



COVID-19 Situation Report & Organizational Update

Board of Health
January 10, 2022

Overview

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

Overall Status

- Omicron driven wave has exponential growth not yet seen in pandemic
- Focus on blunting the wave to preserve care capacity for all who require it
- Currently in modified Step 2 of Roadmap to Reopening
- Scarsin forecasts predict Hamilton to experience hospital admission peak in January 2022 that greatly exceeds previous peak admission levels

Overall Status

- Vaccination status (@ Jan 6, 2022):
 - 1,086,020 doses given;
 - 88.8% of Hamiltonians 12yrs+ vaccinated with one dose, 86.2% with two doses
 - 39.4% of Hamiltonians 5-11yrs vaccinated with one dose
 - 45.1% of eligible Hamiltonians 18yrs+ with third dose
- Blunting this COVID-19 wave remains dependent on vaccination and practice of public health measures

Pandemic Objectives

- Prevent severe illness and death
 - Enhanced public health measures
 - Rapid roll-out of booster doses
 - Focus testing resources on high risk settings, vulnerable populations
- Protect public health & health system capacity
 - For treatment of COVID-19 and non-COVID-19 related illness
 - Focus public health disease control work on high risk settings
 - Ramp down non-urgent surgeries
- Protect in-person learning
 - Support child mental, social, physical health
 - Masks, high efficiency particulate air (HEPA) filters, high contact sports, cohorting
 - Provincial education and child care worker vaccination clinics
- Support individuals and business financially

Pandemic Surveillance Transition to Severity Indicators

- Outbreaks
 - Number, size, severity
- Hospitalizations
- Intensive Care Unit (ICU) Admissions
- Deaths

SITUATION REPORT

Erin Rodenburg, Epidemiologist

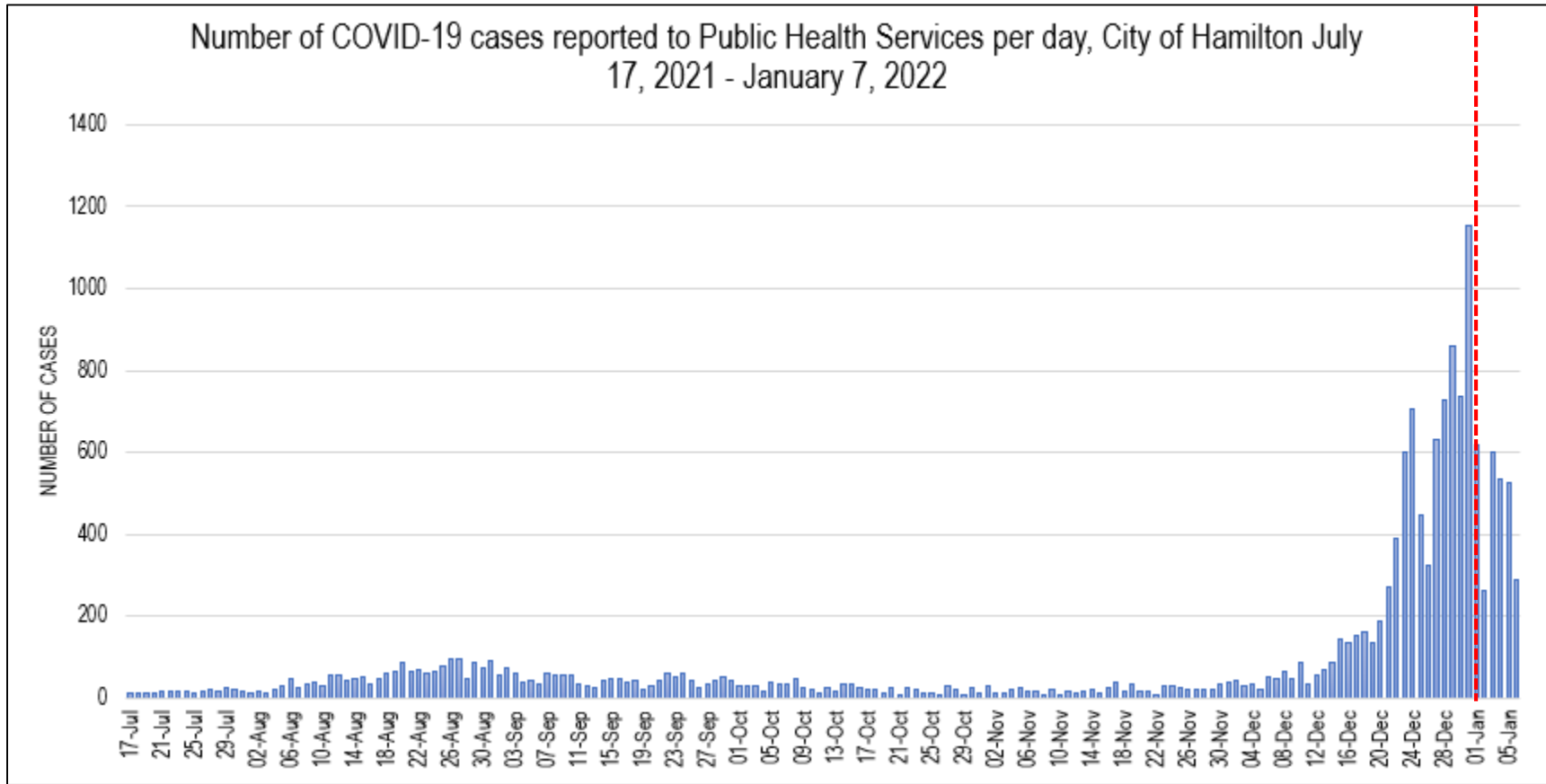
Phases of COVID-19 in Hamilton – Omicron Wave

Phase 1: Pre-peak

December 1, 2021 – January 7, 2022
(~1 month)

- 11,277 laboratory-confirmed cases reported
- 117 hospitalizations, 25 intensive care unit admissions and 8 deaths
- 133 outbreaks declared
- Outbreaks occurred mostly in:
 - communal living settings (64),
 - school and childcare settings (32),
 - hospital/healthcare settings (15)

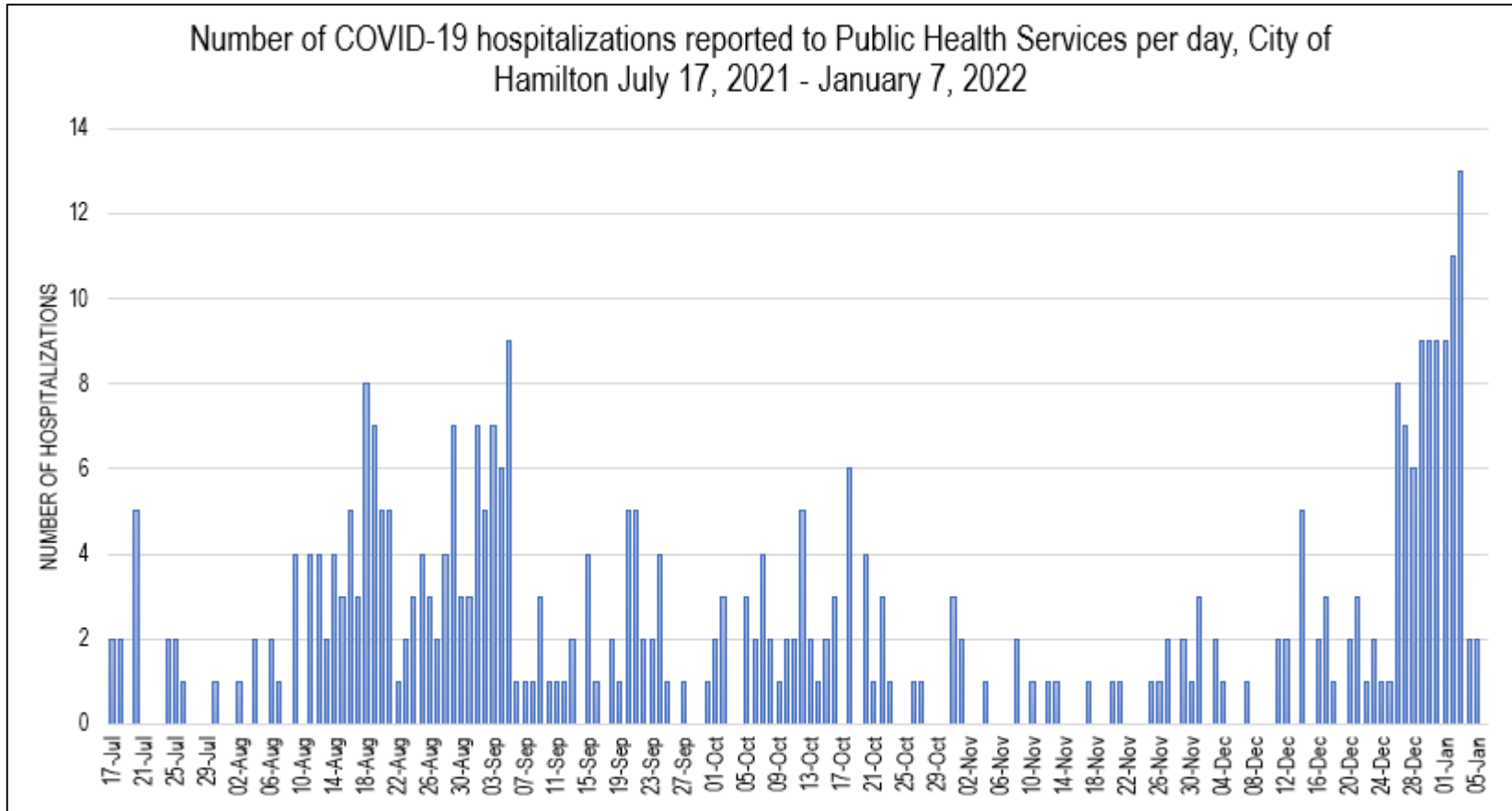
Reported cases



Key Messages

- Hamilton has experienced rapidly increasing COVID-19 case activity because of the Omicron variant
- As of January 7, 2022, there were an average of 634 COVID-19 cases per day reported to Hamilton Public Health
- Caution required as case numbers are underestimated due to changes in testing guidelines and eligibility

