



Public Health Services COVID-19 Situation Report & Organizational Update

Board of Health

May 17, 2021

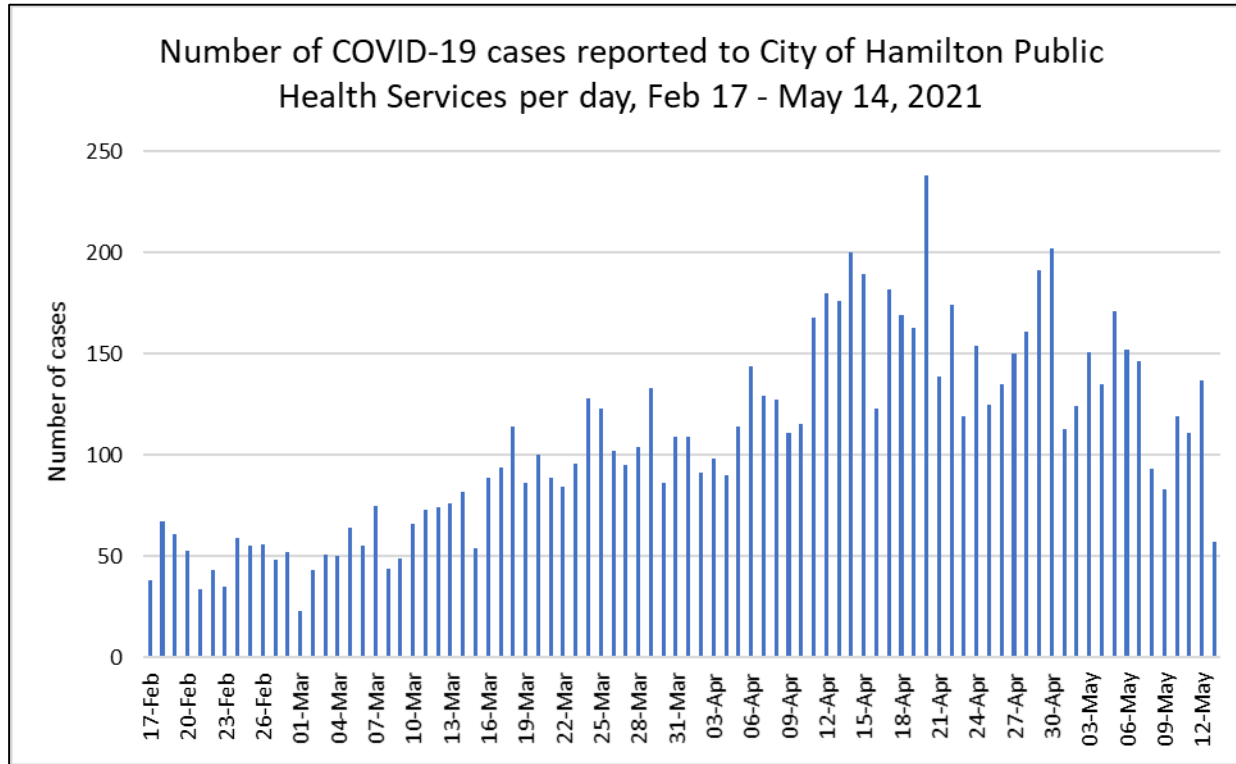
Overview

1. Overall Status Update
2. COVID-19 Situation Report
3. Performance Metrics
4. COVID-19 Vaccine Update

Overall Status

- COVID-19 case activity in Hamilton is trending downwards from the peak of wave 3
- Scarsin forecasting predicts that case levels in Hamilton will continue to be over 40 per 100,000 / week which is above the Red / Control Zone at the end of June
- As of May 14, 2021 there were over 232,000 doses administered and 45.1% of eligible population vaccinated
- New landscape of vaccine rollout – ample supply and expanding eligibility
- Continuing to follow public health measures is vital, even for those who have been vaccinated – need to continue to assume the virus is everywhere

Situation Report – Cases



Key Messages

- COVID-19 case activity is now trending downwards from the peak of wave 3
- As of May 14, 2021, the average number of cases reported per day to Hamilton Public Health is 120

Situation Report – Phases of COVID-19 in Hamilton

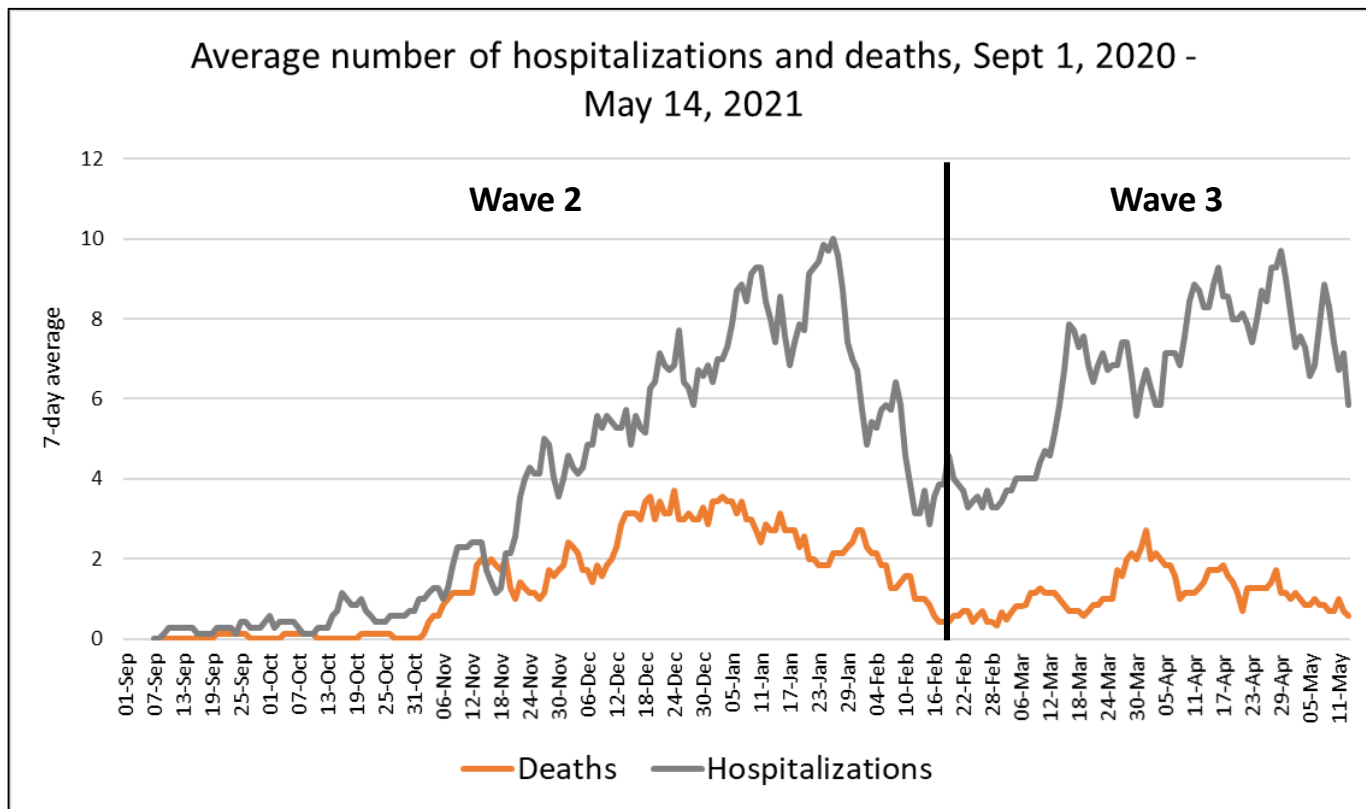
WAVE 3: Pre-Peak Feb 17 – Apr 10, 2021

- 4,240 cases reported
- 131 outbreaks
- 303 hospitalizations and 59 deaths
- 59,120 tests completed at Hamilton Assessment Centres
- Case counts following wave 2 had not yet fallen back to baseline, when activity rose once again and wave 3 commenced
- In the pre-peak phase of wave 3, infections were most commonly due to direct contact with other known cases of COVID-19 and undetermined sources

