



Hamilton

# Public Health Services COVID-19 Situation Report & Status of Programs

Board of Health  
January 11, 2021

# Overview

1. Overall Status Update
2. Provincial Response Framework & Metrics
3. COVID-19 Situation Report
  - Case Activity
  - Outbreak Activity
3. COVID-19 Variants
4. Hamilton COVID-19 Response Table Updates
5. Staffing & Recruitment Update
6. COVID-19 Vaccination Program Update

# Overall Status

- Increasing number of cases and outbreaks has impacted Public Health Services' ability to follow-up with cases and contacts in a timely manner
- Approach to case and contact management has been revised to focus on areas with greatest impact:
  - Isolation of new cases
  - Follow-up with highest risk contacts
  - Outbreak response
- Changes to business processes include (but are not limited to):
  - Collection of qualitative data and some quantitative data elements suspended
  - Collection of detailed data social determinants of health data suspended

# Overall Status

- Vaccination program underway, following frameworks and ongoing guidance provided by the Province
- Began vaccination in Long Term Care Homes/high risk Retirement Homes yesterday, aim to complete by Jan 18, 2021
- Currently dynamic situation with short cycles of planning in response to evolving science and provincial direction/policy and supply of vaccine

# Provincial Response Framework Indicators

 <b>PREVENT</b> (Standard Measures)	 <b>PROTECT</b> (Strengthened Measures)	 <b>RESTRICT</b> (Intermediate Measures)	 <b>CONTROL</b> (Stringent Measures)	 <b>LOCKDOWN</b> (Maximum Measures)
<p><b>Epidemiology</b></p> <ul style="list-style-type: none"> <li>Weekly incidence rate is &lt; 10 per 100,000</li> <li>% positivity is &lt; 0.5</li> <li>Rt &lt; 1</li> <li>Outbreak trends/ observations</li> <li>Level of community transmission/non-epi linked cases stable</li> </ul> <p><b>Health System Capacity</b></p> <ul style="list-style-type: none"> <li>Hospital and ICU capacity adequate</li> </ul> <p><b>PH System Capacity</b></p> <ul style="list-style-type: none"> <li>Case and contact follow up within 24 hours adequate</li> </ul>	<p><b>Epidemiology</b></p> <ul style="list-style-type: none"> <li>Weekly incidence rate is 10 to 24.9 per 100,000</li> <li>% positivity is 0.5-1.2%</li> <li>Rt is approximately 1</li> <li>Repeated outbreaks in multiple sectors/settings OR increasing/# of large outbreaks</li> <li>Level of community transmission/non-epi linked cases stable or increasing</li> </ul> <p><b>Health System Capacity</b></p> <ul style="list-style-type: none"> <li>Hospital and ICU capacity adequate</li> </ul> <p><b>PH System Capacity</b></p> <ul style="list-style-type: none"> <li>Case and contact follow up within 24 hours adequate</li> </ul>	<p><b>Epidemiology</b></p> <ul style="list-style-type: none"> <li>Weekly incidence rate is 25 to 39.9 per 100,000</li> <li>% positivity is 1.3-2.4%</li> <li>Rt is approximately 1 to 1.1</li> <li>Repeated outbreaks in multiple sectors/settings, increasing/# of large outbreaks</li> <li>Level of community transmission/non-epi linked cases stable or increasing</li> </ul> <p><b>Health System Capacity</b></p> <ul style="list-style-type: none"> <li>Hospital and ICU capacity adequate or occupancy increasing</li> </ul> <p><b>PH System Capacity</b></p> <ul style="list-style-type: none"> <li>Case and contact follow up within 24 hours adequate or at risk of becoming overwhelmed</li> </ul>	<p><b>Epidemiology</b></p> <ul style="list-style-type: none"> <li>Weekly incidence rate <math>\geq</math> 40 per 100,000</li> <li>% positivity <math>\geq</math> 2.5%</li> <li>Rt is <math>\geq</math> 1.2</li> <li>Repeated outbreaks in multiple sectors/settings, increasing/# of large outbreaks</li> <li>Level of community transmission/non-epi linked cases increasing</li> </ul> <p><b>Health System Capacity</b></p> <ul style="list-style-type: none"> <li>Hospital and ICU capacity at risk of being overwhelmed</li> </ul> <p><b>PH System Capacity</b></p> <ul style="list-style-type: none"> <li>Public health unit capacity for case and contact management at risk or overwhelmed</li> </ul>	<p>Trends continue to worsen after measures from Control level are implemented.</p>