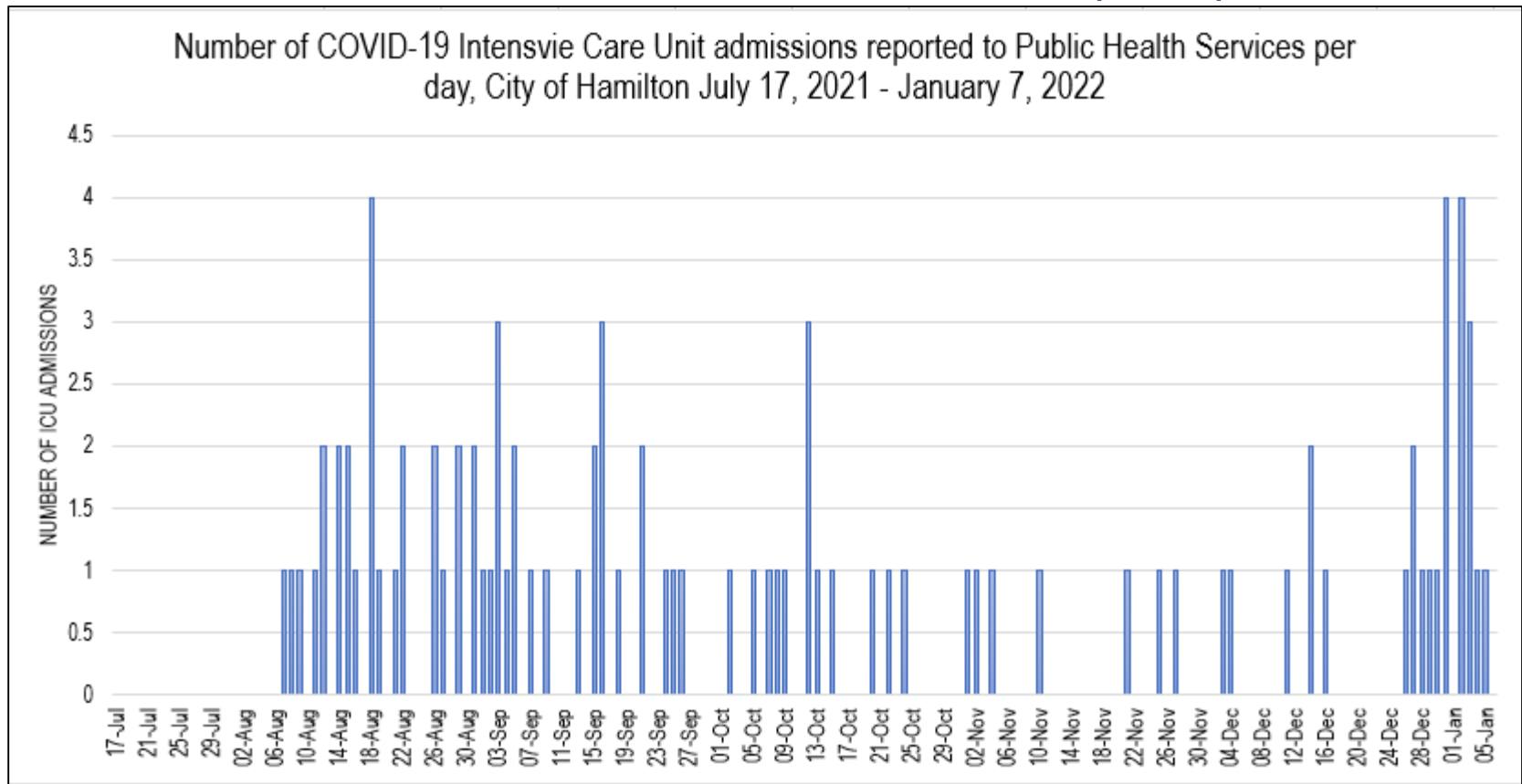
Hospitalizations



Key Messages

- Hamiltonians are experiencing increasing COVID-19 hospitalization, largely due to the Omicron variant
- As of January 7, 2022, there were approximately 8 COVID-19 hospitalizations per day reported to Hamilton Public Health

Intensive Care Unit (ICU) Admissions

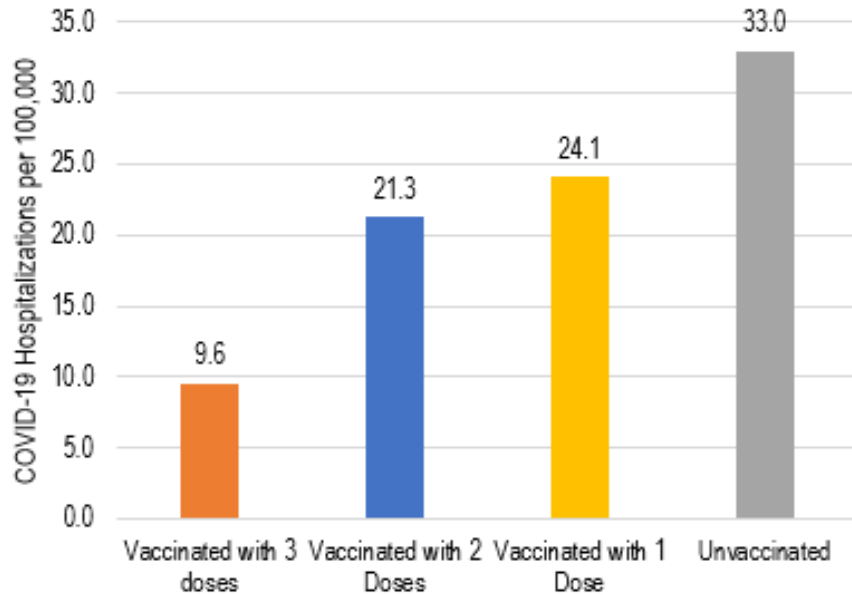


Key Messages

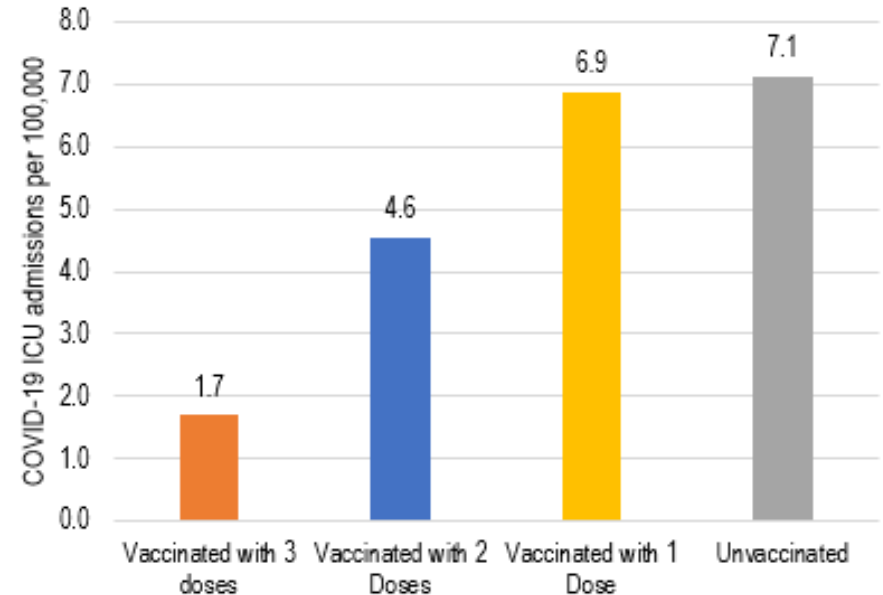
- COVID-19 Intensive Care Unit admissions have begun to increase and are already as high as previous peaks in the pandemic
- As of January 7, 2022, there was an average of 2 COVID-19 Intensive Care Unit admissions per day reported to Hamilton Public Health

Severity Indicators by Vaccination Status

COVID-19 Hospitalizations reported to Hamilton Public Health Services since December 1st, 2021 by vaccination status

