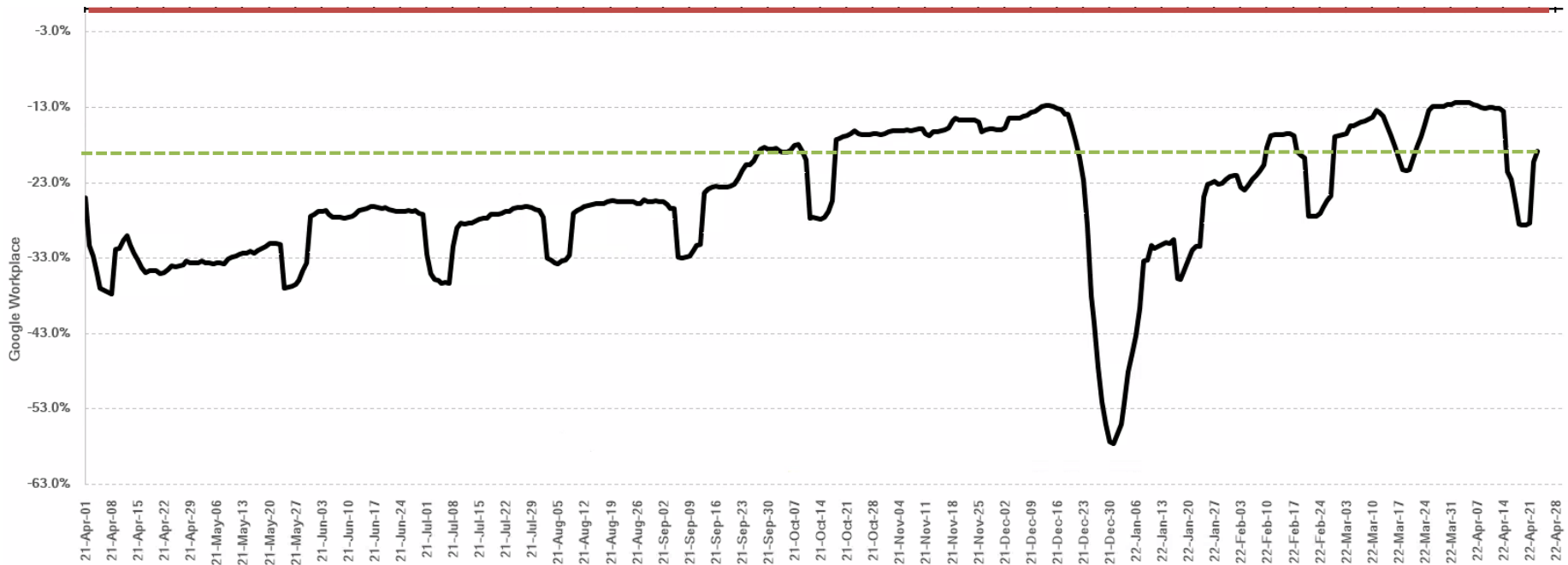


Data Source: Scarsin Decision Support System retrieved Apr 27, 2022

Key Messages:

- Overall, community mobility continues to remain low (and below pre-pandemic levels)
- It has levelled off at 19% below pre-pandemic levels as of April 24, 2022

Workplace Mobility, Hamilton



Data Source: Scarsin Decision Support System retrieved Apr 27, 2022

Key Messages:

- Workplace mobility had leveled off at 13% below pre-pandemic levels. It dipped down during the most recent holiday and as of April 23, 2022, appeared to be returning to that level and was at 19% below pre-pandemic levels

Overview of Scenario and Assumptions

Base Scenario

Scenario Assumes:

