



# Public Health Services COVID-19 Situation Report & Organizational Update

Board of Health  
November 15, 2021

# Overview

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2. COVID-19 Situation Report
3. Scarsin Forecast
4. COVID-19 Vaccine
5. Current Public Health Services Priorities

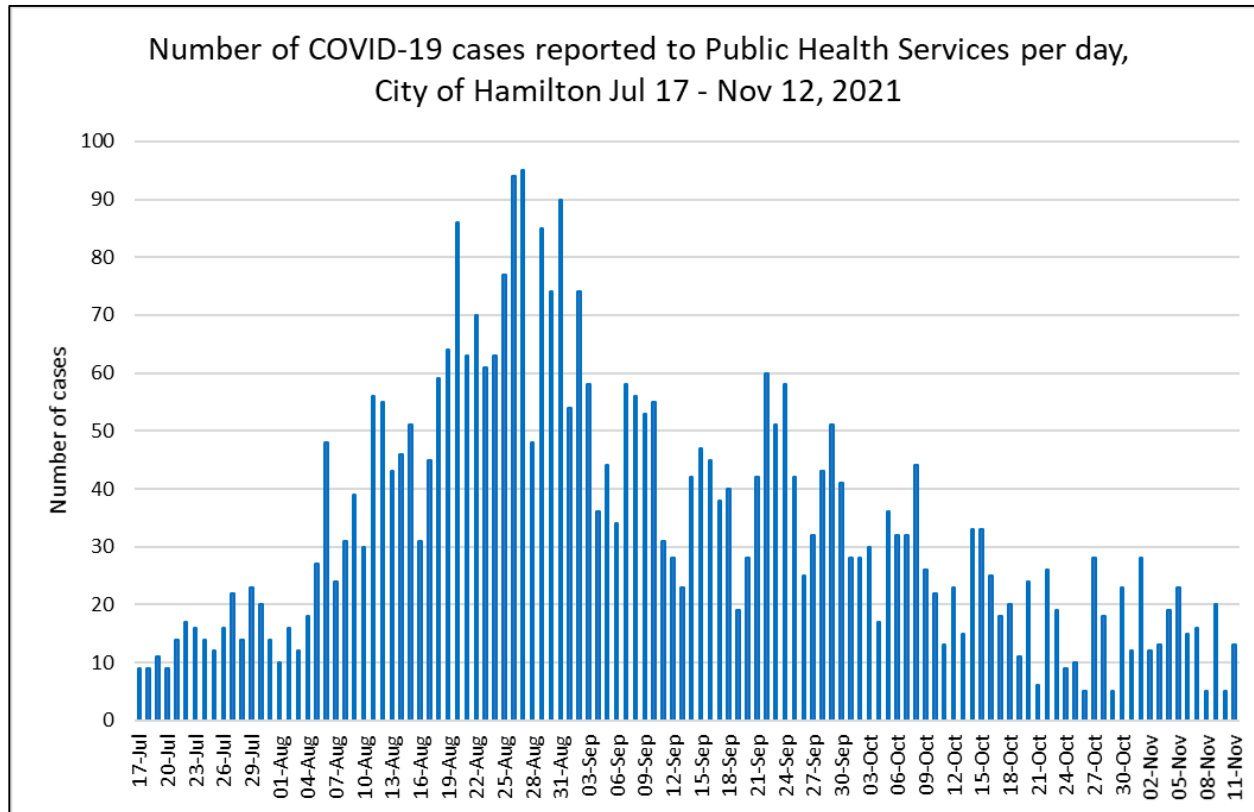
# Overall Status

- Case and outbreak activity in Hamilton has been maintaining at current levels for several weeks
- Provincial pause in reopening due to increase in case activity.
- As of November 11, 2021: 871,132 doses given; 85.6% of Hamiltonians 12yrs+ vaccinated with one dose and 82.2% with both doses
- Updated Scarsin forecast indicates that Hamilton can anticipate an increase in cases with increased transmission risk due to increased indoor activities and reopening, however severe outcomes such as hospitalization should be modest
- Control of COVID-19 remains dependent on both vaccination and the practice of public health measures

# SITUATION REPORT

Stephanie Hughes, Epidemiologist

# Reported Cases



## Key Messages

- Hamilton is in Wave 4 of COVID-19 and maintaining at current activity levels
- As of November 12, 2021 there were 15 cases of COVID-19 reported to Hamilton Public Health per day on average

# Phases of COVID-19 in Hamilton – Wave 4

## Phase 1: Pre-peak Jul 17 – Aug 16, 2021 (1 month)

- 757 cases reported
- 14 outbreaks
- 47 hospitalizations and 4 deaths
- Outbreaks occurring in workplace, child care, communal living settings
- Stage 3 – Provincial Roadmap to Reopen
- Vaccine doses administered decreased

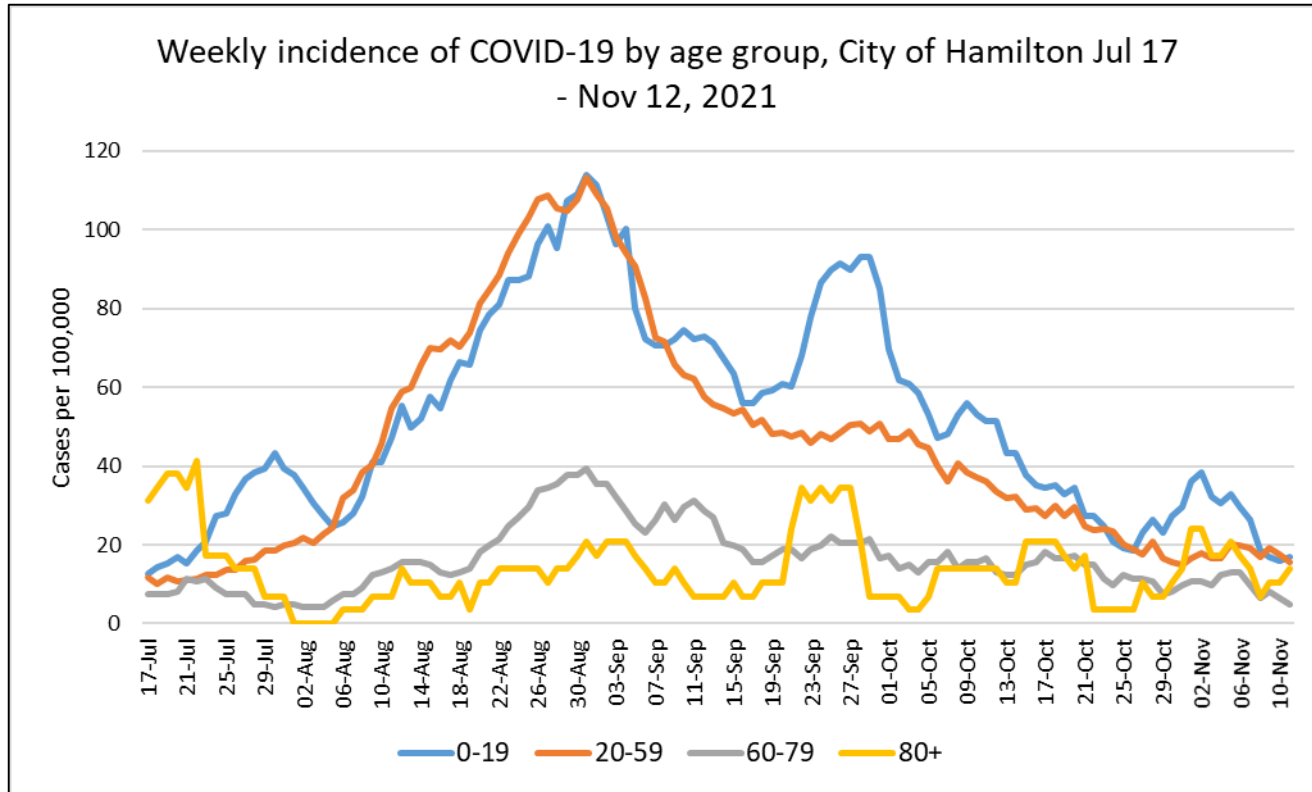
## Phase 2: Peak Aug 17 – Sept 1, 2021 (0.5 month)

- 1,128 cases reported
- 22 outbreaks
- 67 hospitalizations and 3 deaths
- Outbreaks occurring in workplace, child care, athletic settings
- Provincial reopening stages paused, maintenance of public health measures
- Introduction of hyper-local vaccine clinics to areas of Hamilton with lower vaccine coverage

## Phase 3: Post-peak Sept 2 – Nov 12, 2021 (2.5 months)

- 2,094 cases reported
- 76 outbreaks
- 124 hospitalizations and 13 deaths
- Outbreaks occurring in workplace, child care, school, athletic, banquet hall, communal living settings
- Increase in indoor activity
- Vaccine passports implemented (ON)
- Increase in provincial cases