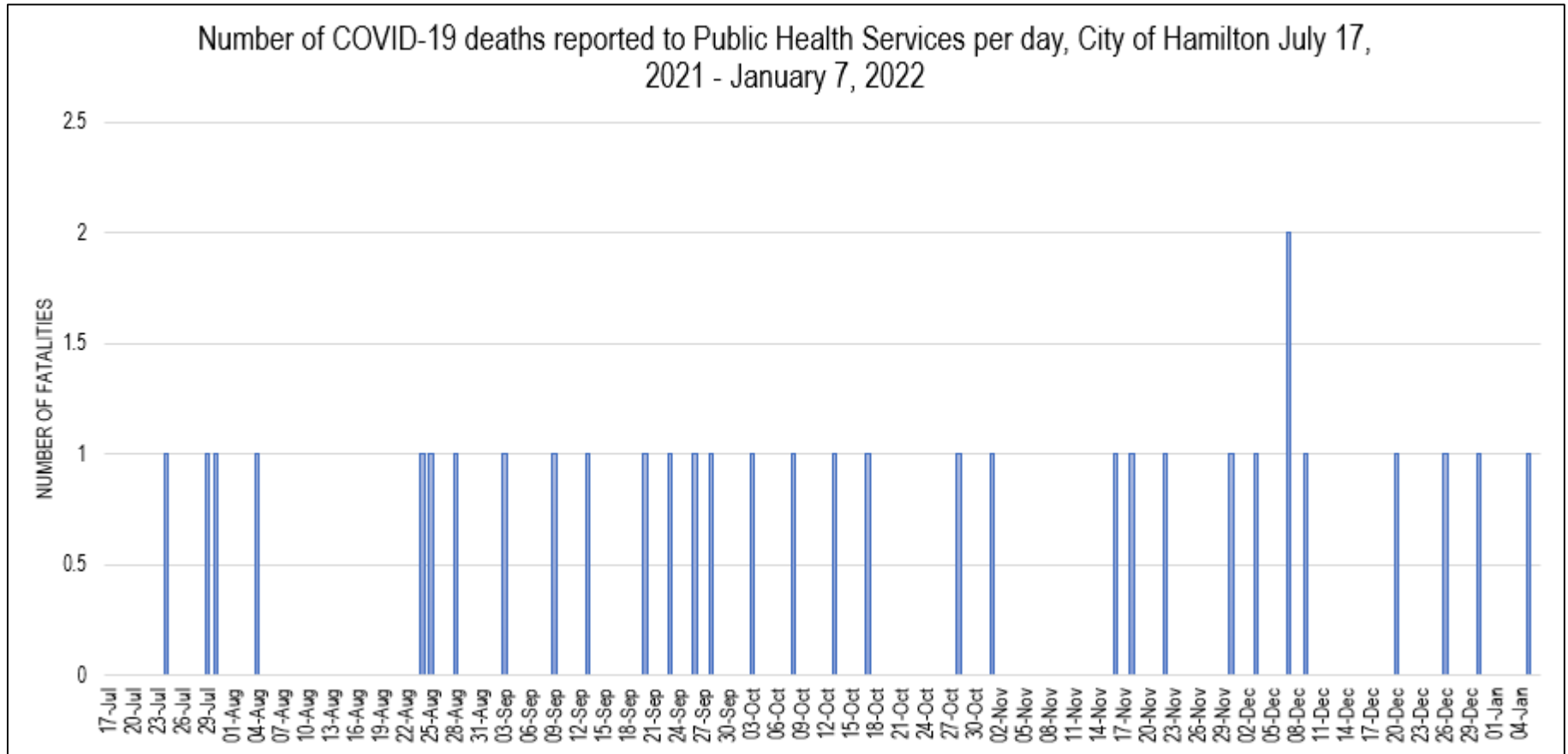


COVID-19 Intensive Care Unit admissions reported to Hamilton Public Health Services since December 1st, 2021 by vaccination status



Key Messages

- The risk of severe outcome (hospitalization or Intensive Case Unit admission) due to COVID-19 during the omicron wave is lower for those with any number of COVID-19 vaccine doses compared to those who are unvaccinated
- A 3rd dose of a COVID-19 vaccine provides the most protection against these outcomes, highlighting the continued importance of vaccination



Key Messages

- COVID-19 fatalities are being closely monitored; they remain stable and relatively low
- As of January 7, 2022, there was less than 1 COVID-19 fatality per day reported to Hamilton Public Health
- Note that COVID-19 fatalities are a lagging indicator, we have not yet reached the time we would expect to see an increase

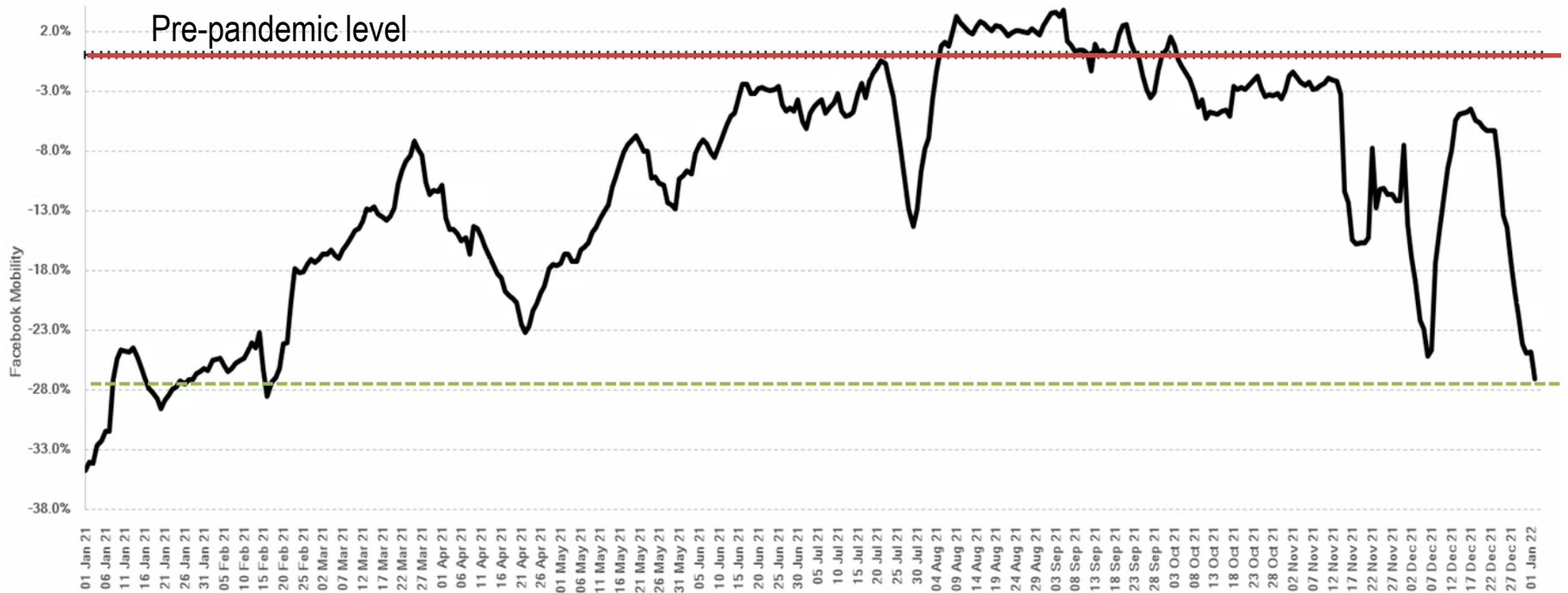
SCARSIN FORECAST

Ruth Sanderson, Epidemiologist

Scarsin Forecast Key Messages

- Focus is on blunting the wave to preserve care capacity for everyone who needs it
- Forecast provides two different scenarios assuming different levels of severity for Omicron (40% risk of hospital admissions compared to Delta is better case scenario; 50% for comparison):
 - Both adjust for new Ontario provincial orders issued January 3, 2022 (modified Step 2 of Roadmap to Reopen); includes remote learning for schools to January 17, 2022, and additional physical distancing measures (retail/ entertainment/ restaurant sectors)
- Omicron driven Wave 4 is at a point of high unpredictability
- Scarsin forecast indicates healthcare capacity will be further stressed – anticipated peak in Hamilton in mid-January 2022 that exceeds previous peak admission levels

Community Mobility, Hamilton



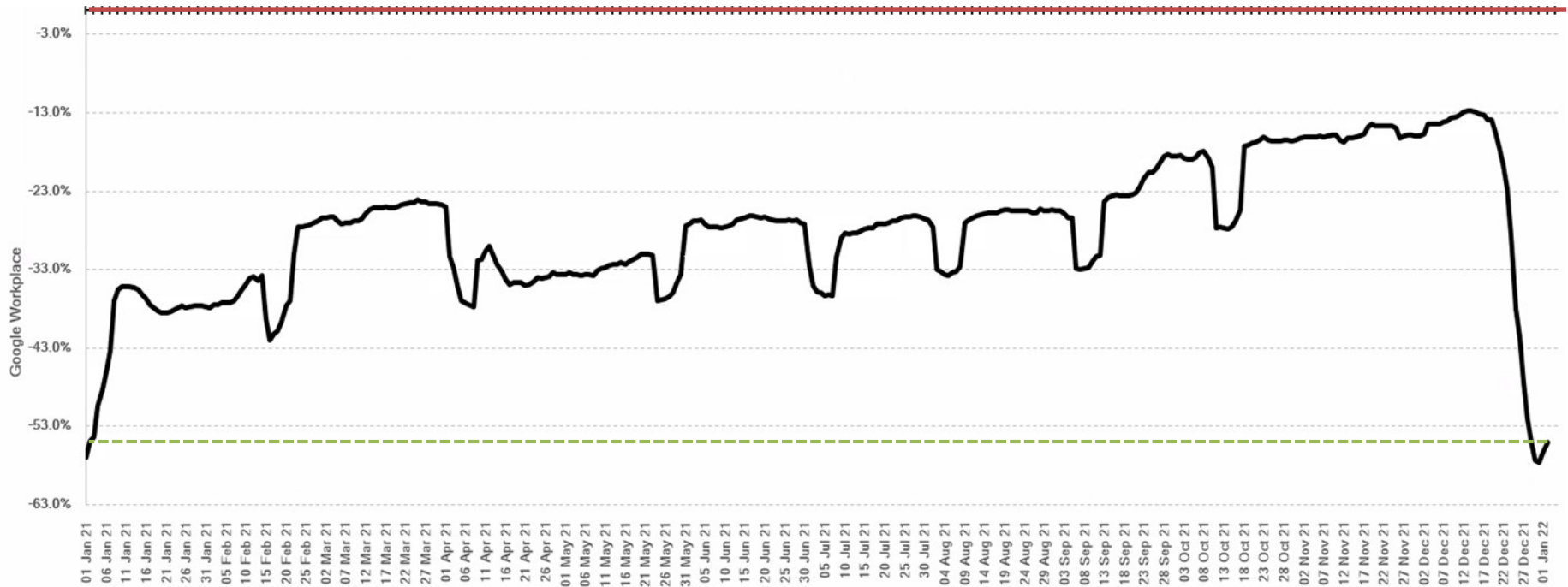
Data Source: Scarsin Decision Support System retrieved Jan 7, 2022

Key Messages:

- Community mobility increased prior to holidays and plunged from 6% below pre-pandemic levels on December 23, 2021 to 27% below pre-pandemic levels by January 2, 2022. As an indicator of community contacts – it will be helpful if we can keep community mobility lower.