WAVE 3: Peak Apr 11 – May 14, 2021

- 4,930 cases reported
- 108 outbreaks
- 258 hospitalizations and 38 deaths
- 40,690 tests completed at Hamilton Assessment Centres
- At the peak of wave 3, there has been an increase in cases associated with COVID-19 outbreak activity.
- The majority of cases reported to Hamilton Public Health Services are now variant cases, notably B.1.1.7
 - The first B.1.617 variant case has now been reported
- There have been more cases reported thus far in wave 3 (pre-peak + peak) than all of wave 2

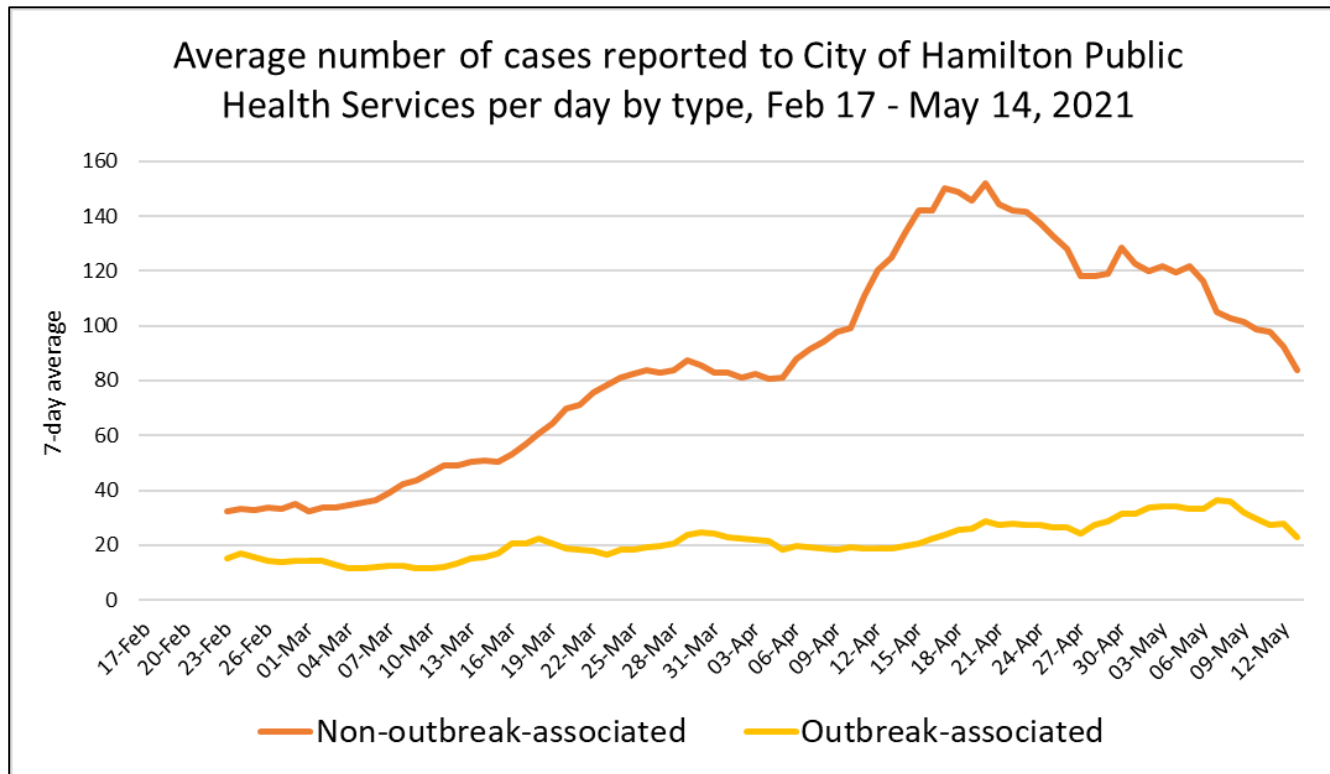
Situation Report – Severity



Key Messages

- There has been a decrease in the average number of deaths reported per day in wave 3 compared to wave 2
- The average number of new hospitalizations has been equally as high in waves 2 & 3

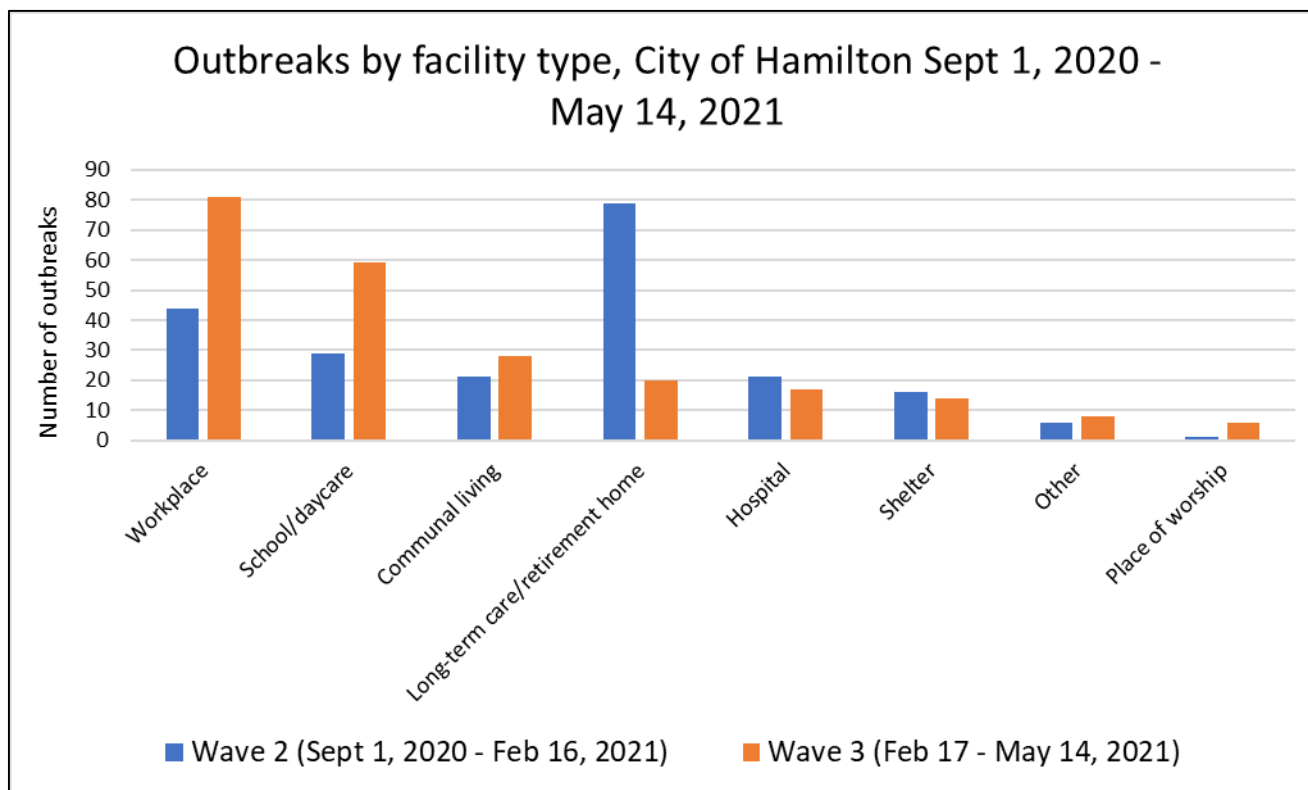
Situation Report – Cases by Type



Key Messages

- The average number of non-outbreak cases has been decreasing since the peak of wave 3
- The average number of outbreak cases has been increasing since the peak of wave 3

