



COVID-19 Situation Report & Organizational Update

Board of Health

March 21, 2022

Overview

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2. Transition Overview
3. COVID-19 Situation Report
4. Scarsin Forecast
5. COVID-19 Vaccine Update
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Overall Status

- COVID-19 expected to continue to circulate in Hamilton at a manageable level
 - Case numbers, while underestimates due to testing eligibility, have seen a small increase since February 2022
 - Local hospital capacity improving.
 - COVID-19 related hospitalization/intensive care unit admissions had been decreasing since the peak of the Omicron wave and since levelled off

COVID-19 Wastewater Testing in Hamilton

- Hamilton participating in Ontario's Wastewater Surveillance Initiative Sampling led by University of Ottawa since July 2020
- Woodward wastewater sampled 4 times a week, results shared following week
- Hamilton Public Health Services' Associate Medical Officer of Health participated in meetings Fall 2020 – Fall 2021
- Results showed general consistency with numbers of cases
- Continually assessed in relation to other metrics e.g. case numbers, percent positivity, hospitalizations
- Hamilton Public Health Services continuing to work with Ottawa University and Ministry of Environment Conservation & Parks to understand the data
- Continues to be under evaluation – no provincial guidance on use for surveillance or disease control
- Hamilton Public Health Services' approach supported by Chief Medical Officer of Health for Ontario

Overall Status

- Vaccination Status (As of March 17, 2022):
 - 90.3% of 12yrs+ with one dose, 88.0% with two doses
 - 52.8% of 5-11yrs with one dose, 34.3% with two doses
 - 56.7% of 18yrs+ with 3rd dose
- Vaccine clinics ongoing
 - Opportunities across community
 - Integration with catch-up for other routine grade 7/8 vaccines

Overall Status

In this transition phase, public health measures shifted from requirements to guidance (again)

- In addition to disease control and vaccination, Public Health Services supporting people/organizations in assessing risk and use of public health measures such as masking, physical distancing, vaccination, hand washing, and related policies
- Will take time, patience and understanding across the community as people and organizations move forward
- New variants or waning immunity may drive up case numbers and/or severity significantly and impact health system, requiring return to more stringent measures

Transition Overview

- Public health measures have shifted from ‘mandate’ to ‘recommendation’
 - Can be challenging transition for some as adjust emotionally and psychologically especially given overall impacts of pandemic
 - Future COVID-19 wavelets and waves necessitate ongoing individual, organizational and societal monitoring and adjustments
- Public Health Services will remain agile & flexible, utilizing the right tool at the right time
 - Need to strike a balance across impacts of the pandemic
 - Use least restrictive tools necessary

Transition Overview

- Changes Specific to Hamilton
 - Medical Officer of Health's Letter of Recommendation for Establishing a COVID-19 Workplace Vaccination Policy (Invalid under ROA Feb 25, 2022)
 - Medical Officer of Health's Letter of Instruction on Requirements to Reduce the Spread of COVID-19 in High-rise Apartment Buildings and High-rise Condominium Buildings
 - By-law 20-155 "A By-law to Require the Wearing of Face Coverings Within Enclosed Public Spaces"
 - By-law 20-164, "A By-law to Promote and Regulate Physical Distancing in the City of Hamilton"
- Changes/recommendations aligned with provincial recommendations

Transition Overview

- Continue to support individuals and organizations to:
 - Understand health impacts of different choices
 - Practice safer behaviours for self and others
 - Minimize risk
- Risk assessment an important tool
- Respectful of individuals choices
- Relationship and community cohesion important determinants of health

COVID-19: PROTECT YOURSELF AND THOSE AROUND YOU

ASSESS YOUR OWN PERSONAL RISK LEVEL. CONSIDER YOUR AGE, HEALTH STATUS & THE SETTING.



Get vaccinated & boosted



Stay home if you have COVID-19 symptoms



Wash your hands often with soap & water



Consider wearing & mask in certain settings



Increase ventilation by opening doors & windows



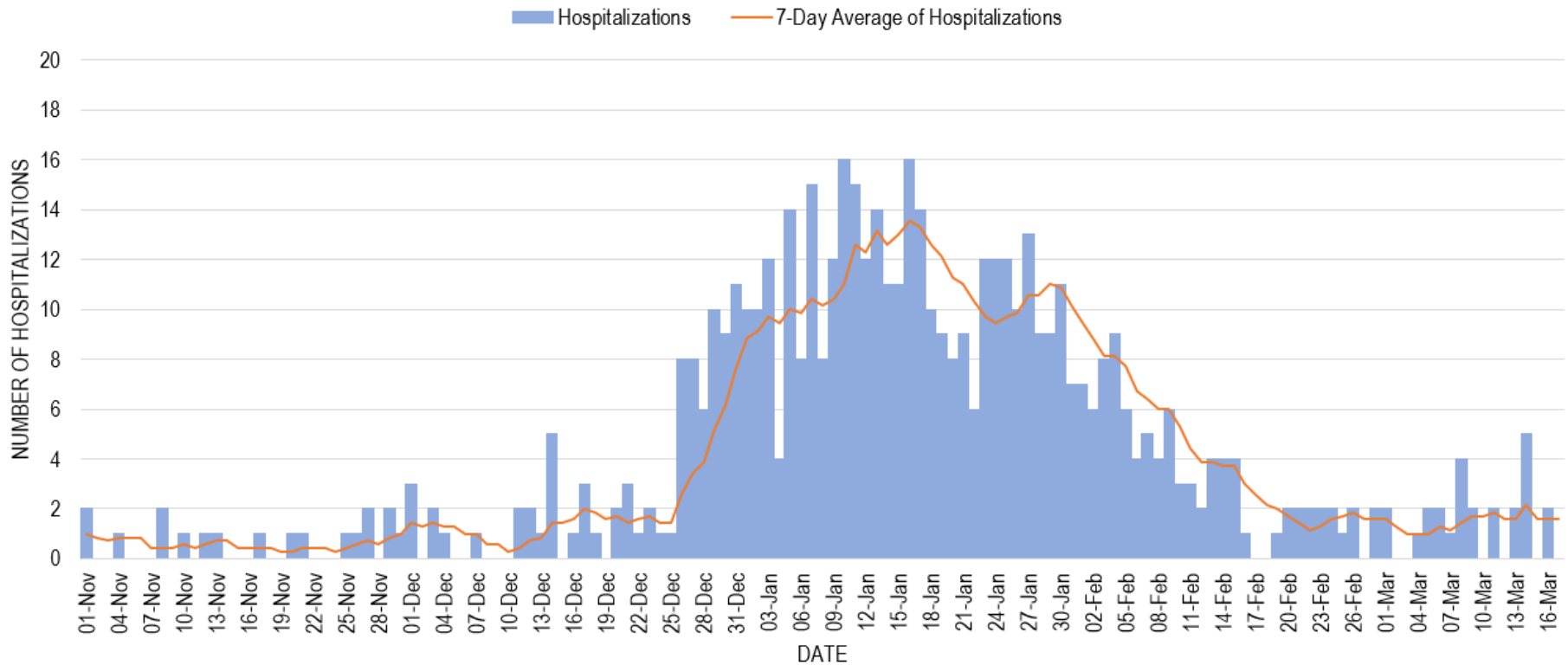
Do activities or gather outdoors, or indoors at less busy times

