Court File No. 223/21

ONTARIO
SUPERIOR COURT OF JUSTICE
(Divisional Court)

BETWEEN:

DAVID DANESHVAR

Applicant

- and -

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO AS REPRESENTED BY THE MINISTER OF HEALTH, and the HONOURABLE CHRISTINE ELLIOTT, MINISTER OF HEALTH for the PROVINCE OF ONTARIO

Respondents

AFFIDAVIT OF DR. MICHAEL RACHLIS
(Sworn March 16, 2021)

I, Dr. Michael Rachlis, of the City of Toronto, in the Province of Ontario, Affirm AND SAY:

About Me

1. My name is Michael Rachlis. I currently reside in Toronto with my wife. I have direct knowledge of the information contained herein. Where I do not have direct knowledge and instead believe the information to be true, I have identified the source of the belief.
2. I am a medical specialist certified in public health and preventative medicine, a private consultant in health policy, and an Adjunct Professor at the University of Toronto Dalla Lana School of Public Health. I graduated with my MD from the University of Manitoba in 1975, completed my residency training in public health at McMaster University, and

passed my specialty examinations in Public Health and Preventative Medicine in 1988. I was granted an honorary Doctor of Laws by the University of Manitoba in 2010. My knowledge of health policy and health economics comes from my training, 20 years of medical practice, and 33 years of consulting work. I have consulted to the federal government, all ten provincial governments, and two Royal Commissions.

3. For further information about my qualifications, please see my curriculum vitae, which is attached as **Exhibit "1"**.
4. Through my professional experience, I am an expert in the areas of public health policy and delivery of health programs.
5. I am aware of my duty to the Court when acting as an expert in a proceeding. I have attached my signed Acknowledgement of Expert Duty (Form 53) to confirm my acceptance of my duties **(Exhibit "2").**

Outline

6. This affidavit is broken down into the following sections:
    a. The Ministry of Health has delegated responsibility for vaccine delivery to Public Health Units (PHUs) ;
    b. There are no specific mandates to PHUs to ensure equity in the delivery of vaccines;
    c. PHUs address equity of access to vaccines differently in their vaccine plans;
    d. The Ministry does not appear to be monitoring the equity of the vaccine roll out;
    e. As a result, there seem to be equity (and other) problems already with the Phase 1 and initial Phase 2 roll out; and
    f. There are some remedies that might be applied even at this late hour with the appropriate supports and resources.

The Ministry of Health has delegated responsibility for vaccine delivery to Public Health Units (PHUs)

7. The Ontario *Health Promotion and Protection Act*, RSO 1990, c. H.7 ("*HPPA*") establishes a comprehensive legislative scheme for public health concerns in Ontario. The *HPPA*, its regulations and the *Ontario Public Health Standards* (2018) (**Exhibit "3"**), set out the requirements, rights and duties of boards of health, municipalities, medical officers of health and the Chief Medical Officer of Health in the province.

8. There are 34 areas public health units, each with a board of health. Each board of health has medical officer of health. There are four different kinds of Boards of Health:

    a. 4 autonomous boards that are integrated into municipal structures (Chatham-Kent, Huron, Lambton, Toronto);
    b. 4 single tier health departments (Haldimand-Norfolk, Hamilton, Ottawa, Oxford);
    c. 6 regional or upper tier health departments (York, Durham, Peel, Halton, Niagara, Waterloo); and
    d. 20 autonomous county/district health units.

9. Where boards of health that are categorized as regional councils and single-tier municipalities, the Regional/Municipal Council acts as the board of health. In the case of Toronto, an advisory board reports to Council.

10. Under the *HPPA*, municipalities are obligated to fund mandatory health programs and services administered by their boards of health. The Province provides grants for public health programs and services. The Province's share of mandatory program funding is 75%.[1]

[1] Although this actually means that the municipalities are supposed to contribute at least 25 percent. But in several public health units, the municipal contribution exceeds what is required.

11. Section 7 of the *HPPA* permits the Minister of Health authority to the Minister of Health to "publish public health standards for the provision of mandatory health programs and services, and every board of health shall comply with the published guidelines".

12. According to the Ontario Public Health Standard ("OPHS"), "[t]he Standards define the responsibilities of boards of health in an integrated health system and are informed by the core public health functions, which include:

    a. Assessment and Surveillance;
    b. Health Promotion and Policy Development;
    c. Health Protection;
    d. Disease Prevention; and
    e. Emergency Management (**Exhibit "3"**, at p. 10).

13. The OPHS outlines expectations for boards of health, which are responsible for providing public health programs and services that contribute to the physical, mental, and emotional health and well-being of all Ontarians.

14. Equity features prominently in the OPHS. The one overall goal of the Policy Framework for Public Health Programs and Service is, "[t]o improve and protect the health and well-being of the population of Ontario and reduce health inequalities" (**Exhibit "3"**, at p. 7). Equity is supposed to apply to all programs and is operationalized in the Health Equity Guideline.

15. The Ministry published the Health Equity Guideline in 2018 (**Exhibit "4"**). As noted in the document, "[g]uidelines are program and topic specific documents which provide direction on how boards of health shall approach. specific requirement(s) identified within the Standards (**Exhibit "4"**, at p.3). The guideline further notes, "[a]s a foundational standard, health equity represents a cross-cutting vision and "fundamental philosophy to guide public health practice in Ontario" (**Exhibit "4"**, at p.7).

16. Requirement 2 for the Health Equity Guideline is:

> The board of health shall modify and orient public health interventions to decrease health inequities in accordance with the Health Equity Guideline, 2018 (or as current), and by:
>
> > a) Engaging priority populations in order to understand their unique needs, histories, cultures, and capacities; and
> >
> > b) Designing strategies to improve the health of the entire population while decreasing the health inequities experienced by priority populations (**Exhibit "4"**, at p.9).

17. Under the *HPPA*, municipalities are obligated to fund mandatory health programs and services administered by their boards of health.

18. Under the *HPPA*, the Ministry has significant authority over boards of health and PHUs to compel adherence to public health standards, as well as any regulations or acts. (sections 4, 5, 7, 83 and 84) The chief medical officer of health has extensive powers to compel PHU actions and provision of information (*HPPA*, section 77).

19. The Province appointed the Ontario COVID Vaccine Distribution Task Force. The Task Force is "[t]o provide advice to the Minister of Health and the Solicitor General to support the development of a COVID-19 immunization strategy, including the ethical, timely and effective distribution of COVID-19 vaccines in Ontario (**Exhibit "5"**).

20. The Ontario COVID Vaccine Plan delegates the responsibility for distribution and delivery of vaccination programs to local public health units (PHUs) (**Exhibit "6"**).

<u>There are no specific mandates to PHUs to ensure equity in the delivery of vaccine</u>

21. PHUs had to submit their plans to the Province/MOH outlining how they would deliver COVID-19 vaccines to their residents.

22. Notwithstanding the general equity standards outlined in the Ontario Public Health Standards, the Province has clearly not required any particular equity standards in the COVID-19 vaccination plans.

23. There is no uniformity in PHU plans. Some are very detailed. Others are merely a few pages. Based on the variance between the different plans there appears to have been no template for PHU vaccination plans. The variation in the plans also demonstrates that little if any attention was paid to equity.

24. The province has provided a list of prioritized groups to get vaccinated in Phases 1, 2, and 3 (**Exhibit "6"**). However, the province has provided no clear direction to the PHUs as to how to achieve equity within these various groups.

25. The COVID Vaccine Distribution Plan includes a prioritization plan based on an Ethical Framework (**Exhibit "7"**). The Task Force claims (**Exhibit "8"**) that it developed its ethical framework on the basis of the Ontario Human Rights Commission's Policy Statement on a human-rights based approach to managing the COVID pandemic (April 2, 2020) (**Exhibit "9"**).

26. However, the Task Force only suggests that Public Health Units PHUs, "[c]onsider applying the Ministry of Health's Health Equity Impact Assessment decision support tool to identify potential health equity impacts" (**Exhibit "7"** and **"10").** There is no requirement that PHUs actually do so.

27. The Health Equity Impact Assessment tool ("HEIA") asks decisions makers to consider the impact of their decisions across a number of vulnerable groups (**Exhibit "10"**).[2] The

[2] Vulnerable groups such as Aboriginal peoples (e.g., First Nations, Inuit, Métis, etc.), age-related groups (e.g., children, youth, seniors, etc.), disability (e.g., physical, D/deaf, deafened or hard of hearing, visual, intellectual/developmental, learning, mental illness, addictions/substance use, etc.), ethno-racial communities (e.g., racial/racialized or cultural minorities, immigrants and refugees, etc.), francophone

HEIA attempts to make explicit the identification of barriers to equity and then the remediation of these barriers. The HEIA also includes a section on how improvement will be monitored. The emphasis is on pro-actively planning for equity with consequent continuing quality improvement as opposed to not planning, having problems, and then not being able to fix them in a timely manner.

28. Of significant importance, is that it was only *recommended* that the PHUs *consider* using this tool. PHUs are not required to actually implement this tool nor build their vaccination rollout plan using the principles outlined in the plan, nor report on the equity of their roll out.

Different PHUs address equity of access to vaccines differently in their vaccine plans

29. As mentioned, there is significant variation across PHU plans.

30. The City of Toronto Public Health Playbook for the COVID-19 Vaccination Program mentions equity 27 times (**Exhibit "11"**).[3] The City established a COVID equity task force in December 2020, and it is involved with the vaccine roll out (**Exhibit "12"**). There is large, planned effort to vaccinate around 8000 homeless persons. Toronto is doing outreach for Indigenous persons through mobile clinics as well as some high-risk persons over 80 years of age to vaccinate them in their homes (**Exhibit "11"**, at p. 23).

(including new immigrant francophones, deaf communities using LSQ/LSF, etc.), homeless (including marginally or under-housed, etc.), linguistic communities (e.g., uncomfortable using English or French, literacy affects communication, etc.), low income (e.g., unemployed, underemployed, etc.), religious/faith communities rural/remote or inner-urban populations, (e.g., geographic/social isolation, under-serviced areas, etc.), sex/gender (e.g., male, female, women, men, trans, transsexual, transgendered, two-spirited, etc.), and sexual orientation (e.g., lesbian, gay, bisexual, etc.).

[3] In these comparisons I searched for all relevant words with "equit" including equity, equitable, equitably, inequity, inequitable, and inequitable.

31. York Region's Vaccination Plan mentions equity twice (**Exhibit "13"**). There is no mention of "homelessness". There is no COVID equity task force.

32. The Haldimand Norfolk PHU plan does not mention mobile clinics (**Exhibit "14"**).

33. Equity planning and assessment are clearly not being used systematically for the COVID vaccine roll out. The approval of these plans by the Province suggest that it has no intention of requiring equity as a component of the plans.

The Ministry does not appear to be monitoring of the equity of the vaccine roll out

34. As mentioned, the Ministry of Health has the ultimate responsibility for providing oversight for the vaccine rollout and has authority to compel PHU compliance with its standards. In the absence of any active monitoring for equity, there will be monitoring and public reporting about raw numbers. PHUs are likely to feel that they must focus on volume to ensure that their performance does not fall below the public's and the province's expectations. That means they would have an incentive to focus on those easiest to vaccinate.

35. As noted, the Provincial Vaccine Distribution Task Force claims it is following the recommendations of the Ontario Human Rights Commission which says, in part:

> **"Strengthen human rights accountability and oversight**
>
> a. Consult with human rights institutions and experts, Indigenous leaders and knowledge-keepers, vulnerable groups, as well as persons and communities affected by COVID-19, when making decisions, taking actions and allocating resources.
>
> b. Institute formal advisory roles for Indigenous knowledge-keepers and representatives of human rights commissions within governmental COVID-19 task forces, special committees and working groups.

c. Take a deliberate and comprehensive approach to independent human rights accountability and oversight, coordinated across jurisdictions, that ensures violations are anticipated, prevented and mitigated from the outset.

d. Collect health and other human rights data regarding the response to the COVID-19 pandemic, disaggregated by the grounds of Indigenous ancestry, race, ethnic origin, place of origin, citizenship status, age, disability, sexual orientation, gender identity, social condition, etc.

e. Regularly monitor and report publicly on the human rights impacts, outcomes and inequalities related to the COVID-19 pandemic and its management (**Exhibit "9"**).

36. However, as mentioned there is no mandate for the use of the Ministry's Heath Equity Impact Assessment Instrument (HEIA) or any other process to plan, audit, or improve the equity of vaccine service delivery.

37. On March 5, 2021 the Premier announced the province's Phase 2 roll out. There was mention of collection of voluntary sociodemographic data but no mention of how or when this would be relayed to PHUs to fine tune their campaigns (**Exhibit "15"**).