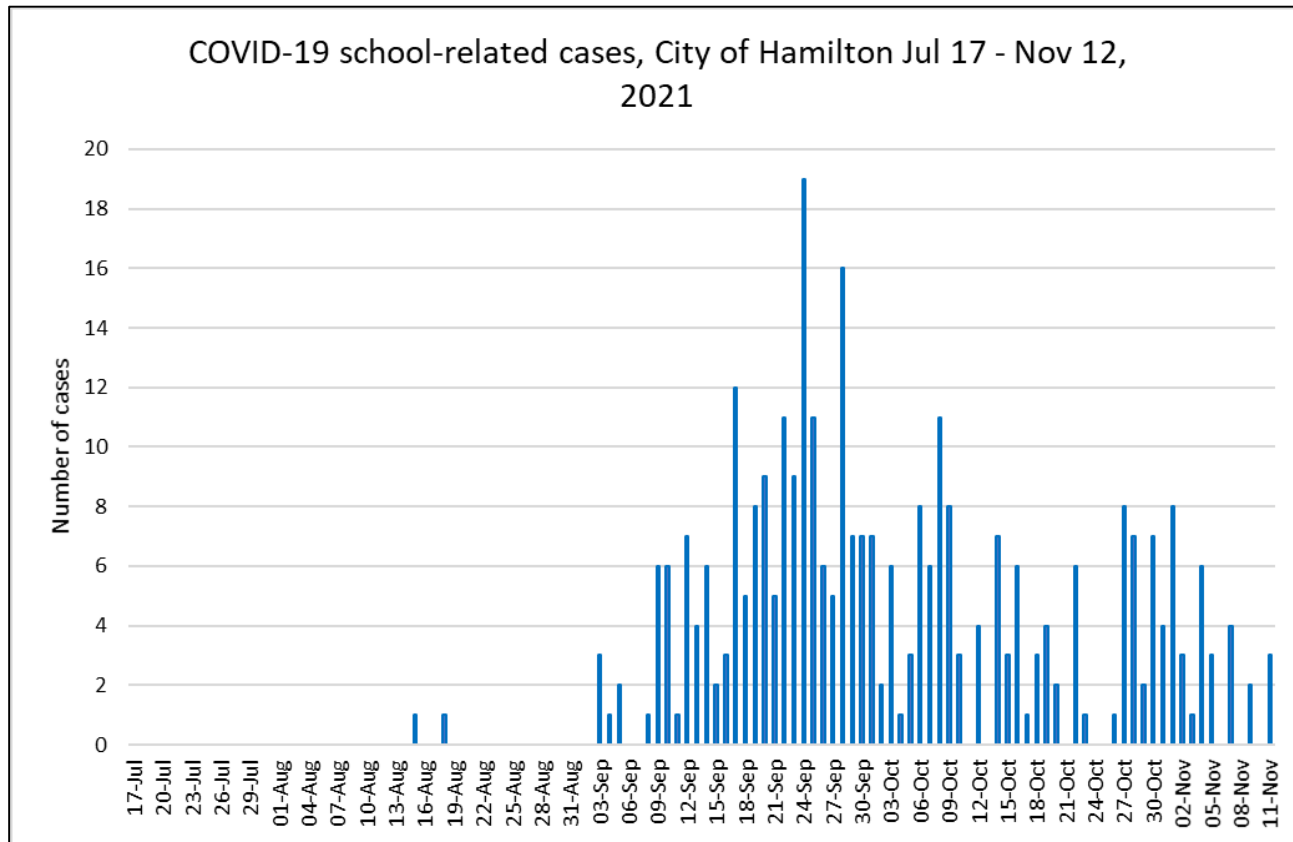
# Affected Age Groups



## Key Messages

- Wave 4 COVID-19 cases in Hamilton have been predominantly younger/middle-aged individuals (0-59 years)
- There have been recent increases in young individuals (0-19 years), which align with increases in school activity

# Reported School-Related Cases

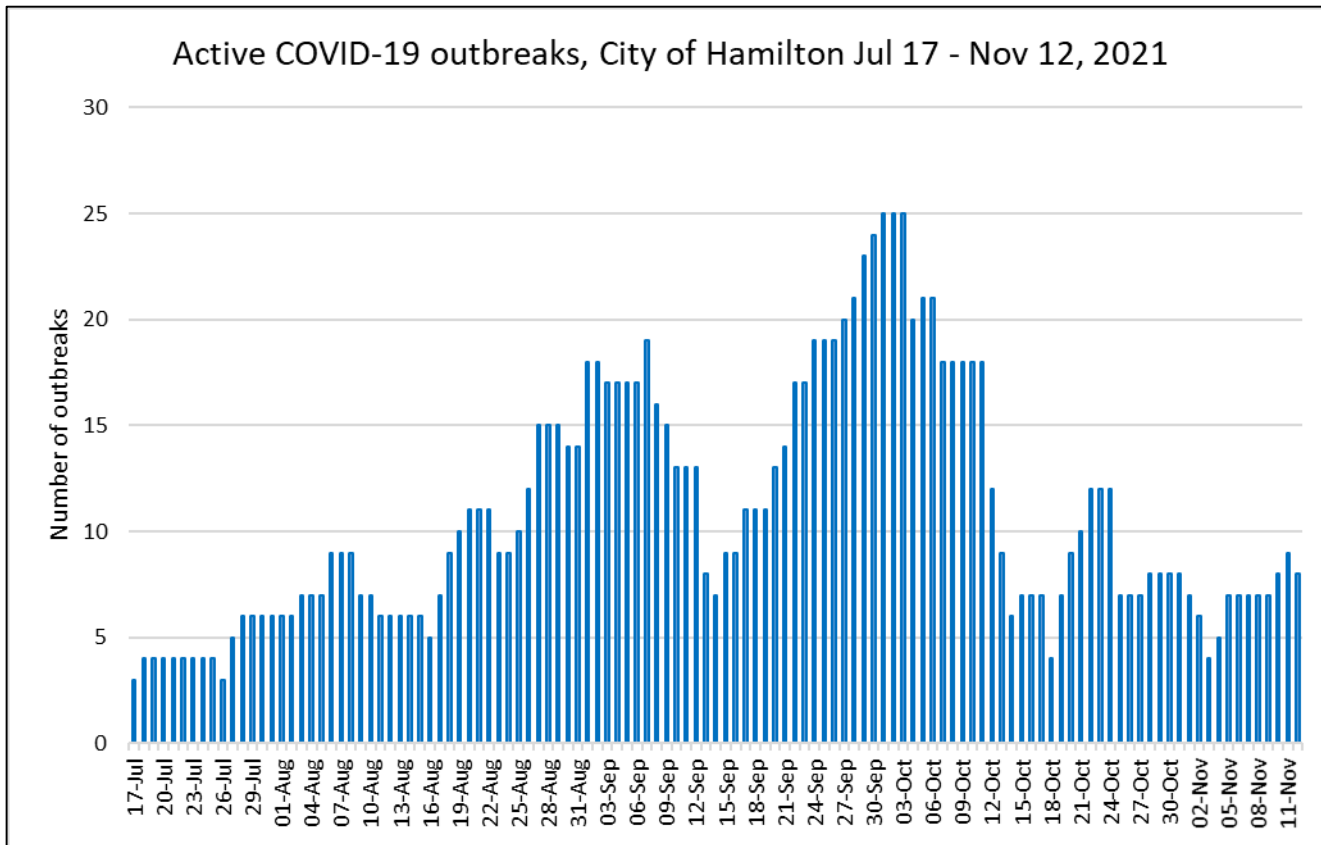


## Key Messages

- School-related COVID-19 case activity in Hamilton hit a peak near the end of September 2021
- As of November 12, 2021 school-related case activity was decreasing



# Active Outbreaks



## Key Messages

- COVID-19 outbreak activity in Wave 4 peaked around late September 2021
- The number of active COVID-19 outbreaks in recent weeks has been maintaining