SITUATION REPORT

Erin Rodenburg, Epidemiologist

Hospitalizations

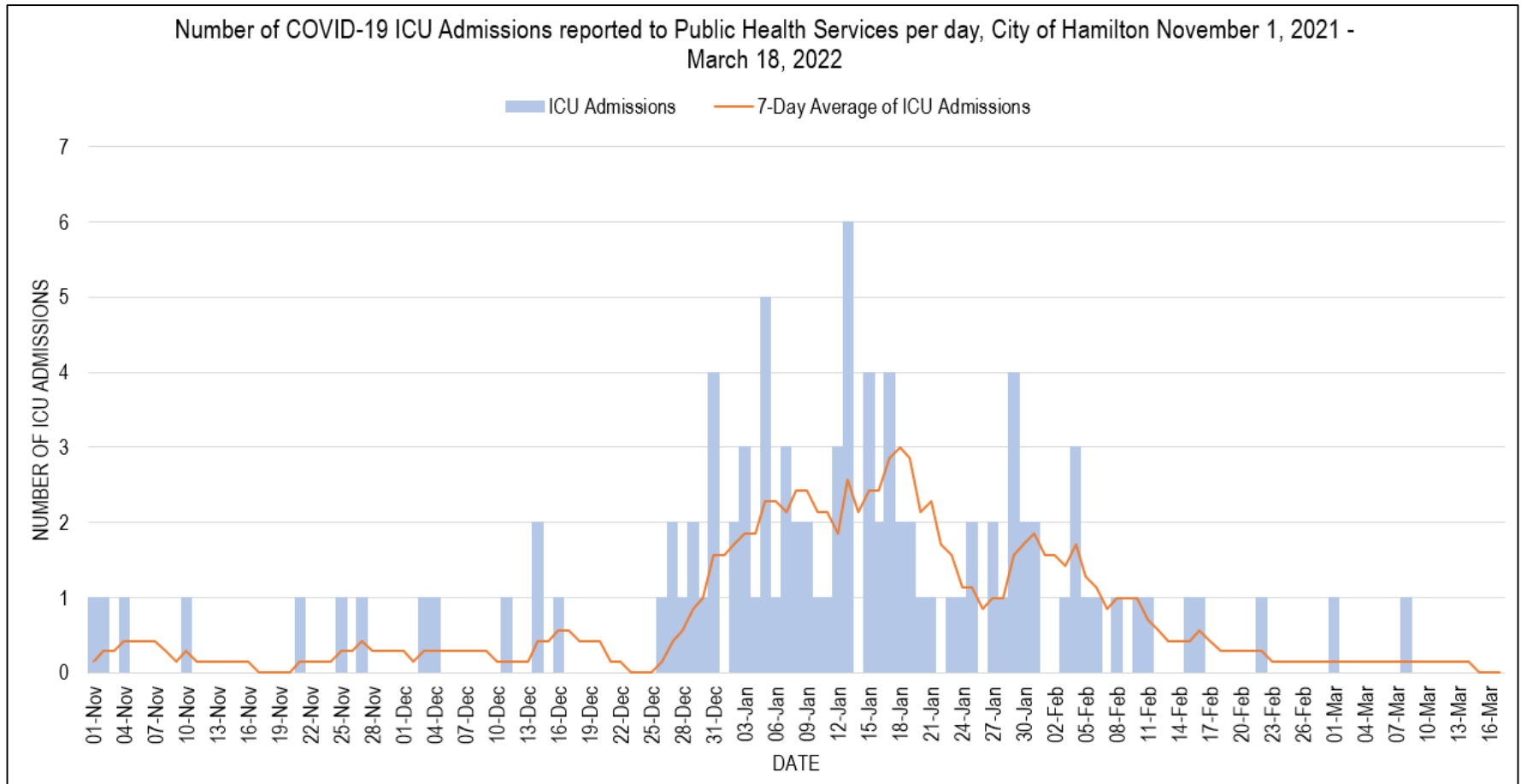
Number of COVID-19 Hospitalizations reported to Public Health Services per day, City of Hamilton November 1, 2021 - March 18, 2022



Key Messages

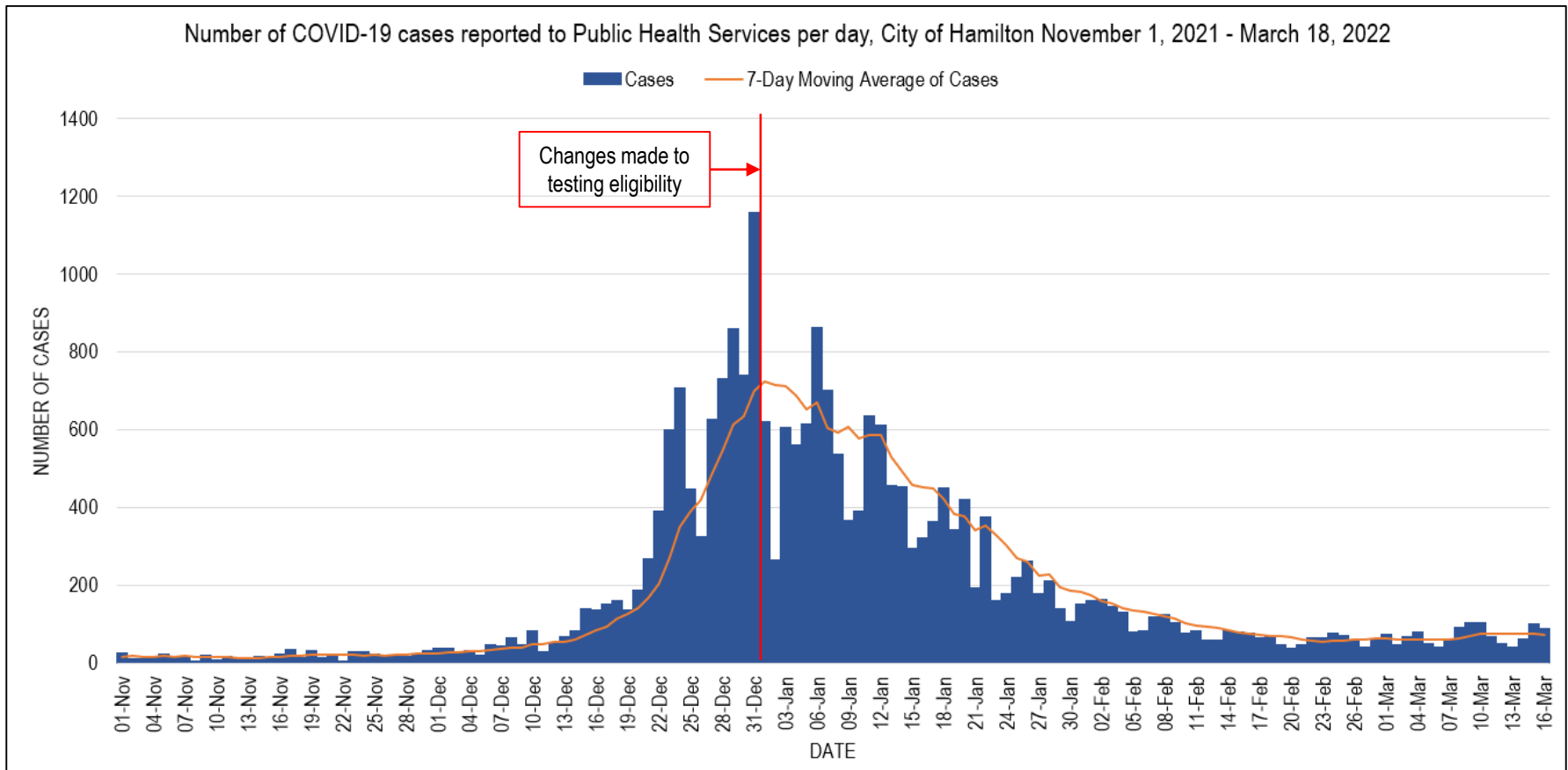
- COVID-19 Hospitalizations had been decreasing since the peak of the Omicron wave and have since levelled off
- As of March 18, 2022, there were approximately **1.6** new COVID-19 hospitalizations per day reported to Hamilton Public Health. This 7-day average has been approximately **1-2** since February 19, 2022