# Provincial Response Framework Indicators

## Epidemiology

	Previous (Dec 25, 2020)	Previous (Jan 1, 2021)	CURRENT (Jan 8, 2021)	Trend
Weekly incidence rate/100,000	127.5	129.0	159.2	↑
% positivity	3.2%	5.5%	6.3%	↑
Effective reproductive number ( $R_t$ )	1.08	1.07	1.16	↑
% of community-acquired cases	**	**	**	
High number of outbreaks among long-term care homes and retirement homes Total of 32 active outbreaks; 9 outbreaks > 10 cases.				

## Public Health System Capacity

	Previous (Dec 25, 2020)	Previous (Jan 1, 2021)	CURRENT (Jan 8, 2021)	Trend
% newly reported cases reached within 1 day of reported date	31.1%	46.6%	48.5%	↑
% newly identified close contacts reached within 1 day of contact ID date	**	**	**	

# Provincial Response Framework Indicators

		Health System Capacity	
	Hospital	CURRENT (Jan 8, 2021)	
Overall adult acute medicine & surgical hospital occupancy/funded acute beds	SJHH	99%	
	HHS	100%	
Overall adult acute alternate level of care (ALC) hospital occupancy/funded acute beds	SJHH	19%	
	HHS	18%	
Overall adult critical care occupancy/funded intensive care unit (ICU) beds	SJHH	81%	
	HHS	90%	

**SJHH:** St. Joseph's Healthcare Hamilton

**HHS:** Hamilton Health Sciences

# COVID-19 Situation Report

## Overview:

1. Case activity
2. Outbreak activity

# 1. Case activity

# Phases of COVID-19 in Hamilton

## Wave 2

### Phase 1: Pre-Peak Sept 2020

- 179 cases reported
- Infections due to direct contact with other cases and undetermined sources
- 2 outbreaks
- Ongoing household spread, socialization, and those feeling ill not staying home
- 6 hospitalizations and 1 death
- 25,220 tests completed at Hamilton Assessment Centres