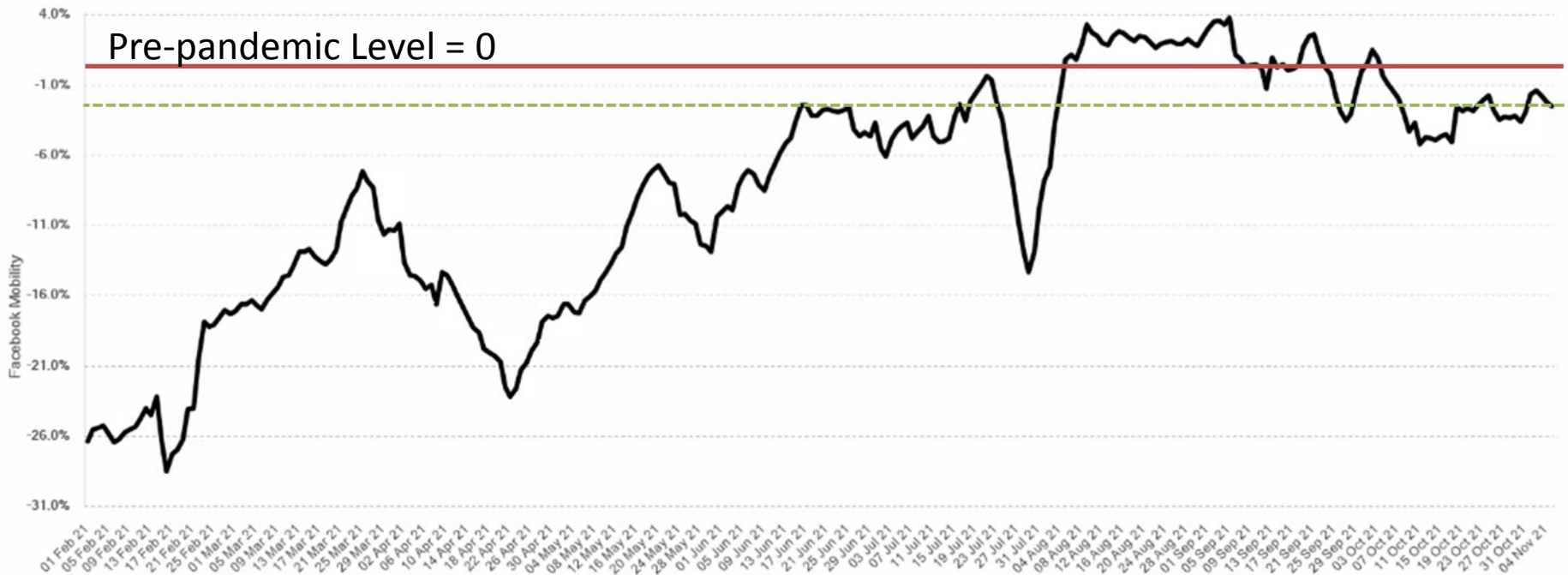
# SCARSIN FORECAST

Ruth Sanderson, Epidemiologist

# Scarsin Forecast

- Hamilton continues to navigate the delicate balance with reopening and control of COVID-19
- Sharing publicly for the first time forecasts that are extended out to the end of Jan 2022:
  - The forecasts continue to indicate that the use of public health measures will balance the increased transmission with increased indoor activities and reopening
  - The updated reopening forecast indicates that, while Hamilton can anticipate an increase in cases this year, severe outcomes, such as hospitalization, are forecast to be modest

# Overall Mobility, Hamilton

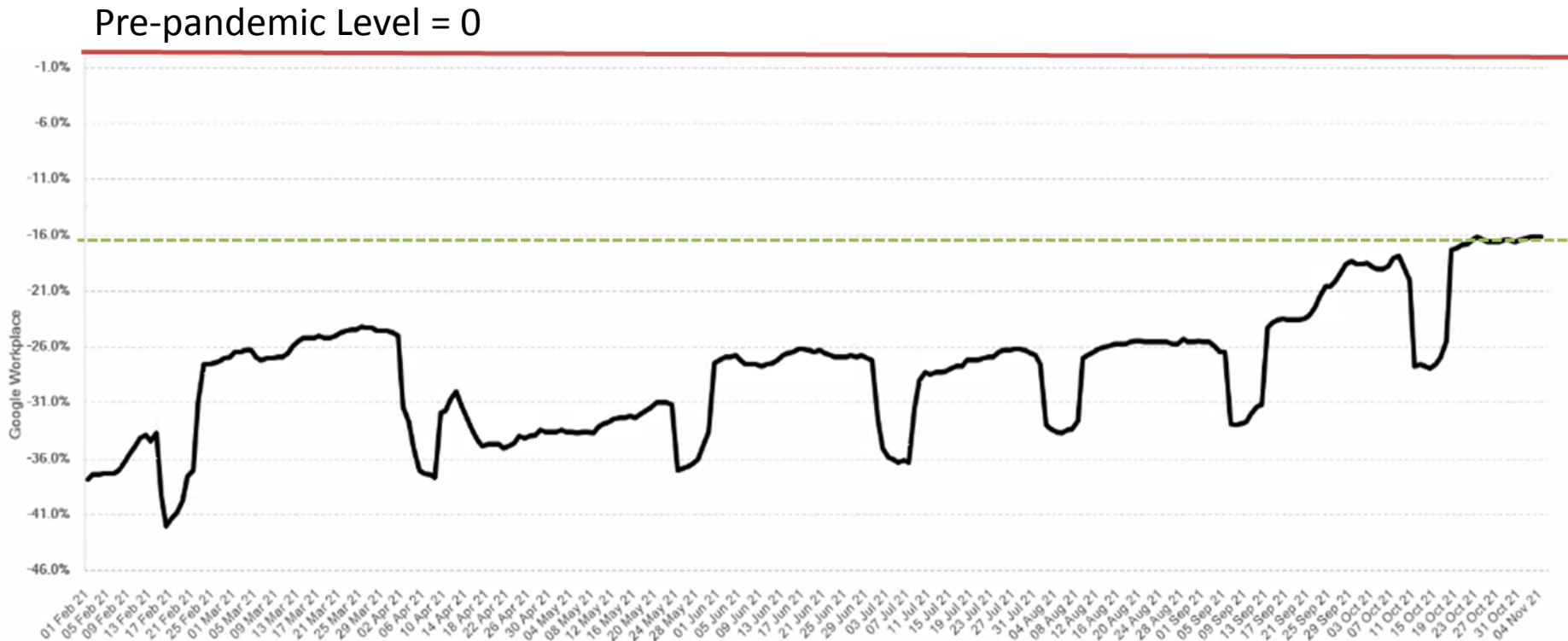


Data Source: Scarsin Decision Support System retrieved Nov 8, 2021

## Key Messages:

Hamilton's community mobility levels remain just below pre-pandemic levels; now at -2% as of Nov 4, 2021.

# Workplace Mobility, Hamilton



Data Source: Scarsin Decision Support System retrieved Nov 8, 2021

## Key Messages:

Workplace mobility has levelled off at 16% below pre-pandemic levels. Levels have not been this high in Hamilton since Mar 2020.

# Scarsin Forecast – Overview of Scenarios

## Scenario 1 – Maintained Public Health Measures (PHM)

–Maintained public health measures (e.g., 70% masking to Jan 31, 2022)

## Scenario 2 – Reopening

Reduced avoidance and physical distancing starting Nov 15, 2021, down to 0% by Feb 15, 2022, in community, workplaces, university & school settings. Masking at 60% to end of year then gradually declines to 0% by end of Mar 2022.

## Scenario 3 – Child Vaccination & Reopening

Vaccination of 5–11-year-olds starting Dec 6, 2021; achieves 40% first dose vaccination by end of year, sets 8-week interval between.