38. There is no evidence that all PHUs are appropriately disaggregating data on vaccine delivery. There is no evidence that all PHUs are regularly monitoring and reporting on outcomes and inequalities related to vaccine delivery. It seems very unlikely that all PHUs are carrying out these functions because they are not mandated to do so by the province.

<u>As a result, there seem to be equity (and other) problems already with the Phase 1 and initial stage of the Phase 2 roll out</u>

39. During early Phase 1 (which is nearly completed), the province focussed on vaccinating people living and working in institutions where the captive populations facilitated comprehensive delivery and therefore equity. However, as the vaccination program moves

outside of institutions many individuals need community and individual supports to ensure they get vaccinated in an equitable fashion.

40. Persons experiencing homelessness are one of the groups prioritized in Phase 1. There are fairly comprehensive plans for vaccine delivery to persons experiencing homelessness in Toronto, Ottawa, and some other parts of the province. In Toronto as of March 12th over 10% of persons experiencing homelessness had been vaccinated. And there are plans to vaccinate most of the rest before April 1st.

41. As of March 5th there was no evidence of operational planning to vaccinate the homeless in York Region and none had been vaccinated. There are at least 300 persons who are homeless in York Region and likely hundreds more.

42. Person over 80 years of age qualify for vaccination in Phase 1. However, in many PHUs qualified person must book their appointments online and must go to a mass vaccination clinic. In some PHUs, appointments could also be booked by telephone but for example, as of March 7, 2021, in Georgina, York Region, persons over 80 had to book online and telephone advice was only available to assist with online booking (**Exhibit "16"**).

43. Evidence is accumulating that restricting vaccine access to online booking or making limited provision for phone contact or community outreach, will significantly disadvantage certain populations such as those with disabilities, language difficulties, lack of access to internet or telephone, and ethno-racial groups who lack faith in institutions (**Exhibit "17"**).

44. Finally, there have been reports in Ontario and other jurisdictions of seniors having to book online and then stand in hours outside in freezing temperatures (**Exhibit "18"**). These painful pictures themselves are sure to deter some frail elders from trying to get their vaccine in in their rightful time.

45. On March 10, 2021 Dr. Isaac Bogoch an infectious disease specialist and a member of the provincial Vaccine Distribution Task Force was interviewed on CBC Radio Toronto Metro Morning (**Exhibit "19"**). In response to a question from host Ismaila Alfa about barriers to vaccination, Dr. Bogoch stated, "[b]ut of course there are a lot of barriers, right. Some people might have barriers to technology. They might have sight barriers. Mobility barriers. Language barriers" (**Exhibit "20"**).

46. When asked about vaccinating homebound elderly in their homes instead of forcing them to go to mass vaccination sites, he said, "[t]here are some community-based programs which have identified community dwelling elder populations and have gone to their homes...that's not widespread throughout the province" (**Exhibit "20"**). And "different public health units have different programs" (**Exhibit "20"**). He added, "[w]e can't ignore the tremendous barriers to care. Alright... Let's say someone helps sign you up or identifies you. But then you've got to go to, you know, a mass vaccine clinic. What if it's raining outside. What if you have to stand for a long period of time" (**Exhibit "20"**). Dr. Bogoch did not offer solutions for how vulnerable Ontarians should overcome these barriers.

47. On March 11, 2021, Doris Grinspun, the CEO of the Registered Nurses Association of Ontario was interviewed on CBC Radio Toronto Here and Now. She said that there are 4000 home care nurses in Ontario. They would like to vaccinate their patients at home. She said that as of March 11th they had not been asked to participate in the vaccination campaign.

48. Other major Provincial health care groups have expressed serious concerns about the lack of equity in the Province's vaccine roll out plan. On March 1, 2021 the CEOs of the Ontario Medical Association, the Ontario Hospital Association, the Ontario College of Family

Physicians, the Alliance for Healthier Communities, the Association of Family Health Teams, the Nurse Practitioner Association of Ontario, and the Nurse-led Clinic Association wrote the premier with their concerns that the vaccine roll out would not occur equitably (**Exhibit "21"**). They informed the premier and Minister of Health:

> We know that communities who've seen the highest rates of infections during the pandemic, the highest impacts on health and wellbeing, have been communities already marginalized before the pandemic hit, and for whom health and social services can be more difficult to access. We also know that it's many of these people who will have difficulty accessing online or phone system booking, are home bound, or are otherwise hesitant or unable to visit mass vaccination clinics or pharmacies. Premier and Minister, we believe it is critical to have a plan to ensure that the people facing the most barriers and risks due to COVID-19 are given particular attention in vaccine plans.

<u>There are some remedies that might be applied even at this late hour with the appropriate supports and resources</u>

49. There are longstanding barriers to the assurance of equity in vaccine delivery. with the:

    a. The lack of collection of data on utilization of services by Indigenous ancestry, race, ethnic origin, place of origin, citizenship status, age, disability, sexual orientation, gender identity, social condition, or another group.
    b. The lack of integration of data systems across public health, hospitals, long-term care centres, primary health care, pharmacies, and other providers.

50. However, in the short term, the province could still mandate and support PHU engagement with relevant organizations and communities to ensure that as much as possible the vaccine delivery program progresses in an equitable fashion.

51. The province could ask PHUs to use home care nurses to identify their clients and provide vaccinations.

52. For example, the eight provincial health care organizations who wrote the premier on March 1, 2021 suggested a three-point approach to facilitate equity:

    a. A comprehensive approach to building vaccine confidence in communities with historical and current barriers to vaccine uptake, by partnering with and resourcing community organizations.
    b. Enhance access through existing partnerships, mobile units, community testing sites, and pop-up community campaigns with priority populations.
    c. Collecting disaggregated data by race and other socio economic data to ensure equitable access and to prevent outbreaks (**Exhibit "21"**, at p. 2).

53. The Ontario Medical Association has written a detailed document which makes recommendations of how to further equity by working more closely with family doctors who could identify priority persons within their practices and then vaccinate them (**Exhibit "22"**).

54. The OMA document advises that the province will have to back the vaccine roll out with resources and other supports:

> Provincial financial and administrative support will be essential as, for example, PHUs continue to manage the nonvaccination COVID-19 response concurrently. Provincial public health leadership from the Chief Medical Officer of Health and scientific guidance from Public Health Ontario, will also be required to provide consistent provincial guidance to ensure a co-ordinated, supported, and equitable cross-province response (**Exhibit "22"**, at p. 4).

55. Even though Ontario lacks integrated electronic data systems and connectivity, family doctors' and pharmacies' electronic records could be used to create appropriate algorithms to prioritize patients. Currently, pharmacies are giving vaccines to whomever can book an appointment to see them. Ironically, they have the data and the regulatory authority to

contact their own high risk patients and vaccinate them. PHUs could work with pharmacies, primary care practices, and home care agencies to vaccinate high risk patients with mobility and other barriers to care.

56. In his November 22, 2020 meeting with the Ontario Commission on Long Term Care, Toronto geriatrician Dr. Nathan Stall noted that the province became "myopic over the summer" and "did not focus on long-term care" (**Exhibit "23"**, at p. 40). As a consequence, Ontario actually had more Long-Term Care resident deaths in the second wave in the fall of 2020 and winter of 2021 than in the first wave from February to June 1st (**Exhibit "24"**).[4]

57. Let's not fail the most vulnerable still among us in the third wave before they can get vaccinated. Without expeditious action there will be lives unnecessarily lost.

58. The province must take corrective action if it wants to ensure that all Ontarians get their COVID vaccinations at the appropriate time.

Conclusion

59. The province has overall responsibility for public health and the COVID vaccination program. The Ministry of Health has delegated its responsibility for vaccine delivery to Public Health Units (PHUs). There are no mandates to PHUs about following the Province's equity guidelines such as the HEIA in the delivery of vaccine. Without such requirements, different PHUs address equity of access to vaccines differently. There appears to be little Ministry monitoring of the equity of the vaccine roll out and as a result there are equity (and other) problems already with the Phase I and II roll out. There are

[4] Ontario Long-Term Care Home COVID-19 Data. There were 1652 Long-Term Care facility resident COVID deaths in the first wave up to June 1, 2020 and 1878 deaths in the second wave from October 1, 2020 through March 7, 2021.

remedies that might be applied even at this late hour with the appropriate supports and resources

60. I make this affidavit in support of David Daneshvar and for no other or improper purpose.

AFFIRMED before me in the City of Toronto, in the Province of Ontario, this 16th day of March, 2021.

Commissioner for Taking Affidavits
David Baker, LSO #17674M

Michael Rachlis

This is Exhibit **1** referred to in the Affidavit of **Dr. Michael Rachlis.** Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

Curriculum Vitae (March 16, 2021)

Michael M Rachlis MD MSc FRCPC LLD (*honoris causis*)

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Education:

Degree	University	Department	Year
MD	Manitoba	Medicine	1975
MSc	McMaster	Clinical Epidemiology	1988

Academic and Professional Appointments

Date	Rank and Position	Department	Institution
2012	Adjunct Professor	Dalla Lana School of Public Health	University of Toronto
2008	Associate Professor (Status only)	Dalla Lana School of Public Health	University of Toronto
1999	Associate Professor (Status only)	Health Policy Management & Evaluation	University of Toronto
1998	Associate Professor	Clinical Epidemiology	McMaster
1989	Assistant Professor	Clinical Epidemiology	McMaster

Honours

1969-1973	General Motors Scholarship, University of Manitoba
1982	Physicians' Services (Ontario) Fellowship for two months study in Seattle
1984-1985	Ontario Ministry of Health Fellowship to support postgraduate study in clinical epidemiology at McMaster University
1988	Fellowship in Public Health and Preventative Medicine granted by the Royal College of Physicians
1995	Association of Ontario Health Centres Annual Award
2002	Queen's Golden Jubilee Medal
2009	President's Award from the National Specialty Society for Community Medicine for CPD development
2009	University of Toronto Dalla Lana School of Public Health Public Health and Preventative Medicine Residency Program Faculty Educator Award
2010	Doctor of Laws degree (honoris causa) from the University of Manitoba

	Faculty of Medicine
2012	JP Maclean lecturer University of Manitoba
2012	Emmett Hall Lecturer Canadian Association of Health Services and Policy Research
2013	Queen's Diamond Jubilee Medal
2013	Annual Jean Wordsworth Award given by the Ontario branch of Canadian Pensioners Concerned
2016	Distinguished preceptor Queen's University Public Health and Preventive Medicine program

Scholarly and Professional Activities

Editorial Positions

Reviews

1994 - 2018 Reviewer for Canadian Journal of Public Health (approximately one review every two years)
1994 - 2018 onwards Reviewer for Canadian Medical Association Journal (approximately 1 review every two years)
1994 - 1995 Reviewer for Probe (a bimonthly journal of Canadian dental hygienists)
1996 - 1997 Reviewer for Canadian Public Administration
2001 - 2006 Reviewer for Healthcare Policy

Invited Speaker (Selected engagements 2000 onwards)

The John Howard Society of Ontario. Toronto. June 12, 2019.

University of Western Ontario Masters in Public Health program. London. April 8, 2019.

Public Sector Solutions to Waiting for Care. To a conference organized by the Canadian Health Coalition. November 30, 2018. Ottawa.

Atlantic Canada Conference of Medical Officers of Health. Halifax. October 11, 2018

Alberta Friends of Medicare. Edmonton. May 26, 2018.

Canadian Health Care: A Failure of Governance. To the Canadian Council of Legislative Auditors. Toronto. April 9, 2018.

Medicare Can't Wait: How to wrestle down wait times without liberalizing private finance. To "Is Two-Tier Care the Future? Private Finance in Canadian Medicare", a conference organized by the Centre for Health Law, Policy and Ethics, University of Ottawa. April 7, 2018.

Canadian Medical Politics: From Saskatchewan to Today. To the monthly meeting of the Sacramento Chapter of Physicians for a National Health Program. March 2, 2018.

Public Sector Solutions to Waiting for Care. To the annual meeting of the Canadian Health Coalition. February 26, 2018. Ottawa.

More Effective Primary Health Care: Why it's the Most Strategic Aspect of Health Care System Innovation. To the College of Licensed Practical Nurses of Alberta fifth annual Think Tank. October 5, 2017.

Congestive Heart Failure in Manitoba: You're moving in the right direction. To a conference organized by the St. Boniface Hospital CHF Clinic. May 24, 2017.

Ontario's health care system and care for those involved with the justice system. To a group convened by the John Howard Society of Ontario. June 25, 2017.

Canada's Public Health System. Webinar organized by the Public Health Physicians of Canada. October 6, 2016.

An introduction to health policy analysis. To the Annual General Meeting of Translating Research in Elder Care. Edmonton. June 13, 2016.