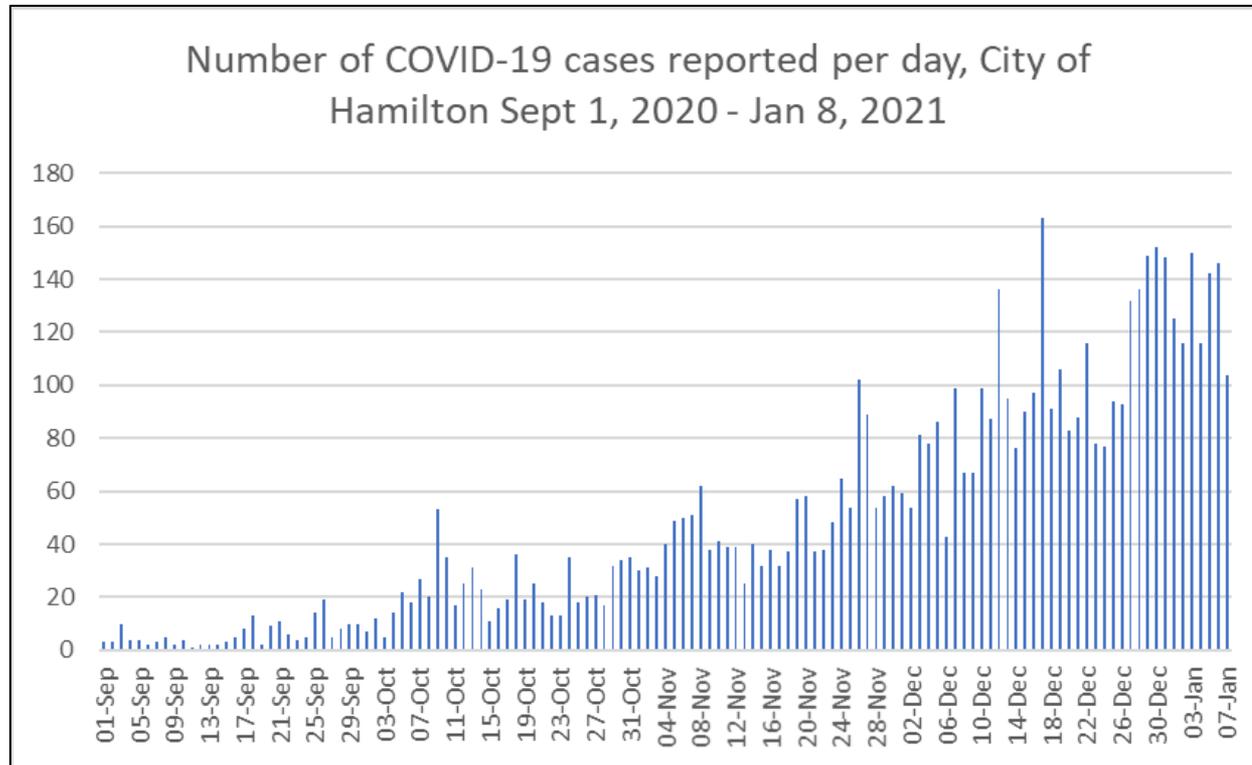
### Phase 2: Peak 1 Oct 2020

- 691 cases reported
- Infections due to outbreaks, direct contact with other cases, and undetermined sources
- Various factors led to ongoing risky behaviours: choice, stigma, structural barriers
- 27 outbreaks
  - One large and notable: SPINCO, triggered early Oct 2020 peak
- 17 hospitalizations and 2 deaths
- 27,943 tests completed at Hamilton Assessment Centres

### Phase 3: Peaks 2+ Nov 2020 – Jan 8, 2021

- 5,343 cases reported
- Infections due to outbreaks, direct contact with other cases, and undetermined sources
- Various factors led to ongoing risky behaviours: choice, stigma, structural barriers
- 117 outbreaks
  - Several notable: Chartwell Willowgrove, Grace Villa, Juravinski, Shalom Village
- 298 hospitalizations and 148 deaths
- 71,415 tests completed at Hamilton Assessment Centres