### Scenarios Assume:

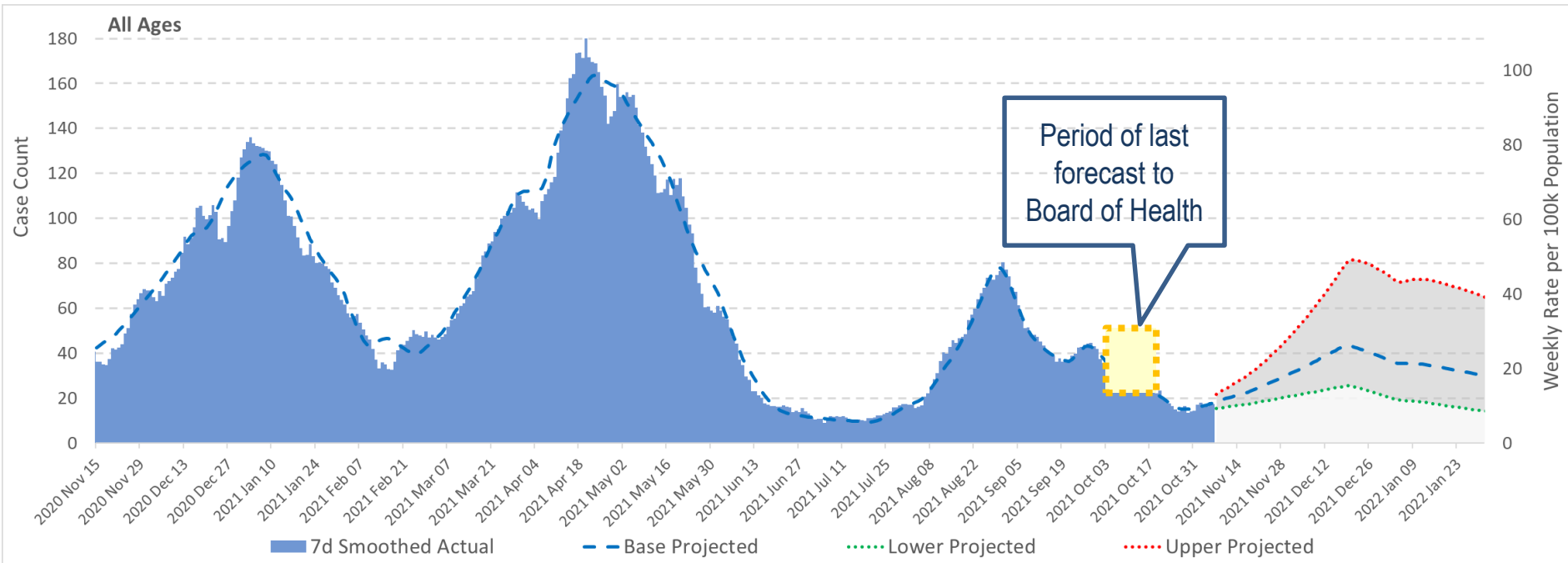
- Increased transmission risk with increased activity
- indoors due to cooler weather and “reopening” activities
- 80% vaccination in eligible population by late Oct 2021
- with continued vaccination
- Maintained workplace mobility after Oct 2, 2021, so that
- it decreases to 12% below pre-pandemic levels by Jan 9, 2022; community mobility at 0% by Dec 31, 2021
- Delta circulating at 99.5% of cases as of Sep 20, 2021
- Immunity curves adjusted for vaccine type
- First dose immunity adjusted for Delta
- Reduced dosing interval to four weeks in Jul 2021
- Fall in-class learning schools/ universities

### -Updated Data:

- Case data retrieved Nov 8, 2021
- Updated mobility data
- Vaccination data retrieved Nov 8, 2021

# Scarsin Forecast

## Scenario 2 Reopening: COVID-19 Cases Among Hamiltonians



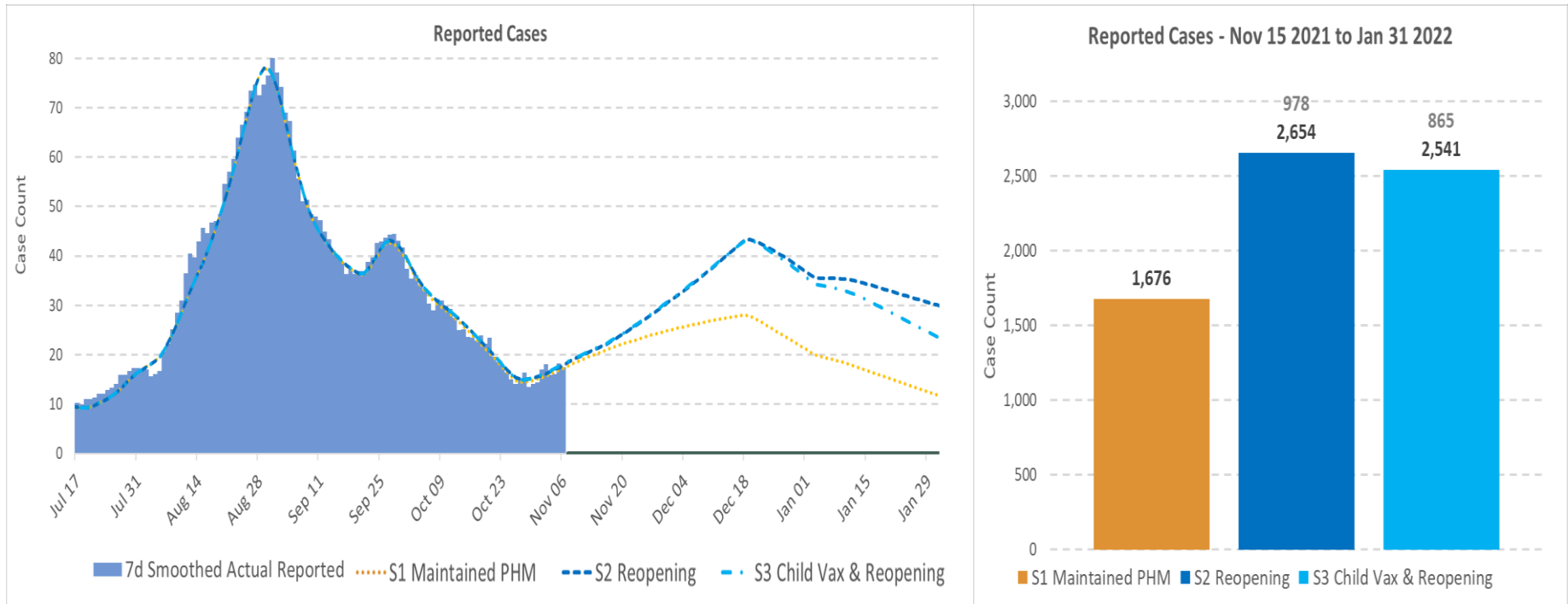
Data Source: Scarsin Decision Support System retrieved Nov 10, 2021

### Key Messages:

Compared to this time last year, Hamilton is in a much better position due to continued public health measures and vaccination. A modest increase in cases is predicted in late Nov with “reopening” and added transmission risk from increased indoor activity (including reduced avoidance/ distancing after Nov 15, 2021). Cases may peak at 40 per day.

# Scarsin Forecast

## Scenario Comparisons, COVID-19 Cases Among Hamiltonians



Data Source: Scarsin Decision Support System retrieved Nov 10, 2021

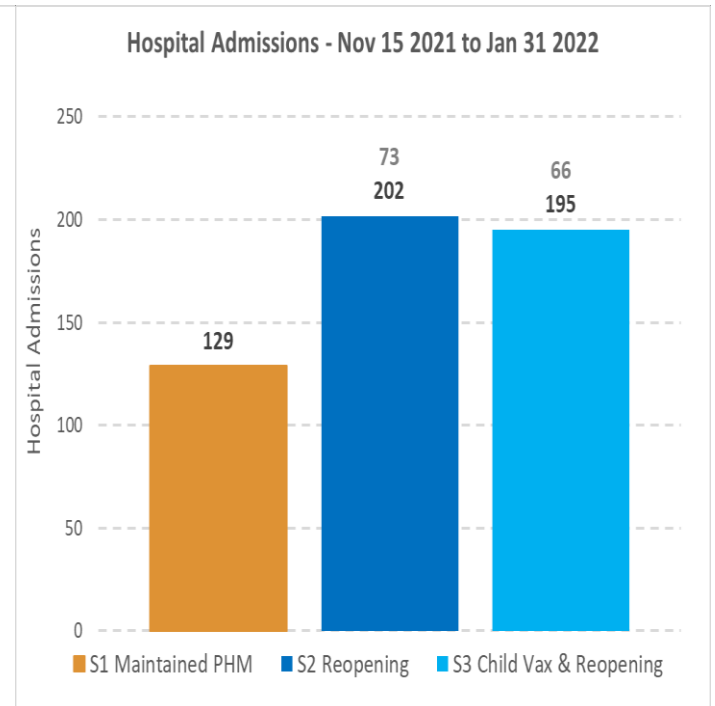
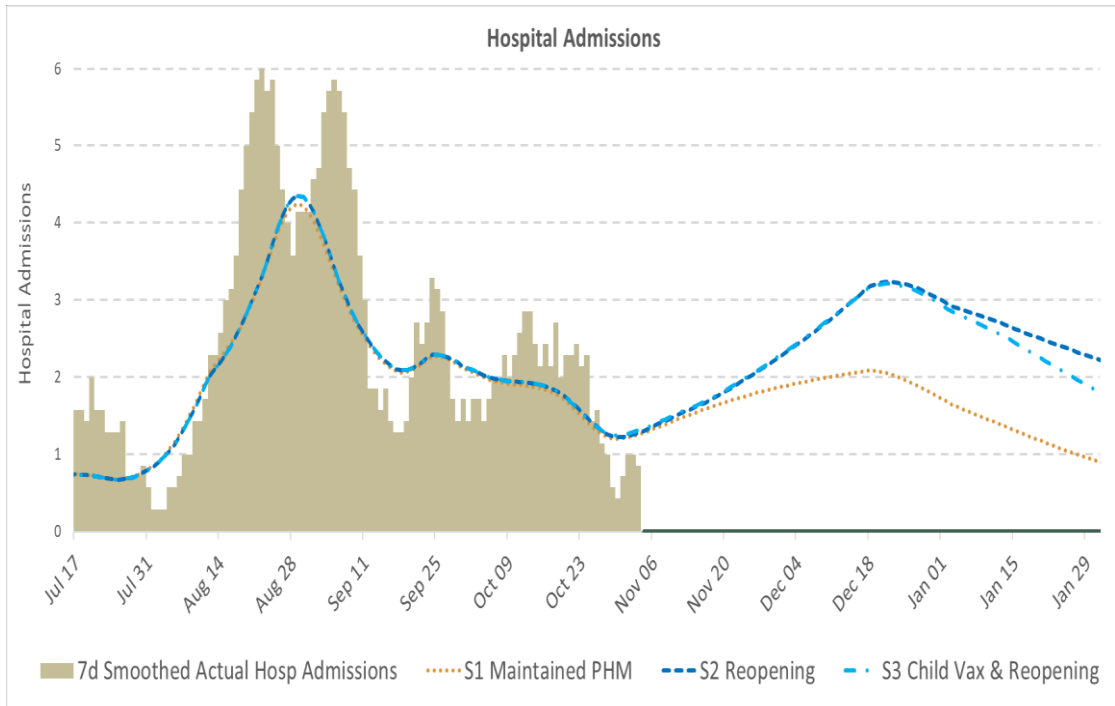
### Key Messages:

**Scenario 2 Reopening** predicts 978 additional cases from Nov 15, 2021 – Jan 31, 2022, compared to **Scenario 1 the previous base of maintaining all public health measures (PHM)** in place to the end-of-the-year. Cases will primarily be among those aged 0-19yrs (32%) and 20-59yrs (57%). Vaccination of children aged 5-11yrs, starting in Dec 2021, will prevent 113 cases in the new year compared with the reopening scenario (**Scenario 2**).



# Scenario Comparisons, COVID-19 Hospital Admissions Among Hamiltonians

# Scarsin Forecast



## Key Messages:

**Scenario 2-Reopening** scenario predicts 73 additional hospital admission from Nov 15, 2021 – Jan 31, 2022, compared to **Scenario 1 Maintained Public Health Measures**. Admissions will primarily be among those aged 20-59yrs (75%) and 60-79yrs (17%). Vaccination of children 5-11yrs in Dec 2021 (**Scenario 3**), will prevent 7 additional hospitalizations in Jan 2022 compared with **Scenario 2**. Anticipate 13 deaths in **Scenario 2** between Nov 15, 2021, and Jan 31, 2022; primarily in those over 60yrs (77%).

Data Source: Scarsin Decision Support System retrieved Nov 10, 2021

# Scarsin Forecast Summary

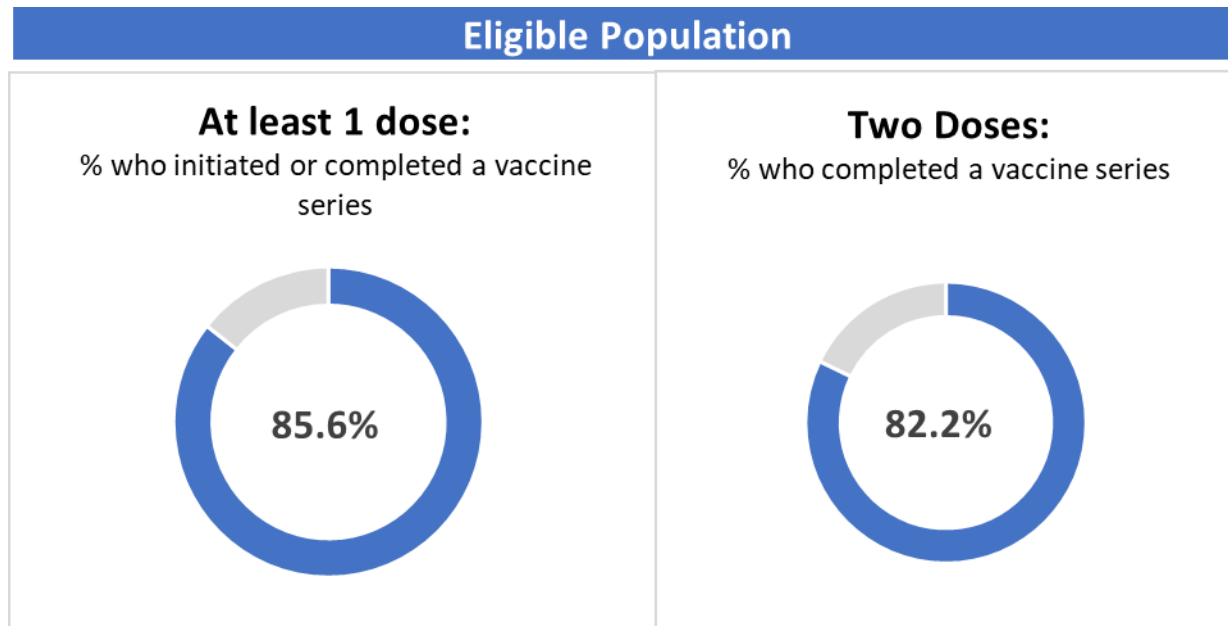
- Cases/ hospitalizations and deaths continue to be predicted to be lower out to the end of Jan 2022 than in Wave 3 and will likely remain below the levels previously reached in Wave 4
- A modest increase in cases (primarily in younger age groups) is expected in Nov/ Dec 2021 due to the increased risk of transmission as Hamiltonians move indoors and reopening continues
  - Continued use of public health measures can balance the anticipated increase in transmission
  - Vaccinating children aged 5-11yrs, starting in Dec 2021, is predicted to prevent 113 cases and 7 hospitalizations by the end of Jan 2022

# COVID VACCINE UPDATE

Melissa Biksa, Manager – COVID-19 Vaccine

# COVID-19 Vaccine – Overall Coverage

Estimated as of End Of Day November 11, 2021



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

Eligible population includes individuals born in 2009 or earlier.

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

# COVID-19 Vaccine – Coverage by First and Second Doses

Estimated as of End Of Day November 11, 2021

|  | Previous<br>(Oct 29) | Previous<br>(Nov 5) | CURRENT<br>(Nov 12)     | Trend |
|--|----------------------|---------------------|-------------------------|-------|
| % change in first-dose coverage among Hamilton’s eligible population in the past week  | 85.1%<br>(+0.3%)     | 85.4%<br>(+0.3%)    | <b>85.6%</b><br>(+0.2%) | ↓     |
| % change in second-dose coverage among Hamilton’s eligible population in the past week | 81.0%<br>(+0.7%)     | 81.6%<br>(+0.6%)    | <b>82.2%</b><br>(+0.6%) | ↓     |
| # of first- and second-doses administered to Hamilton residents in the past week       | 4,926                | 4,171               | <b>3,786</b>            | ↓     |
| ▪ % of first- and second-doses administered to Hamilton residents in Hamilton          | 88.2%                | 88.8%               | <b>89.8%</b>            | --    |
| ▪ % of first- and second-doses administered to Hamilton residents outside of Hamilton  | 11.8%                | 11.2%               | <b>10.2%</b>            | --    |