Workplace Mobility, Hamilton

Pre-pandemic level



Data Source: Scarsin Decision Support System retrieved Jan 7, 2022

Key Messages:

- Workplace mobility plunged from 12% below pre-pandemic levels on December 16, 2021, to 55% below pre-pandemic levels on January 2, 2022. Again, where feasible it will be helpful to keep workplace mobility low.

Overview of Scenarios and Assumptions

Scenario 1 – Omicron Better Severity Scenario

Omicron severity greatly reduced from Delta's (i.e., appears that 40% of Delta's severity is reasonable assumption and consistent with recent United Kingdom studies)

Scenario 2 – Omicron Base Scenario

Omicron severity reduced from Delta's (i.e., at 50% of Delta's severity)

Scenarios Assume:

- Public health measures aligned with recent provincial announcement
 - (e.g., school closure/online learning to January 17, 2022; delayed university reopening to February 2022; masking 70%; community mobility set at 15% below pre-pandemic levels in January 2022 and gradually increasing to 10% below; workplace mobility updated to 27% below pre-pandemic levels and gradually increasing to 20%)
- Waning 2nd dose immunity
- Vaccinations aligned with Hamilton targets: (e.g., children 5-11 years old achieve at least 50% first dose by end of January 2022; entire adult 18+ years old population to achieve at least 70% 3rd dose coverage by end of January 2022)

-Limitation:

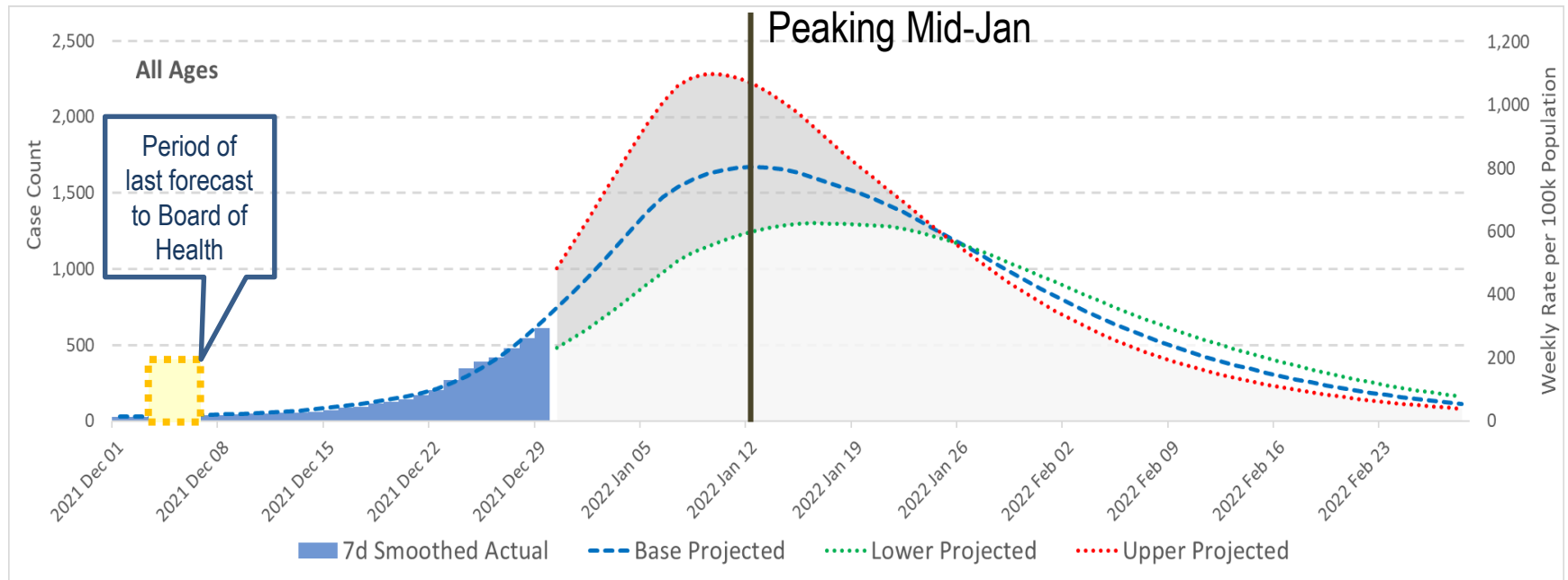
- Major changes in testing practices will likely reduce future
- reported cases

-Updated Data:

- Vaccination/case/hospital data retrieved January 2, 2022
- Uses recent Ontario hospitalization values by age group to forecast hospital admissions and intensive care admissions for Hamilton

Scarsin Cases Forecast

Scenario 1 – Omicron Better Severity: COVID-19 Cases Among Hamiltonians



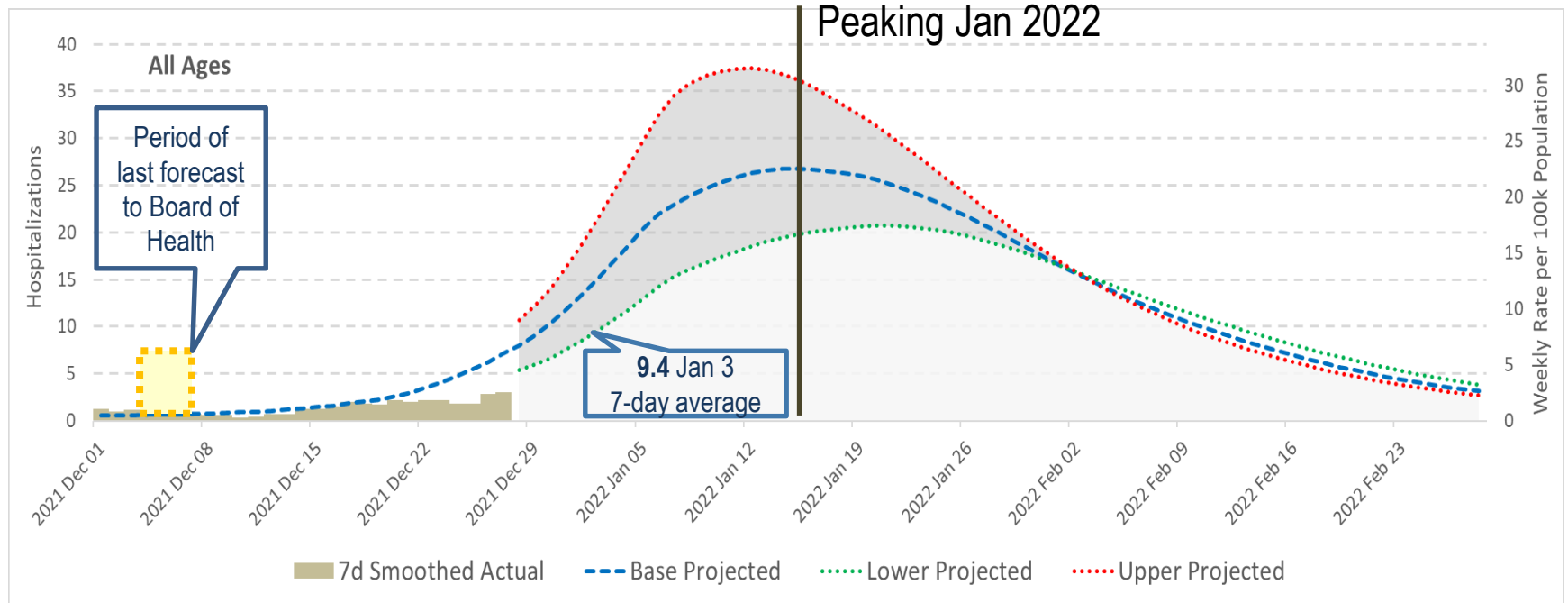
Data Source: Scarsin Decision Support System retrieved Jan 4, 2022

Key Messages:

- Forecast predicts substantial future case growth; peaking mid-January, 2022 at over 1500 cases (actual cases will be higher than reported due to testing changes) which could rise to over 2000 cases per day. Predict 40,875 cases between January 10 – February 28, 2022. Most cases will be in those 20-59yrs (67%), followed by 0-19yrs (21%) and 60yrs+ (12%).