- Public health measures aligned with Ontario's reopening plan including the continuation of masking in higher risk settings to Jun 11, 2022
- Omicron severity is approximately 36% severity of Delta
- Transmission rates adjusted for increased transmission of Omicron subvariant BA.2 at 1.3 times that of BA.1. Assume BA.2 at 95% of cases as of Apr 30, 2022
- Transmission rates were aligned with current hospital actuals
- Comprehensive waning immunity, 2nd and 3rd dose immunity incorporated as well as waning immunity for those infected at 210 days
- Vaccinations updated (included 4th doses) to align with Hamilton's actuals and announced booster doses out to the end of Dec 2022

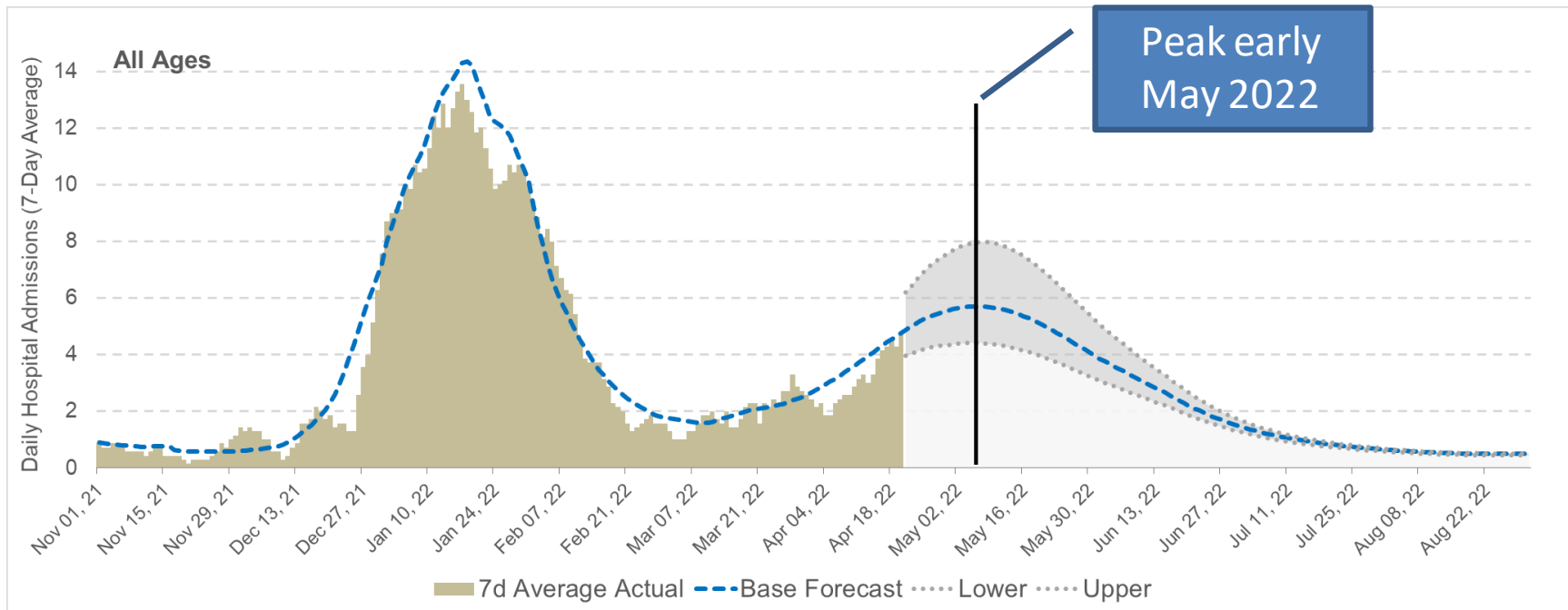
Limitation:

- Challenging to model the spread of COVID-19 due to major changes in testing practices in late Dec 2021, which led to increased undercounting through identified lab-confirmed cases

Updated Data:

- Case/ hospital/ death data retrieved Sun Apr 25, 2022
- Updated vaccination and mobility data Sun Apr 25, 2022