First doses remaining to achieve 90% vaccine coverage: **22,747**

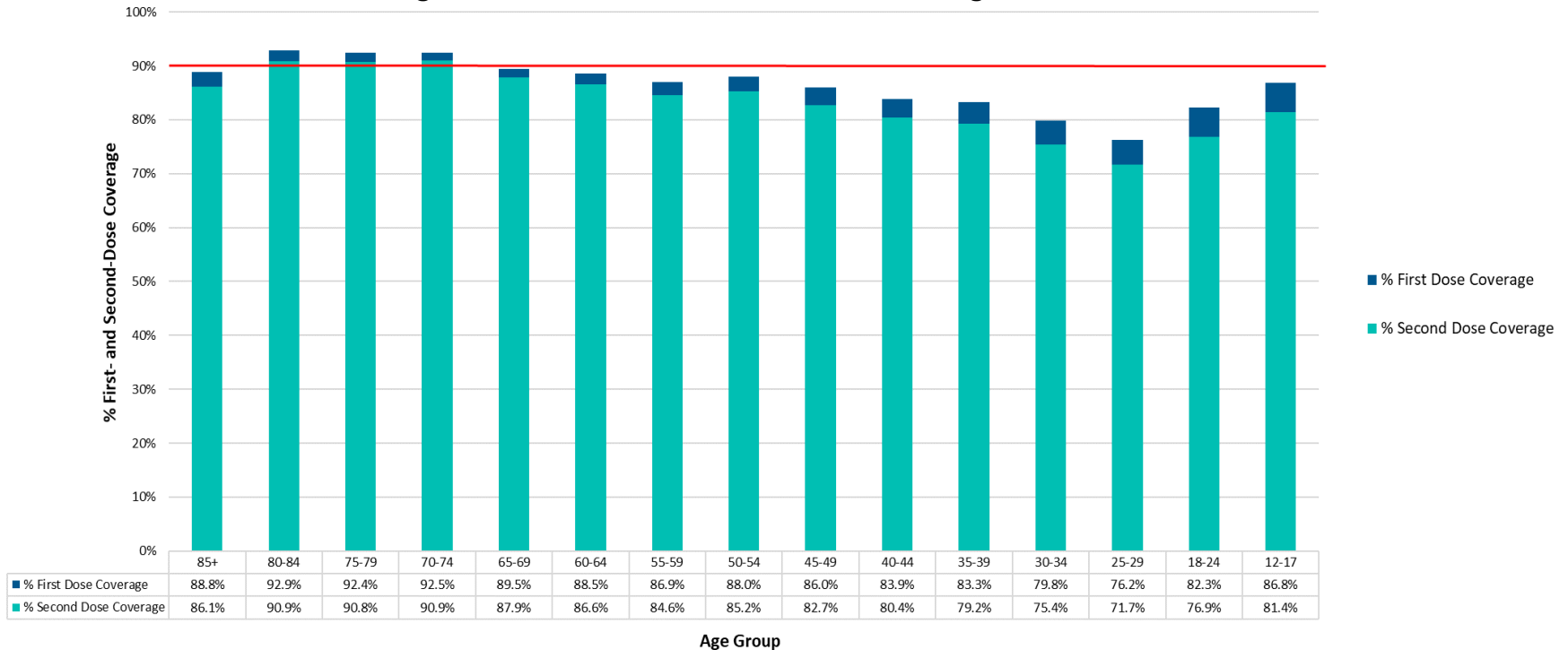


Sources: IntelliHealth (COVAXon Data Load); IntelliHealth (Population Projections, 2020).

# COVID-19 Vaccine – Coverage by Age

Estimated as of End Of Day November 11, 2021

## Aged-Based COVID-19 Vaccine Coverage

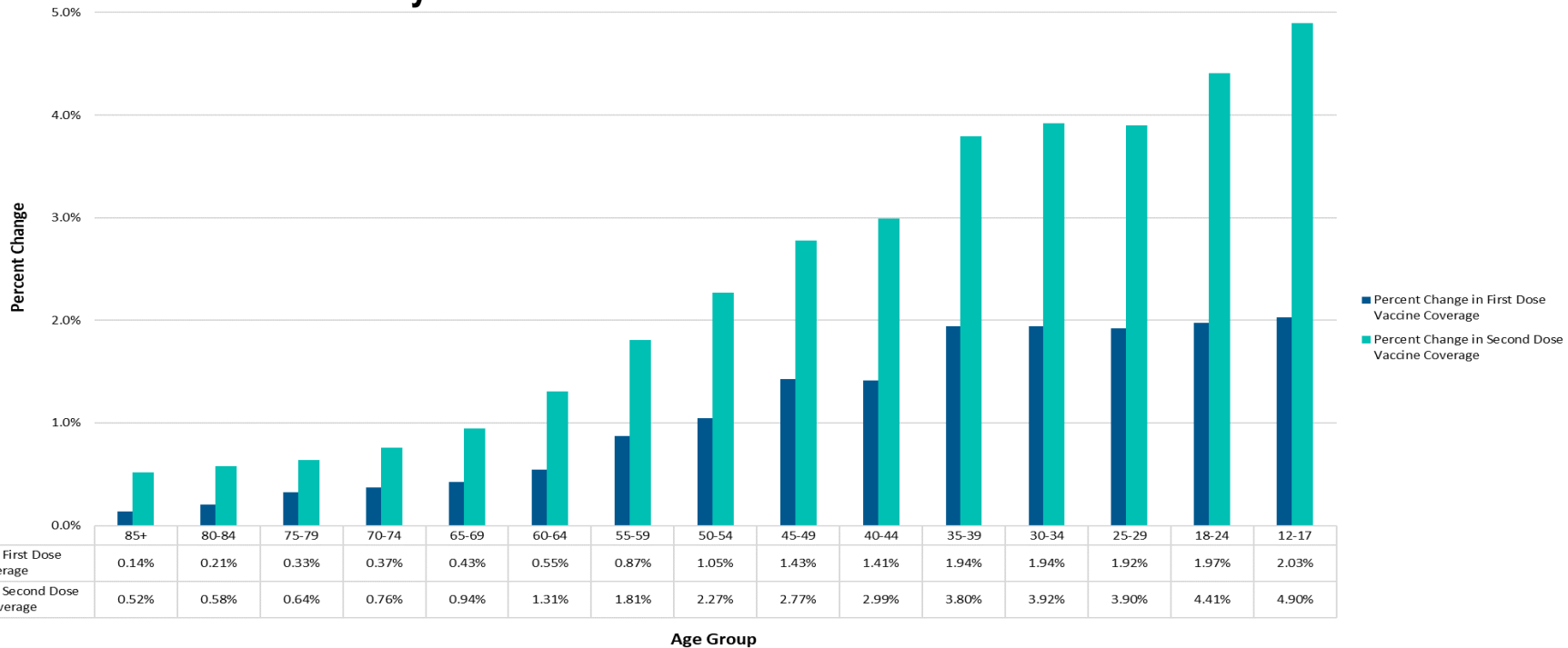


Sources: IntelliHealth (COVAXon Data Load); IntelliHealth (Population Projections, 2020).

# COVID-19 Vaccine – Coverage by Age

Estimated as of End Of Day November 11, 2021

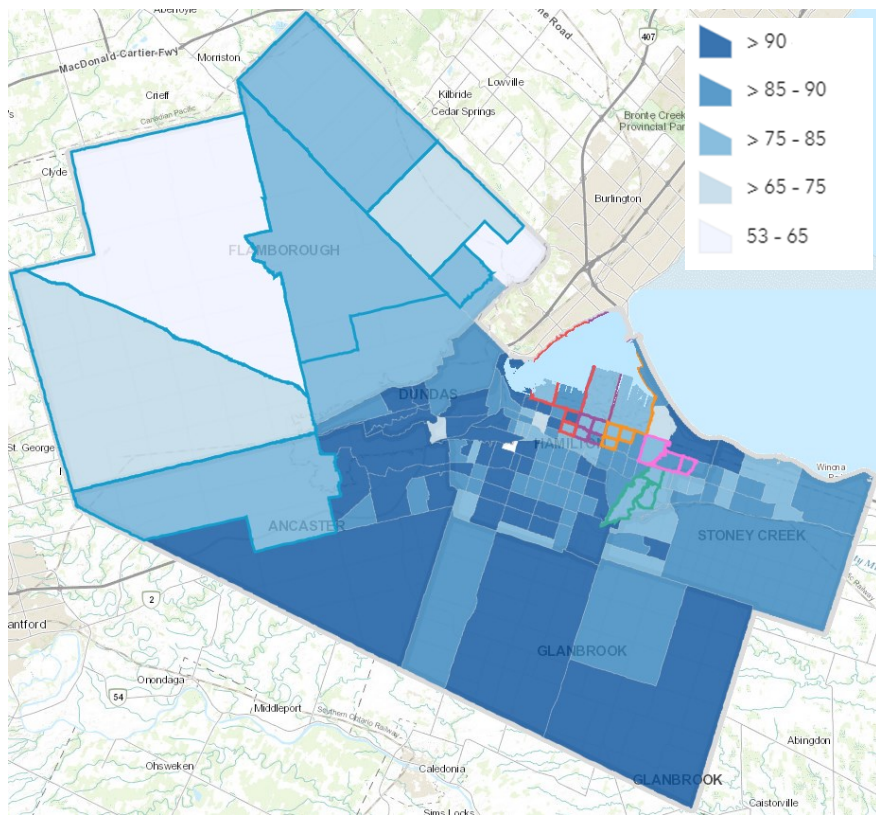
## Percent Change in COVID-19 Vaccine Coverage by First and Second Dose in the Past Month