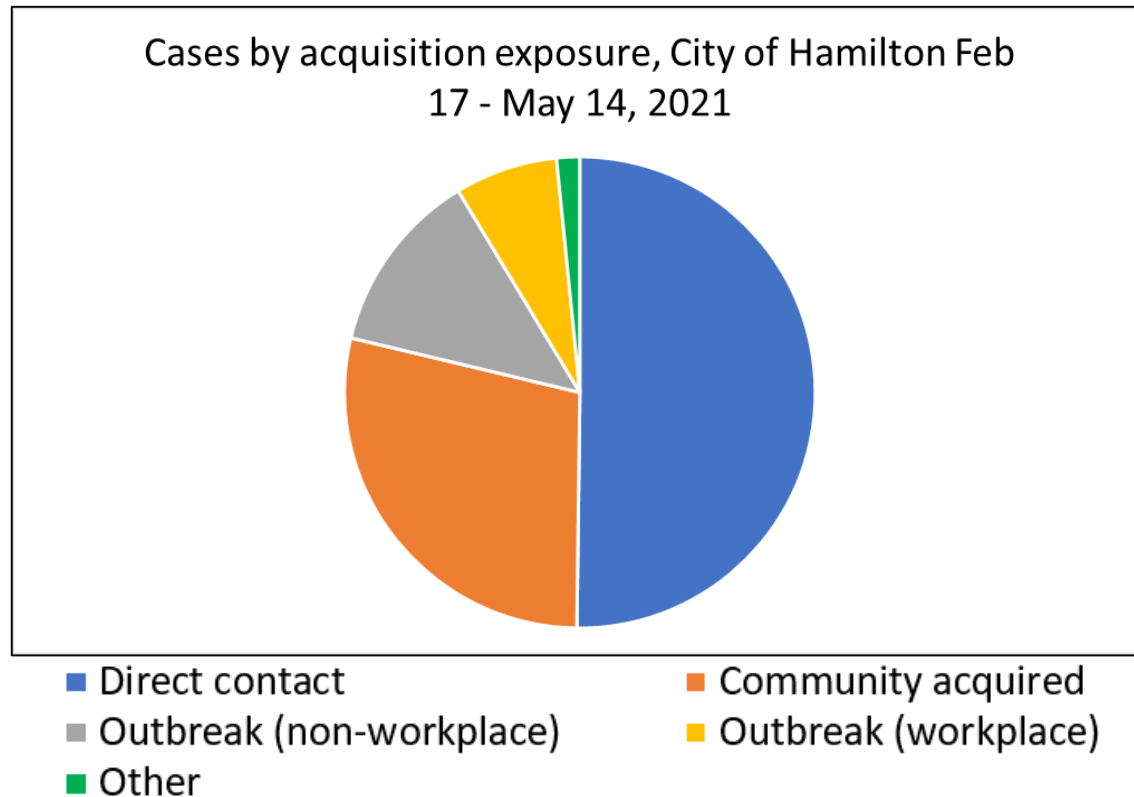
Situation Report – Outbreak Settings



Key Messages

- There has been a shift in outbreak facility types when comparing waves 2 and 3
- In wave 3, there have been fewer long-term care/retirement home outbreaks, and a drastic increase in workplace & school/daycare outbreaks

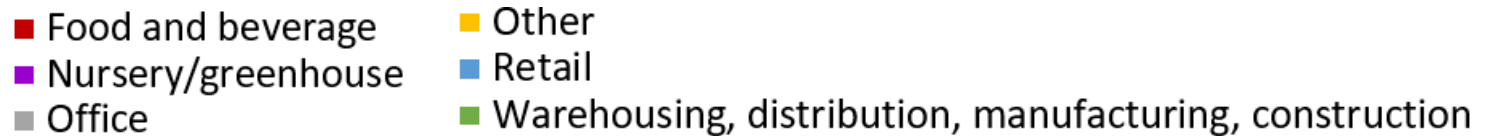
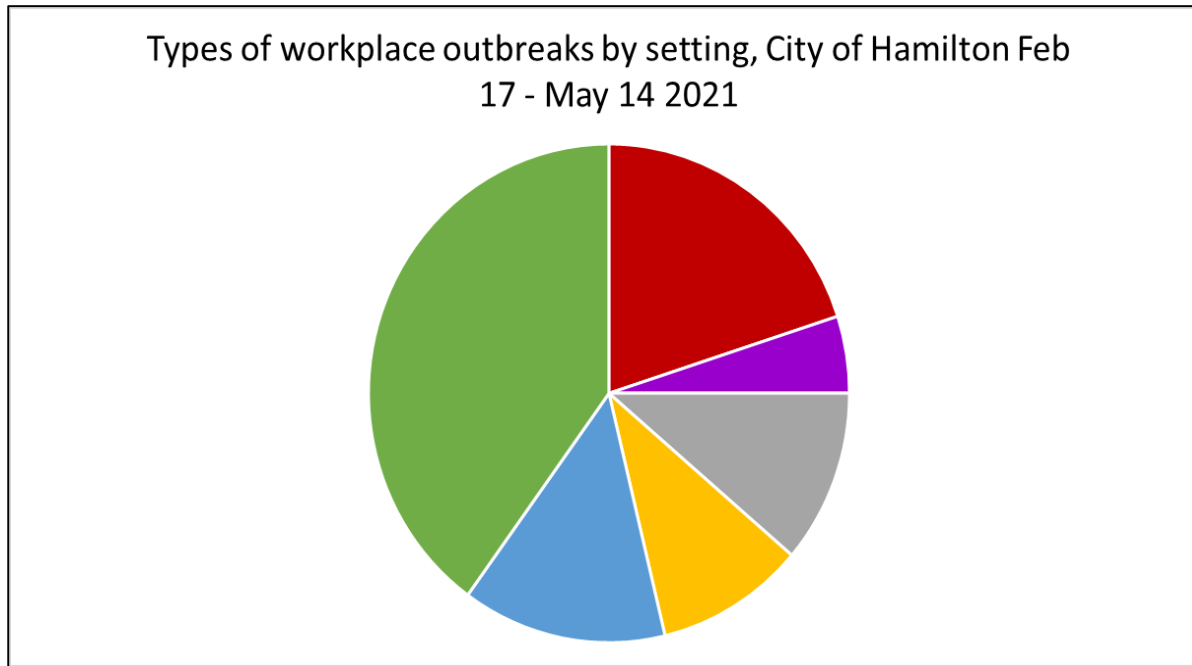
Situation Report – Acquisition Exposures



Key Messages

- Cases associated with workplace outbreaks comprise ~7% of all cases reported to Hamilton Public Health in wave 3 thus far
- The largest proportion of cases reported are due to direct contact with other cases

Situation Report – Workplace Outbreak Settings



Key Messages

- The largest proportion of workplace outbreaks has been in the warehousing, distribution, manufacturing, construction sector
- This has been consistent throughout the pandemic

Outbreaks in Apartment Buildings

- Currently 3 declared outbreaks
 - 235 Rebecca St.
 - 125 Wellington and 50 Cathcart
 - 151 Queen St. N.
- Outbreaks occurring in the context of Social Determinants of Health
 - Precarious working conditions/essential workers
 - Environment
- Transmission within families/living units
 - Challenges with implementation of public health measures