Program for All Inclusive Care of the Elderly: Lessons for Canada. To the Mississauga Halton Local Health Integration Network. Oakville ON. May 12, 2016.

Contested Ground: Why innovation isn't enough. To the annual University of British Columbia Centre for Health Services and Policy Research conference. April 6, 2016.

Population Health planning within an insurance-based health care model. Community Health Assessment for Indigenous communities. Winnipeg. January 14, 2016.

The second stage of Medicare. Niverville Heritage Centre Annual Gala. Niverville MB. November 7, 2015.

What we can learn from the Alaska South Central Foundation. To the annual primary health care day of the Winnipeg Regional Health Authority. November 26, 2015.

Around the World with Health Policy in 3 hours. Public Health and Preventive Medicine National Review Course. Kingston ON October 26, 2015

Canadian Health Care Policy: Where does it stand today and where is it going tomorrow? To the BC Colleges, Universities, and Institutes Benefits Consortium 18th Annual conference Whistler BC. May 28, 2015

Population Aging: Glacier or Tsunami? Trillium Health Partners Ethics Grand Rounds Mississauga April 14, 2015.

Modernizing Medicare for the 21st century. Southern Regional Health Authority Annual Meeting Niverville MB. October 9, 2014.

Ontario health care is as sustainable as we want it to be. To the Ontario Hospital Association Leadership Summit. Collingwood September 4, 2014.

Fourteen Actors in Search of a Script: Canadian Health Policy in 2014. To the 47th Annual Canadian Employee Benefits Conference sponsored by the International Foundation of Employee Benefits and Pension Plans. August 11, 2014. Calgary Alberta

Canada Health Accord: Importance of Leadership Engagement and New Directions. To: Pan-Canadian Town Hall Meeting: Canada Health Accord - Leadership Engagement and New Directions, a meeting sponsored by the Ottawa Chapter of Emerging Health Leaders. Ottawa. May 21, 2014.

Les Temps changent: Franchir le mur pour changer la facon d'offrier les soins de sante. To the annual meeting of L'Association québécoise d'établissements de santé et de services sociaux (AQESSS). Quebec City. May 8, 2014.

Public Health Care is sustainable: Modernizing Medicare for the 21st Century. To the annual meeting of the New Brunswick Liberal Party. April 26, 2014.

Medicare under pressure: let's dance while we make the necessary changes. To annual scientific meeting of the Manitoba Chapter of the College of Family Physicians. Winnipeg. April 11, 2014.

Public Health Care is sustainable: Modernizing Medicare for the 21st Century. To a community panel established by St. Joseph's Hospital Toronto. March 29, 2014.

Introduction to the Canadian and Ontario Health Care systems. To the Ontario Chinese Health Coalition. Toronto. March 22, 2014

Public Health Care is sustainable: Modernizing Medicare for the 21st Century. To a community meeting in Waterloo, Ontario. January 21, 2014.

What do we know about patient and family centred care? To the semi-annual Manitoba Patient Access Network meeting. Winnipeg. November 18, 2013.

Making Medicare sustainable: An evidence-based, democratic approach to health human resource planning. To the students and faculty of Nursing at North Island College. Courtenay, British Columbia. November 7, 2013.

Public Health Care is sustainable: Modernizing Medicare for the 21st Century. To a community meeting at North Island College. Courtenay, British Columbia. November 6, 2013.

Beyond the Public and Private Debate to the Second Stage of Medicare. To the Queen's University Health and Human Rights Conference. November 1, 2013.

The Promise and Potential of CHCs: Building on the Legacy of Douglas and Hastings. To the semi-annual meeting of the Canadian Association of Community Health Centre Associations. Saskatoon. September 26, 2013.

It's Time for Tommy Douglas' Second Stage of Medicare. To the Annual meeting of the Canadian Federation of Nurses Unions. Toronto. June 4, 2013.

Population aging and Medicare are sustainable. To the North York University Women's club. May 1, 2013,

Medicare is as sustainable as we want it to be. University of Toronto Massey Grand Rounds 7th Annual Symposium. March 20, 2013

Invited presenter to the Canadian House of Commons Standing Committee on Health. March 19, 2013.

Medicare is as sustainable as we want it to be. To a forum organized by the Retired Academic and Librarians of the University of Toronto. University of Toronto. February 7, 2013.

Modernizing Medicare for the 21st Century. To St. Clement's Church. Toronto. January 13, 2013

Medicare's Sustainability, Public Finance, Fair Taxation and the Public's Health. To the Annual Meeting of the Ontario Health Coalition. Toronto. November 18, 2012.

Canadian Health Care sustainability. To the Canadian Science Policy Conference 2012. Calgary. November 6, 2012.

Achieving a common quality agenda: Utopian Dream, Oxymoron, or Democratic Wish. To Health Transformation 2012 a conference organized by Health Quality Ontario. Toronto. October 23, 2012.

Health Services Reform, Public Health Services, and the public's health: How do we unite our divisions? To the Annual Meeting of the Ontario Public Health Association. October 23, 2012.

Medicare is as Sustainable as We want it to be. To the Royal College of Physicians and Surgeons of Canada 4TH RAC Summit. Ottawa. October 18, 2012.

Health system reform: From theory to practice. To the Manitoba Centre for Health Policy and Evaluation annual Rural Remote Day. Winnipeg. October 16, 2012.

Is there are right prescription for Seniors health care in Canada? To The Joys and Tears of Living Longer, a conference organized by the BC Council of Seniors Organizations. Vancouver. October 1, 2012.

Enhancing Health and Improving health care: Tommy Douglas's Second Stage of Medicare and Ontario's Community Health Centres. To the Annual Meeting of the Port Hope Community Health Centre. June 20, 2012

Taking the Medicine: Quality and Innovation are the keys to Medicare's Renewal. To the annual meeting of Doctors Nova Scotia. Nova Scotia. June 2, 2012.

Evidence Based Health Policy: Utopian Dream, Oxymoron, or Democratic Wish. The annual Justice Emmett Hall Memorial Lecture. The Canadian Association for Health Services and Policy Research. May 30, 2012. Montreal.

What Brazil can learn from Canada's primary health care. CONASS (Conselho Nacional de Secretarios de Saude). Brasilia Brazil April 24, 2012.

Dollars and Sense: Medicare is Sustainable if we do our work differently. Quebec Medical Association. Montreal. April 20, 2012.

Health and the Aging Population: Apocalypse Not Now. International Federation of Employee Benefit Plans. Naples, Florida. April 1, 2012.

Taking Evidence on Health Human Resource Policy to the Field: Are we moving the Yardsticks or the Goal Posts? Canadian Health Human Resource Network. Vancouver February 27, 2012.

Public Health Policy Analysis. Public Health Infrastructure Steering Committee. Ottawa. February 7, 2012.

Medicare and the Aging Population: Apocalypse Not Now. Canadian Health and Wellness Innovations Conference. International Federation of Employee Benefit Plans. Savannah, Georgia. February 5, 2012.

Dollars and Sense: Medicare is as Sustainable as we want it to be. JP Maclean Lecture Winnipeg Manitoba. January 10, 2012.

Innovative Solutions for Optimum Health Care Delivery. To the Ontario Economic Summit. Toronto. November 22, 2011.

Ontario's Primary Health Care Policy: Powerful Interests, Compliant Institutions. GTA CHC Health Promotion Network Fair. Toronto. November 16, 2011

Tommy Douglas, the Second Stage of Medicare and Ontario's mental health system. To a Day in Psychiatry. Huron Perth Healthcare Alliance Mental Health Services. Stratford Ontario. September 30, 2011.

Prescription for Excellence: it's time for the Second Stage of Medicare. Grand River CHC and Aberdeen Health and Community Services. Brantford Ontario. September 21, 2011.

Skating where the puck is going: Post-secondary education and Ontario health policy. To University of Ontario Institute of Technology Health Faculty retreat. Oshawa. September 2, 2011.

The Quality Imperative for Health Care and the Second Stage of Medicare. To the third Canadian Quality Conference. Winnipeg Manitoba. June 28, 2012.

Prescription for Excellence: what's wrong with Ontario's health system and how to fix it. Brockville General Hospital. Brockville Ontario. June 13, 2011.

Enhancing the Role of Community Health Centre Boards of Directors in Quality Oversight. International Community Health Centre Conference. Toronto. June 9, 2011.

Prescription for Excellence: what's wrong with Ontario's health system and how to fix it. Middlesex Hospital Alliance. Strathroy Ontario. June 7, 2011.

Peer to Peer Mentoring, Chronic disease management and prevention, and the future of Medicare. To a conference on peer to peer mentoring for early inflammatory arthritis sponsored by Sunnybrook Hospital. Toronto. May 31, 2011.

The sustainability of Canadian health care. Students for Medicare. Toronto. May 28, 2011.

Aging in Place and Developing a Continuum of Care. Saskatchewan Seniors Mechanism Humboldt Saskatchewan. May 17, 2011.

The Future of Health Care in Canada: Reading the tea leaves from the federal election. International Federation for Employee Benefits Plans. Ottawa. May 13, 2011.

Who should be responsible for what you eat? The Government, Private Industry, or You? University of Toronto Public Health Interest Group. May 9, 2011

Medicare: The Problem is Quality and the Solution is Innovation. University of Toronto IHI Open School. April 12, 2011.

The Second Stage of Medicare. 1st Annual Quality Improvement & Patient Safety (QuIPS) Interdisciplinary Student Conference Leslie Dan Faculty of Pharmacy, University of Toronto. April 2nd, 2011

Is Medicare really that ill, or are We Ill-Informed? McMaster Health Forum. Hamilton. March 22, 2011

Medicare's sustainability and the end of the 2004 FPT health accord. To senior management New Brunswick Department of Health. March 8, 2011.

Prescription for Excellence: Fixing Medicare with Innovation and Quality. National Research Council of Canada, Institute for Information Technology. University of NB Fredericton. March 7, 2011.

Saving Medicare with Collaborative care: How you can add your Spice to the Recipe. Dietitians of Canada Central and Southern Ontario regional conference. Toronto. March 2, 2011.

Long Term Care in Canada: The Status Quo is no Option. To a breakfast for Members of Parliament organized by the Canadian Federation of Nurses' Unions. Ottawa. February 8, 2011.

What is the second stage of Medicare and why are we still waiting for it? ICES Annual Conference. Toronto. February 7, 2011.

Canada's health policy and young doctors. Canadian Federation of Medical Students. Ottawa. February 5, 2011.

Godot has arrived but we're still waiting for community-based care for the elderly in Ontario: Why has this happened and what we can do about it? University of Toronto Institute for Life Course and Aging. January 18, 2011

The Future of Medicare. Canadian Health Professionals Secretariat. Ottawa. November 25, 2010

Medicare isn't an excuse for letting children live in poverty. Campaign 2000 MPs Breakfast on Parliament Hill. Ottawa. November 25, 2010

Modernizing Canadian health care for the 21st Century: The Second Stage of Medicare and Ontario's community health centres. Vaughn Community Health Centre. November 23, 2010

Demographics, aging and Community-Based Health Care in Ontario. Concerned Friends Annual Meeting. Toronto November 17, 2010

October 19, 2010, Why are we still waiting for a community based health care system in Ontario. To the Ontario Community Support Services annual meeting. Markham, Ontario.

October and November 2010. Demographics, aging and financial sustainability. To five briefings organized by the Canadian Health Services Research Foundation in Calgary, Winnipeg, Halifax, Ottawa, and Toronto.

September 30, 2010. Prescription for Excellence. Greater St. Catherines Community Health Centre annual meeting. St. Catherine's.

September 29, 2010. Prescription for Excellence. Parkdale Community Health Centre annual meeting. Toronto.

September 24, 2010. Prescription for Excellence. Southeast Ottawa Community Health Centre annual meeting. Ottawa.

September 15, 2010. Public Solutions Are The Cure For Health Care Wait Lists. To a Regina public meeting. Regina.

September 9, 2010. Prescription for Excellence. Barrie Community Health Centre annual meeting. Barrie.

July 26, 2010 What can Brazil learn from Canada's health system. To a meeting of the Aperfeiçoamento da Gestão em Atenção Primária project, co-sponsored by CIDA, the University of Toronto, and various groups in Brazil. Brasilia, Brazil.

July 27, 2010 What can Brazil learn from Canada's health system. To a meeting of senior staff from the Pan-American Health Organization. Brasilia, Brazil.

July 28, 2010 Reflections on Brazil's health system. To a meeting of the Aperfeiçoamento da Gestão em Atenção Primária project and Brazil state secretaries of health.