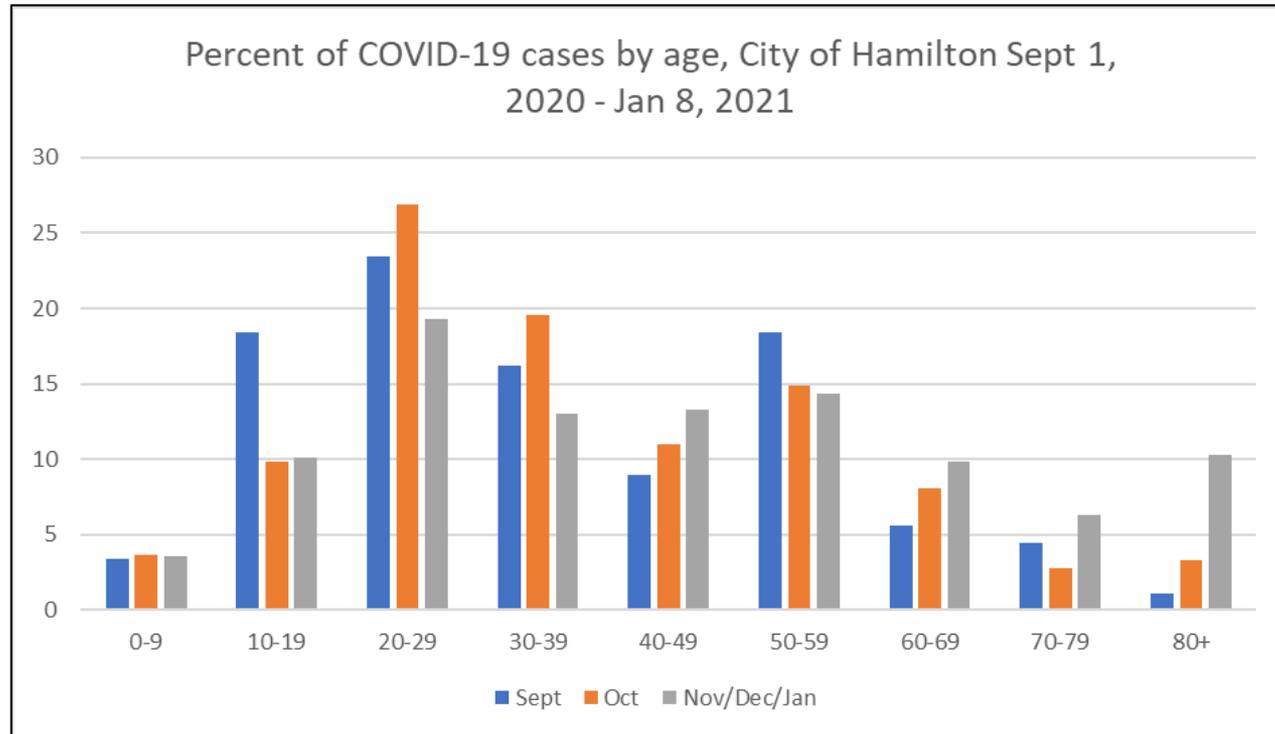
# Reported cases



## Key Messages

- COVID-19 case activity has increased drastically in the City of Hamilton throughout wave 2
- Since Sept 1, 2020, the average number of cases reported per day has increased from ~1 to 135

# Age distribution



## Key Messages

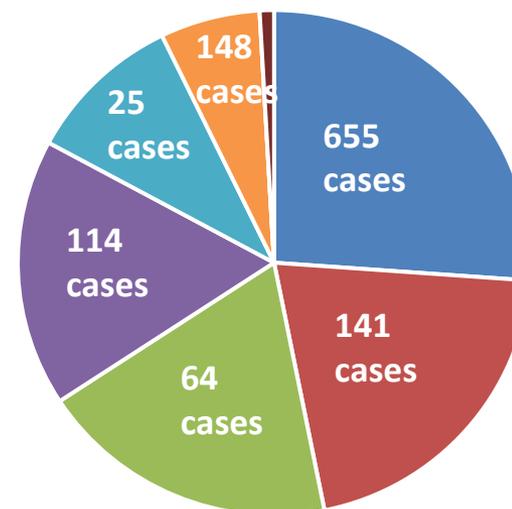
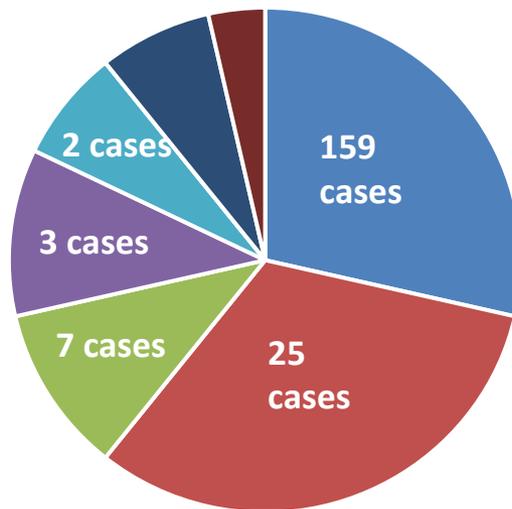
- Overall, from Sept 1, 2020 – Jan 8, 2021, the highest percentage of cases occurred in the 20-29 year age group
- More recently (Nov 1, 2020 – Jan 8, 2021), there has been a rise in the 80+ year age group