Scarsin Forecast COVID-19 Hospital Admissions among Hamiltonians

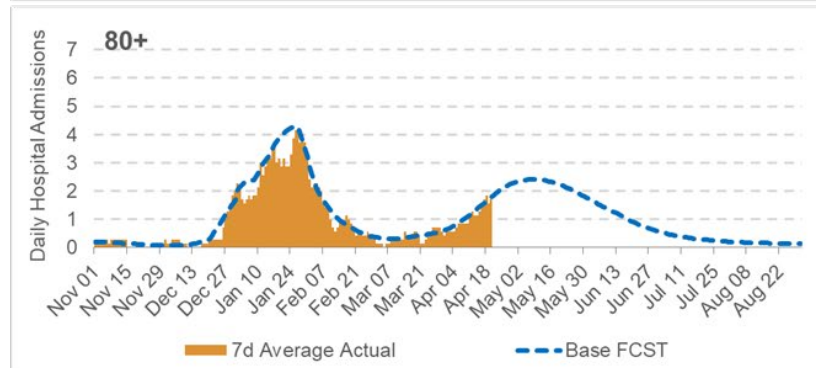
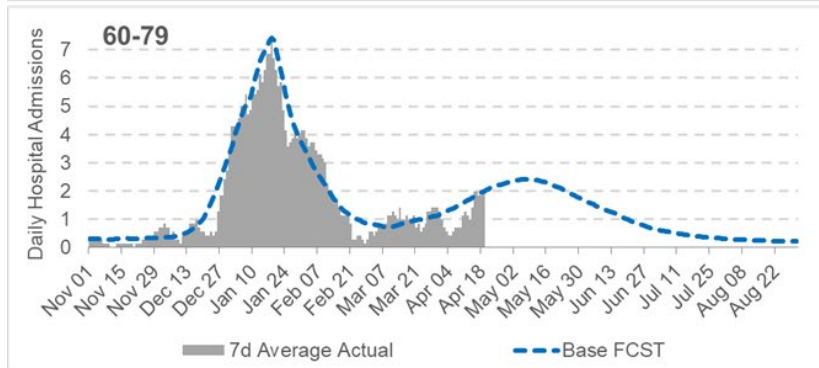
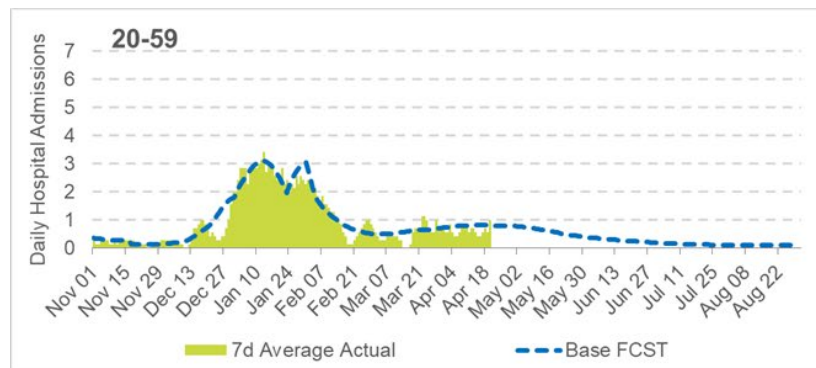
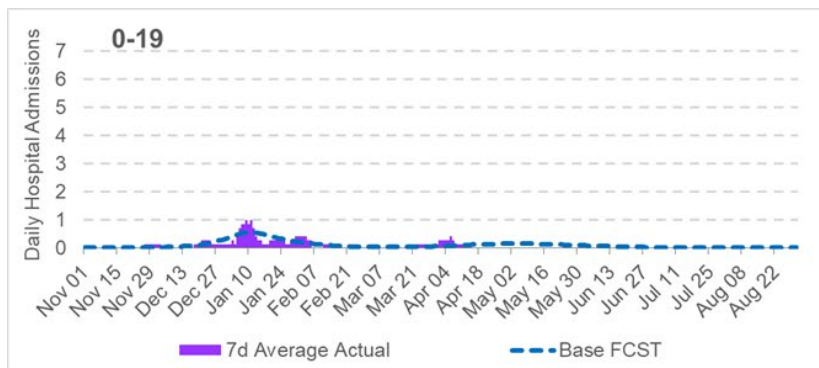