Intensive Care Unit Admissions



Key Messages

- COVID-19 intensive care unit admissions had been decreasing since the peak of the Omicron wave and have since levelled off
- As of March 18, 2022, there were **0** new COVID-19 hospitalizations per day reported to Hamilton Public Health. This 7-day average has been at or below **0.1** since February 22, 2022

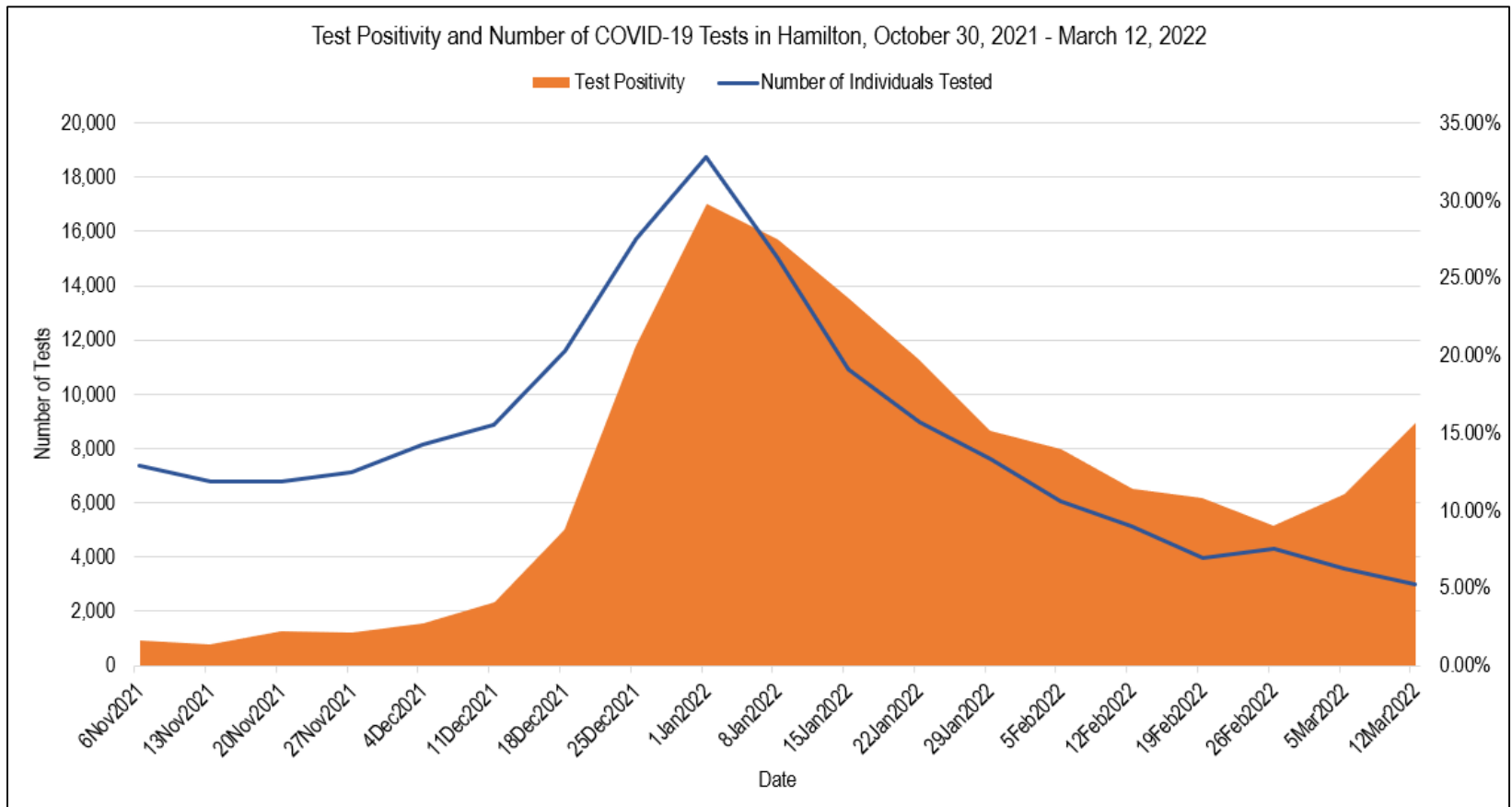


Changes made to testing eligibility

Key Messages

- COVID-19 Case data is known to be underestimated due to polymerase chain reaction test (PCR) eligibility, however it remains an important measure to determine the trends of COVID-19 transmission in our community
- As of March 18, 2022, the 7-day average of cases is **74**, which has increased since February 23, 2022 when the 7-day average was **56**

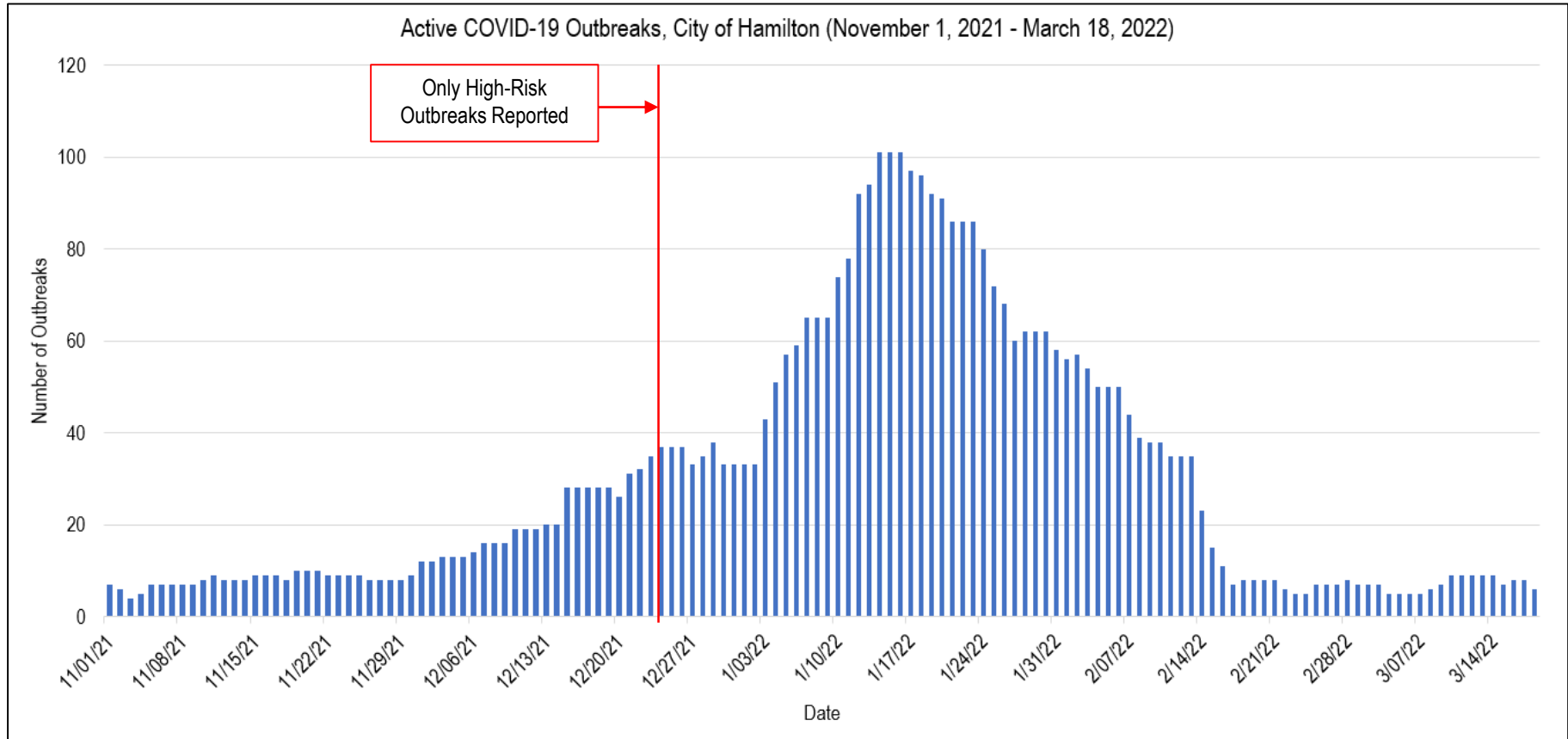
Test Positivity



Key Messages

- Number of polymerase chain reaction test and test positivity peaked during the Omicron wave in early January 2022 at over 18,000 and almost **30%**, respectively. Both have consistently decreased until the end of February 2022 at about 6,000 and just under **10%**, respectively
- Most recently, test positivity has shown signs of increasing, consistent with the increases seen in reported cases