## 2. Outbreak activity

# Number of COVID-19 outbreaks by facility type

City of Hamilton, Sept 1 – Oct 31, 2020; N=29 outbreaks

City of Hamilton, Nov 1, 2020 – Jan 8, 2021; N=117 outbreaks



■ Long-term care home	■ Workplace	■ School/daycare
■ Retirement home	■ Group home	■ Hospital
■ Athletic facility	■ Other	

## Key Messages

- A shift in affected facility types has occurred throughout wave 2
- More recently, a larger proportion of school/daycare and retirement home outbreaks have been declared

# COVID-19 outbreak cases by facility type

Facility type	Total # outbreaks	Total cases	Staff cases	Resident/ patient/patron/ student cases	Visitor/other cases	Deaths
Long-term care home	37	814	339	463	12	105
Workplace	32	166	157	9	0	1
Hospital	7	148	81	65	2	11
Retirement home	22	117	39	71	7	10
Athletic facility	2	79	3	76	0	0
School/daycare	24	71	33	38	0	0
Group home	13	27	20	7	0	0
Other	2	9	3	3	3	0
<b>Total</b>	<b>146</b>	<b>1,439</b>	<b>682</b>	<b>733</b>	<b>24</b>	<b>127</b>

## Key Messages

- The largest proportion of outbreak-associated cases in wave 2 thus far (Sept 1, 2020 – Jan 8, 2021) have been in long-term care homes (N=814)
- The number of cases per outbreak high for long-term care and hospitals, low for workplaces and schools/daycares

# COVID-19 Variants

- UK variant was detected after a rapid increase in COVID-19 cases was observed late September 2020, with an ongoing increase as of December 2020
- South African variant was detected through routine genomic surveillance in December 2020.
- Data suggests these strains may be more transmissible
- Early analyses suggests there is no increased risk for hospitalization or reinfection with the variants
- Currently no indication that the vaccines will be less effective against these variants, subject of ongoing study
- As of January 5, 2021, **nine** cases of the UK variant have been identified in Canada (**six** in Ontario)

# Hamilton COVID-19 Response Table Update

- Extended Assessment Centre hours to meet increased demand. Residents are able to access COVID testing within one day.
- Ongoing support to congregate settings in crisis challenged by large outbreaks and lack of human resources. Mobile Emergency Support Team actively recruiting staff to assist.
- Ongoing partnership with Chamber of Commerce and Business Improvement Areas to support business understanding of/adherence to provincial guidelines and safe work environments.
- Examining procurement of COVID-19 forecasting tool to assess pandemic trajectory and impacts of public health measures/vaccination

# Staffing & Recruitment Update

## Overall

- 263 Public Health Services staff and 8 City staff supporting COVID-19 response
- Demands on staff continue to be significant