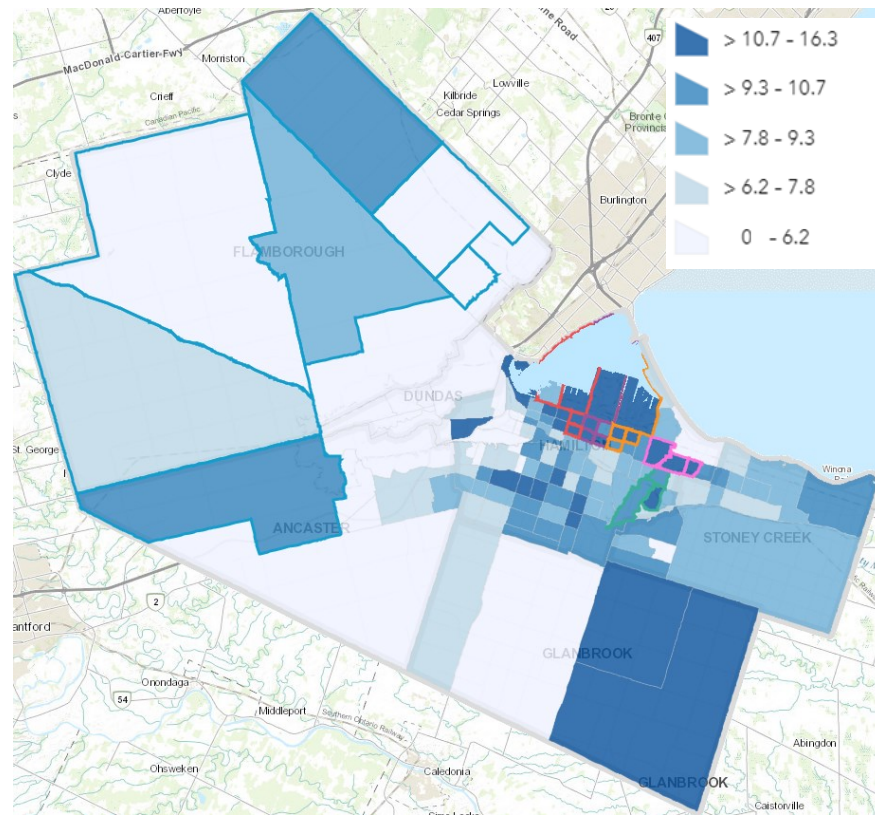
Sources: IntelliHealth (COVAXon Data Load); IntelliHealth (Population Projections, 2020).

# COVID-19 Vaccine – Coverage by Census Tracts (“neighbourhoods”)

Estimated  $\geq$  One Dose Coverage Among Eligible Population (up to November 8, 2021)



Change in  $\geq$  One Dose Coverage Among Eligible Population (August 5 – November 8, 2021)

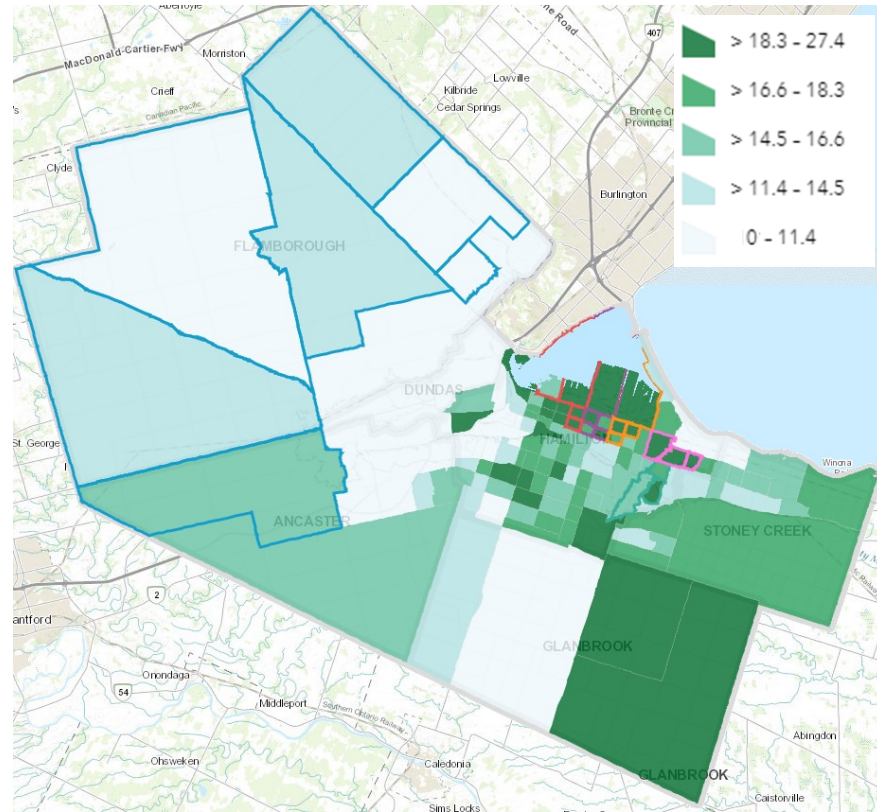
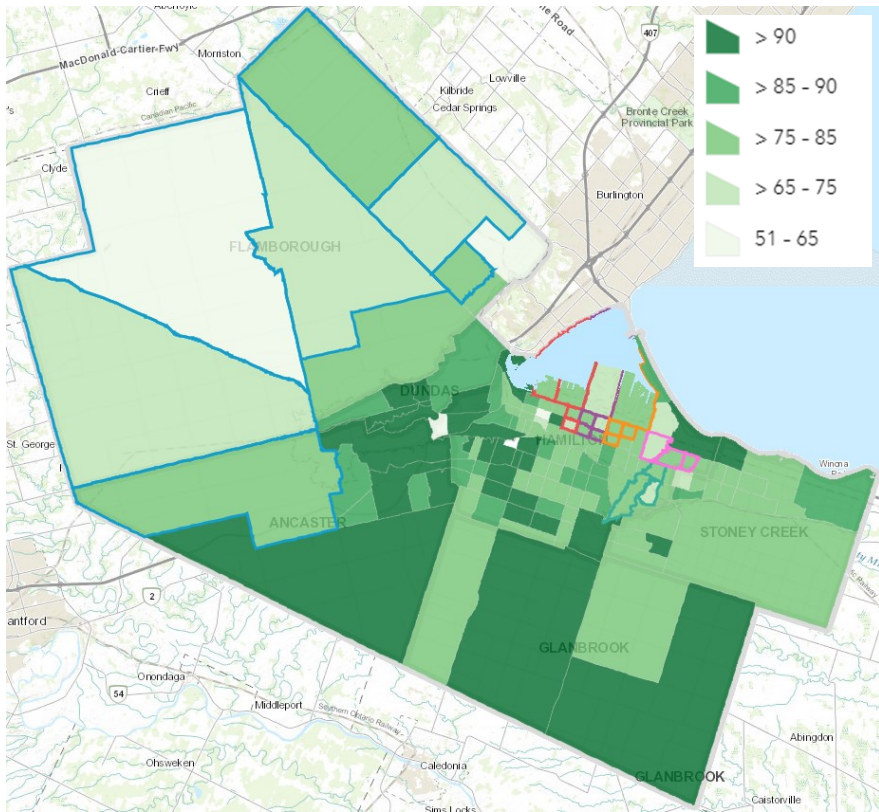




# COVID-19 Vaccine – Coverage by Census Tracts (“neighbourhoods”)

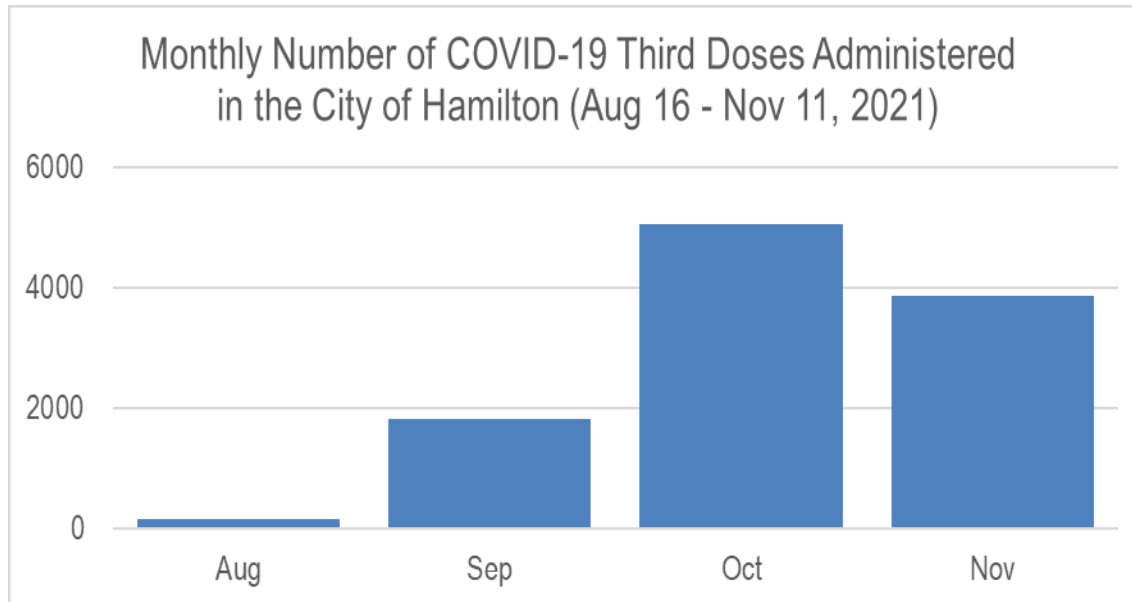
Estimated Two Dose Coverage Among Eligible Population (up to November 8, 2021)