April 27, 2010 Chronic Disease Management and Prevention and Modernizing Medicare for the 21st Century. To the annual meeting of the Canadian Council of Legislative Auditors. Toronto

March 25, 2010 Dinosaurs in Translation. To the annual conference of the University of British Columbia Centre for Health Services and Policy Research. Vancouver

March 25, 2010 Upstream without a paddle. To the annual meeting of the BC Nurse Practitioner Association. Vancouver

March 3, 2010 First Things First! Primary health care is the key to managing wait lists, chronic disease, and modernizing Medicare for the 21st Century. To the Primary Health Care Conference. Southey, SK.

January 18, 2010 Why does Canada's Primary Health Care lag other Countries? To the Primary Health Care Summit sponsored by the Canadian Institutes for Health Research. Toronto

January 13-14 What can Sweden learn from Canada's health system? To meetings of Social Democratic Party health committees in Stockholm and Uppsala, Sweden.

December 3, 2009 What can other countries learn from Canada's health system? To a visiting delegation from Beijing, China.

November 27, 2009. Paging Doctor Shortage: is it bad enough for YOU to change? To the annual meeting of the Ontario Chapter of the Canadian College of Family Physicians. Toronto.

November 4, 2009 What can the US learn from Canada's health system (and vice versa). To the Mid-West Health Executives Group and Associates meeting on the Future of Healthcare – Caring for the Uninsured and Underinsured. Detroit, Michigan.

October 22, 2009. Equity from the Start: The way ahead in Ontario. To the Association of Local Public Health Agencies of Ontario. Toronto.

September 30, 2009 Yes we can fix Medicare! Community health centres, Tommy Douglas, and the Second Stage of Medicare. To the annual general meeting of the Seaway Community Health Centre. Cornwall, Ontario.

September 25, 2009 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the annual Manitoba Saskatchewan Pharmacy Management Seminar. Riding Mountain, Manitoba.

June 23, 2009 Happy Workers, Healthy Patients, Sustainable Organizations. To the annual meeting of the health Employers' Association of BC. Vancouver.

June 17, 2009 Building the Best: Reflections: to Meeting of the Minds a conference organized by the change Foundation at the Ontario Hospital Association. Toronto

June 16, 2009 What can the US learn from Canada's health system? To Progressive Democrats of America.

March 29, 2009. Yes we can fix Canada's health system. To a community meeting organized by the Merrickville and Smiths Falls Community Health Centres. Smith's Falls, Ontario.

March 27, 2009. From Health Insurance to Health System: The Vital Role of Universities in the Second Stage of Medicare. To lunch hour forum organized by the Quebec branch of the International Federation of the Medical Students' Association. McGill University. Montreal.

March 14, 2009. The Second Stage of Medicare: How we got to where we are and how to get us to where we need to go. McMaster Students for Health Innovation conference, "Bright minds, big ideas". Hamilton, Ontario

February 9, 2009. Emerging Canadian and U.S. Health Care Issues. The International Foundation for Employee Benefit Plans. Victoria, British Columbia.

November 24, 2008. "Waiting for the Second Stage of Medicare". Ryerson University. Toronto

November 12, 2008. "From Health Insurance to Health System: Why have we been waiting for the Second Stage of Medicare". University of Western Ontario. London Ontario.

October 30, 2008 *"*Waiting for Effective Queue Management*"*. University of Ottawa, Telfer School of Management.

October 9, 2008 "What can other countries learn from Canada's health system." To a visiting delegation from Uppsala Sweden. Toronto.

September 23, 2008 Keynote speaker at the Annual General Meeting of Annapolis Valley Health, Kentville Nova Scotia.

September 16, 2008 Member of the affirmative team (other members: Dr. Arthur Kellerman Emory University and Dr. Paul Krugman Princeton University) for the resolution, "Universal Health Coverage Should be a Federal Government Responsibility". The debate was held at Rockefeller University New York City and sponsored by the Rosenkranz Foundation.

July 31, 2008. "What can the rest of the world learn from Canada's health system?" Keynote speaker to the 34th annual international conference of Operations Research and Health Services. Toronto.

June 26, 2008. Keynote speaker to the third annual scientific Congress of the Ciudad Sanitaria Dr. Luis E. Aybar. Santo Domingo, Dominican Republic.

June 11, 2008. Keynote speaker to the annual general meeting of the Hamilton Family Health Team. Hamilton, Ontario.

May 23, 2008. Masters of Ceremonies for Working together to Prevent and Manage Chronic Disease (a conference sponsored by St. Joseph's Hospital Toronto and the Ontario Hospital Health Promotion Network). Toronto.

April 11, 2008. Plenary Speaker to the annual meeting of the Manitoba Chapter of the Canadian College of Family Physicians. Winnipeg.

March 30-31, 2008. Main resource person for a visiting delegation of senior board and management from Christus Health from the US.

March 6, 2008. Plenary speaker to the annual Women's and Children's Health conference Regina, Saskatchewan.

March 4, 2008. Plenary speaker to 20th annual conference sponsored by the Centre for Health Services and Policy Research. Vancouver BC.

November 6, 2007. Plenary speaker to "Building on the Evidence", a conference sponsored by Simon Fraser University and the BC Centre for Policy Alternatives. Burnaby, BC

October 31, 2007 Plenary speaker to "Global Perspectives on Chronic Disease" organized by the Calgary Health Region. Calgary Alberta.

November 5, 2007. Plenary Speaker to the Canadian Hospice Palliative Care Association annual meeting. Toronto.

September 18, 2007. Keynote speaker to the annual meeting of the Service Employees International Union, Ontario Local 1. Windsor Ontario.

September 5, 2007, "The Canadian Health Care System: Development, Structure, Problems, Solutions", to a touring group of senior UK NHS executives.

June 21, 2007 Keynote speaker to a forum on chronic disease management and prevention organized by the North Simcoe Muskoka LHIN, Orillia, Ontario.

June 15, 2007, Keynote speaker to the annual meeting of the Canadian Pension and Benefits Institute, Winnipeg, Manitoba.

June 12, 2007, "High Performance Health Systems – How Do We Get There from Here?" to the National Health Leadership Conference, Toronto.

June 6, 2007, "The good, the bad, and the ugly: Modernizing Medicare for those /coping with Alzheimer's and related dementias", to the annual meeting of the Alzheimer's Society of Ottawa.

May 30, 2007, "From Health Insurance to Health System: The Vital Role of Universities in the Second stage of Medicare", the Henry and Sylvia Wong Forum in Medicine, McMaster University, Hamilton Ontario.

May 17, 2007, Association of Ontario Midwives annual meeting, Barrie, Ontario

May 3, 2007, “The Principles of the Second Stage of Medicare” to the SOS Medicare: Looking Forward, a national conference organized by the Canadian Health Coalition, Regina, Saskatchewan.

May 1, 2007, The Harkness Canadian Health Policy Tour, Hosted by the Canadian Health Services Research Foundation for The International Program in Health Policy and Practice, The Commonwealth Fund, Winnipeg, Manitoba.

April 30, 2007, Annual meeting of the Canadian Healthcare Engineering Society, London, Ontario

March 30, 2007, West Central LHIN Chronic Disease Management and Prevention day, Brampton, Ontario

March 26, 2007, Ontario Association of Community Care Access Centres meeting, “Collaboration for Primary Health Care”, Toronto

March 1, 2007 Keynote speaker to “Timely Access to Care: Gender Issues”, a conference organized by Health Canada, Ottawa.

November 29, 2006 Liberal Party of Canada Seniors Commission, Montreal

November 10, 2006 Dietitians of Canada (Southern Ontario branch). Toronto.

October 28, 2006 University of Windsor Faculty of Nursing. Windsor.

October 26, 2006 The Council on Aging of Ottawa. Ottawa

October 11, 2006 Canadian Alliance of Community Health Centre Associations. Saint John NB.

September 25, 2006 Canadian Economic Development Association. Thunder Bay.

July 10, 2006. Chronic Disease Management and Prevention in Canada. Chronic Disease Management and Prevention Think Tank. (Sponsored by the Central Local Health Integration Network.) Thornhill.

June 3, 2006. Association of Discharge Planning Coordinators of Ontario Annual Meeting. Toronto.

June 1, 2006. Canadian Orthopedic Residents’ Association. Toronto.

May 11, 2006. Ottawa Interclinic and Education Day. Ottawa.

May 9, 2006. Public Sector Solutions to Wait Lists. To a breakfast with Members of Parliament, hosted by the National Federation of Nurses Unions. Ottawa

May 1, 2006. Canadian Health Professionals Secretariat. Ottawa.

April 21, 2006. Dialogue on the Future of Medicare. (Conference sponsored by the Ontario Hospital Association and the Ontario Medical Association). Toronto.

April 13, 2006 First Things First: Primary Health Care Reform and Community Health Centres. Manitoba Association of Community Health Centres. Winnipeg

April 7, 2006. Health Sciences Association of BC Annual Meeting. Vancouver.

April 6, 2006. Chronic Disease Management. Local Health Integration Networks Education Session. Toronto

March 31, 2006. Prospects for Improving Wait Times in a Post Chaoulli World. To Taming the Queue (a conference sponsored by the Canadian Medical Association). Ottawa

March 16, 2006. Adapting the Canadian Health Care System to Provide High Quality Care for Seniors. British Columbia Premier's Council on Aging and Seniors Issues.

February 20, 2006. Ontario Hospital Association Nurse Practitioner Conference. Toronto.

February 15, 2006. Public Health and Primary Care. To a conference on Primary Health Care sponsored by the Capital Health Region. Edmonton.

December 7, 2005 Queue the Innovation: Developing a Research Agenda for Health System Waits. Canadian Institutes of Health Research. Winnipeg

November 26, 2005. Modernizing Medicare for the 21st Century. BC NDP Convention. Vancouver

November 17, 2005 Answering Healthcare Challenges with Innovation. InnoWest 2005 Calgary

November 10, 2005. Canadian Institute of Actuaries. Toronto

November 2, 2005 The Future of Canadian Public Health. Manitoba Public Health Association. Winnipeg

October 27, 2005 First Things First: Primary Health Care is the Key to Health Reform Moving in the Right Direction (conference organized by the Nova Scotia Department of Health). Halifax

October 13, 2005 Canada's Health Care System: Challenges to Public and Private Sectors. Fidelity Investments Canada. Toronto

September 26, 2005 Canadian Perspective on Chronic Disease Management
Global Perspectives on Chronic Disease Management. (Sponsored by the Calgary Health Region) Calgary

August 23, 2005 Implementing Change at the Local Level: Lessons from the Field. To the Executive Training for Research Application. Banff, Alberta.

August 3, 2005 Ontario's Health Care System: Challenges and Opportunities Workplace Safety and Insurance Board. Toronto

June 23, 2005 Campbellford Memorial Hospital Annual meeting. Campbellford, Ontario.

June 22, 2005 Canada's Health Care System: Challenges and Opportunities. NHS Duality Session. Sponsored by the British Columbia Provincial Health Services Agency. Vancouver

June 10, 2005 Ontario's Primary Health Care Reforms: Challenges and Opportunities Martin Bass Lecture, Trillium Primary Care Research Forum. Toronto

May 28, 2005 New Brunswick Liberal Party. Memramcook, New Brunswick

May 25, 2005 Healthy Cities in Canada: Lessons from the Past 20 Years. WHO Healthy Cities Forum. Suzhou, China

May 16, 2005 Vancouver Island CCHSE Chapter Victoria

April 25, 2005 Canadian Coordinating Office for Health Technology Assessment Annual Meeting. Ottawa

March 31, 2005 Ontario Hospital Association Northwest Region. Thunder Bay

March 7, 2005 Population Health and Intersectoral Action: Easy to Say, Hard to do. University of Ottawa. Population Health Program.

March 22, 2005 Prescription for Excellence: How Innovation is Saving Canada's Health Care System Saskatchewan Association of Health Organizations, Saskatoon

March 3-4, 2005 Prescription for Excellence in Dementia Care. To the 18th Annual Alzheimer Symposium. Toronto.

February 25, 2005 Prescription for Excellence: How Innovation and Primary Health Care Renewal are Saving Canada's Health Care System. To the Annual Meeting of the Alberta College of Family Physicians. Banff, Alberta.

January 28, 2005 Community Health Centres and Canadian Health Policy 2005: Stop me if you've heard this one before. To the Annual meeting of the Canadian Alliance of Community Health Centre Associations. Toronto.

February 17, 2005 Are We Any Closer to Home Plate? Prospects for Canadian Home Care. To the Children and Youth Home Care Network. Banff, Alberta.

December 8, 2004 The Prevention Imperative: A Better Investment for Health. To a meeting sponsored by the Ontario Prevention Clearinghouse. Toronto.

December 2, 2004 Prescription for Excellence: How Innovation is Saving Ontario's Health Care System. To the board of the Northumberland Hills Hospital. Coburg, Ontario.