Scarsin Hospitalizations Forecast

Scenario 1 – Omicron Better Severity: COVID-19 Hospital Admissions Among Hamiltonians



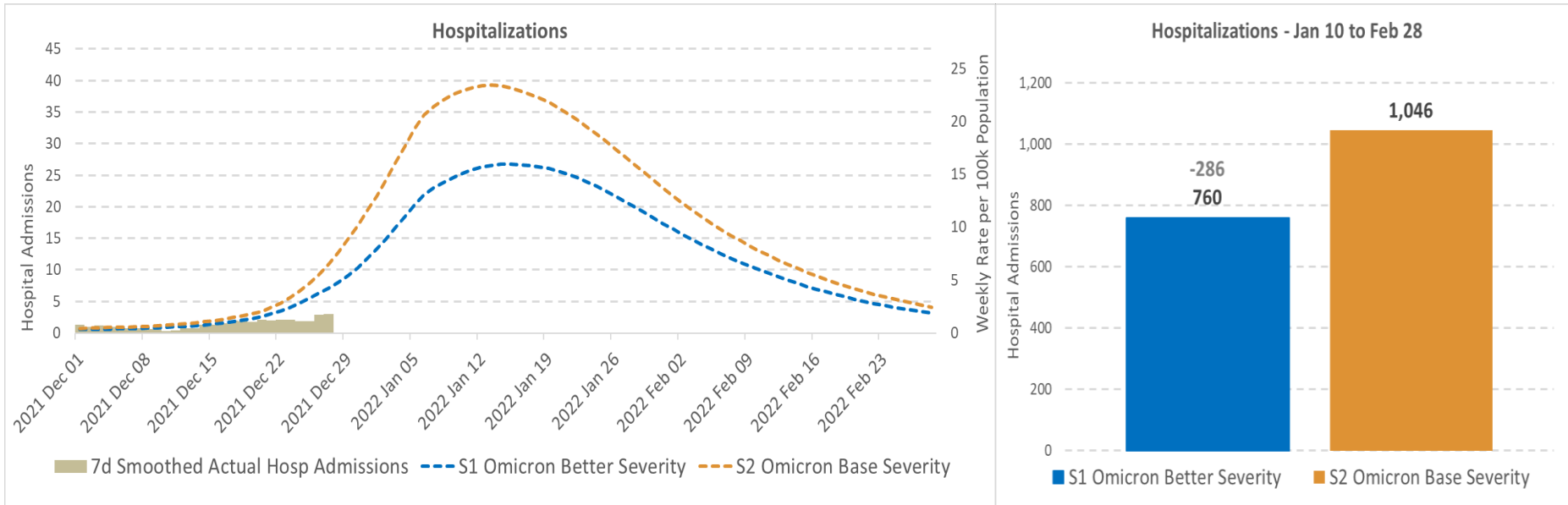
Data Source: Scarsin Decision Support System retrieved Jan 4, 2022

Key Messages:

- Scenario 1 – Omicron better (reduced) severity scenario predicts 760 new hospital admissions among Hamiltonians from January 10, 2022, to February 28, 2022. Hospitalizations peak just a few days later than cases in January. Current hospitalizations may substantially increase to just over 25 admissions at the peak mid-January 2022.

Scarsin Hospitalizations Forecast

Scenario Comparisons, COVID-19 Hospital Admissions Among Hamiltonians



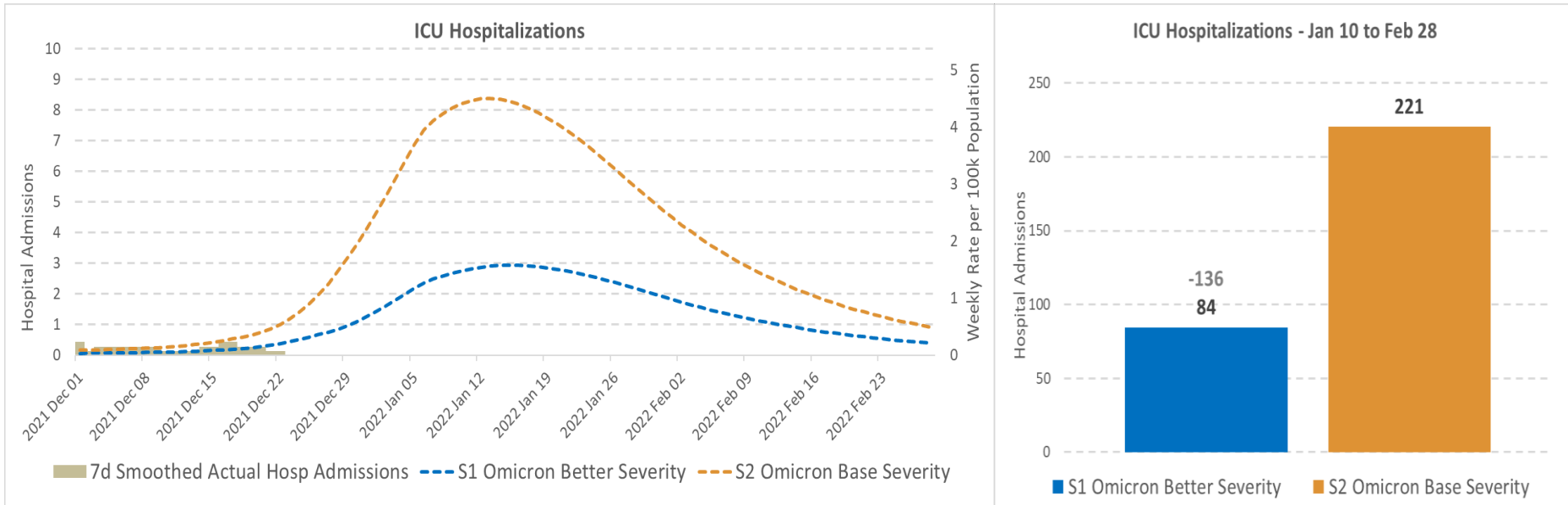
Data Source: Scarsin Decision Support System retrieved Jan 4, 2022

Key Messages:

- Scenario 1-Omicron, the better (reduced) severity scenario, predicts 760 new hospital admission among Hamiltonians, which is 286 fewer admissions than Scenario 2 with higher levels of severity from January 10, 2022, to February 28, 2022.

Scarsin ICU Forecast

Scenario Comparisons, COVID-19 Intensive Care Unit (ICU) Admissions Among Hamiltonians



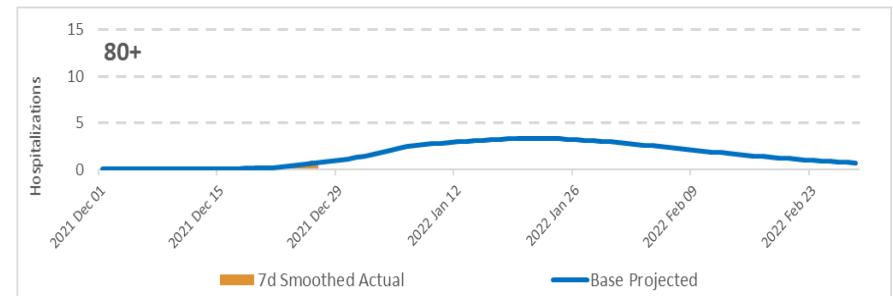
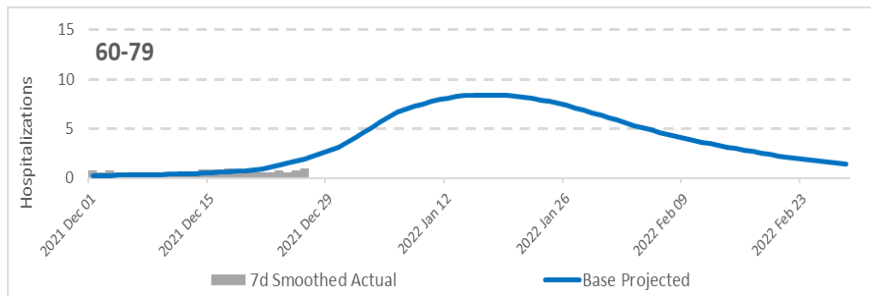
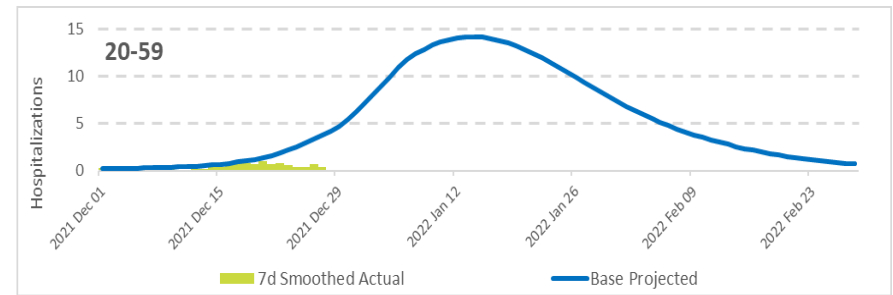
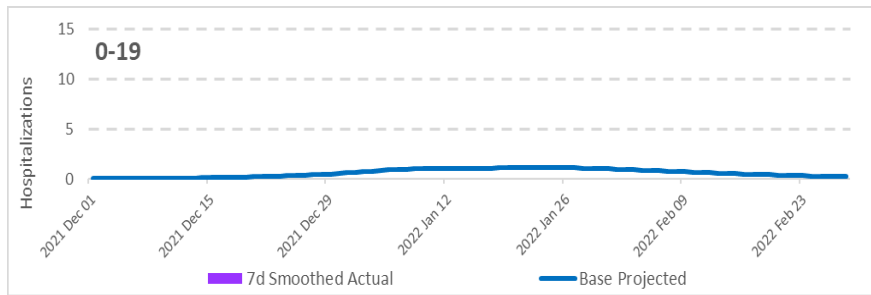
Data Source: Scarsin Decision Support System retrieved Jan 4, 2022

Key Messages:

- Scenario 1- Omicron Better Severity Scenario predicts 84 Intensive Care Unit admissions January 10 – February 28, 2022, 136 fewer than Scenario 2.