Change in Two Dose Coverage Among Eligible Population (August 5 – November 8, 2021)



# COVID-19 Vaccine – Third Doses

Estimated as of End Of Day November 11, 2021



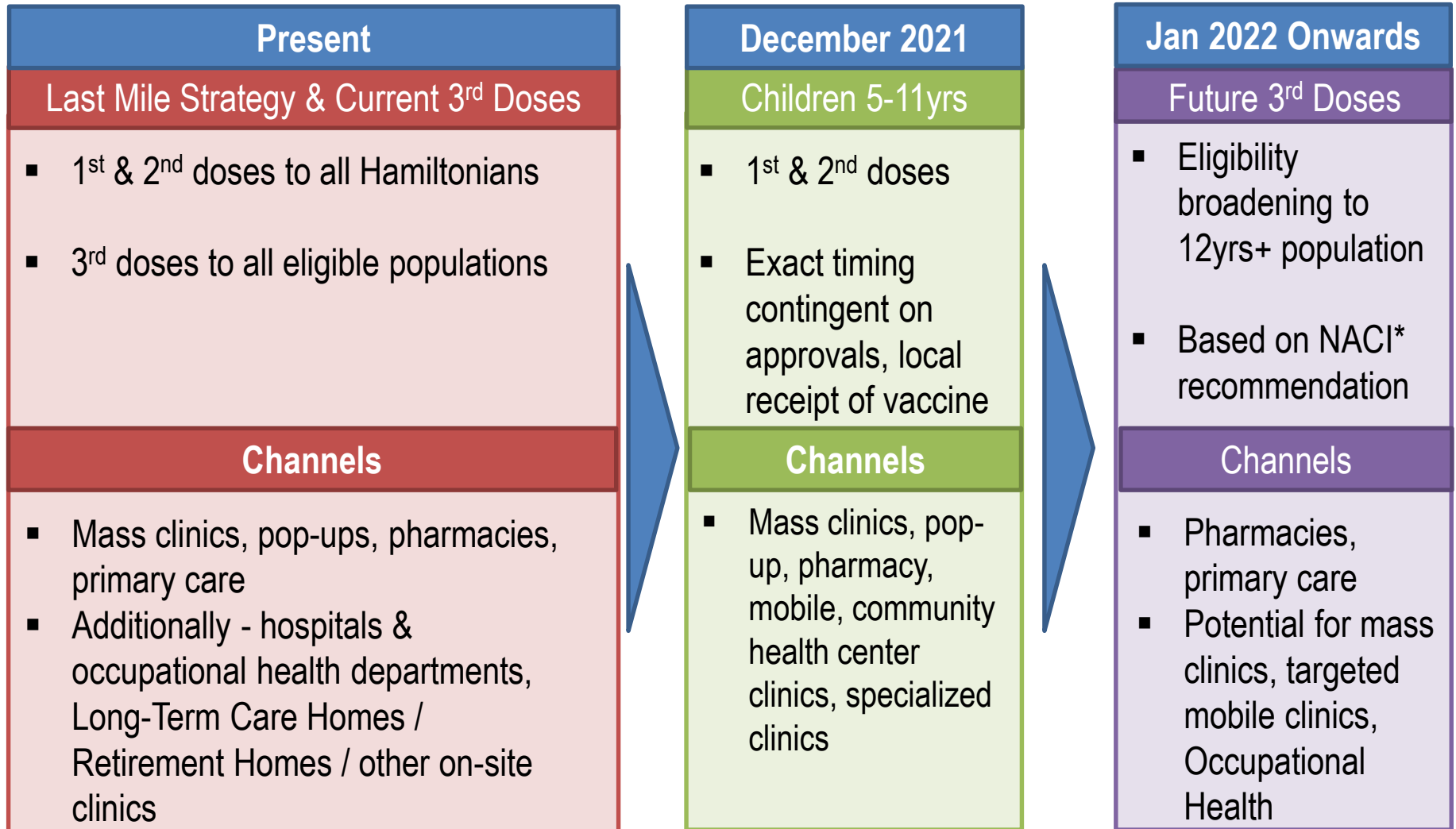
Nearly **11,000** third doses administered in the City of Hamilton

So far, majority administered in October 2021 and in long-term care and retirement homes

Rate of administration increasing in November 2021

Sources: IntelliHealth (COVAXon Data Load)

# COVID-19 Vaccine – Rollout Placemat



\*NACI = National Advisory Committee on Immunization

# COVID-19 Vaccine – Operational Priorities

As we move through new eligibility for 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> doses, the priority for administration is:

1. 1<sup>st</sup> and 2<sup>nd</sup> doses (including 5-11 year olds)
2. Booster (3<sup>rd</sup>) doses

Online scheduling will be configured to prioritize appointments for 5-11 year old population and 12 year old+ 1<sup>st</sup> and 2<sup>nd</sup> doses will be able to walk-in.

# COVID-19 Vaccine - 3<sup>rd</sup> Doses

Two doses of vaccine offer **robust and persistent protection against severe disease from COVID-19**

Third doses are **recommended and not mandatory**

## Currently Eligible

- Moderately-to-Severely Immunocompromised
- Older Adults in Congregate Settings
- Community Dwelling Older Adults 70yrs+
- Health Care Workers, including Essential Caregivers
- Indigenous Adults
- Viral Vector Vaccine Recipients

# COVID-19 Vaccine: Mass Clinics Update

- Locations
  - CF Lime Ridge: Opened November 3, 2021
  - The Centre on Barton: New mass clinic will open week of November 15, 2021
  - Hamilton Health Sciences West End Clinic: Health Care Workers Only
- Booking
  - 1<sup>st</sup> & 2<sup>nd</sup> Doses 12yrs+ Population: Walk-in & VERTO
  - 1<sup>st</sup> & 2<sup>nd</sup> Doses 5-11yrs Population: VERTO Only
  - 3<sup>rd</sup> Doses: VERTO Only

# COVID-19 Vaccine – Mobile Clinics Update

| Pop-Up Clinic Schedule (Nov. 15th - 28th) |                                |                  |                                     |
|---|--------------------------------|------------------|-------------------------------------|
| <b>Monday</b>                             | Waterdown Library              | <b>Thursday</b>  | Barton Library                      |
|   | Central Library                |                  | Bennetto Rec                        |
|   | East End Clinic                |                  | Red Hill Library                    |
| <b>Tuesday</b>                            | Red Hill Library               | <b>Friday</b>    | Ancaster Library/<br>Bernie Morelli |
|   | Bernie Morelli/<br>Pinky Lewis |                  | East End Clinic                     |
|   | School Clinic                  |                  | <b>Saturday</b>                     |
| <b>Wednesday</b>                          | Huntington Park Rec            | Stoney Creek Rec |                                     |
|   | East End Clinic                | <b>Sunday</b>    | Mountain Clinic                     |
|   | Bennetto Rec                   |                  | Stoney Creek Rec                    |

- 5-11yrs specific clinics will be operated once the vaccine is approved

# CURRENT PUBLIC HEALTH SERVICES PRIORITIES

Dr. Elizabeth Richardson, Medical Officer of Health



# Current Public Health Services Priorities

## COVID Response

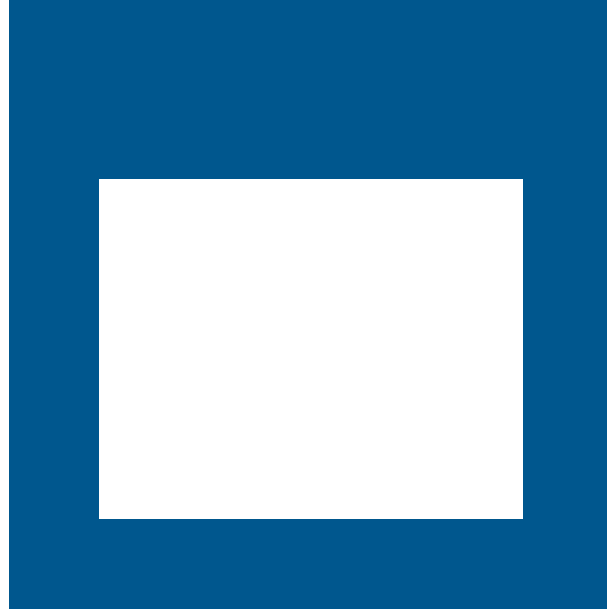
- Ongoing COVID-19 disease control program and expanding COVID-19 vaccination program

## Deficits of Care

- Identify most urgent deficits of care that need to be addressed first
- Use a “Build Back Better” approach when reopening programs to apply lessons learned through COVID-19

## Staff Wellness

- Develop and implement strategies to support and retain public health staff, considering the significant impact on mental health and wellness due to the length of emergency response and deployment



QUESTIONS?