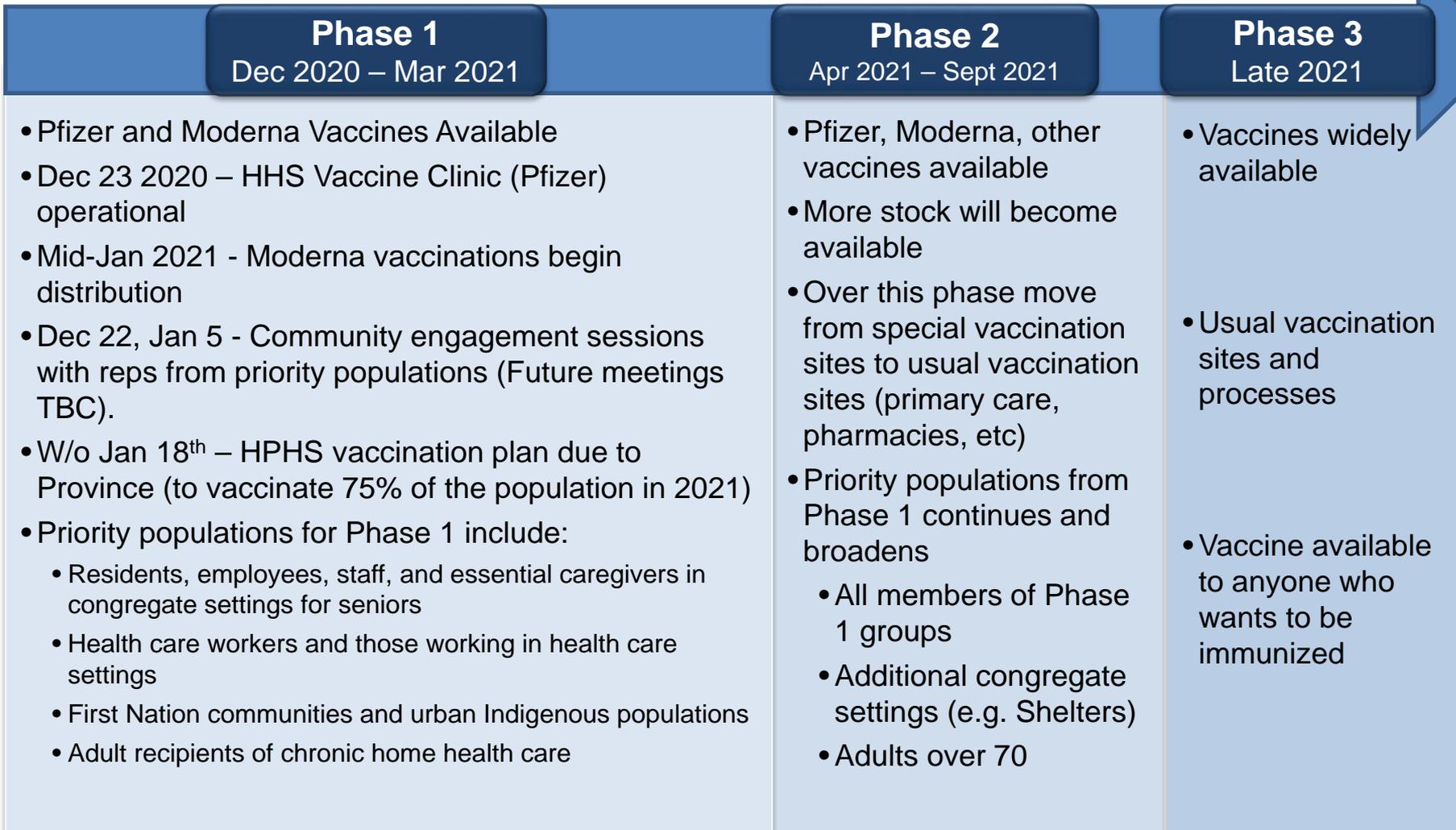
## Deployment of Additional PHS Staff in late December

- 21 Public Health Nurses
- 2 Public Health Services Leaders

## Additional Support from Ministry of Health

- 11 Case Management staff started as of Jan 4, 2021, trying to recruit more
- 33 Contact Tracers have started

# Vaccine Distribution Timeline



# Situation Update

- As of January 10, 2021 , there have been approximately 5,800 vaccines administered in Hamilton.
- The current fixed-site vaccination clinic at Hamilton Health Sciences will continue to deliver vaccine as the supply is received from the Province.
- As of this week individuals will begin receiving their 2<sup>nd</sup> dose of vaccine
- Mobile clinics, coordinated by Public Health Services with Primary Care Physicians and Hamilton Paramedics, now underway in Hamilton long term care and high risk retirement homes - first mobile clinic held yesterday, Jan 10, 2021.
- As of January 10, 2021, just over 3000 of 6200 staff/essential caregivers in long-term care and high-risk retirement homes in Hamilton have received vaccines with more planned in the coming days.