Scarsin Hospitalizations Forecast

Scenario 1 – Omicron, COVID-19 Hospital Admissions by Age Group, Hamiltonians



Data Source: Scarsin Decision Support System retrieved Jan 4, 2022

Key Messages:

- While only 12% of cases are predicted in those 60yrs+, 49% of new hospital admissions will be among those 60yrs+; 5% will be among those 0-19yrs, and 45% in those 20-59yrs from January 10 to February 28, 2022. However, of the 119 deaths that are forecast; 86% in those 60yrs+ (not shown).

Scarsin Forecast Summary

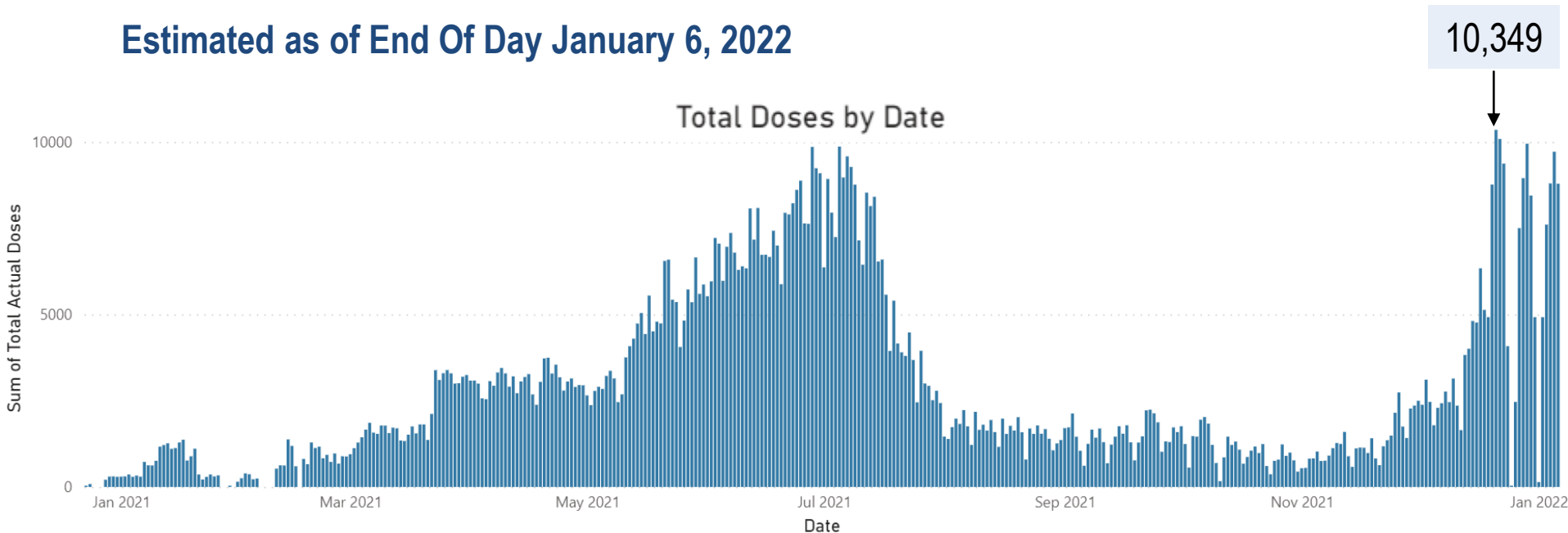
- Information on the severity of Omicron is still emerging, however, the sheer volume of cases is driving-up hospitalizations predicted to peak in January 2022:
 - The peak of total new hospital admissions, including intensive care unit admissions, is anticipated to be far greater than seen in previous waves
- Severe outcomes will disproportionately occur more among those aged 60yrs and over (12% of cases but 49% of hospital admissions/ 86% of deaths)
- Further model adjustments will be incorporated to further refine hospital and Intensive Care Unit admissions as additional information becomes available
- Vaccinations remain a key strategy combined with ongoing reductions in contacts, masking and physical distancing to blunt the Omicron fueled wave. Anticipated anti-viral treatments may help to reduce severe outcomes

COVID VACCINE UPDATE

Melissa Biksa, Manager – COVID-19 Vaccine

COVID-19 Vaccine – Doses Administered in Hamilton

Estimated as of End Of Day January 6, 2022

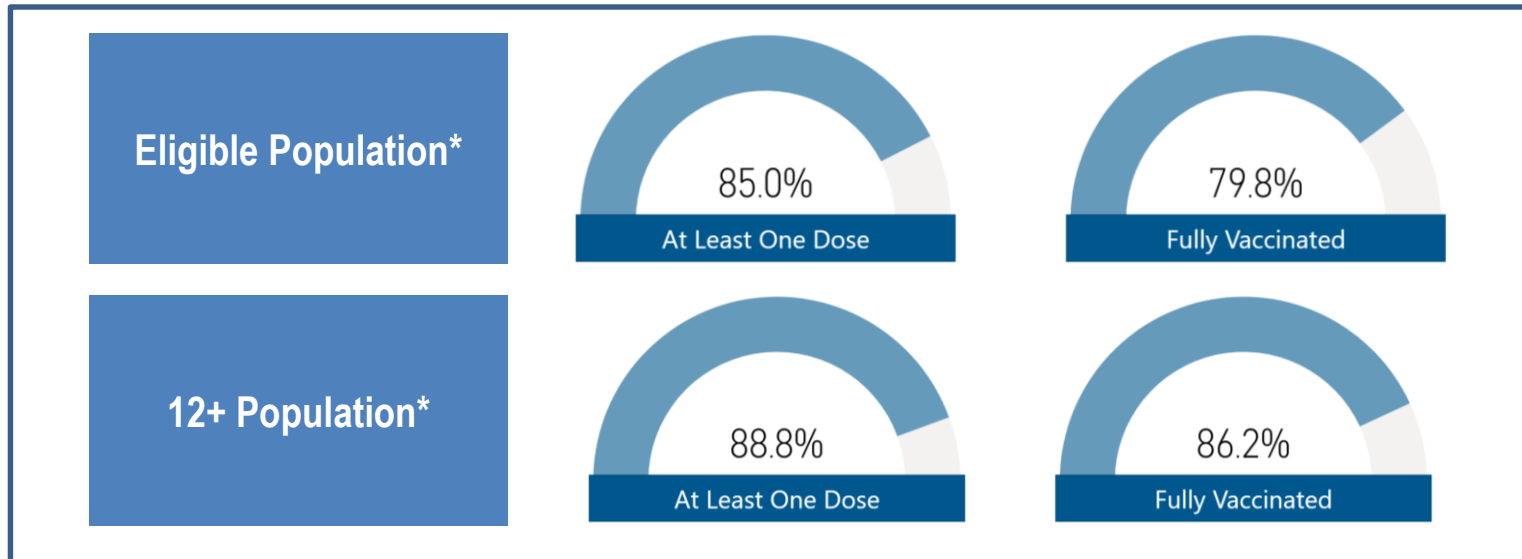


- Over **1.08 Million** COVID-19 vaccine doses administered in Hamilton since December 23, 2020
- Significant increase beginning mid-December 2021, reaching peak of **10,349** doses administered on December 21, 2021
- 3rd doses driving recent throughput, accounting for over 90% of daily doses administered

Sources: IntelliHealth (COVAXon Data Load)

COVID-19 Vaccine – Overall Coverage

Estimated as of End Of Day January 6, 2022



3rd doses administered to **45%** of people currently eligible**, which represents **37%** of 18+ year old population residing in Hamilton

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. The 12yrs+ population includes individuals born in 2009 or earlier.
**Defined as being 18+ years of age and at least 56 days from administration of second COVID-19 dose.
Sources: IntelliHealth (COVAXon Data Load); IntelliHealth (Population Projections, 2020).