Data Source: Scarsin Decision Support System retrieved Apr 25, 2022

Key Messages:

- New hospital admissions are likely to peak just below 6 hospital admissions per day in early May 2022 and will recede to pre-Omicron levels into the summer. There is some uncertainty in the trajectory, admissions could peak at nearly 8 per day or around 4 per day
- Approximately 280 new admissions are anticipated between May 2 to August 31, 2022

Scarsin Forecast COVID-19 Hospital Admissions by Age Group, Hamiltonians

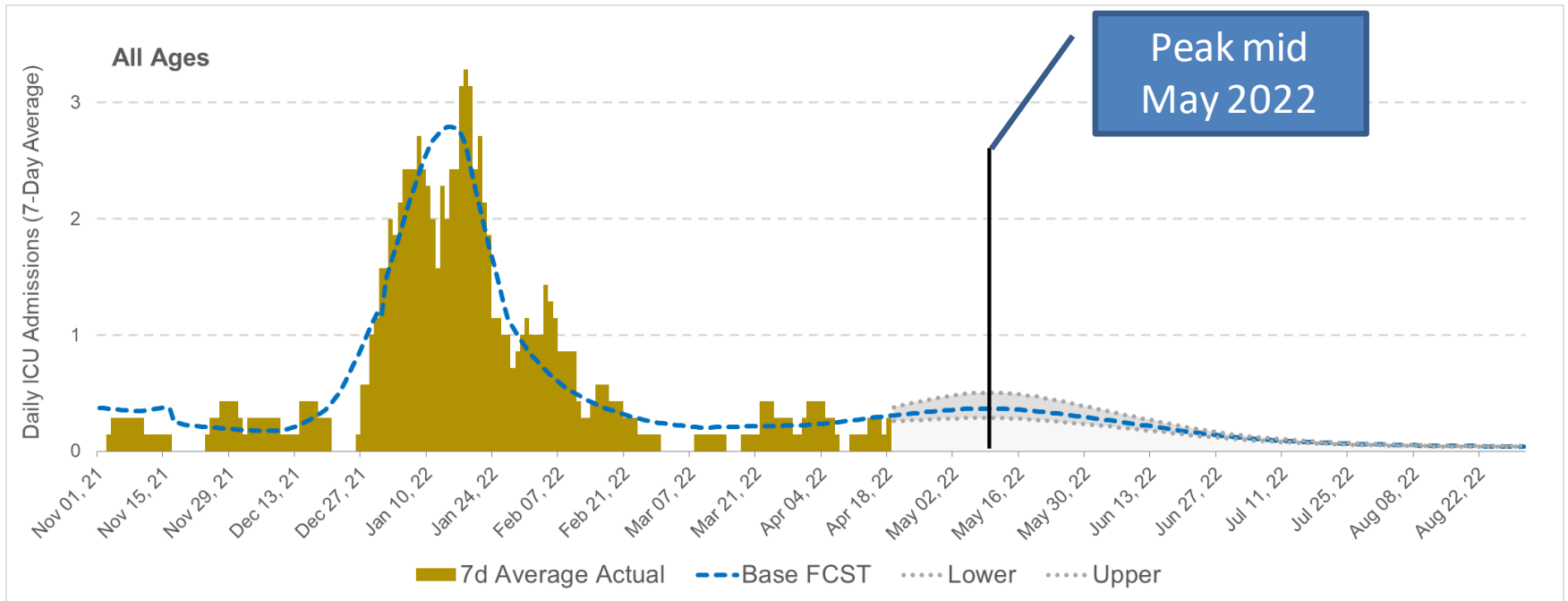


Data Source: Scarsin Decision Support System retrieved Apr 25, 2022

Key Messages:

- Trajectories differ by age group; infections have now moved into older age groups
- Those aged 60 years and older will make up 86% of new hospital admissions to the end of August 2022

Scarsin Forecast COVID-19 Intensive Care Unit (ICU) Admissions among Hamiltonians

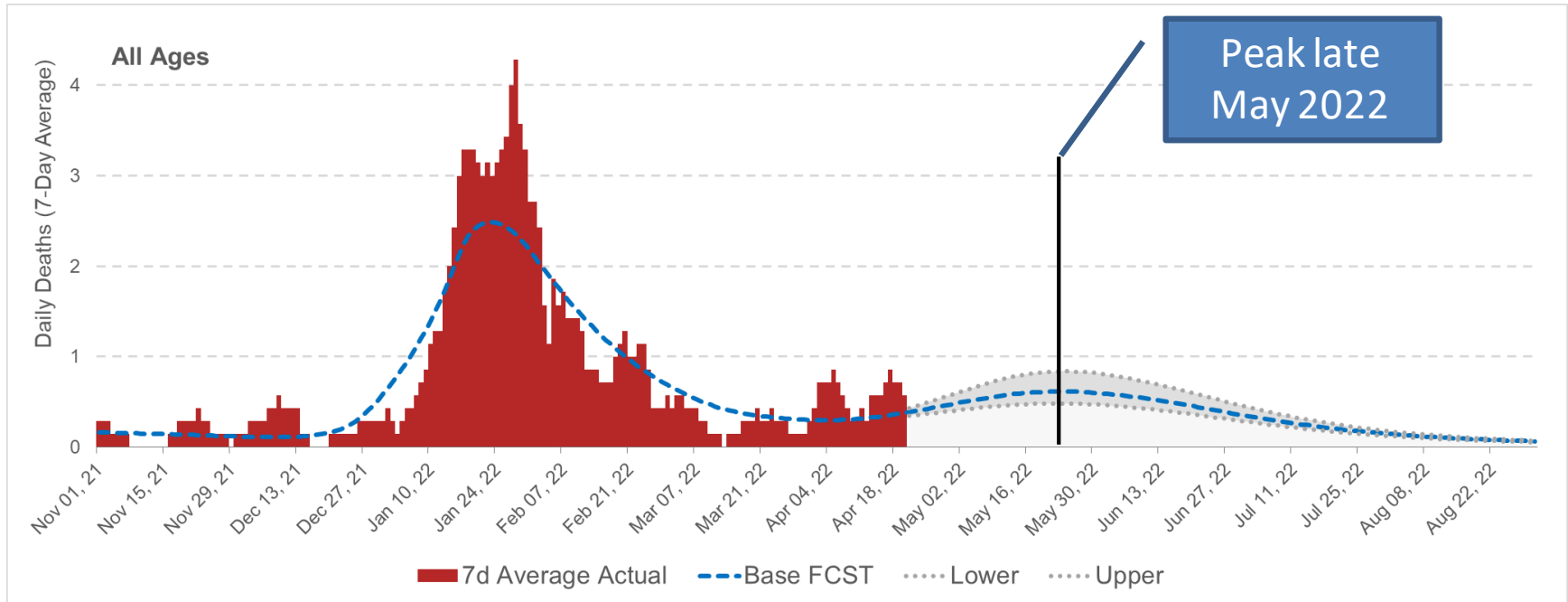


Key Messages:

Data Source: Scarsin Decision Support System retrieved Apr 25, 2022

- Intensive Care Unit admissions will increase slightly above pre-Omicron levels, peaking below 1 per day on average
- The forecast predicts 20 new Intensive Care Unit admissions among Hamiltonians between May 2 to August 31, 2022
- Most Intensive Care Unit admissions (64%) are predicted to be in those aged 60-79 years

Scarsin Forecast Deaths Due to COVID-19 among Hamiltonians



Data Source: Scarsin Decision Support System retrieved Apr 25, 2022

Key Messages:

- The forecast predicts 42 deaths between May 2 to August 31, 2022, and will return to near pre-Omicron wave levels into the summer
- Most deaths are predicted in those aged 80 years and older (82%).