Active outbreaks



Key Messages

- COVID-19 outbreak activity in the Omicron wave peaked in mid-January 2022
- The number of active COVID-19 outbreaks in recent weeks had been consistently decreasing and has since levelled off at below 10 since February 17, 2022

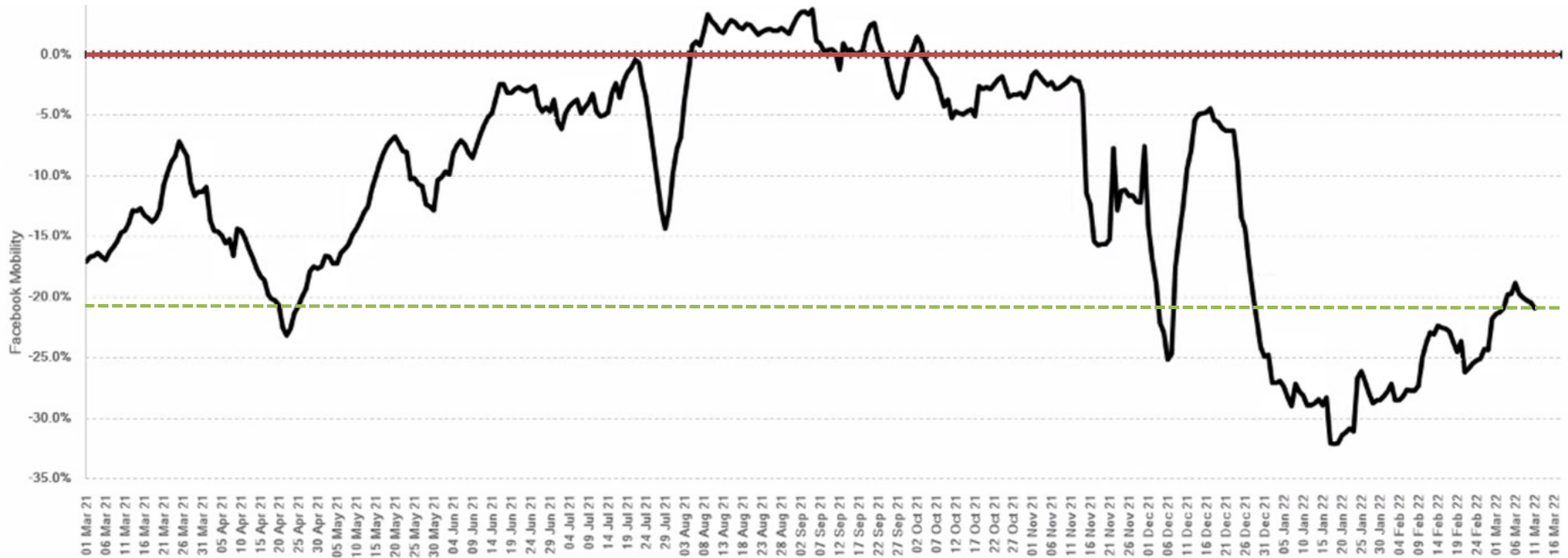
SCARSIN FORECAST

Ruth Sanderson, Epidemiologist

Scarsin Forecast Key Messages

- The forecast provides two scenarios:
 - A base scenario that lifts public health measures including masking, which results in increased transmission and a small resurgence
 - A second scenario that keeps transmission rates steady, lower than in the base scenario, that illustrates even in ideal circumstances with no resurgence, COVID-19 will continue to circulate
- The base forecast anticipates that as public health measures are removed and contact rates increase, infections may modestly increase in the short term
- Cases are likely to remain above pre-Omicron wave levels in the near term

Overall Mobility, Hamilton

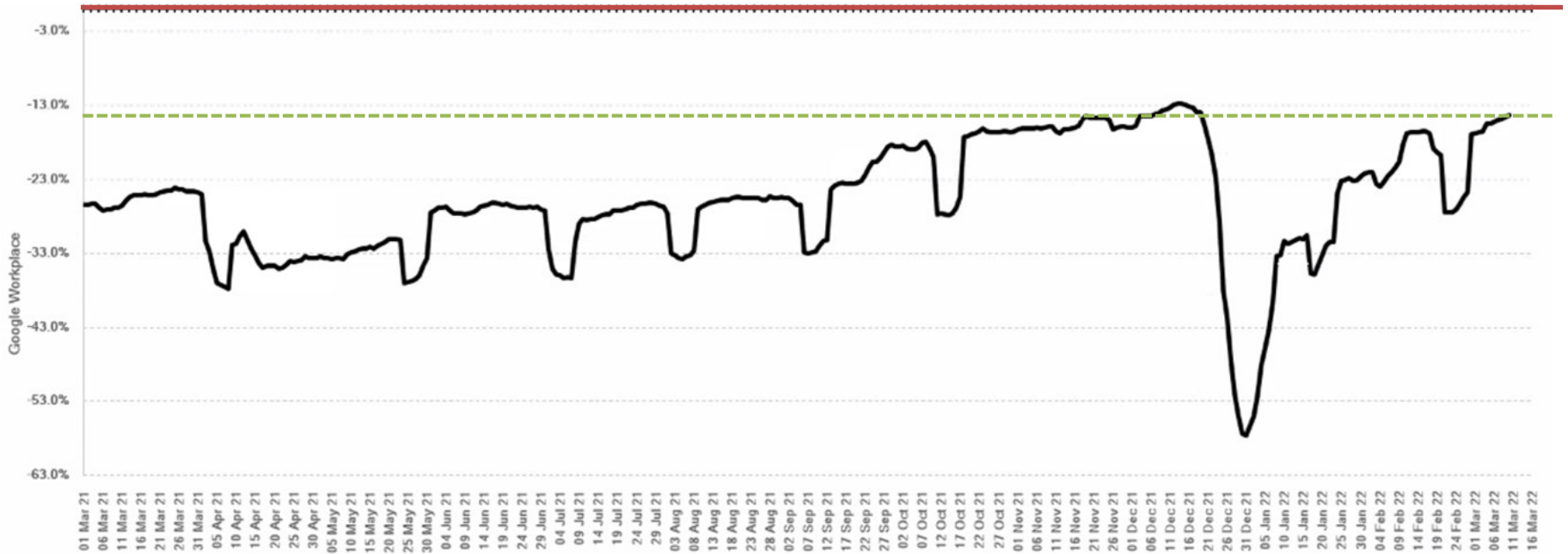


Data Source: Scarsin Decision Support System retrieved Mar 14, 2022

Key Messages:

- Community mobility has increased slowly since mid-January 2022. It was at 21% below pre-pandemic levels as of March 11, 2022; lower than this time last year
- Assumed to reach 8% below pre-pandemic levels by April 1, 2022 and at 0% by May 1, 2022
- Reduced community mobility contributes to reduced transmission rates

Workplace Mobility, Hamilton



Data Source: Scarsin Decision Support System retrieved Mar 14, 2022

Key Messages:

- Workplace mobility continues to increase and was at 14% below pre-pandemic levels as of March 10, 2022; now similar to pre-Omicron wave level
- Assumed to reach 10% below pre-pandemic levels April 1, 2022 and 3% below pre-pandemic level by May 1, 2022
- Reduced workplace mobility contributes to reduced transmission rates

Overview of Scenarios and Assumptions

Scenario 1 – Resurgence
Elevated contact transmission
with staged reopening

Scenario 2 – No Resurgence
Transmission levels remain
steady with staged reopening

Scenario Assumes:

- Public health measures aligned with Ontario's reopening plan including lifting of mask mandates on March 21, 2022
- Omicron severity is approximately 36% severity of Delta
- Transmission rates were aligned with current hospital actuals
- Waning 2nd and 3rd dose immunity incorporated
- Vaccinations updated (included 4th doses) to align with Hamilton's actuals and planned doses out to June 2022; targets adjusting for decreasing trend in dose throughput

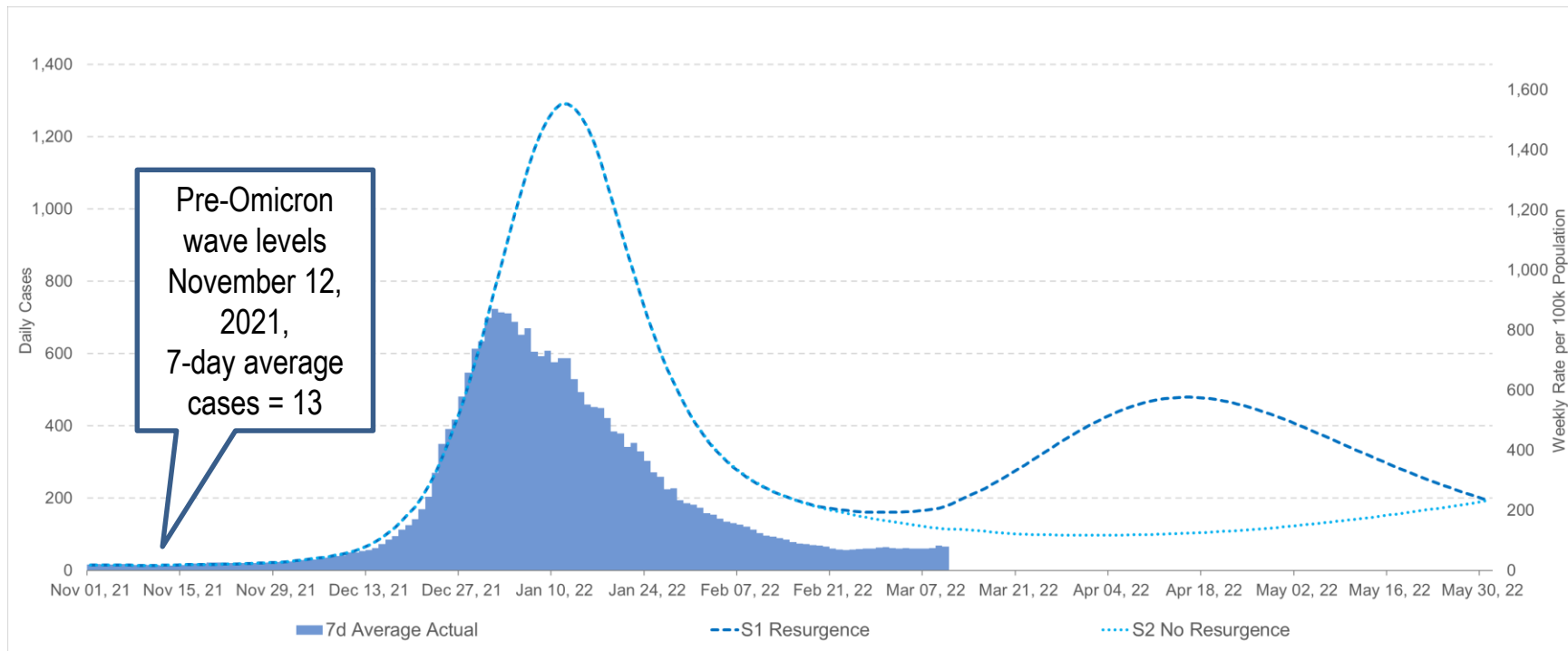
Limitation:

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

Updated Data:

- Case/ hospital/ death data retrieved March 13, 2022
- Updated vaccination and mobility data

Scarsin Forecast COVID-19 Cases Scenario Comparisons among Hamiltonians

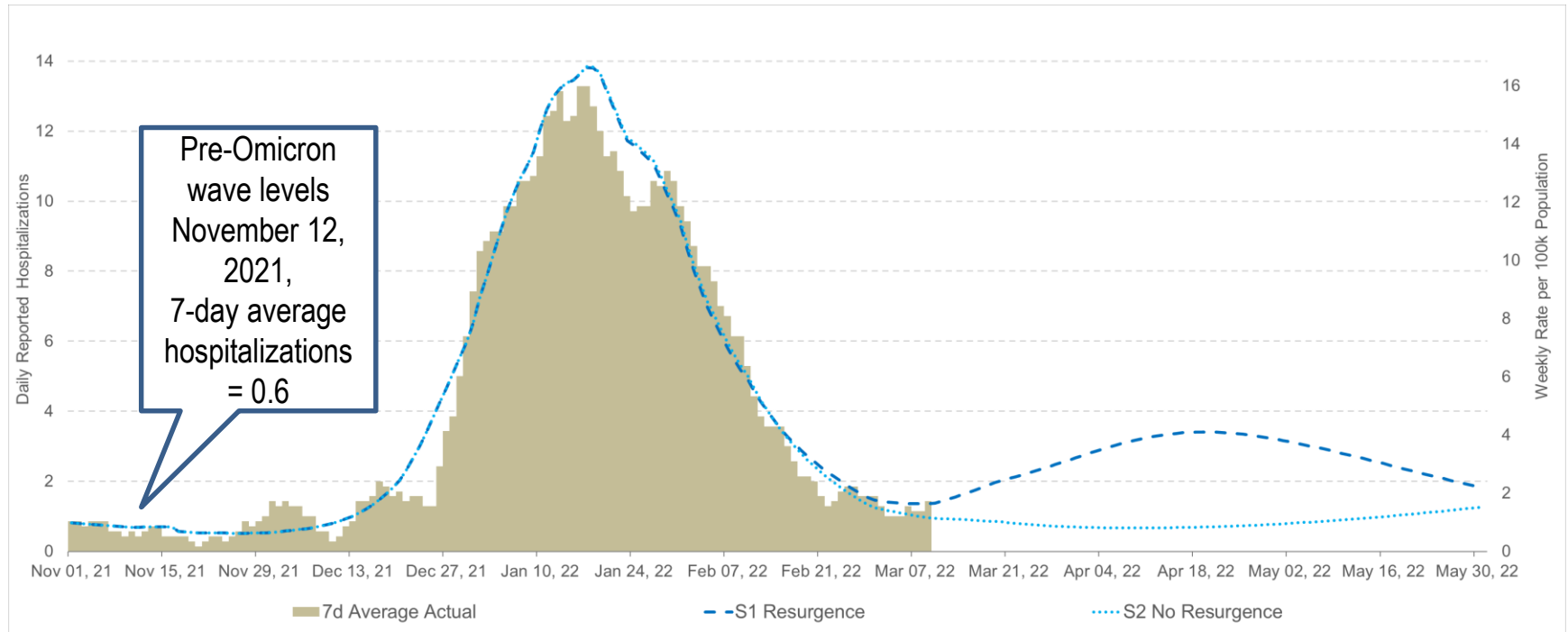


Data Source: Scarsin Decision Support System retrieved March 14, 2022

Key Messages:

- **Scenario 1 – Resurgence** continues to indicate that Hamilton will likely experience an increase in cases with reopening which peaks in mid to late April 2022. In both scenarios, cases are not forecast to return to pre-Omicron wave levels in the near-term (e.g., case average November 12, 2021= 13)
- Potential for over 26,600 cases between March 21, 2022 to May 31, 2022; 17,500 could be prevented if no resurgence

Scarsin Forecast COVID-19 Hospital Admissions Scenario Comparisons among Hamiltonians



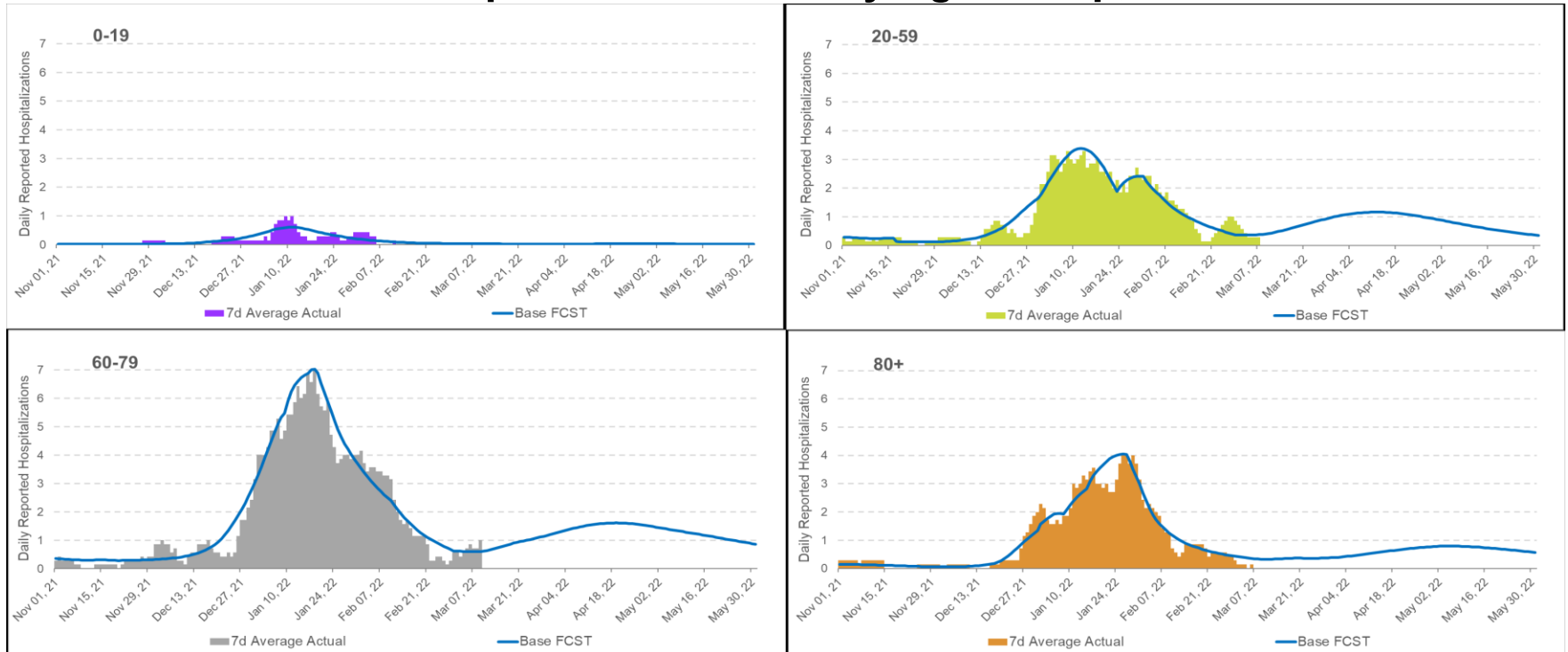
Data Source: Scarsin Decision Support System retrieved Mar 14, 2022

Key Messages:

- **Scenario 1 – Resurgence** indicates that the recent decrease is likely to reverse, resulting in a small swell of hospitalizations with reopening (200 hospitalizations among Hamiltonians from March 21, 2022 to May 31, 2022); the swell is forecast to peak in mid to late April 2022 and remain below the previous peak level
- Avoiding a resurgence could prevent 140 new hospitalizations from March 21, 2022 to May 31, 2022

Scarsin Hospitalizations Scenario 1-Resurgence

COVID-19 Hospital Admissions by Age Group, Hamiltonians

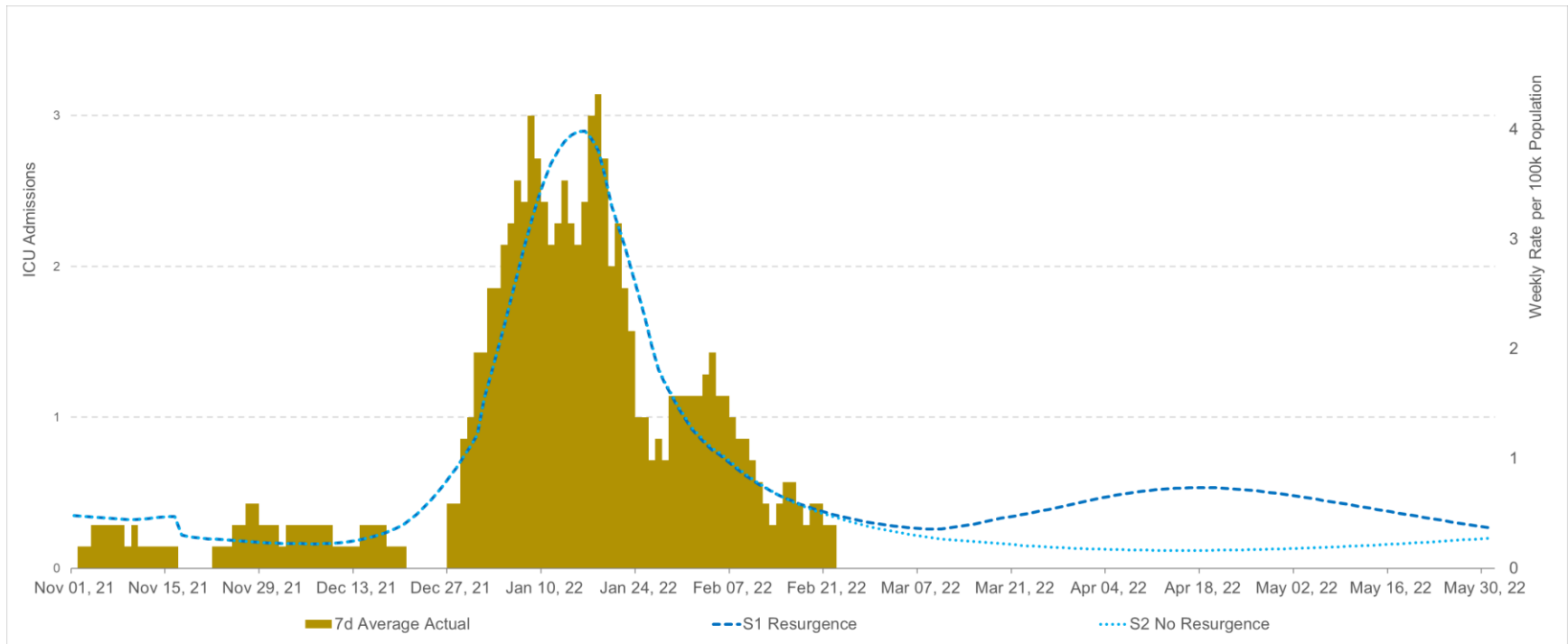


Data Source: Scarsin Decision Support System retrieved Mar 14, 2022

Key Messages:

- Trajectories differ by age group. Potential for those aged 20-59yrs to experience a higher level of hospitalizations than those 80yrs and older due to higher levels of protection with 3rd and 4th dose vaccinations in those 80+yrs
- Severe outcomes continue primarily among those 60+yrs; 15% of cases but 70% of admissions, 95% of deaths

Scarsin Forecast COVID-19 Intensive Care Unit Admissions Scenario Comparisons among Hamiltonians

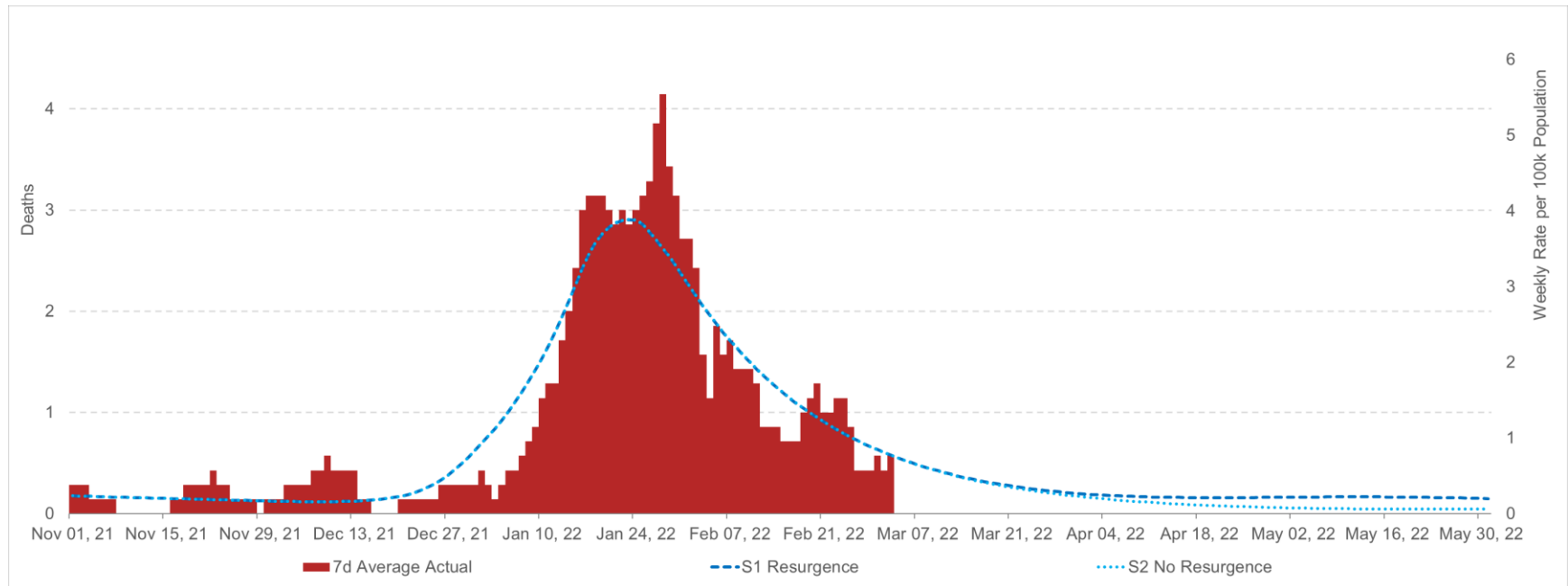


Data Source: Scarsin Decision Support System retrieved Mar 14, 2022

Key Messages:

- The **Scenario 1 – Resurgence** scenario predicts approximately 30 new intensive care unit admissions among Hamiltonians from Mar 21, 2022 to May 31, 2022
- 21 intensive care unit admissions would be prevented if the resurgence was avoided

Scarsin Forecast Deaths Due to COVID-19 Scenario Comparisons among Hamiltonians



Data Source: Scarsin Decision Support System retrieved Mar 14, 2022

Key Messages:

- The **Scenario 1 – Resurgence** scenario predicts 13 deaths among Hamiltonians from Mar 21, 2022 to May 31, 2022; six deaths could be prevented if the resurgence was avoided
- Anticipate that approximately 95% of deaths will occur in those aged 60 years and older

Scarsin Forecast Summary

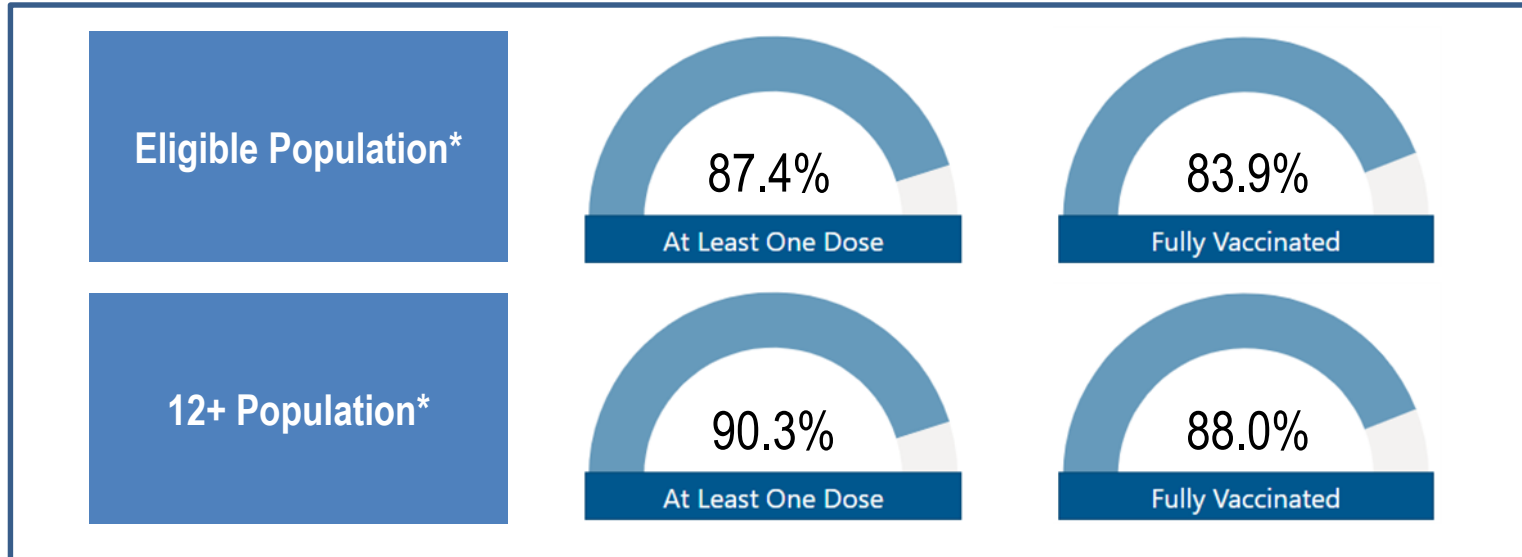
- The forecasts out to the end of May 2022, indicate that COVID-19 is expected to continue to circulate in Hamilton at a manageable level:
 - With an increase in transmission, a modest resurgence of cases and hospitalizations will occur, which will peak in mid-to-late April 2022
 - Even with no increase in transmission, cases will not likely return to pre-Omicron wave levels in the near-term
- Severe outcomes continue primarily among those 60 years old and older; 15% of cases but 70% of new hospital admissions and 95% of deaths
- Hamiltonians are encouraged to use public health measures including vaccination, masking and distancing as warranted by the situation to reduce serious health consequences from COVID-19 infections, particularly for those that are more vulnerable