Key Messages

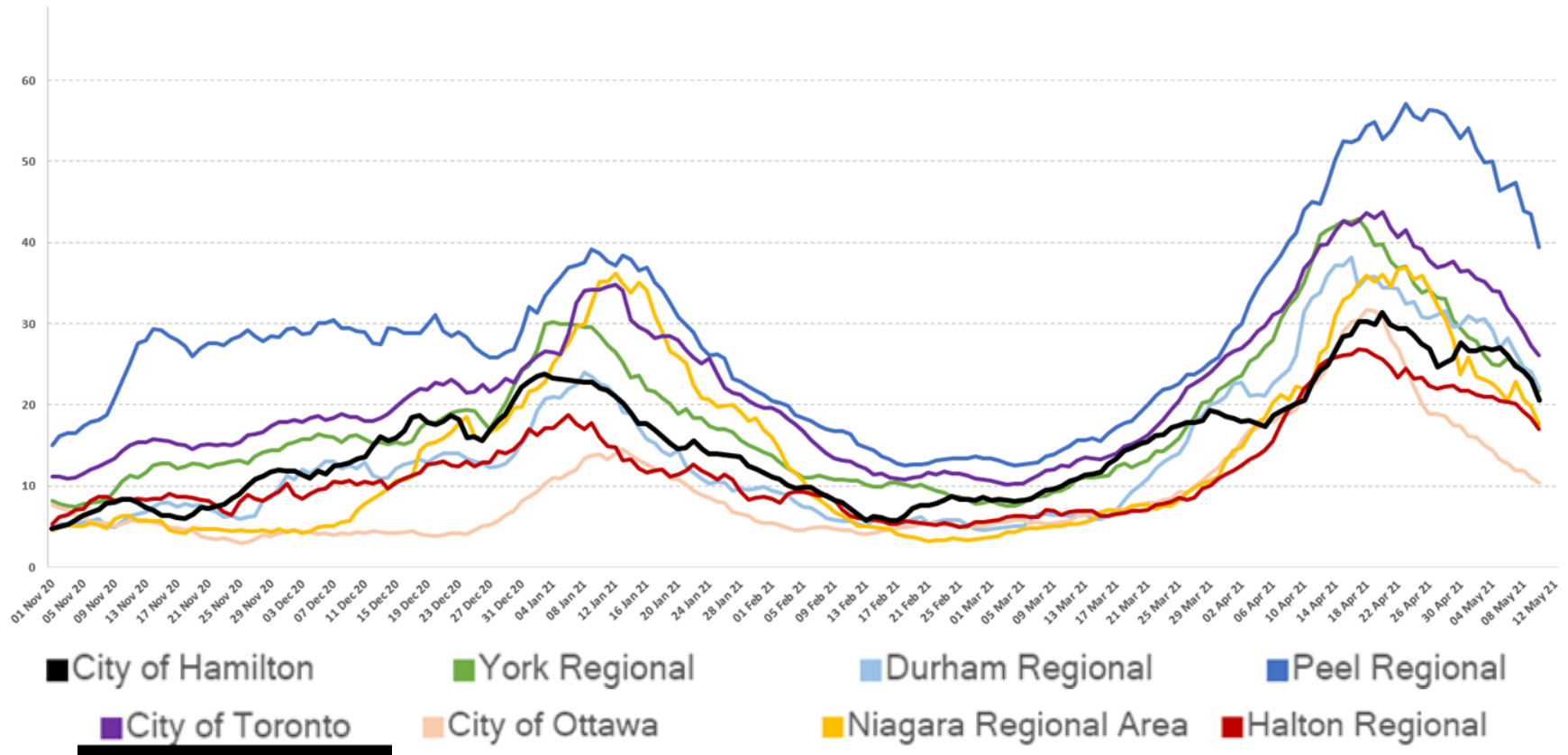
- Mobility levels continue to increase despite stay-at-home order being in place
- Case levels in Hamilton will continue to be above 40 weekly cases per 100,000 at the end of June which is above the Red/Control Zone
- Timing of school re-opening and lifting of stay-at-home order will affect case counts and to a much smaller degree hospitalizations and deaths

Assumptions at time of last forecast

- Extended stay-at-home order to May 31, 2021
- Remote learning to end of school year

COVID-19 Daily Case Rates (per 100,000) Selected Comparison Public Health Units to Hamilton

Actual Daily Case Rates (7-Day Smoothed) / 100,000

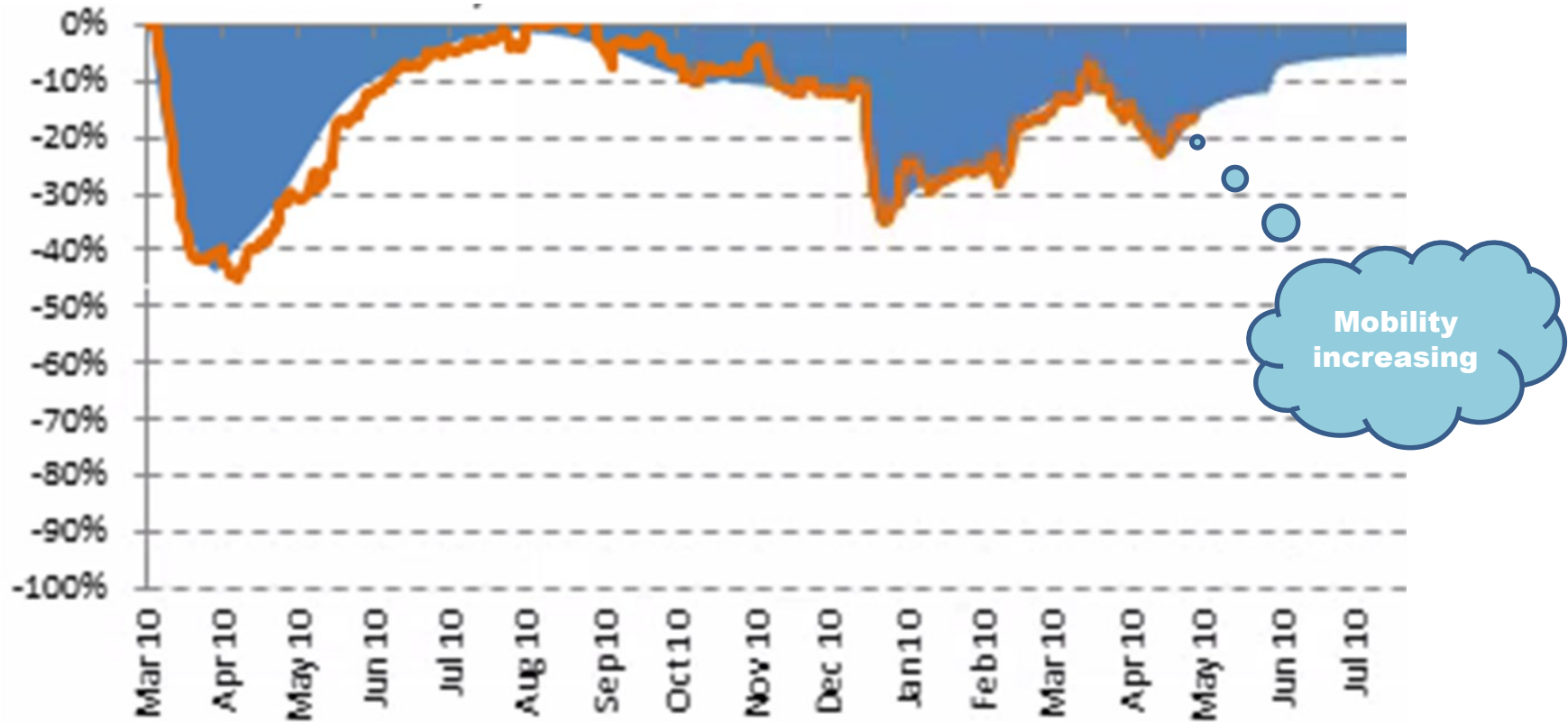


Data Source: Scarsin Decision Support System retrieved May 12, 2021

Key Messages:

- Rates are coming down in most jurisdictions. Hamilton's rates are now like those of York and Durham. Hamilton's cases are now declining following the peak.

Overall Mobility in Hamilton

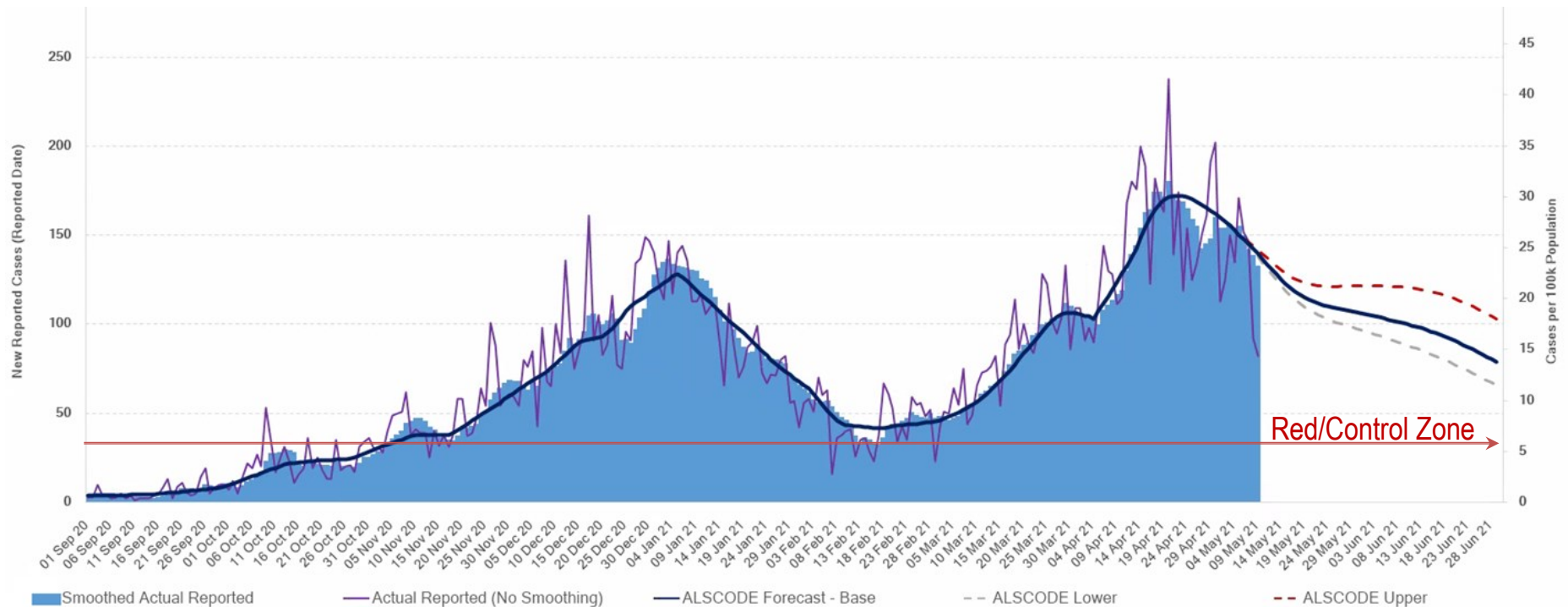


Data Source: Scarsin Decision Support System retrieved May 10, 2021

Key Messages:

- Increase in mobility is concerning. Assesses community response to public health measures (e.g., stay-at-home order). Indicator represents the percentage decrease in mobility since pre-pandemic (Feb. 2020). Currently at -15%.

Scarsin Forecast



Data Source: Scarsin Decision Support System with CCM data retrieved May 11, 2021

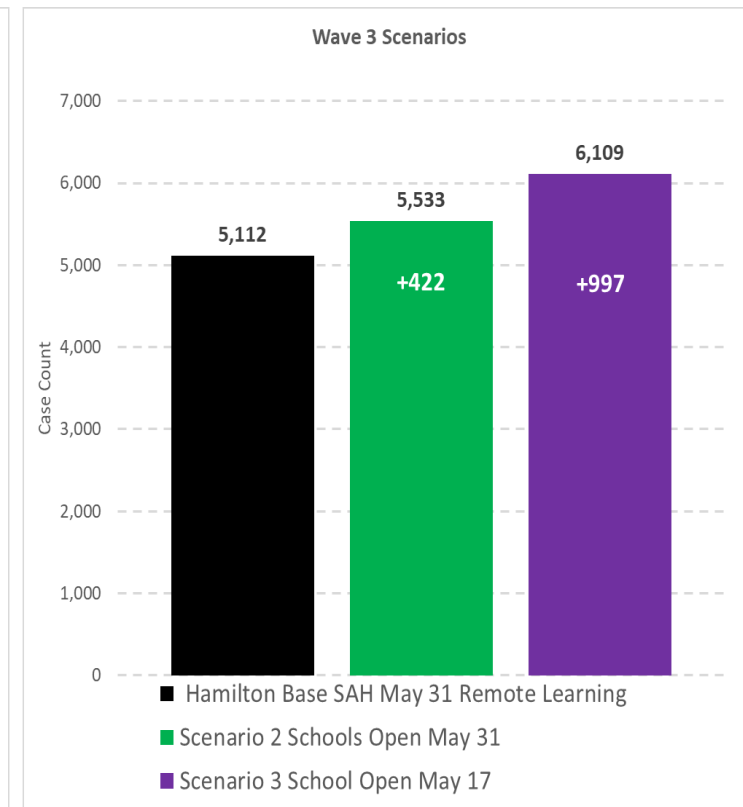
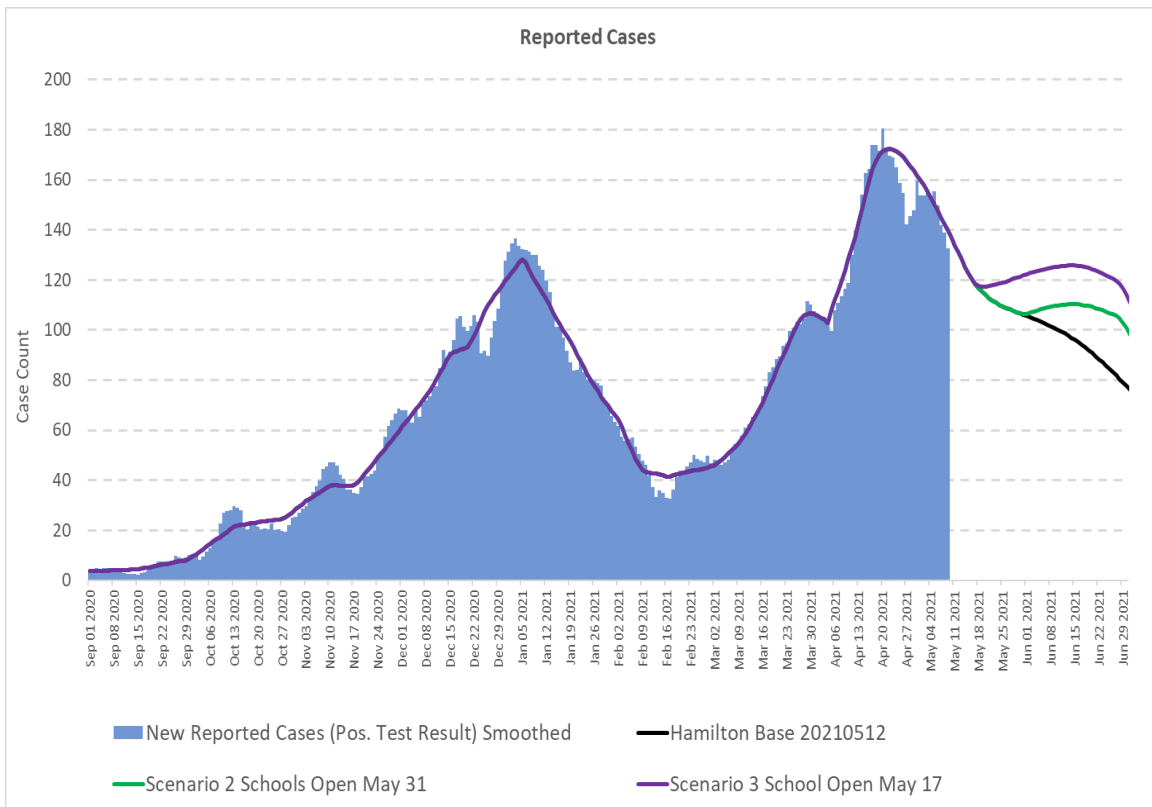
Key Messages:

- Predict in June that we will still be above Red/ Control Level of 40 weekly cases/100,000 population. Red/ Control Zone is equal to approximately 5.7 daily cases per 100,000.

Scarsin Forecast – Alternative Scenarios

- Scenarios:
 - Base – Stay-at-home ends May 31, 2021
 - Scenario 1 – Remote learning to end of year ([June 28, 2021](#))
 - Scenario 2 – School Open [May 17, 2021](#)
 - Scenario 3 – School Open [May 31, 2021](#)