November 18, 2004 What are Local Health Integration Networks and What Will they Mean for Southeast Toronto? To Healthy Connections Sponsored `by the Southeast Toronto Project. Toronto.

November 16, 2004 Prescription for Excellence: How Innovation is Saving Ontario's Health Care System. To the annual Ontario Hospital Association conference lunch meeting of the Ontario Chapter of the Canadian College of Health Services Executives. Toronto.

November 12, 2004 Nurse Practitioners in Canada: Finally Allowed on Prime Time. To the Nurse Practitioner Association of Ontario and the Registered Nurses Association of Ontario Annual Nurse Practitioner Conference. Toronto.

November 5, 2004 Ontario Health Issues 2004. To a Roundtable sponsored by Health Canada Ontario Region. Toronto.

October 6, 2004 Prescription for Excellence for Canada's Health Care System: If Quality is the problem, Innovation is the Solution. To the Roundtable Project on Safe and Timely Return to Function and Return to Work. Toronto.

September 30, 2004 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the annual meeting of the Power Workers Union. Toronto.

September 29, 2004 Prescription for Excellence: Make Quality Job One. To the Annual Provincial Health Care Conference. Winnipeg.

September 28, 2004 Prescription for Excellence: How Innovation can Improve Rural and Remote Health Care. To the annual Rural and Remote Health Care Day sponsored by the Manitoba Centre for Health Policy. Winnipeg.

September 24, 2004 Prescription for Excellence: How Innovation is Creating (could create) a Better Health System for Women. To an annual women's health conference sponsored by St. Joseph's Health Centre. Toronto.

September 22, 2004 Prescription for Excellence: How Innovation Could Save Ontario's Health Care System. To the annual meeting of the Durham Haliburton Kawartha and Pine Ridge District Health Council. Whitby.

September 22, 2004 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the annual meeting of the South Riverdale Community Health Centre. Toronto.

September 21, 2004 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the annual Back to School Conference sponsored by the Trillium Health Centre**.** Mississauga.

September 20, 2004 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the annual meeting of the Rexdale Community Health Centre. Toronto.

September 17, 2004 Prescription for Excellence: How Innovation Could Save Ontario's Health Care System. To the annual meeting of the Northwestern Ontario District Health Council. Thunder Bay.

September 15, 2004 Prescription for Excellence: How Innovation Could Save Ontario's Health Care System. To the annual meeting of the Sandy Hill Community Health Centre. Ottawa.

September 13, 2004 Prescription for Excellence: Beyond Cost-Cutting to Elimination of Waste and Continuous Quality Improvement. To the annual meeting of the Ontario Hospital Association, Financial Managers. Toronto.

September 8, 2004 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the annual CAW Retirees Conference. Port Elgin, Ontario.

September 6, 2004 Prescription for Excellence: How Innovation is improving Canada's Therapeutics. To the annual Pharmascience Advisory Committee meeting. New Orleans.

June 21, 2004 Prescription for Excellence: Innovation, Quality, and the Canadian Health Care System. To a meeting sponsored by Providence Health Care System. Vancouver.

June 16, 2004 Prescription for Excellence: Aim for Quality to Achieve Sustainability. København Hospital Corporation. København, Denmark

June 14, 2004 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the annual meeting of the Kitchener Downtown Community Health Centre. Kitchener.

June 11, 2004 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the annual conference of the Institute for Health Economics, University of Alberta. Edmonton.

June 9, 2004 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the Capital Health Authority Board and Senior Management. Edmonton.

May 20, 2004 Prescription for Excellence: How Innovation can Control Pharmaceutical Costs. To a symposium sponsored by the Quebec Ministry of Health and Social Services. Quebec City.

May 19, 2004 Reforming Primary Health Care in the UK. To a conference on Primary Health Care sponsored the Federal, Provincial, and Territorial Governments. Winnipeg.

May 13, 2004 Chronic Disease Management: the Key to a Sustainable Health Care System. To the Annual Mackid Symposium. Calgary.

April 30, 2004 Re-engineering for Excellence: Thoughts about Health Care System Re-design. To the Manitoba Centre for Health Policy. Winnipeg.

April 20, 2004 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the annual meeting of the Canadian Biotechnology Secretariat. Ottawa.

April 15, 2004 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the annual leadership conference of the Canadian College of Health Services Executives. Niagara on the Lake.

April 5, 2004 Prescription for Excellence: Following our Values to a Better Health Care System. To the University of Manitoba Joint Program on Ethics. Winnipeg.

February 13, 2004 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the quarterly meeting of the Executive Directors of the Ontario Community Health Centres. Ottawa.

November 24, 2003 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the annual Canadian Employees' Benefit Conference sponsored by the International Foundation of Employee Benefit Plans. Orlando.

November 21, 2003 Healthy Workplaces = Healthy Patients. To the annual Healthy Workplaces in Action 2003 conference sponsored by the Registered Nurses Association of Ontario. Toronto.

October 18, 2003 Prescription for Excellence: How Innovation is Saving Canada's Health Care System. To the annual meeting of the Association of Women's Health, Obstetrical, and Neonatal Nurses of Canada. Mississauga.

September 19, 2003 The Future of Canadian Health Care. To the annual meeting of the Canadian Health Care Anti-Fraud Association. Toronto.

November 6, 2002 Population Health: Looking to the Future. To a management retreat of the Ontario Region, Health Canada. Alliston, Ontario.

June 24, 2002 The Future of Primary Health Care. To the Annual Meeting of the Canadian Nurses Association. Toronto.

June 17, 2002 Medicare is Sustainable and Can be Improved Through Innovation. To the annual meeting of the Canadian Association of Retired Persons. Toronto.

November 29, 2002 The State of Canadian Health Care Services and Their Impact as a Determinant of Health. To the Social Determinants of Health Across the Lifespan Conference organized by the School of Health Policy and Management, York University. Toronto.

November 7, 2002 Stitches in Time: How Innovation is Saving Medicare. The ninth annual Peter McGregor Memorial Lecture. Sault Ste Marie, Ontario.

October 18, 2002 Stitches in Time: Medicare can be Preserved Through Innovation. To a meeting celebrating the 25th anniversary of the Metro Toronto Reference Library. Toronto.

May 3, 2002 The Role of Nurses in Shaping Canada's Health Care System. To the Annual Meeting of the Alberta Registered Nurses Association. Calgary.

April 14, 2002 A Stitch in time: Saving Medicare Through Innovation. To the Canadian Strategy on HIV/AIDS (CSHA) Montreal.

March 19, 2002 A Stitch in time: Saving Medicare Through Innovation. To the Annual Alberta Health Authorities Forum. Edmonton.

February 28, 2002 Saving Medicare Through Innovation. To a special forum organized by the Canadian Council of churches. Ottawa.

November 22, 2001 Modernizing Medicare for the 21st Century. To the Ontario Employer committee on Health Care. Toronto.

November 13, 2002 A Stitch in time: Saving Medicare Through Innovation. To the annual Employee Benefits Conference. Maui.

October 25, 2001 Challenges and Opportunities in Formulating Evidenced-Based Health Policy. To the Annual Fall Institute of the Centre for Knowledge Transfer. University of Alberta, Edmonton.

October 18, 2001 Measuring Health System Performance. To the annual management retreat of St. Michael's Hospital. Toronto.

September 26, 2001 Modernizing Medicare for the 21st Century. To the annual conference of the Niagara Emergency room Nurses Association. St. Catherines, Ontario.

September 21, 2001 Pharmacists and the Renewal of Medicare. To the annual meeting of the British Columbia Pharmacists' Association. Parksville, BC.

June 8, 2001 Community Health Centres and Health Reform. To the annual meeting of the Association of Ontario Health Centres. Toronto.

May 28, 2001 Privatization of Canada's Health Care System. To: Pulse 2001. Toronto.

May 27, 2001 Weathering the Storm. To the Annual Meeting of the Canadian Pharmacists' Association. Halifax, Nova Scotia.

May 11, 2001 Modernizing Medicare for the 21st Century. To the annual Silver Conference of the Health Administration program, University of Saskatchewan. Saskatoon, Saskatchewan.

May 9, 2001 A Review of the Fyke Commission. To a workshop convened by the Saskatchewan Institute for Public Policy. Saskatoon.

May 7, 2001 Where is the Canadian Health Care System going? To: Canadian and American Health Care in the New Millennium. (A conference sponsored by the Canadian Consulate in New York City and the Commonwealth Fund). New York City.

May 2, 2001 From Values to Meaning. To a conference on Values sponsored by Casey House. Toronto.

April 30, 2001 Modernizing Medicare for the 21st Century. To the annual meeting of the Canadian Association of Teaching Hospitals. Toronto.

March 24, 2001 We can Fix Medicare's Problems Publicly. To a policy conference sponsored by the New Brunswick Liberal Party. Mirimichi City, New Brunswick.

November 29, 2000 Primary Health Care in Ontario. To as conference sponsored by the community care access centre of Peel County. Mississauga.

October 24, 2000 An Interdisciplinary Look at Primary Health Care. To: Primary Health Care Reform a conference organized by Insight Canada.

September 15, 2000 A Review of Current Developments in Health Policy. To the 19th annual Intergovernmental Budget Conference. Victoria, BC.

June 1, 2000 Modernizing Medicare for the 21st Century. Presented to the BC Health Innovation Forum sponsored by the BC Ministry of Health. Vancouver.

May 29, 2000 Population Health: How Can Dietitians Add their Spice to the Mix. To the annual meeting of Dietitians Canada. Ottawa.

May 18, 2000 Health System Reform in Canada. The first annual Peebles Kelly lecture. Sponsored by VON Winnipeg. Winnipeg.

March 29, 2000 Collaborative Action: What makes it work. To: Collaborative Action to Promote Healthy Weights in Nova Scotia. Sponsored by Cancer Care Nova Scotia.

January 15, 2000 New Developments in Canada's Health Care System. To the annual Pennsylvania Area Health Education Center Conference. Hershey, Pennsylvania.

Selected Consultancies

2020	Consultant to Fabiani Cohen & Hall LLP, New York City on Canadian health and disability coverage
2018	Consultant to the Alberta Department of Health on strategic planning
2018	Consultant to the Ontario Provincial Auditor on two health care investigations
2017-18	Manitoba Department of Health on primary health care Policy, Federal Provincial Territorial policy and health system performance.
2017	Co-chair of Priority Procedures Committee within the Manitoba Wait Times Task Force.
2016-18	Consultant to Winipeg Regional Health Authority on re-engineering the Downtown Access primary health care centre
2015	Expert witness for the BC Attorney General on Cambie Surgeries Corporation vs. Medical Services Corporation of BC, et al.
2016	Manitoba Department of Health on primary health care Policy, Federal Provincial Territorial policy and health system performance.
2016	Winnipeg Regional Health Authority on primary health care and health system performance.
2015	Consultant to the Canadian Federation of Nurses' Unions on health system Reform

2015	Expert report written for the Federal Court of Canada in the case of Canadian Doctors for Refugee Health Care (et al) vs. the Attorney General of Canada and Minister of Citizenship and Immigration (Docket T-356-13 Citation T-356-13). (This case was decided for the plaintiffs on May 25, 2015 by the Honorable Madam Justice Mactavish
2015	Manitoba Department of Health on health human resources, primary health care policy, and health system performance.
2014	Consultant to the Canadian Federation of Nurses' Unions on health system reform
2014	Expert witness for the BC Attorney General on Cambie Surgeries Corporation vs. Medical Services Corporation of BC, et al.
2014	Manitoba Department of Health on health human resource issues and primary health care policy.
2013	Manitoba Department of Health on the use of policy forums to enhance the use of evidence in health policy.
2012	Manitoba Department of Health on the use of policy forums to enhance the use of evidence in health policy.
2011	Canadian Health Services Research Foundation on using policy forums to advance health policy
2011	Merrickville and District Community Health Centre on developing a new primary health care model for orphaned patients.
2011	Ottawa Public Health Department and the Confederation of Ottawa Community Health Centres on closer collaboration.
2011	Manitoba Department of Health on performance management.
2010	Ottawa Department of Public Health and Ottawa consortium of community health centres on public health and primary health care collaboration
2010	Saskatchewan CUPE. Report prepared with Hugh Mackenzie for an arbitration between the Canadian Union of Public Employees and the Regina Qu'appelle Health Authority.
2010	Manitoba Department of Health on access to specialty services
2010	Assistance with the Canadian Health Services Research Foundation on Briefings on Health Systems Planning for the Aging Population
2010	Canadian Federation of Nurses' Unions on the sustainability of Medicare
2009/2010	Community Organizational Health Inc. on governance and quality Oversight in Ontario's community health centres
2009	Ontario Agency for Health Protection and Promotion on public health and population health approaches across systems and providers
2008	Calgary Health Region on chronic disease management
2008	Wellesley Institute Toronto on Health Equity
2007	Ontario Ministry of Health and Long-Term Care on Wait list management
2007	Alberta Ministry of Health and Wellness on primary health care and public health collaboration
2007	Ontario Health Quality Council on access and chronic disease management