COVID-19 Vaccine – Overall Coverage

Estimated as of End Of Day January 6, 2022

	Previous (Dec 24, 2021)	Previous (Dec 31, 2021)	CURRENT (Jan 7, 2022)	Trend
% change in 1 st dose coverage among Hamilton's population aged 5+yrs in the past week	84.3% (+0.5%)	84.6% (+0.3%)	85.0% (+0.4%)	--
% change in 2 nd dose coverage among Hamilton's population aged 5+yrs in the past week	79.3% (+0.2%)	79.5% (+0.2%)	79.8% (+0.3%)	--
% change in 3 rd dose coverage among Hamilton's population aged 18+yrs in the past week	22.3% (+10.0%)	29.6% (+7.2%)	37.5% (+7.9%)	--
# of 1 st doses administered to Hamilton's population aged 5+yrs in the past week	3,199	1,725	1,928	--
# of 2 nd doses administered to Hamilton's population aged 5+yrs in the past week	1,321	1,072	1,532	--
# of 3 rd doses administered to Hamilton's population aged 18+yrs in the past week	47,504	34,056	36,765	--



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

COVID-19 Vaccine – Pediatric Population

Estimated as of End Of Day January 6, 2022

- Over **16,800 1st doses** administered to pediatric population in Hamilton (**39.4% coverage**)
- Quick uptake in first two weeks (November 25 to December 8, 2021)
- Geographic variation in coverage
 - Highest in Dundas, Ancaster, Glanbrook, Lower West
 - Lowest in Lower Central, Lower East, Lower Stoney Creek and East Mountain

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

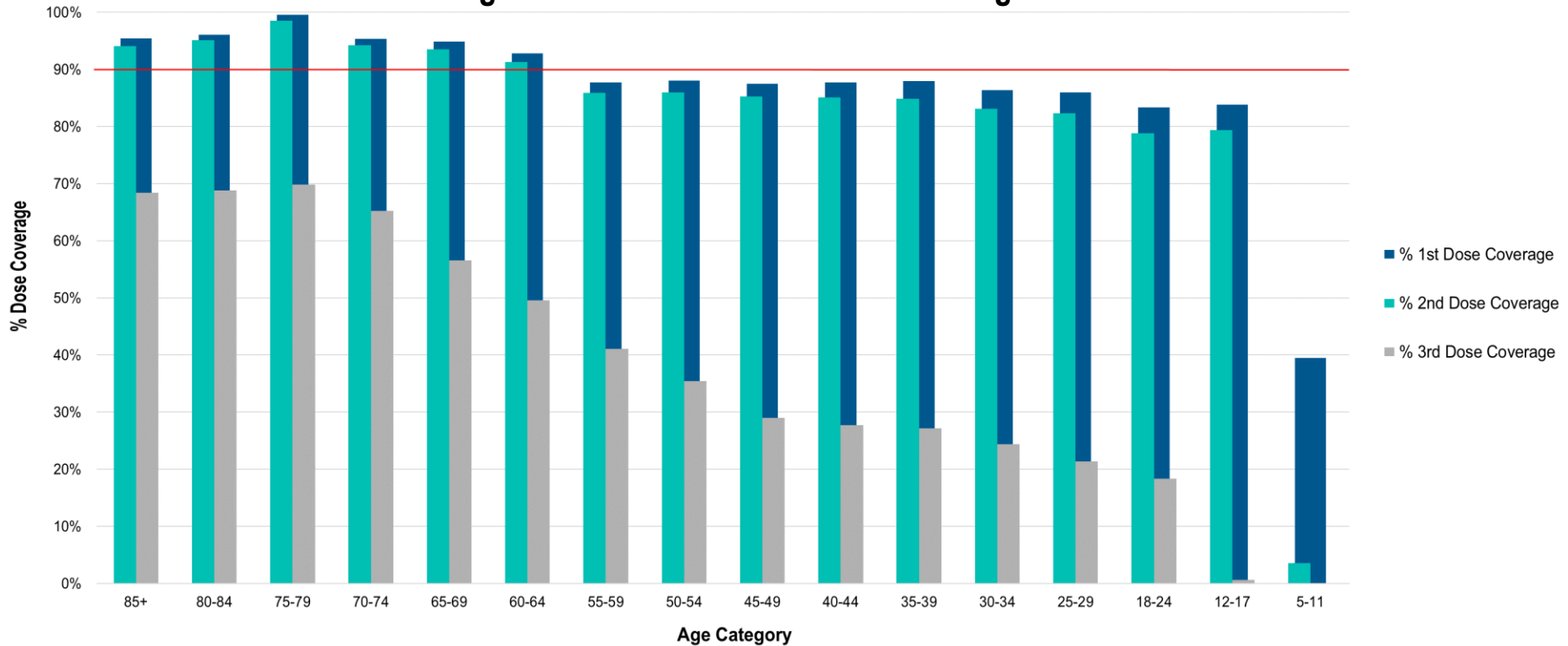
The pediatric population includes individuals born 2010 to 2016.

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

COVID-19 Vaccine – Coverage by Age

Estimated as of End Of Day January 6, 2022

Aged-Based COVID-19 Vaccine Coverage

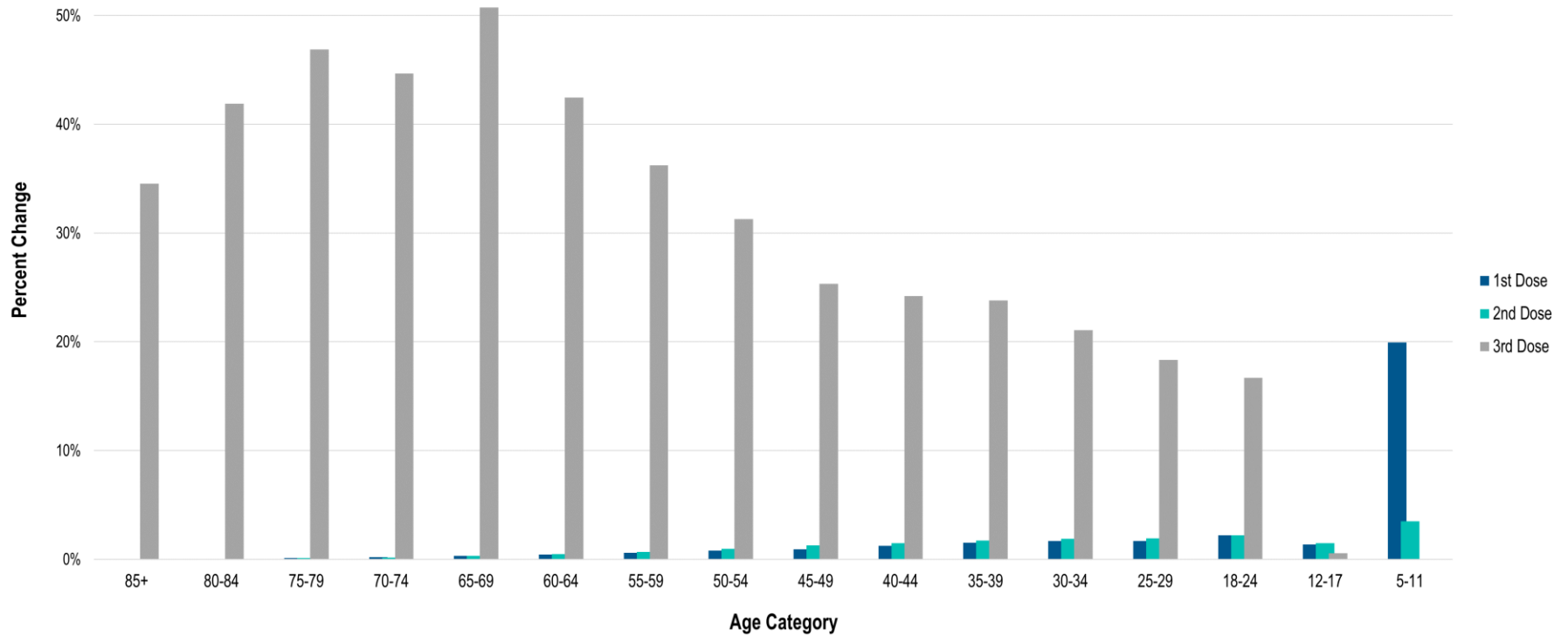


Sources: IntelliHealth (COVAXon Data Load); IntelliHealth (Population Projections, 2020).

COVID-19 Vaccine – Coverage by Age

Estimated as of End Of Day January 6, 2022

Percent Change in COVID-19 Vaccine Coverage by Age in the Past Month



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

COVID-19 Vaccine – Operational Update

- Significant scale-up in clinic operations in response to Omicron variant
 - Focus on maximizing reach through established sites
 - Access preserved for 1st & 2nd doses, including for 5 – 11 year old population
 - 3rd dose walk in added at Centre on Barton (January 5, 2022)
- Eligibility
 - 5 – 11 Year Old Population: 2017 cohort by birth date
 - 3rd Doses: 18yrs+, 3 months post-2nd dose
 - 4th Doses: Residents of long-term care, retirement homes, & other seniors congregate settings

COVID-19 Vaccine – Next Steps in Program Evolution

- Bookings slowing as reach 40% mark as in previous campaigns
- Continue to vaccinate high risk groups as soon as possible
 - Broad access to clinics
 - Walk-ins for 50yrs+
 - Large scale and community based clinics
 - Return to senior's congregate settings for fourth doses
- Support return to onsite education through collaboration with school boards, child care system
 - Promote/assist with access to existing clinics
 - Open to walk-ins for children
 - Provincial clinic for education and child care workers
 - Additional mobile school clinics after seniors complete

COVID-19 Vaccine – Plans for Mid-to-Late January 2022

- Large-Scale Clinics
 - Transition Limeridge Mall clinic to one shift to increase capacity of our mobile stream - Week of January 17, 2022
- Mobile
 - Support and provide 4th doses to retirement homes & other senior congregate settings, while continuing community pop-up clinics
 - School-based clinics to follow after 4th doses in congregate settings
- 5-11 Year Old Population
 - Implement walk-ins for 5-11 year olds at large-scale clinics starting Monday, January 10, 2022
 - Continue community clinics
 - Add school-based clinics after congregate settings complete

Vaccine Confidence

Pediatric Strategy 5-11 years

3rd Dose Strategy

Community Engagement & Tailored Materials



COVID-19 VACCINES / لقاحات كوفيد-19

Third/Booster Doses of COVID-19 Vaccines / الجرعات الثالثة / المنشطة

Individuals aged 18 and over are eligible to schedule their third/booster doses, three months (84 days) after second dose.

- Getting your third/booster dose is the best way to protect yourself against the rapidly spreading Omicron variant.
- The best vaccine for your booster dose is the vaccine that is available first.
- Both the Moderna and Pfizer COVID-19 vaccines provide strong protection against COVID-19 and its variants.
- Evidence suggests that a third/booster dose can further increase protection against severe illness and hospitalization.