School Re-Opening Forecasts – COVID-19 Cases

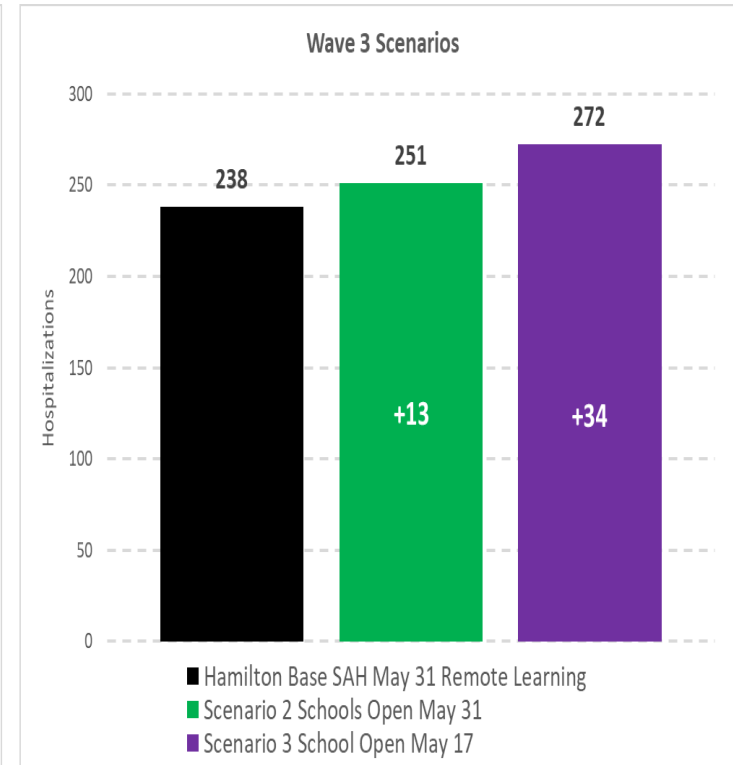
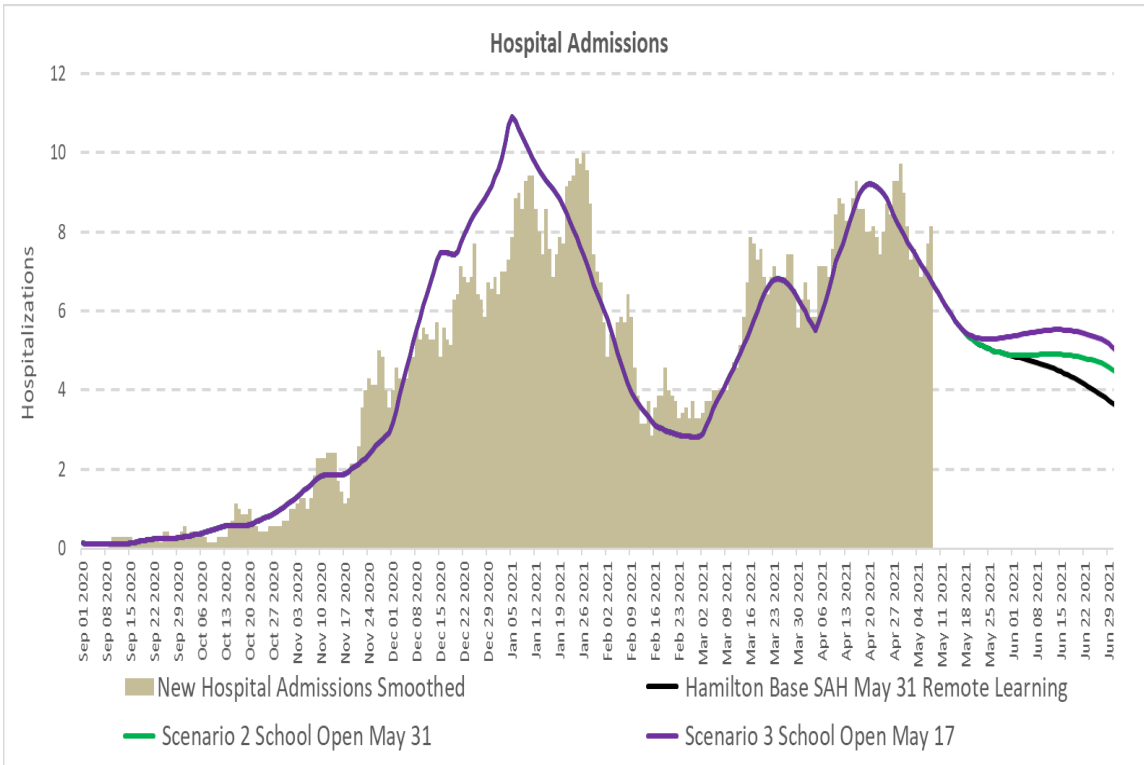


Data Source: Scarsin Decision Support System, scenarios created May 12, 2021

Key Messages:

- Cases may increase by 422 for May 31, 2021 school reopening, earlier re-opening May 17, 2021 may result in 997 more cases (compared with base model, ongoing remote learning to end of school year, between May 12-June 30, 2021).

School Re-Opening Forecasts – COVID-19 Hospital Admissions

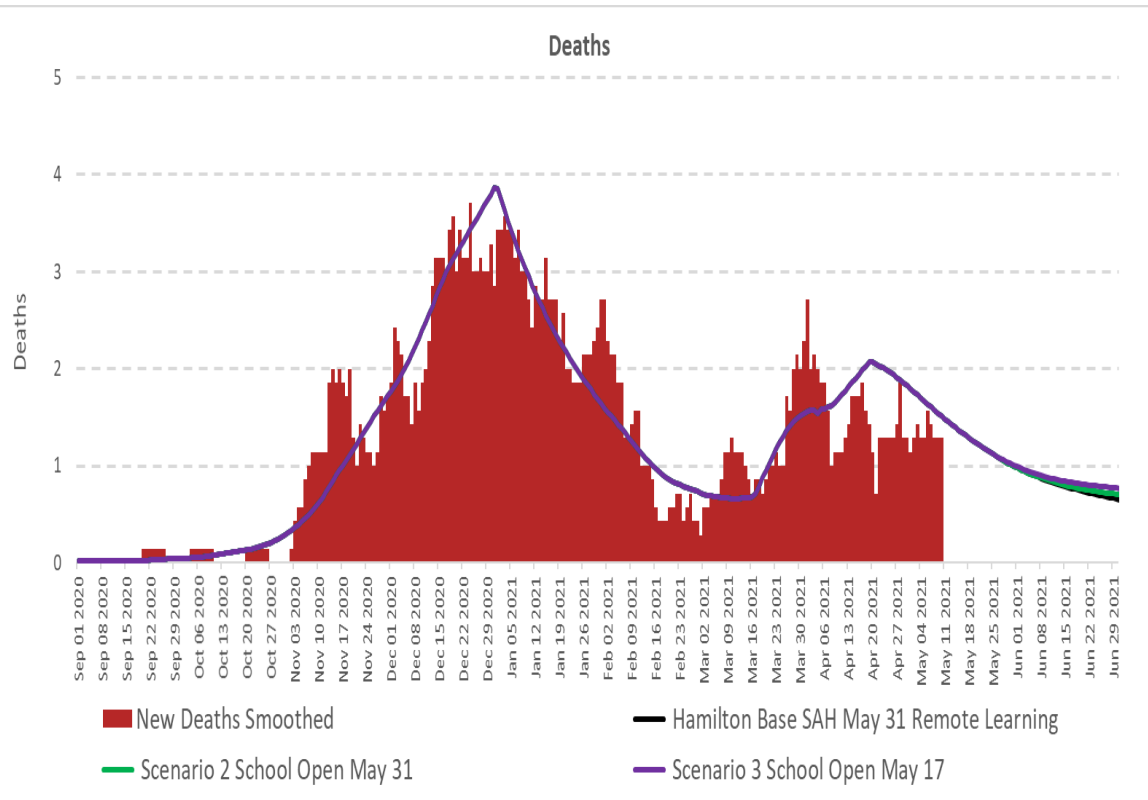


Data Source: Scarsin Decision Support System, scenarios created May 12, 2021

Key Messages:

- Hospital admissions for Hamiltonians may increase by 13 with the school reopening May 31, 2021 (compared with base, ongoing remote learning to end of school year), re-opening May 17, 2021 may result in 34 more admissions than base.

School Re-Opening Forecasts – COVID-19 Deaths



Data Source: Scarsin Decision Support System, scenarios created May 12, 2021

Key Messages:

- Deaths may increase by 1 with school reopening May 31, 2021 (compared with base, ongoing remote learning to end of school year), re-opening May 17, 2021 may result in 2 more deaths than base.

Performance Metrics

Epidemiology

	Previous (Apr 30)	Previous (May 7)	CURRENT (May 14)	Trend
Weekly incidence rate/100,000	170	181	140	↓
% positivity	9.0%	8.9%	8.4%	--
Effective reproductive number (R_t)	0.86	1.12	0.82	--
% of community-acquired cases	29.0%	28.2%	28.3%	--

High outbreak activity continues in workplaces, supportive housing, childcare settings, and multi-unit dwellings. Total of 40 active outbreaks: 11 outbreaks have ≥10 cases; 39 outbreaks have cases screened positive for variants.