2007	Calgary Health Region on chronic disease management
2006	Ontario Health Quality Council on access and chronic disease management
2006	Calgary Health Region on chronic disease management
2006	Health Canada on health care queues
2005	Public Health Agency of Canada on primary health care and public health collaboration
2005	Ontario Workplace Safety and Insurance Board on health systems
2005	Alberta Health and Wellness on health care queues
2005	Capital Health Authority (Edmonton) on health care queues and primary health care
2004	Manitoba Health on health care queues
2004	Health Canada on health care queues
2004	Calgary Health Region on health care queues
2004	Capital Health Authority (Edmonton) on health care queues and primary health care
2004	Ontario Ministry of Health on seniors' health policy
2003	Saskatchewan Health on primary health care policy
2002	British Columbia Ministry of Health on chronic disease management
2002	Expert witness in defense of Ms. Angela Chesters appeal for citizenship status before the Federal Court of Canada
2001/2002	The Federal Royal Commission on the Future of Canadian Health Care (The Romanow Commission)
2000	Manitoba Minister of Health on health reform
2000	BC Ministry of Health on Health Services Innovation
1999	Alberta/NWT Region of Health Canada (Health Promotion and Programs Branch) on Intersectoral Action for Health
1998	Home Care Development Group, Health Canada
1998	New Brunswick Health Care Review
1998	Alberta Provincial Health Council
1998	Calgary Health Region on Primary Health Care
1998	Federal Provincial Territorial Advisory Committee on Population Health, on Intersectoral Action for Health
1990	The Royal Commission on New Reproductive Technologies

Society Memberships

Canadian Doctors for Medicare
Canadian Medical Protective Association
Canadian Public Health Association
Ontario Public Health Association
Royal College of Physicians and Surgeons of Canada

Granting Agency Responsibilities

University Committees

Divisional Committees

Theses Committees

2014 "External Internal" member of University of Toronto Institute for Health Policy Management and Evaluation PhD candidate's Seija Kromm's thesis committee.

2019 External member of University of Toronto Faculty of Engineering Master's candidate's Pavel Shmatnik's M Eng thesis.

Courses Taught

1989 – 1999 Tutor and lecturer in HRM 738 – Graduate school course in Health Policy Analysis run by the Department of Clinical Epidemiology and Biostatistics. Professor Jonathan Lomas established the course in 1987 and I played a supportive role in its revisions after 1989.
1992 – 1994 Lecturer in MS 771 – Graduate school course in Population Health run by the Department of Clinical Epidemiology and Biostatistics.
1994 – 2000 Lecturer to University of Toronto first year medical students as part of first week orientation
1995 -- 2013 Lecturer in the University of Toronto Canada's Health System and Health Policy HAD 5010. Course director Professors Paul Williams.
1996 – 2004 Lecturer in McMaster University Faculty of Nursing 3BO3, Population Health
2000 Course director HAD 5712, Canadian Politics and Health Policy. Department of Health Policy Management and Evaluation, University of Toronto.
2001 Lecturer in Health Policy Analysis. Faculty of Nursing, University of Toronto.
2002 Lecturer and tutor in HAD 5020, Department of Health Policy Management and Evaluation, University of Toronto.
2003 Lecturer in POLC55H Scarborough campus, University of Toronto.
2004 Lecturer in CHL 5004, Introduction of Public Health Sciences, University of Toronto.
2004 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over two months.
2005 Lecturer in University of Toronto Introduction to Health and Social Policy
2005 onward Lecturer in University of Toronto Industrial Engineering, MIE 561 - Healthcare Systems, course instructor, Michael Carter
2005 to 2016 Lecturer in University of Toronto Social Work 4412 The Context of Mental Health and Health Practice: Course Coordinator: Steve Lurie
2006 Lecturer in Sociology, 278Y1 introduction to social policy, course instructor, Margot Lettner
2007 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over two months.

2009 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over two months.
2011 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over two months.
2012 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over one month.
2013 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over one month.
2014 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over one month.
2015 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over one month.
2016 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over one month.
2017 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over one month.
2018 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over one month.
2019 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over one month.
2020 Course director for an ad-hoc course in health policy analysis for senior residents in Public Health and Preventative Medicine. Four sessions over one month.
2014 Lecturer in University of Toronto University College UNI 211H1S -- Health Policy in Canada. (March 16, 2015).
2014 - 2018 Lecturer in the University of Toronto Physician Assistant Program Introduction to the Physician Assistant Role
2015 - 2018 Coordinator and presenter of half day in public health policy analysis for the Queen's University annual review course Canadian Public Health Physicians. Course Director Dr. Kieran Moore, Queen's University.
2015 to 2018 Faculty coordinator of the annual Media Day for University of Toronto Public Health and Preventative Medicine residents and Ryerson University Journalism students. Media Day and communications teaching was substantially changed during this time.
2018 Effective Primary Health Care: The heart of a Sustainable Health Care System. Department of Family and Community Medicine. Social, Political, and Scientific Issues in Primary Care. March 21, 2018. Course Director Dr. Samantha Green, St. Michael's Hospital.

Students' placements supervised

Nancy Kotani, MSW student University of Toronto 1979.
Dr. Elizabeth Rea, public health and preventive medicine resident, University of Toronto 1994.
Dr. Irene Armstrong, public health and preventive medicine resident, University of Toronto 2004.

Dr. Kathleen Dooling, public health and preventive medicine resident, University of Toronto 2008/09.
Dr. Liane Macdonald, public health and preventive medicine resident, University of Toronto 2011.
Dr. JinHee Kim, public health and preventive medicine resident, University of Toronto 2012.
Dr. David Poon, public health and preventive medicine resident, University of Toronto 2013.
Dr. Pamela Leece, public health and preventive medicine resident, University of Toronto 2013.
Dr. Natalie Bocking, public health and preventive medicine resident, University of Toronto 2013.
Dr. Winnie Siu, public health and preventive medicine resident, University of Toronto 2014.
Dr. Rajesh Girdhari, public health and preventive medicine resident, University of Toronto 2014.
Dr. Kate Reeves, public health and preventive medicine resident, University of Toronto 2015.
Dr. Emily Groot, public health and preventive medicine resident, Queen's University 2016.
Dr. Jia Hu, public health and preventive medicine resident, University of Toronto 2016.
Dr. Jennifer Loo, public health and preventive medicine resident, University of Toronto 2016.
Dr. Jasmine Pawa, public health and preventive medicine resident, University of Toronto 2016.
Dr. Alex Summers, public health and preventive medicine resident, University of Toronto 2017.
Dr. Karalyn Dueck, public health and preventive medicine resident, University of Toronto 2017.
Dr. Kathryn Marsilio, public health and preventive medicine resident, University of Toronto 2017.
Dr. Jenni Cram, public health and preventive medicine resident, University of Toronto 2017.
Dr. Cindy Shen, public health and preventive medicine resident, University of Toronto 2018.
Dr. Elspeth McTavish, public health and preventive medicine resident, University of Toronto 2018.
Dr. Alexandra Caturay, public health and preventive medicine resident, Queen's 2018.
Dr. Mike Benusic, public health and preventive medicine resident, University of Toronto 2019.
Dr. JoAnne Fernandes, public health and preventive medicine resident, University of Toronto 2019.
Dr. Nicolas Sheppard-Jones public health and preventive medicine resident, University of Toronto 2020.
Dr. Mary Choi public health and preventive medicine resident, University of Toronto 2020.

Externally awarded grants and awards during the last seven years

Publications

Career totals:	135
Books	3
Chapters in Books	3
Articles in Refereed Journals	10
Articles in Refereed Conference Proceedings	6
Working Papers	3
Technical Writings/Reports	69
Abstracts and/or Papers Read	0
Popular Articles	38
Other	3

Books:

Rachlis M, Kushner C. Second Opinion: What's Wrong with Canada's Health Care System and How to Fix it. Collins. Toronto. 1989.

Rachlis MM, Kushner C. Strong Medicine: How to Save Canada's Health Care System. HarperCollins. Toronto. 1994.

Rachlis MM. Prescription for Excellence: How Innovation is Saving Canada's Health Care System. HarperCollins. Toronto. 2004.

Chapters in Books

Rachlis M. Health Care Policy. In: Long Term Care in an Aging Society: Choices and Challenges for the '90s. Edited by Larue GA and Bayly R. Prometheus Books. Buffalo, NY. 1992.

Rachlis MM. Cholesterol screening; the costs and benefits of various programs. In: Restructuring Canada's Health Care System; How do We Get There from Here? Ed Deber RB, Thompson GG. University of Toronto Press. Toronto. 1992.

Rachlis M. Health Care and Health. In: Social Determinants of Health. Ed Raphael D. Canadian Scholars Press. Toronto. 2004.

Articles in refereed journals

Fooks C, Rachlis M, Kushner C. Concepts of quality of care: National survey of five self-regulating health professions in Canada. International Journal of quality Assurance. 1990;2:89-109.

The Toronto Working Group on cholesterol policy (Naylor CD, Basinski A, Frank JW, Rachlis MM). Asymptomatic Hyper-cholesterolemia: A clinical policy review. Journal of Clinical Epidemiology. 1990;43:1029-1121.

Naylor CD, Baigrie RS, Goldman BS et al. Revascularization panel, Consensus methods group (Rachlis MM chair). Assessment of priority for coronary revascularization. Lancet. 1990;335:1070-1073.

Rachlis MM, Olak J, Naylor CD. The vital risk of delayed coronary surgery: Lessons from the randomized trials. Iatrogenics. 1991;1:103-111.

Rachlis MM. Defining basic services and de-insurance: The wrong diagnosis and the wrong prescription. Canadian Medical Association Journal. 1995:152:1401-1405.

Lomas J, Rachlis M. Moving rocks: Block funding in PEI as an incentive for cross-sectoral reallocations among human services. Canadian Public Administration. 1997;39:581-600.

Rachlis M. Canada deserves a national health system. Healthcare Management Forum. 1997;10(1):43-45.

Rachlis MM. Moving forward with public health in Canada. Canadian Journal of Public Health. 2004:95:405-406.

Rachlis MM. Medicare: Innovation is the Key to Sustainability. Healthcare Management Forum. 2005;18(2):

Dooling K, Rachlis M. Vancouver's supervised injection facility challenges Canada's drug laws. Canadian Medical Association Journal. 2010;182:1440 - 1444.

<u>Papers in refereed conference proceedings</u>

Rachlis M. Opting out and extra billing – Medicare vs. The Canada Health Act. In: Medicare, the Decisive Year. Proceedings of the Canadian Centre for Policy Alternatives Conference on Medicare. Canadian Centre for Policy Alternatives. Ottawa. 1984.

Rachlis MM. Surgical pre-operative time: An economic waste? A discussants perspective. In: Proceedings of the third Canadian Conference on Health Economics 1986. Ed John Horne. The department of Social and preventive Medicine. University of Manitoba. Winnipeg. 1987.

Rachlis M, Fooks C. A catalogue of Canadian utilization review activities. In; conference proceedings of the first annual policy conference of the Centre for Health Economics and Policy Analysis. Ed Fooks C, Lomas J. Centre for Health Economics and Policy Analysis. McMaster University. Hamilton. 1988.

Rachlis M. Health and Health Care for Ontario in the 1990s: Will the Crisis of the 1980s Spell Danger or Opportunity In: Healthy Populace Healthy Policy, Proceedings of a conference held May 17-19, 1989. Ed. S. Mathwin Davis. School of Policy Studies, Queen's University. Kingston, Ontario.

Rachlis MM. The Canadian Experience with Public Health Insurance. In Proceedings of a conference on the Canadian Health Care System. University of North Texas. Denton, Texas. 1994.

Rachlis MM. Primary health care and Canadian physicians c. 1997. In Proceedings of the Second Trilateral Physicians Workforce Conference. November 14-16, 1997. The Centre for Health Services and Policy Research. University of British Columbia. Vancouver. 1998.

Working papers

Birch S, Lomas J, Rachlis M, Abelson J. HSO performance: A critical appraisal of the current research. Centre for Health Economics and Policy Analysis. McMaster University. Working Paper (#90-1) Hamilton. 1990.

Financial incentives in the Canadian Health Care System. Final report submitted to Health Canada. Principal investigator M Giacomini. Investigators: J Hurley, J Lomas, V Bhatia, P Grootendorst, B Hutchison, S Birch, B O'Brien, M Rachlis, G Stoddart, L Goldsmith, S West, M Peters, J Gillet, H Khan, S Kumar, D Schneider, V Vincent. March 31, 1996.