Scarsin Forecast Summary

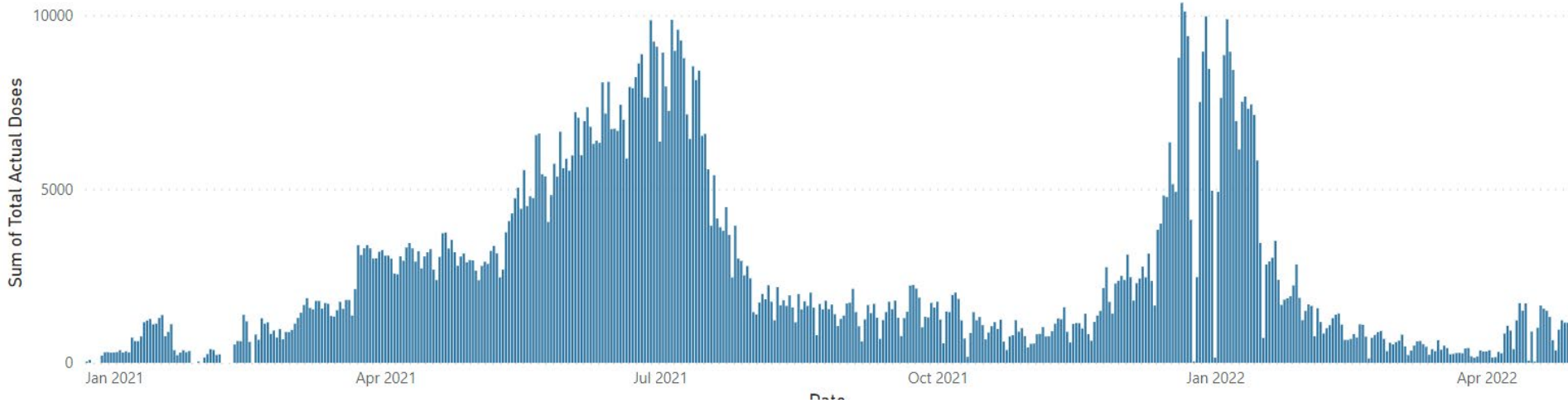
- The forecast, to the end of August 2022, indicates that new hospital admissions due to COVID-19 are reaching their peak among Hamiltonians:
 - Peak admissions among Hamiltonians predicted in early May 2022
 - Peak predicted to be about half the previous Omicron peak level (i.e., just below 6 new admissions per day on average compared with Omicron peak levels at approximately 13) but could get to as high as 8 admissions per day
 - Intensive care unit admissions forecast to peak at less than 1 per day
 - Hospital admission levels are forecasted to return to pre-Omicron levels by the end of June
- Infections are forecast to increase in older age groups after first peaking in younger age groups
- Vaccinations continue to be important as we consider the impact of waning immunity and a potential fall wave

COVID VACCINE UPDATE

Melissa Biksa, Manager – COVID-19 Vaccine

COVID-19 Vaccine – Doses Administered in Hamilton

Estimated as of End Of Day April 28, 2022



- Over 1.25 million COVID-19 vaccine doses administered in Hamilton since December 2020
- Recent increase in doses administered driven by expanded 4th dose eligibility (April 7, 2022)
- Over 24,300 4th doses administered in Hamilton, currently averaging 774 doses per day