Public Health System Capacity

	Previous (Apr 30)	Previous (May 7)	CURRENT (May 14)	Trend
% newly reported cases reached within 1 day of reported date	62.9%	83.2%	92.8%	↑
% newly identified close contacts reached within 1 day of contact identification date	76.1%	84.9%	80.1%	--

Performance Metrics

Health System Capacity

	Hospital	Previous (Apr 30)	Previous (May 7)	CURRENT (May 14)
Overall adult acute medicine & surgical hospital occupancy/funded acute beds	SJHH	86%	84%	72%
	HHS	87%	87%	92%
Overall adult acute alternate level of care (ALC) hospital occupancy/funded acute beds	SJHH	16%	14%	10%
	HHS	13%	11%	8%
Overall adult intensive care unit (ICU) occupancy/funded ICU beds	SJHH	78%	72%	88%
	HHS	81%	80%	79%

SJHH: St. Joseph's Healthcare Hamilton

HHS: Hamilton Health Sciences

Additional Local Indicators

	Previous (Apr 30)	Previous (May 7)	CURRENT (May 14)	Trend
Mental health-related emergency department visits	176	145	146	--
Substance misuse-related emergency department visits	79	73	83	--
Paramedic incidents for suspected opioid overdose	17	19	14	--
Violence-related emergency department visits	10	11	5	--
Social impacts and environmental exposure-related emergency department visits	12	9	17	--

Trends are based on comparisons to historical data and thresholds.

COVID-19 Vaccine Update

COVID-19 Vaccine Update

Overall Objectives

1. Prevent deaths
2. Prevent illness, hospitalization and intensive care unit admissions
3. Reduce transmission
4. Achieve high levels of population immunity

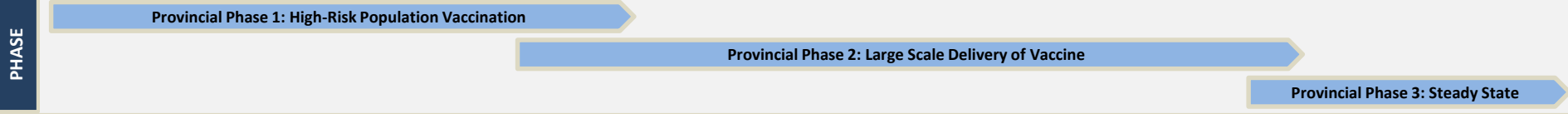


COVID-19 Vaccine Update – Placemat

HAMILTON COVID-19 VACCINATION PLAN: OVERVIEW

TIMING OF VACCINE ROLLOUT (INCLUDING DATES OF EACH PHASE & CLINIC OPERATION) ARE SUBJECT TO CHANGE & ARE DEPENDENT ON PROVINCIAL DIRECTION AND/OR AVAILABLE SUPPLY OF VACCINE

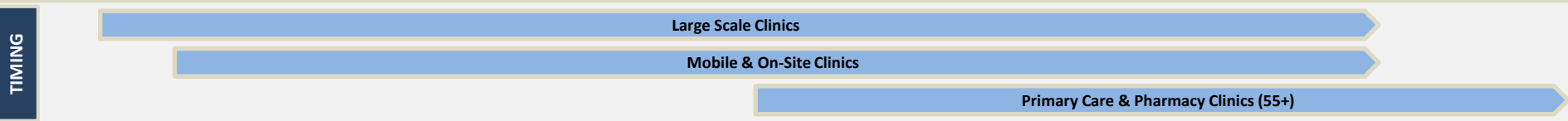
Dec 2020 > Jan 2021 > Feb 2021 > Mar 2021 > Apr 2021 > May 2021 > Jun 2021 > Jul 2021 > Aug 2021 > Beyond






Provincial Priority Populations by Phase

DESCRIPTION	Phase 1 Immediate Priority	Phase 2 (in Progress)	Phase 3
	<ul style="list-style-type: none"> Staff, essential caregivers, residents in long-term care, high-risk retirement homes Alternate level of care (ALC) patients in hospitals who have a confirmed admission to long-term care, retirement home or other congregate care home for seniors Highest priority followed by very high priority health care workers Indigenous adults in high risk communities <p>Phase 1 Next Priority</p> <ul style="list-style-type: none"> Adults 80 years of age and older Staff, residents, caregivers in retirement homes, congregate care settings for seniors High priority health care workers All Indigenous adults Adult recipients of chronic home care 	<ul style="list-style-type: none"> Continue Phase 1 priority populations Adults 18+ Individuals with Highest Risk, High-Risk & At-Risk Health Conditions Residents, Essential Caregivers and Staff of High-Risk Congregate Settings Adults 18+ in priority neighbourhoods (L9C, L8W, L8L, L8N, L9K) Essential Workers who cannot work from home (Group 1 & 2) 	<ul style="list-style-type: none"> Remaining Hamiltonians in the general population who wish to be vaccinated will receive the vaccine Youths 12-15

Vaccination Approach



DESCRIPTION	Large Scale Clinics	Mobile & On-Site Clinics	Primary Care & Pharmacy Clinics (55+)
	<p>Hamilton Health Sciences Large Scale Clinic St. Joseph's Healthcare Hamilton Large Scale Clinic Additional Public Health Large Scale Clinics</p> <p> Anticipated Throughput: 8,400 doses / day at peak Supports large scale vaccination of the population</p>	<p>Mobile Bus Clinics Pop-Up Facility Clinics Rolling Clinics</p> <p> Anticipated Throughput: 750 doses / day at peak Provides vaccination through accessible channels</p>	<p>Primary care practice-based vaccinations Pharmacy-based vaccinations</p> <p> Anticipated Throughput: >1,000 doses / day at peak Provides vaccination through usual channels</p>

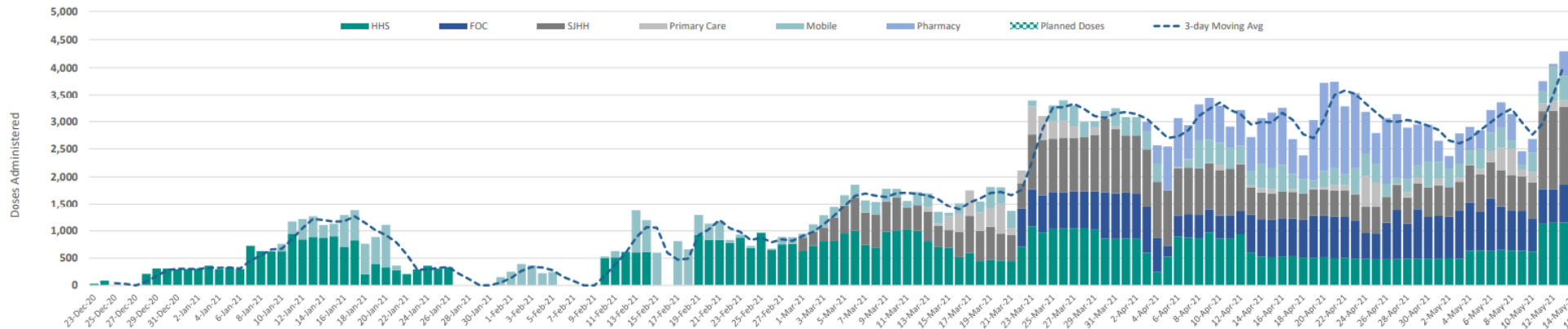
COVID-19 Vaccine Update

Estimated as of End Of Day May 13, 2021

Site	Total doses administered
Hamilton Health Sciences	78,263
St. Joseph's Healthcare Hamilton	50,831
First Ontario Centre	36,177
Mobile Clinics	30,916
Primary Care	8,817
Pharmacies	27,607
Total in Hamilton	232,611

Product	Total doses administered
Pfizer	162,733
Moderna	34,405
AstraZeneca	35,473

Total Doses Administered in Hamilton by Day

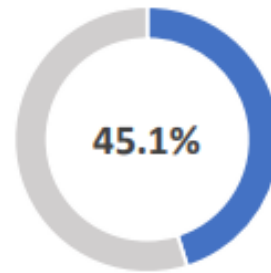


Source: IntelliHealth (COVAXon Data Load)

COVID-19 Vaccine Update

Estimated as of End Of Day May 13, 2021

% of adult population* who initiated or completed a vaccine series (at least 1 dose)



*Hamilton residents age 18+ (n=488,459); Population Projections, 2021 (IntelliHealth).
Note: Only includes Hamilton residents; approximately 2% of addresses are missing.