Evans RG, Barer ML, Lewis S, Rachlis M, Stoddart GL. Private Highway, One Way Street: The De-Klein and Fall of Canadian Medicare. Centre for Health Services and Policy Research. University of British Columbia. 2000.

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Rachlis MM. The Consumers role in the health care system: recipient, governor, voter. 1989. (Commissioned by the Ontario Ministry of Health)

Rachlis MM. the implementation of Health Toronto 2000: Recommendations concerning the health care system and the proposed changes in health policy from the province of Ontario. 1990. Commissioned by the medical officer of health, City of Toronto.

Rachlis MM, Frank JW. Towards a policy to control coronary heart disease in Ontario. 1990. Toronto. (Commissioned by the Ontario Ministry of Health)

Rachlis MM. Response to strategies for Change. 1990. Commissioned by the medical officer of health, City of Toronto.

The impact of the 1991 Federal Budget on health care, public health programs, and the health status of Ontario citizens. 1991. Commissioned by the medical officer of health, City of Toronto.

Rachlis MM. What's wrong with Canada's health care system and how to fix it. Commissioned by the United States Congressional Committee on Government Operations. 1991.

Rachlis MM. New directions for long-term care reform. Commissioned by the Ontario Senior Citizens Consumers Alliance for Long Term Care Reform. 1992.

Rachlis M. Caring about health. A Canadian Public Health Association Issue Paper on FPT Arrangements for Health Policy. Commissioned by the CPHA. 1992.

Rachlis MM. The Canadian Experience with Public Health Insurance. Commissioned by the United States Senate Committee on Labour and Human Resources. 1993.

Rachlis MM, Kushner C. Community Health Centres: the Better Way to Health Reform. Commissioned by the Alberta, British Columbia, Newfoundland, New Brunswick, and Manitoba Nurses' Unions. 1995.

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Kushner C, Rachlis MM. Civic Lessons: Strategies for increasing consumer participation in health policy development. Commissioned by the National Forum on Health. 1996.

Rachlis MM. What can Quebec learn from public health services in the rest of Canada. Commissioned by the Quebec Ministry of Health and Social Services. 1997.

Rachlis MM. Primary health care in Canada. Commissioned by the Transition Fund Health Canada. 1997.

Rachlis MM. The third way: Developing hybrids of institutional and community care. Commissioned by the British Columbia Nurses' Union, the Hospital Employees Union, and the Health Sciences Association. 1998.

Rachlis MM. Capitation payment and Canadian Primary Health Care. Commissioned by the Pennsylvania Area Health Education Center. 1999.

Rachlis MM. Providing Primary Health Care to an Aging Population. Commissioned by the Alberta Long Term Care Policy Advisory Committee. 1999.

Rachlis MM. Intersectoral Action for Health. Commissioned by Health Canada and Alberta Health. 1999.

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Rachlis MM. Modernizing Medicare for the 21st Century. Commissioned as the background document for a conference on Health Innovation sponsored by the British Columbia Ministry of Health. 2000.

Rachlis MM. The hidden costs of privatization: An international comparison of community and continuing care. In: Without Foundation. Eds. Cohen M, Pollak N. Canadian Centre for Policy Alternatives BC Office. Vancouver. 2000.

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2007. Vancouver.

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Rachlis MM. The Ontario Agency for Health Protection and Promotion and the coordination of public health and population health approaches across systems and providers. Written for the Ontario Agency for Health Protection and Promotion. October 2009.

Ross S. Rachlis MM. Quality Oversight in Ontario Community Health Centres (CHCs). Written for community Organizational Health Inc. (the accreditation body for Ontario's community health centres). May 21, 2010.

Mackenzie H, Rachlis MM. The Sustainability of Medicare. Written for the Canadian Federation of Nurses' Unions. August 2010.

Rachlis MM, Mackenzie H. Report on the costs of moving services from the Regina Qu'appelle Health Authority to private clinics. (Report was prepared for an arbitration between the Canadian Union of Public Employees and the Regina Qu'appelle Health Authority. September 10, 2010.)

Rachlis MM. Access to specialty services in Manitoba. (Report prepared for the Manitoba Department of Health. January 17, 2011.

Rachlis MM. Ottawa Public Health and the Community Health and Resource Centres. Report prepared for the Ottawa Public Health Department and the Ottawa Consortium of Community Health and Resource Centres. February 8, 2011.

Rachlis MM. Implementation of Performance Management in the Manitoba Health system. (Report prepared for the Manitoba Department of Health. June 27, 2011.)

Rachlis MM. Are high taxes really a problem? Prepared for the Canadian Association of Retired Persons. September 9, 2011.

Rachlis MM. Policy forums to assist in the policy development process. (Report prepared for the Manitoba Department of Health. May 25, 2012.)

Why poverty is a medical problem. Dorman K, Pellizzari R, Rachlis M, and Green S. Poverty and Health Part I. Ontario Medical Review. October 2013. Pages 15-19. Overall series editor: Dr. Andrea Feller. Series editorial committee: Dr. Andrea Feller, Dr. Gary Bloch, Dr. Michael Rachlis.

Office interventions for poverty. Raza, D, Bloch G, Kulie S, Poverty and Health Part II. Ontario Medical Review. October 2013. Pages 21-24. Dorman K, Pellizzari R, Rachlis M, and Green S. Overall series editor: Dr. Andrea Feller. Series editorial committee: Dr. Andrea Feller, Dr. Gary Bloch, Dr. Michael Rachlis.

Office interventions for poverty: child health. Morinis J, Feller A. Poverty and Health Part III. Ontario Medical Review. November 2013. Pages 20-23. Overall series editor: Dr. Andrea Feller. Series editorial committee: Dr. Andrea Feller, Dr. Gary Bloch, Dr. Michael Rachlis.

Office interventions for poverty: racialized groups. Green S, Labelle M, Vien V. Poverty and Health Part IV. Ontario Medical Review. November 2013. Pages 25-29. Overall series editor: Dr. Andrea Feller. Series editorial committee: Dr. Andrea Feller, Dr. Gary Bloch, Dr. Michael Rachlis.

Policy and population approaches to poverty. Rachlis M, Goel R, Mackie C, Pellizzari R, Simon L. Poverty and Health Part V. Ontario Medical Review. October 2013. Pages 30-34. Overall series editor: Dr. Andrea Feller. Series editorial committee: Dr. Andrea Feller, Dr. Gary Bloch, Dr. Michael Rachlis.

Expert report to the Federal Court of Canada in the case of Canadian Doctors for Refugee Health Care (et al) vs. the Attorney General of Canada and Minister of Citizenship and Immigration (Docket T-356-13 Citation T-356-13) which was decided in favour of the plaintiffs on May 25, 2015 by the Honorable Madam Justice Mactavish.

Expert report to the court in the case of Cambie Surgical Corporation vs British Columbia. The case is due to go to trial Fall 2016.

How could we spend $11 Billion to improve health care in Canada? Written for the Canadian Federation of Nurses Unions. August 2015. Companion documents were written for each of the ten provinces.

Manitoba Wait Times Reduction Task Force: Final Report. November 21, 2017. See: https://www.gov.mb.ca/health/documents/wtrtf.pdf. (I co-chaired the Priority Procedures Sub-Committee and also helped to author other sections of the report.)

J Small, M Rachlis. For Primary Health Care Transformation Initiatives. April 2018. Written for the Winnipeg Regional Health Authority.

Abstracts and/or papers read

Popular articles

Rachlis MM, Kushner C. Under the Knife. The Report on Business Magazine. October 1992. Pages 81-91.

Rachlis MM. Do we really need more doctors? Toronto Star. August 25, 1999.

Rachlis MM. Blame the victim. National Post Business Magazine. May 2000. Page 86.

Rachlis MM. Beam me up Tony: MRI scans and scams. Toronto Star. July 9, 2002.

Rachlis M. Prescription for Excellence: How Innovation is Saving Canada's Health Care System. Winnipeg Free Press. February 22, 2004.

Rachlis M. Medicare Made Easy. The Globe and Mail. April 26, 2004.

Rachlis M. A Reality Check on Health Promises. Winnipeg Free Press. June 13, 2004

Rachlis M. The Premiers' Annual Theatrical Performance: Consensus masks confusion. Winnipeg Free Press. August 5, 2004.

Rachlis M. Could Hollywood Write a Happy Ending to the Medicare Sequel? Winnipeg Free Press. September 12, 2004.

Rachlis M. The good, the bad, and the ugly. Winnipeg Free Press. September 19, 2004

Rachlis M. Cue some Fresh Thinking about Health Care Queues. Winnipeg Free Press. December 2, 2004.

Rachlis MM. Community health centres are Medicare's best kept secret. Globe and Mail. June 13, 2005.

Rachlis MM, Bloch G, Tamari I. Poverty makes Ontario sick: Economic inequality translates into limited access to health-care for province's poor. Toronto Star. August 5, 2008

Rachlis MM. CMA leaders out of tune with most doctors. Toronto Star. August 27, 2008

Rachlis MM. Failure to launch: The health policy debate fizzles on the hustings. Toronto Star. October 7, 2008.

Rachlis MM. For profit won't heal health care. Toronto Star. April 16, 2009.

Rachlis MM. A Canadian doctor diagnoses U.S. healthcare. Los Angeles Times. August 3, 2009.

Rachlis MM. Let's not lose track of the big picture at eHealth Ontario. Toronto Star. June 12, 2009.

Rachlis MM. Can this minister fix the health file? Toronto Star. October 16, 2009.

Rachlis MM. How one Ontario community avoided chaos at H1N1 clinics
Sault Ste. Marie facility offers shining example of how primary care system delivers service. Toronto Star. November 3, 2009.

Rachlis MM. Medicare Attack dogs barking up the wrong tree. Toronto Star. February 4, 2010.

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Rachlis MM. Reality check on health care costs. Toronto Star. April 4, 2010.

Rachlis MM. Canada playing in wrong health league. Toronto Star. July 4, 2010

Rachlis MM. How to heal health care delivery. Toronto Star. August 19, 2010

Rachlis MM. Medicare has a very good month. Toronto Star. November 9, 2010

Rachlis MM. The health-care sky is not falling! Toronto Star. November 12, 2011

Bloch G, Pellizzari R, Zakrison T, Berger P, Rachlis M. Doctors say tax us! Ontario is worth it. Toronto Star. April 2, 2012.

Rachlis MM. Canadians are ready for an adult conversation on Medicare. Toronto Star. October 14, 2012.

Bloch G, Pellizzari R, Rachlis M Woolhouse S. Doctors' Ontario budget prescription: Raise taxes Toronto Star. May 1, 2013.

M Rachlis. Doctors say tax us: Canada is worth it. Toronto Star. September 21, 2017.

M Rachlis. Fate of Ontario Drug Benefit could define federal election. Toronto Star. January 10, 2019.

M Rachlis. Health revamp ignores root problems. Winnipeg Free Press. March 16, 2019.

Canada can't supply U.S. market with cheaper drugs, despite Trump tweets. Toronto Star. August 4,2019.

M Rachlis. De-listing medical services is wrong diagnosis, wrong prescription for health-care system. Toronto Star. August 28, 2019.

M Rachlis. Who does the College of Physicians and Surgeons represent? Toronto Star online. December 4, 2019.

M Rachlis. Pay me know or pay me later: Canada's response to COVID-19. Toronto Star. April 6, 2020.

M Rachlis. This is the model of long-term care we need and deserve. Toronto Star online. May 8, 2020.

Other

Access to Health Care in America. Committee on Monitoring Access to Personal Health Care Services. Institute of Medicine. Edited by Michael Millman. National Academy Press. Washington 1993. *Reviewed* in the Canadian Medical Association Journal. 1994;150:1641-1642.

Basinski A, Naylor CD, Frank JW, Rachlis M. Randomized clinical trials in heart disease (letter). Journal of the American Medical Association. 1989;261:2952-2953.

Do we care? Renewing Canada's Commitment to Health. Ed by Margaret Somerville. McGill-Queen's University Press. Montreal and Kingston. 1999. Reviewed in the Canadian Medical Association Journal. November 30, 1999.

Faculty Profile

Name: Michael M. Rachlis
Current titles/positions:

Adjunct Professor the Dalla Lana School of Public Health University of Toronto.

Degrees:

Degree	University	Department	Year
MD	Manitoba	Medicine	1975
MSc	McMaster	Clinical Epidemiology	1988
LLD	Manitoba	Medicine (Honorific)	2010

Email: contact@michaelrachlis.com.
Website: www.michaelrachlis.com
Office location: 13 Langley Avenue, Toronto ON Canada M4K 1B4

Current Academic Interests

Health policy analysis
Policies to support health services quality improvement
Primary health care and public health collaboration
Health Care queue management
Healthy public policies

Teaching interests

Interested in the education of health sciences students and professionals in health policy analysis.