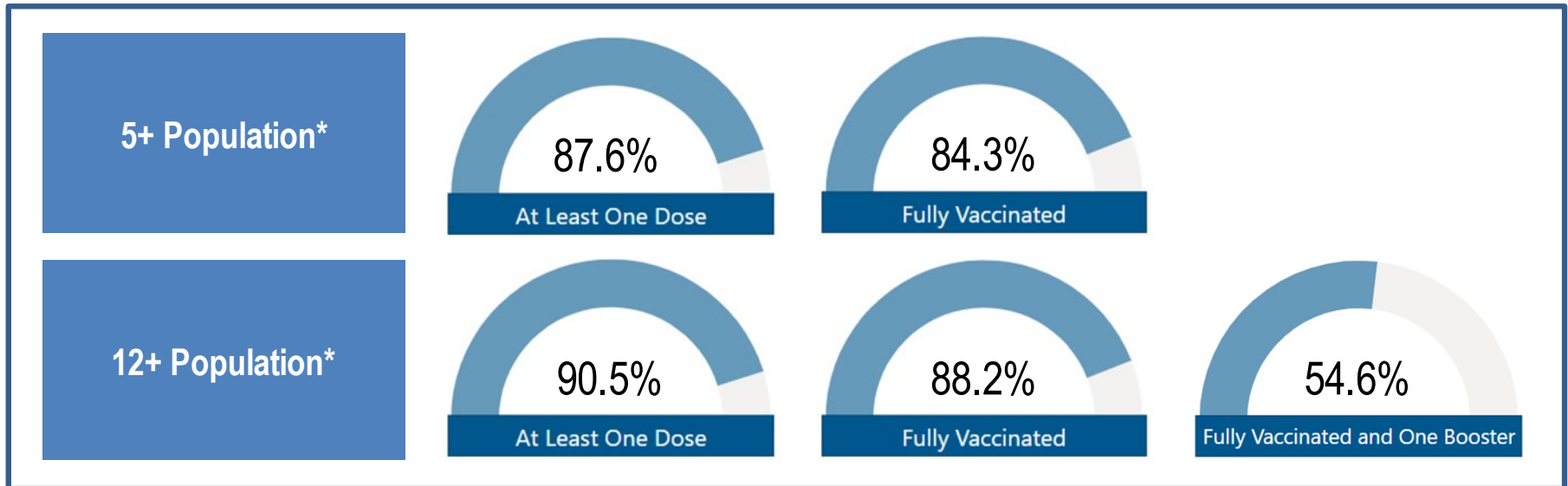
Note: Includes Hamilton residents and individuals vaccinated in Hamilton who cannot be assigned to a health unit region.

*The 5+ population includes individuals born in 2016 or earlier, 12+ population includes individuals born in 2009 or earlier, and 18+ population includes individuals born in 2003 or earlier.

Sources: IntelliHealth (COVAXon Data Load); IntelliHealth (Population Projections, 2020).

COVID-19 Vaccine – Overall Coverage

Estimated as of End Of Day April 28, 2022



- Coverage in 5 to 11 year-old population increased to **53.4%** (1st dose) and **38.1%** (2nd dose)
- 3rd dose coverage in adult population is **57.7%** with higher coverage in older age groups
- 4th dose coverage increases with age

Note: Includes Hamilton residents and individuals vaccinated in Hamilton who cannot be assigned to a health unit region.

*The 5+ population includes individuals born in 2016 or earlier, 12+ population includes individuals born in 2009 or earlier, and 18+ population includes individuals born in 2003 or earlier.

Sources: IntelliHealth (COVAXon Data Load); IntelliHealth (Population Projections, 2020).

COVID-19 Vaccine – Eligibility & Interval

- 4th Dose – Current Eligibility
 - Individuals 60 years of age and older & First Nations, Inuit, & Métis individuals and their non-Indigenous household members 18 years of age and older
- Vaccination Post-Infection Recommendation
 - 1st/2nd dose – 8 weeks post-symptom onset or positive test
 - 3rd/4th dose – 3 months post-symptom onset or positive test

COVID-19 Vaccine – Key Messages

- **Important to stay up-to-date with your vaccines**
 - COVID-19 vaccines continue to be widely available
- **Grade 7/8 vaccine available through catch-up clinics**



Hamilton

QUESTIONS?