% Vaccinated with at least 1 dose (Hamilton 18+ population)	Days between milestones
0-10%	88
10-20%	16
20-30%	16
30-40%	15

COVID-19 Vaccine Update

Estimated Vaccine Coverage by Age (End of Day May 13, 2021)

Age Group	Est Population Size	Vaccine Series Initiation	% Vaccine Series Initiation
85+ Years	15,491	12,729	82%
80 to 84 Years	13,448	11,283	84%
75 to 79 Years	19,294	15,434	80%
70 to 74 Years	27,932	22,338	80%
65 to 69 Years	34,035	24,882	73%
60 to 64 Years	40,459	28,080	69%
55 to 59 Years	42,467	24,177	57%
50 to 54 Years	37,154	16,312	44%
45 to 49 Years	35,153	13,376	38%
40 to 44 Years	37,328	12,979	35%
15 to 39 Years	204,596	35,068	17%

Source: IntelliHealth (COVAXon Data Load)

Notes:

1. Data are preliminary and subject to change.

COVID-19 Vaccine Update

Estimated Vaccine Coverage by Forward Sortation Area (All Ages) (End of Day May 9, 2021)			
FSA	Est Population Size	Vaccine Series Initiation	% Vaccine Series Initiation
L8B	21,529	6,990	32.5%
L8E	44,981	12,141	27.0%
L8G	23,005	8,644	37.6%
L8H	28,146	6,915	24.6%
L8J	30,205	8,116	26.9%
L8K	34,147	10,506	30.8%
L8L	34,905	9,905	28.4%
L8M	14,639	3,977	27.2%
L8N	16,234	5,306	32.7%
L8P	24,537	9,412	38.4%
L8R	13,674	3,672	26.9%
L8S	15,100	4,836	32.0%
L8T	20,548	7,225	35.2%
L8V	22,321	7,728	34.6%
L8W	28,179	9,785	34.7%
L9A	27,176	8,666	31.9%
L9B	26,693	9,378	35.1%
L9C	43,824	17,778	40.6%
L9G	26,323	10,990	41.8%
L9H	33,489	15,335	45.8%
L9K	16,852	7,570	44.9%
LOR	43,672	16,104	36.9%
Average	590,179	200,979	34.1%

Source: IntelliHealth (COVAXon Data Load); ICES 03 Apr 2021 (total population)

Notes:

1. Coverage estimates are for all ages and include ages in the estimated population size that may not be eligible for vaccination. Estimates are therefore lower than overall coverage for the adult (18+) population.
2. The number vaccinated and estimated population size only include residents of the City of Hamilton even though some FSAs are shared between health units. N1R and N0B are not included at this time.
3. The estimated population size for LOR was estimated to only include Hamilton residents and should be used with caution.

COVID-19 Vaccine Update – Eligibility

Eligibility group	Week of April 26	Week of May 3	Week of May 10	Week of May 17	Week of May 24	Week of May 31
Provincial age band	April 30: 55 and older	50 and older	40 and older	30 and older	18 and older	12 to 17
Hotspot age band	April 27: 45 and older	18 and older	-	-	-	-
Health conditions	Highest-risk health conditions continues	High-risk health conditions	At-risk health conditions	-	-	-
Cannot work from home	April 29: licensed childcare workers	Group 1	Group 2	-	-	-

COVID-19 Vaccine Update – Supply

- New landscape of vaccine rollout – ample supply
 - By end of May, everyone 12yrs+ who wants a vaccine will be able to book an appointment
 - Ongoing needs: ensuring access, building vaccine confidence

COVID-19 Vaccine Update – 12-17 year olds

- On May 5, 2021 Health Canada approved Pfizer vaccine for those 12yrs + years of age
- Public Health Services working with School Boards for vaccination of 12-17 year olds
- Ideal timeline – first dose in June and second dose in August

COVID-19 Vaccine Update – Pause of AstraZeneca Vaccine

- First doses of AstraZeneca paused out of an abundance of caution due to an observed increase in a rare blood clotting condition following first dose
- Province will be making a decision regarding second dose approach for those who have received a first dose of AstraZeneca

COVID-19 Update - Vaccine Readiness Network

The Vaccine Readiness Network is the local engagement group for the COVID-19 vaccine. This group is assembled in order to engage with various stakeholders across the City.

The purpose of engaging stakeholders is:

- to describe and share provincial direction,
- to enhance local awareness,
- to understand barriers,
- to identify information and access needs and opportunities,
- to engage community in creating meaningful resources and champions for key populations in our community

COVID-19 Update – Vaccine Readiness Network

Key Contributions

- Targeted mobile pop-up clinics for those disproportionately impacted by COVID-19:
 - Hotspot clinics,
 - Black and racialized/people of colour,
 - Indigenous community,
 - Shelter staff and residents,
 - Temporary farm workers,
 - Disability services, and
 - Homebound
- Community partners supporting with outreach and booking

COVID-19 Update – Vaccine Readiness Network

Key Contributions

- Engaging with priority populations through meetings and outreach to:
 - Develop tailored messages, print, video and social media resources for communities with high vaccine hesitancy rates
 - Vaccine Q&A sessions for priority populations (live and pre-recorded)
 - Hot spot forward sortation area (FSA) mail out
 - Provide translated resources
 - Determine specific barriers to vaccination, and
 - Facilitate access to vaccines/vaccine clinics (clinics located within their neighbourhood, ensuring clinics are comfortable for the community, providing answers to questions, transportation to clinics, etc.)

COVID-19 Update – Vaccine Readiness Network

What works

- Partnership with community organizations
- Leadership from trusted community members
- Leveraging social influencers
- Acknowledgement of racial inequities and identification of priority populations
- Education (tailored)
- Health care providers reaching out to clients
- Vaccine accessibility (hour, transportation, familiar)
- Ambassadors with community expertise

Key challenge

- Covid-19 pandemic continues to highlight longstanding disparities rooted in the social determinants of health

COVID-19 Vaccine Update – Ambassadors

- Need identified through ongoing work with community partners to supplement existing activities to address vaccine hesitancy and access barriers
- A total of 10 Vaccine Ambassadors have been hired
 - All Ambassadors are from Black, racialized and Indigenous communities within Hamilton
- Three factors were considered to identify priority populations:
 - % of Hamilton population
 - % of COVID-19 cases
 - Rates of vaccine hesitancy

COVID-19 Vaccine Update – Ambassadors

- Work with communities to build vaccine confidence
- Act as a trusted local resource to their communities
- Engage priority populations through community outreach
 - Listen to the needs of the community
 - Promote and distribute evidence-based and translated resources about vaccines





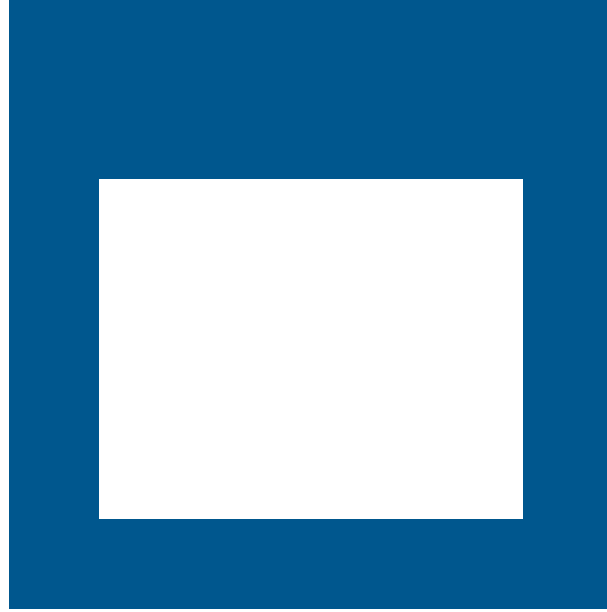
Local goals and Objectives

- To increase vaccine confidence
- To decrease vaccine hesitancy
- To increase vaccine uptake

Union of multiple grassroots organizations that were previously culturally focused (e.g. Canada's South Asian COVID-19 taskforce)

How?

- Share vaccine selfies or video on social media
 - Challenging friends and family to book a vaccine when it's their turn
 - Share why you got the vaccine
- Utilize local and national influencers
- Utilize “This is Our Shot” brand to push internal messaging on social media
- Engage with ethnic communities to share clinic information, and presentations through established “This is Our Shot” channels (What’s App, social media)
- Information in 30 languages



QUESTIONS?