If you or family aged 5+ haven't received your first or second dose of the vaccine, now is the time.

Get Your Vaccine:

Book online at hamilton.ca/GetYourVaccine	If you do not have access to online booking, you:
<ul style="list-style-type: none"> Have an Ontario health card (green or red and white) and Have an email address or cell phone that can receive text. 	<ul style="list-style-type: none"> Call the COVID-19 Vaccine Hotline at 905-374-8048, option 4 Transition services are available in 180 languages

Vaccines are also available at local pharmacies: open.33.ontario.ca/vaccine-locations

The best way you can prevent the spread of COVID-19 is to get fully vaccinated and keep your guard up by following public health measures including wearing a mask, keeping your distance, limiting close contacts and staying home when you're unwell.

hamilton.ca/GetYourVaccine | Hamilton



Thank You to Our Community Partners

2021 Community Booking and Outreach Funding Recipients

- De dwa da dehs nye>s Aboriginal Health Centre
- Afro Canadian Carribean Association of Hamilton & District
- Amitie Canado Congolaise
- Asociación Fraternidad Hispana
- Association de la Communaute Ivoirienne de Hamilton
- Centre de Sante Hamilton Niagara
- Circle of Friends for Newcomers
- Corktown Neighbourhood Association
- Hamilton Centre for Civic Inclusion
- Helping Hands Street Mission (Hamilton)
- Eva Rothwell Centre
- Niwasa Kendaaswin Teg
- P&J Consulting
- Refuge Hamilton Centre for Newcomer Health
- Seeds of Leadership
- South Asian Heritage Association of Hamilton & Region
- YWCA Hamilton

Thank you to all members of the Vaccine Readiness Network for their commitment and contributions.

HAMILTON CONNECTED COVID CARE

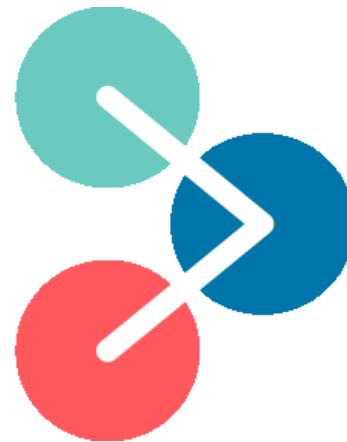
Dr. Tammy Packer

Chief, Dept. of Family Medicine, SJHH and HHS

Member, Primary Care Executive, Greater Hamilton Health Network

HAMILTON CONNECTED COVID CARE

**Greater
Hamilton
Health
Network**



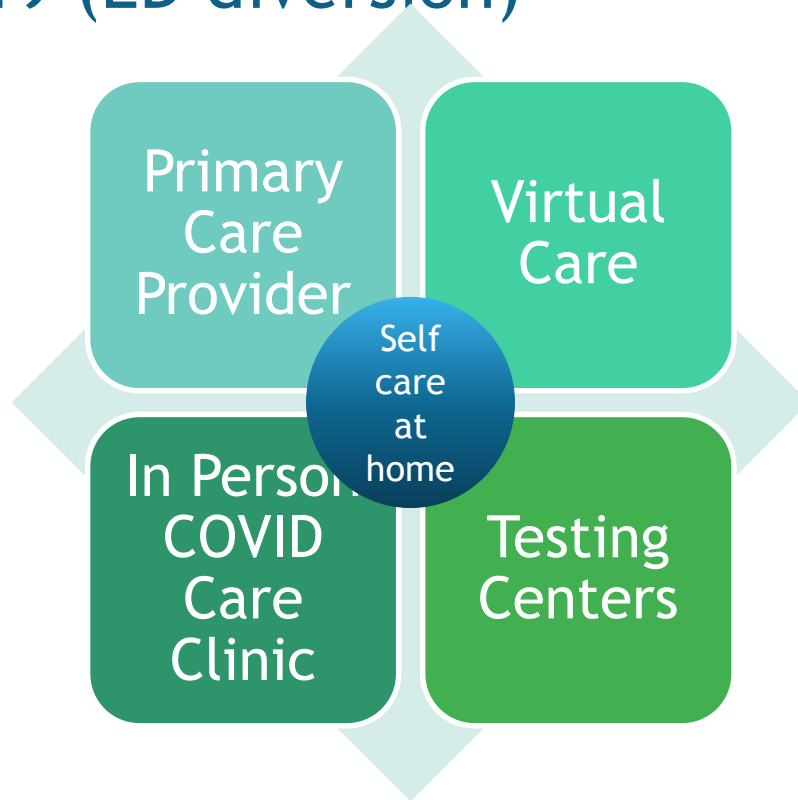
Building Community Health Together

January 10, 2022

Goal: Integrated
planning across
sectors to meet
the need for ED
diversion for mild-
moderate COVID
19 patients



Four Pathways of care for those with COVID-19 (ED diversion)



Key Message: Self Care at Home

Communicated publicly

- Communicate education and resources for self-care at home to public, providers
- Broad based and inclusive strategy
- Materials are available for posting online from Primary Care
- Shared resource materials across all elements



Primary care as first point of access



- ▶ The first step for additional support (beyond self-care) that will be communicated to the general public as part of the communications plan is to call your family doctor re; mild/moderate COVID-19 care and guidance
- ▶ Ensure continuity of care is maintained with patient's normal care provider whenever possible
- ▶ Facilitate primary care support for those without access
- ▶ Primary care to utilize validated Hamilton Family Medicine (HFAM)/Ontario Health Covid @ Home pathways for community assessment, monitoring and management

Virtual Care : Two pathways



VIRTUAL EMERGENCY
DEPARTMENT VISIT
[URGENTCAREONTARIO.CA](https://www.urgentcareontario.ca)



COVID VIRTUAL COMMUNITY
WARD PRIMARY CARE
SUPPORTED

Virtual Urgent Care

- If an individual does not have a family doctor, or cannot access their family doctor, they may visit the Virtual Urgent Care clinic via <https://www.urgentcareontario.ca/> or by calling 1-844-227-3844 from Monday - Friday between 12 - 6PM
- This will be communicated publicly as an option for those without access to a family doctor
- Materials on self-COVID-19 care will be provided to patients post-Virtual Urgent Care visit
- Individuals will be risk categorized and triaged accordingly to receive follow up via their primary care provider/ COVID-19 CARE Clinic/Virtual Community Ward

COVID Virtual Community Ward

- Patients can be referred to the COVID-19 Virtual Community Ward from Virtual Urgent Care, the Assessment Centre, or St. Joseph's Healthcare Hamilton/Hamilton Health Sciences Emergency Departments.
- The virtual ward is intended to provide 5-7 days of monitoring (occasionally up to 14 days) for high and moderate-risk patients to help keep them safe at home and identify need for in person and acute/emergent care
- Risks include both medical and Social Determinants of Health
- Monitoring which involves proactive primary care outreach to moderate and high risk patients over a 5-10 day course is understood as an important Emergency Department diversion strategy
- This option does not replace normal primary care provider and is only for covid monitoring



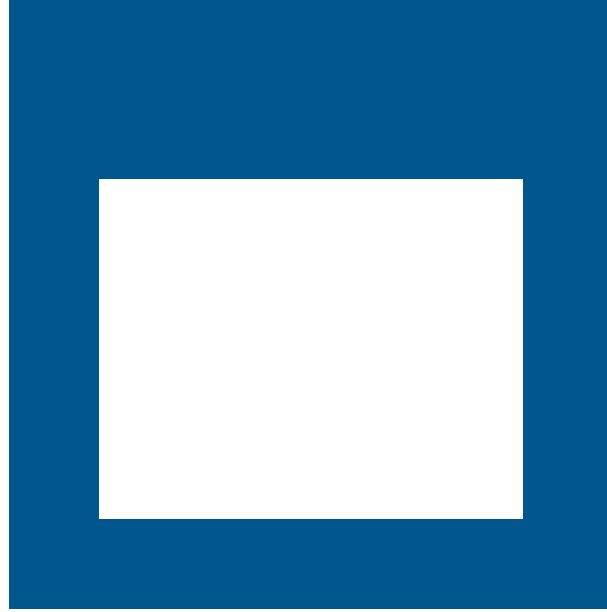
In Person COVID-19 Care Clinic

- A physical location will be opened in proximity to the St. Joseph's Healthcare Hamilton Emergency Department to be used for in-person COVID-19 assessment clinic ***once local Emergency Departments (St. Joseph's Healthcare Hamilton, Hamilton Health Sciences) exceed a defined capacity threshold.*** This threshold has been identified and is linked to excess Emergency Department volumes across the city
- The clinic will be communicated to all potential referral sources prior to go live
- Sources of access would include referral from Primary Care, Virtual Urgent Care, Emergency Departments, Virtual Community Ward, Telehealth, the Assessment Centre and Emergency Department walk-ins

Pre-Go Live Basics

The following items are in development with the aim of implementing this model the week of January 10, 2022:

- ▶ Communications
- ▶ Self-Care Resources
- ▶ Virtual Urgent Care pathways
- ▶ Virtual Primary Care Community Ward
- ▶ Primary Care Engagement and Education
- ▶ Emergency Department Provider Engagement
- ▶ COVID-19 Care Clinic at St. Joseph's Healthcare Hamilton
- ▶ Note: Referral to Monoclonal Antibody Therapy Clinic through these channels has been included in planning



QUESTIONS?