# Vaccine Planning

- Local Plan due to Ministry of Health and Long-Term Care by January 18, 2021
- Comprehensive plan to include:
  - A description of populations to be vaccinated by phase/over time (including quantitation of subpopulations and identification of barriers)
  - Prioritization strategy and implementation plan
  - Measurement, Monitoring, and evaluation plan
  - Communication plan over period of three vaccine phases
  - Channels/Options for vaccine delivery across phases
  - Strategy to address vaccine hesitancy including health promotion plan and the use of vaccine champions, HHR, considerations for storage/transport/security, and CQI of the plan.

# Key Populations

The province has announced key populations to receive the vaccine, including those at higher risk of serious illness and dying from COVID-19:

- Residents, staff, essential caregivers and other employees of congregate living settings (e.g. long-term care homes and retirement homes) that provide care for seniors as they are at higher risk of infection and serious illness from COVID-19;
- Health care workers;
- Adults in Indigenous communities, including remote communities where risk of transmission is high; and
- Adult recipients of chronic home health care

# Provincial Vaccine Phases

1

**December 2020 - March 2021**

**Who can be vaccinated:**

- Residents, employees and staff, and essential caregivers in congregate settings for seniors
- Health care workers and those working in health care settings
- First Nation communities and urban Indigenous populations
- Adult recipients of chronic home health care

2

**April 2021- September 2021**

**Who can be vaccinated:**

- All members of **Phase 1** groups
- Additional congregate settings (e.g. Shelters)
- Other populations and communities at greater risk\*

3

**September 2021 - End of 2021**

**Who can be vaccinated:**

- Available to anyone who wants to be immunized

# Purpose of Prioritization

- Demand for COVID-19 vaccines initially exceeds available supply
- The province has committed to distributing COVID-19 vaccines to priority populations in order to:
  - Reduce serious illness and death
  - Preserve health care and hospital capacity; and
- The province has released key resources to:
  - describe roles and responsibilities for prioritization
  - set priorities, targets and priority populations
  - guide a consistent approach to prioritization

# Approach to Prioritization

- In the first weeks of vaccine roll out, the province has provided specific direction on intended audience
  - Congregate settings for seniors – starting with Long Term Care Homes/Retirement Homes
- As Phase 1 implementation the province has released several key resources:
  - an [Ethical Framework for COVID-19 Vaccine Distribution](#) which distills ethical principles to guide COVID-19 distribution and promote consistency, stewardship, accountability and public trust.
  - **A COVID-19 Guidance for Prioritizing Health Care Workers for COVID-19 Vaccination**
  - Public Health Ontario data tools on risk of exposure
- The province has indicated more cycles of planning are underway to support prioritization in Phase 1, 2 & 3
  - Rapid decision making that is responsive to science, lived experience and implementation

# Ethical Framework: Foundation to Decision Making

## Minimize harms and maximize benefits

- Reduce overall illness and death related to COVID-19
- Protect those at greatest risk of serious illness and death due to biological, social, geographical, and occupational factors
- Protect critical infrastructure
- Promote social and economic well-being

## Equity

- Respect the equal moral status and human rights of all individuals
- Distribute vaccines without stigma, bias, or discrimination<sup>1</sup>
- Do not create, and actively work to reduce, disparities in illness and death related to COVID-19, including disparities in the social determinants of health linked to risk of illness and death related to COVID-19<sup>2</sup>
- Ensure benefits for groups experiencing greater burdens from the COVID-19 pandemic