COVID VACCINE UPDATE

Melissa Biksa, Manager – COVID-19 Vaccine

COVID-19 Vaccine – Overall Coverage

Estimated as of End Of Day March 17, 2022



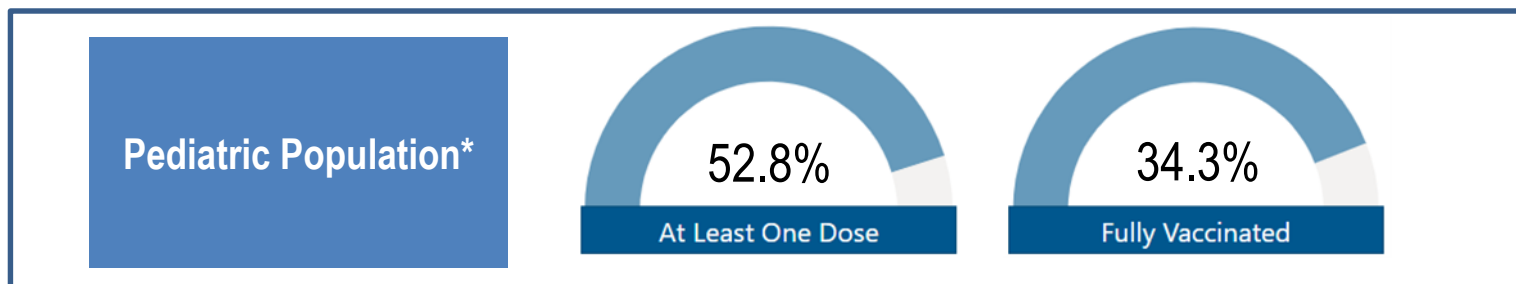
3rd Doses in Hamilton
18+ Population: **56.7%**
12+ Population: **53.4%**

3rd Doses in Ontario
18+ Population: **58.5%**
12+ Population: **55.0%**

Note: Includes Hamilton residents and individuals vaccinated in Hamilton who cannot be assigned to a health unit region.
*The eligible 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 – Pediatric Population

Estimated as of End Of Day March 17, 2022



A total of **3,234 doses** were administered at **159 school clinics** from January 28, 2022 to March 11, 2022

- Majority (**79%**) of doses administered were pediatric 1st and 2nd doses
- **51%** of all pediatric 1st doses and **20%** of all pediatric 2nd doses in Hamilton during this period

Geographic variation in coverage

- Highest in Dundas, Glanbrook, Lower West
- Areas with lower coverage continue to have some of the greatest change, narrowing the gap

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

*The pediatric population includes individuals born in 2010 to 2016.

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


COVID-19 Vaccine – Operational Update

- Limeridge Mall clinic transitioning to Grade 7/8 vaccines catch-up as of March 28, 2022
 - COVID-19 vaccines will still be available
- Mobile team scaling back operations
 - 1 clinic per day, 5 days per week starting March 28, 2022
- COVID-19 vaccines continue to be available through various community channels

ORGANIZATIONAL UPDATE

Dr. Elizabeth Richardson, Medical Officer of Health

Recovery likely to take 1 to 3 years to settle into new roles and address deficits of care

- 
- COVID-19 response/vaccination will require extra resources for 2022 at a minimum (e.g. vaccine clinic)
 - Scenario-based planning for potential future COVID-19 situations – **Completed**
 - Assess deficits of care and order of program restart – **Completed**
 - Adapt organization to be responsive to and supportive of the new realities – **In Progress**

Using a gradual, phased and priority-based approach

- Continue to adapt Public Health Services' organizational structure to reach a sustainable state and:
 - Continue COVID-19 disease control and vaccine programming as COVID-19 transitions
 - Continue reopening programs and resume full operations
 - Provide enhanced programming during recovery to address deficits of care and service backlog
 - Further updates at April 2022 Board of Health

- Significant movement and change for staff:
 - Disease activity, provincial direction on public health roles continue to impact staffing levels and work for COVID-19 disease control and vaccine programming
 - Significant reorientation and retraining required for staff deployed for up to 2 years and returning to pre COVID-19 work during reopening, recovery
- Staff mental health support and recovery initiatives in place and require time to do and transition
- Continue to refine program recovery initiatives and related budgets based on need and capacity

Status of Public Health Services

Programs currently operational

- Air quality & climate change
- Alcohol, drugs and gambling services* – counselling & outreach
- Breastfeeding support*
- Child & adolescent services
- Sexual health clinics*, case management, phone line
- Dental Clinics & Bus* – preventive and restorative services
- Dental – Healthy Smiles Ontario preventive clinics*
- Epidemiology & evaluation*
- Fixed premise & child care inspections (routine)*
- Harm reduction* – VAN, needles distribution, Wesley Clinic
- Heat/cold alerts
- High/moderate/low-risk food premises inspections
- Residential care facility inspections
- Indigenous health strategy
- Infectious disease (non COVID-19) case and contact management
- Infectious disease (non COVID-19) – community outbreak investigation, Infection Prevention and Control lapse
- Investigation of food-borne illness reports and other urgent health hazards
- Naloxone distribution
- Rabies investigations
- Recreational water facility inspections
- Residential care facility inspections
- School Program – targeted school service delivery, board planning
- Small drinking water inspections
- Special event inspections*
- Tobacco enforcement
- Urgent health hazard complaint investigations
- Vaccine cold chain inspections*
- Vaccine inventory support & management
- Vector Borne Disease Program
- Virtual and in-home visits for babies, children, and families*
- West Nile Virus surveillance and prevention

*Partially operational

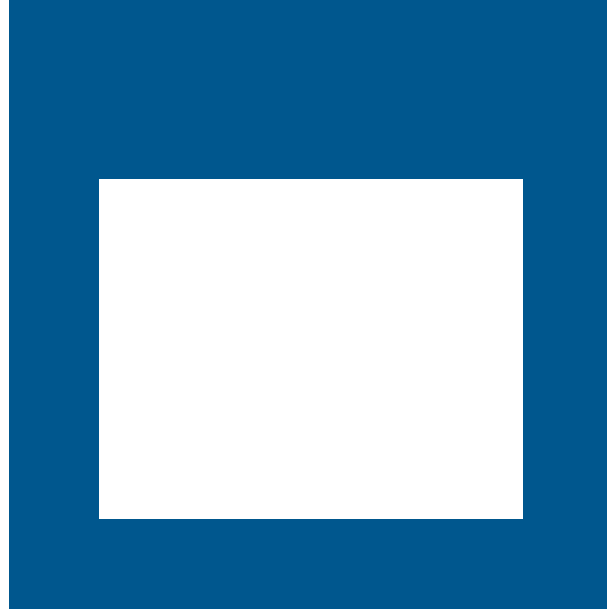
Status of Public Health Services 2022

On hold

- Alcohol, drugs and gambling services – group sessions
- Chronic disease prevention
- Dental & vision school screenings
- Drug Strategy
- Harm reduction – remaining street health clinics
- Healthy growth & development – face to face home visiting, parenting groups
- Mental health & wellbeing promotion
- Personal service setting inspections
- Pest control inspections
- Sexual health – remaining clinics, health promotion
- School program – universal service delivery and supports
- Substance misuse prevention
- Tobacco cessation clinics
- Tobacco hotline
- Vaccine – remaining cold chain inspections
- Vaccine – grade 7 & 8 clinics, community catch-up clinics

Order of Resuming Services

1. Recovery planning and transition support
2. Vaccine catch-up (routine immunizations, school screening, etc.)
3. Increase prenatal screening, assessment, referral, and case management for high risk individuals and families
4. Services for infants, toddlers and children in the early years at risk for poor social and emotional development
5. Resume pre-pandemic inspection levels for food safety, personal service settings, and tobacco enforcement
6. Increase number of schools/students receiving targeted and universal supports
7. Expand dental preventive services for adults and seniors
8. Dental school screening catch-up and resume pre-pandemic Healthy Smiles Ontario preventive services



QUESTIONS?