## Fairness

- Ensure that every individual within an equally prioritized group (and for whom vaccines have been found safe and effective) has an equal opportunity to be vaccinated
- Ensure jurisdictional ambiguity does not interfere with vaccine distribution (e.g., Jordan's Principle)<sup>3</sup>
- Ensure inclusive, consistent, and culturally safe and appropriate processes of decision-making, implementation, and communications

## Transparency

- Ensure the underlying principles and rationale, decision-making processes, and plans for COVID-19 vaccine prioritization and distribution are clear, understandable, and communicated publicly

## Legitimacy

- Make decisions based on the best available scientific evidence, shared values, and input from affected parties, including those historically under-represented
- Account for feasibility and viability to better ensure decisions have intended impact
- To the extent possible given the urgency of vaccine distribution, facilitate the participation of affected parties in the creation and review of decisions and decision-making processes

## Public Trust

Ensure decisions and decision-making processes are informed by the above principles to advance relationships of social cohesion and enhance confidence and trust in Ontario's COVID-19 immunization program

# Key Roles and Responsibilities for Prioritization

Role	Responsibility
Ministry of Health (MOH)	<ul style="list-style-type: none"><li>• Set priority populations and sequence for vaccine utilization</li><li>• Determine vaccine allocation</li><li>• Set targets and timelines</li></ul>
Public Health Unit (PHU)	<ul style="list-style-type: none"><li>• Lead local vaccination programs;</li><li>• Responsible for the process of deciding sequencing of vaccines;</li><li>• Ensure consistent application of priority tools;</li><li>• Engage with stakeholders to inform local decision making</li></ul>
Health Care Organizations	<ul style="list-style-type: none"><li>• Support and facilitate vaccine clinics</li></ul>

# Local Process to Support Sequencing

- Local prioritization process established to engage with key stakeholders to:
  - Align with provincial direction to recommend local sequencing
  - Share/use best available data and resources to inform sequencing
  - Ensure a consistent application of provincial guidance/tools
  - Gather intelligence from key stakeholders to assist with sequencing
  - Ensure public trust and transparency in the process

## Key Stakeholders:

- Diverse community representation (e.g. Newcomers to Canada, Indigenous, Black community, homeless/shelter/housing, older adults)
- Administrative and clinical leadership from key health sectors (e.g. acute/hospitals, mental health and addictions, primary care, patient/family/caregiver, home care)
- A bioethicist

## Next Steps:

- Continue to align with provincial direction at a local level
- Continue engagement with key stakeholders to assist in sequencing of vaccines within the province's phases
- Sequencing will be in step with logistical considerations (vaccine type, amount, staff)

**This feels rushed, can we trust the COVID vaccine is safe?**

These vaccines are going through a full and usual approval process by Health Canada, and fully meet safety profiles.

They reduce illness due to COVID, but we don't yet know if they stop people from transmitting the virus, thus public health measures remain critical.

Both the Pfizer and Moderna products require two doses for full effectiveness, but they are not interchangeable; the second dose must be the same as the first dose.

**Will the vaccine interact with DNA in any way?**

As mRNA vaccines, people may be concerned that the vaccine may alter their DNA, or that its side effects are worse than the disease. These vaccines do not alter one's DNA.

**What are the side effects?**

The side effects are mainly pain and swelling at the vaccine site, as with other vaccines. This is the body's natural response, building immunity against the virus. Side effects will likely be moderate and resolve after a few days. So far these side effects in our experience are uncommon. Side effects will continue to be monitored, here, across Canada and around the world

**How do I decide if the vaccine is right for me and my family?**

Get informed and make your decisions based on scientific evidence and what makes sense for your family. Vaccination is a personal choice. The vast majority of Canadians agree is part of good health and important for prevention of serious disease. Public Health recommends that everyone who is eligible gets the vaccine once it is available, but recognize that the choice is not always as easy as following this advice. Take the time to read and understand the vaccine information from reliable sources. Follow-up by asking questions and reaching out to trusted medical experts like your family doctor, nurse practitioner, or health care provider.



Hamilton

QUESTIONS?