Research:

Professional and Community Service:

2011 onwards Faculty adviser to the University of Toronto Chapter of the IHI Open School and faculty lead for annual Quality Improvement and Patient Safety (QuIPS) conference.

2012 onwards interim coordinator of Doctors for Fair Taxation

2002 - 2019 Organizer of annual “Canucks at IHI” a reception for Canadian delegates attending the Institute for Healthcare Improvement National Forum. Orlando, Florida.

Member National Specialty Society of Public Health and Preventative Medicine Continuing Professional Development Committee from 2006 to 2012.

Main organizer and emcee of a day in health policy analysis for the National Specialty Society of Public Health and Preventative Medicine, June 11, 2012. Edmonton.

Main organizer and emcee of a day in health policy analysis for the National Specialty Society of Public Health and Preventative Medicine, June 19, 2011. Montreal.

Main organizer and emcee of a panel on public health and primary health care collaboration during H1N1 at the annual meeting of the Canadian Public Health Association. June 14, 2010 Toronto. This panel was co-sponsored by the National Specialty Society of Public Health and Preventative Medicine and the Institute for Health Services and Policy Research.

Main organizer and emcee of a half day in health policy analysis for the National Specialty Society of Public Health and Preventative Medicine, June 6, 2009. Winnipeg

Main organizer and emcee of a day in health policy analysis for the National Specialty Society of Public Health and Preventative Medicine, June 1, 2008. Halifax

Keynote speaker and main organizer of a day in health policy analysis for the National Specialty Society of Public Health and Preventative Medicine, September 16, 2007. Ottawa.

Member of the Steering Committee and chair of the awards subcommittee of the Global Perspectives on Chronic disease Conference, Calgary October 2007.

Member of the Conference of Deputy Ministers of Health Advisory Committee on Population Health. 1995-1998.

Member Federal Provincial Territorial Public Health Working Group. 1997-2000.

Coordinator Withrow Public School Breakfast Program. 1996-1998.

This is Exhibit **2** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

Court File No.223/21

FORM 53
Courts of Justice Act
ACKNOWLEDGMENT OF EXPERT'S DUTY

ONTARIO
SUPERIOR COURT OF JUSTICE
(Divisional Court)

BETWEEN:

DAVID DANESHVAR

Applicant

- and -

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO AS REPRESENTED BY THE MINISTER OF HEALTH, and the HONOURABLE CHRISTINE ELLIOTT, MINISTER OF HEALTH for the PROVINCE OF ONTARIO

Respondents

ACKNOWLEDGMENT OF EXPERT'S DUTY

1. My name is Dr. Michael Rachlis. I live in the City of Toronto, in the Province of Ontario.

2. I have been engaged by or on behalf of David Daneshvar to provide evidence in relation to the above-noted court proceeding.

3. I acknowledge that it is my duty to provide evidence in relation to this proceeding as follows:

    a. To provide opinion evidence that is fair, objective and non-partisan;

    b. To provide opinion evidence that is related only to matters that are within my area of expertise; and

    c. To provide such additional assistance as the court may reasonably require, to determine a matter in issue.

4. I acknowledge that the duty referred to above prevails over any obligation which I may owe to any party by whom or on whose behalf I am engaged.

Date: March 16, 2021

Signature

This is Exhibit **3** referred to in the Affidavit of **Dr. Michael Rachlis.** Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

Ministry of Health and Long-Term Care

Protecting and Promoting the Health of Ontarians

Ontario Public Health Standards: Requirements for Programs, Services, and Accountability

The Ontario Public Health Standards: Requirements for Programs, Services, and Accountability are published as the public health standards for the provision of mandatory health programs and services by the Minister of Health and Long-Term Care, pursuant to Section 7 of the *Health Protection and Promotion Act*.

Effective: January 1, 2018
Revised: July 1, 2018

Ontario

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Policy and Legislative Context

1

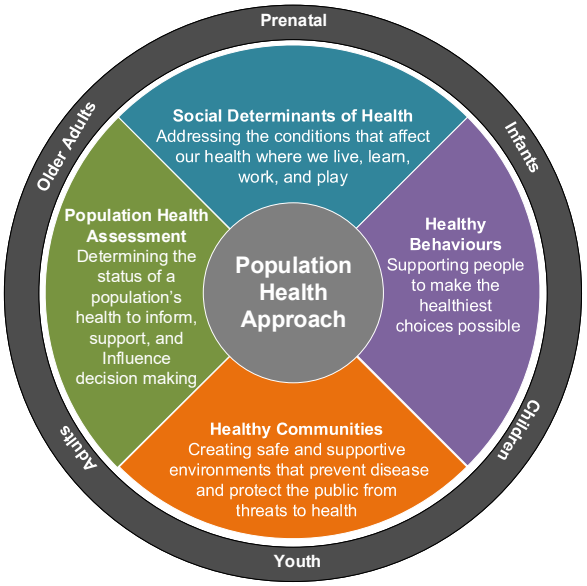
What is Public Health?

The focus of public health is on the whole population. Its work is embedded in the daily lives of the people of Ontario. Public health interventions have made the food we eat safer, they have protected us from infectious diseases and environmental threats to health, and they have created healthier environments to support and inform choices about risks, including those related to tobacco and alcohol. Public health also impacts communities by developing healthier built environments, responding to public health emergencies, and promoting social conditions that improve health.

Public health works through multiple channels and on multiple issues in order to have an impact on the health of the population. The work is diverse, including individual clinical service delivery, education, inspection, surveillance, and policy development, among other activities. What unifies public health action is its focus on prevention, upstream interventions and societal factors that influence health.

Our public health system reflects the diversity of Ontario's population. Boards of health serve populations large and small, in urban and rural settings. Each has responsibility for delivering local public health programs and services within its geographic borders. Public health does this in partnership with many other entities including governmental, non-governmental, and community organizations. Public health also builds partnerships with Indigenous communities (inclusive of First Nations [Status and Non-Status], Métis, Inuit, and those who self-identify as Indigenous) to work together to address their public health needs.

Figure 1: What is Public Health?



Public health work is grounded in a population health approach – focused on upstream efforts to promote health and prevent diseases to improve the health of populations and the differences in health among and between groups. Health risks and priorities change as people grow and age and public health works to address health across the life course.

Policy Framework for Public Health Programs and Services

The work of public health is diverse, multi-faceted, and expansive. The **Policy Framework for Public Health Programs and Services** (Figure 2) brings focus to core functions of public health (i.e., assessment and surveillance, health promotion and policy development, health protection, disease prevention, and emergency management) and highlights the unique approach to our work. It articulates our shared goal and objectives, and outlines the contribution of our work in reaching population health outcomes related to health and health equity.

Our goal is realized through the achievement of program outcomes and contributions to population health outcomes - by reducing preventable disease, injury and death and taking action on health inequities for the people of Ontario. The public health sector works in partnership with health and social sectors to contribute to these population health outcomes.

Consistent with Ministry of Health and Long-Term Care (ministry) policy direction, public health programs and services are focused primarily in four domains:

- Social Determinants of Health;
- Healthy Behaviours;
- Healthy Communities; and
- Population Health Assessment.

The population health approach assesses more than health status and the biological determinants of health, but includes the social factors that influence health, including income, education, and employment. It moves beyond traditional health perspectives that focus on disease and disability, taking into account mental and social well-being and quality of life.

The public health sector achieves its objectives and ultimately improves population health outcomes through the delivery of public health programs and services. Our programs and services reach all Ontarians, with a special focus on those at greater risk of poor health outcomes. Boards of health are guided by the principles of Need; Impact; Capacity; and Partnership, Collaboration, and Engagement. The application of these principles ensures that boards of health assess, plan, deliver, manage, and evaluate public health programs and services to meet local needs, while also working towards common outcomes.

Figure 2: Policy Framework for Public Health Programs and Services

Goal	To improve and protect the health and well-being of the population of Ontario and reduce health inequities			
Population Health Outcomes	• Improved health and quality of life • Reduced morbidity and premature mortality • Reduced health inequity among population groups			
Domains	**Social Determinants of Health**	**Healthy Behaviours**	**Healthy Communities**	**Population Health Assessment**
Objectives	To reduce the negative impact of social determinants that contribute to health inequities	To increase knowledge and opportunities that lead to healthy behaviours	To increase policies, partnerships and practices that create safe, supportive and healthy environments	To increase the use of population health information to guide the planning and delivery of programs and services in an integrated health system
Programs and Services	**Goals** • To increase the use of public health knowledge and expertise in the planning and delivery of programs and services within an integrated health system • To reduce health inequities with equity focused public health practice • To increase the use of current and emerging evidence to support effective public health practice • To improve behaviours, communities and policies that promote health and well-being • To improve growth and development for infants, children and adolescents • To reduce disease and death related to infectious, communicable and chronic diseases of public health significance • To reduce disease and death related to vaccine preventable diseases • To reduce disease and death related to food, water and other environmental hazards • To reduce the impact of emergencies on health			
Principles	**Need** • Assess the distribution of social determinants of health and health status • Tailor programs and services to address needs of the health unit population	**Impact** • Assess, plan, deliver, and manage programs and services by considering evidence, effectiveness, barriers, and performance measures	**Capacity** • Make the best use of available resources to achieve the capacity required to meet the needs of the health unit population	**Partnership, Collaboration and Engagement** • Engage with multiple sectors, partners, communities, priority populations, and citizens • Build and further develop the relationship with Indigenous communities. These relationships may take many forms and need to be undertaken in a way that is meaningful to the particular community and/or organization

Statutory Basis for the Standards

Authority for the establishment of boards of health is provided under Part VI, Section 49, of the *Health Protection and Promotion Act*. The *Health Protection and Promotion Act* specifies that there shall be a board of health for each health unit. A health unit is defined in the *Health Protection and Promotion Act*, in part I, section 1(1), as the "...area of jurisdiction of the board of health". In order to respect the board of health as the body that is accountable to the ministry, while also respecting the delegation of authority for the day-to-day management and administrative tasks to the medical officer of health, the requirements for the Ontario Public Health Standards: Requirements for Programs, Services, and Accountability (the Standards) have been written as "The board of health shall...".

Section 5 of the *Health Protection and Promotion Act* specifies that boards of health must superintend, provide or ensure the provision of public health programs and services in specified areas as follows:

- Community sanitation and the prevention or elimination of health hazards;
- Provision of safe drinking water by small drinking water systems;
- Control of infectious and diseases of public health significance, including providing immunization services to children and adults;
- Health promotion, health protection, and disease and injury prevention;
- Family health;
- Collection and analysis of epidemiological data; and
- Such additional health programs and services as prescribed by regulations.

Section 7 of the *Health Protection and Promotion Act* grants authority to the Minister of Health and Long-Term Care to "publish public health standards for the provision of mandatory health programs and services, and every board of health shall comply with the published guidelines" (s.7(1)), thereby establishing the legal authority for the Standards.

Where there is a reference to the *Health Protection and Promotion Act* within the Standards, the reference is deemed to include the *Health Protection and Promotion Act* and its regulations.

Boards of health may deliver additional programs and services in response to local needs identified within their communities, as acknowledged in Section 9 of the *Health Protection and Promotion Act*.

Furthermore, boards of health should bear in mind that in keeping with the *French Language Services Act*, services in French should be made available to French-speaking Ontarians located in designated areas.

Boards of health need to be knowledgeable about their duties and responsibilities as specified in other applicable Ontario laws, including but not limited to: the *Building Code Act, 1992;* the *Child Care and Early Years Act, 2014*; the *Employment Standards Act*, *2000*; the *Immunization of School Pupils Act*; the *Healthy Menu Choices Act, 2015*; the *Smoke Free Ontario Act*; the *Electronic Cigarettes Act, 2015*; the *Skin Cancer Prevention Act (Tanning Beds), 2013*; the *Occupational Health and Safety Act*; and the *Personal Health Information Protection Act, 2004*.

Purpose and Scope of the Standards

The role of boards of health is to support and protect the physical and mental health and well-being, resiliency and social connectedness of the health unit population, with a focus on promoting the protective factors and addressing the risk factors associated with health outcomes. The Standards define the responsibilities of boards of health in an integrated health system and are informed by the core public health functions, which include:

- Assessment and Surveillance;
- Health Promotion and Policy Development;
- Health Protection;
- Disease Prevention; and
- Emergency Management.

Boards of health are responsible for programs and services in all core function areas, demonstrating accountability to the ministry, and monitoring and measuring the effectiveness, impact and success of their programs and services. The Standards articulate the ministry's expectations for boards of health in these three areas.

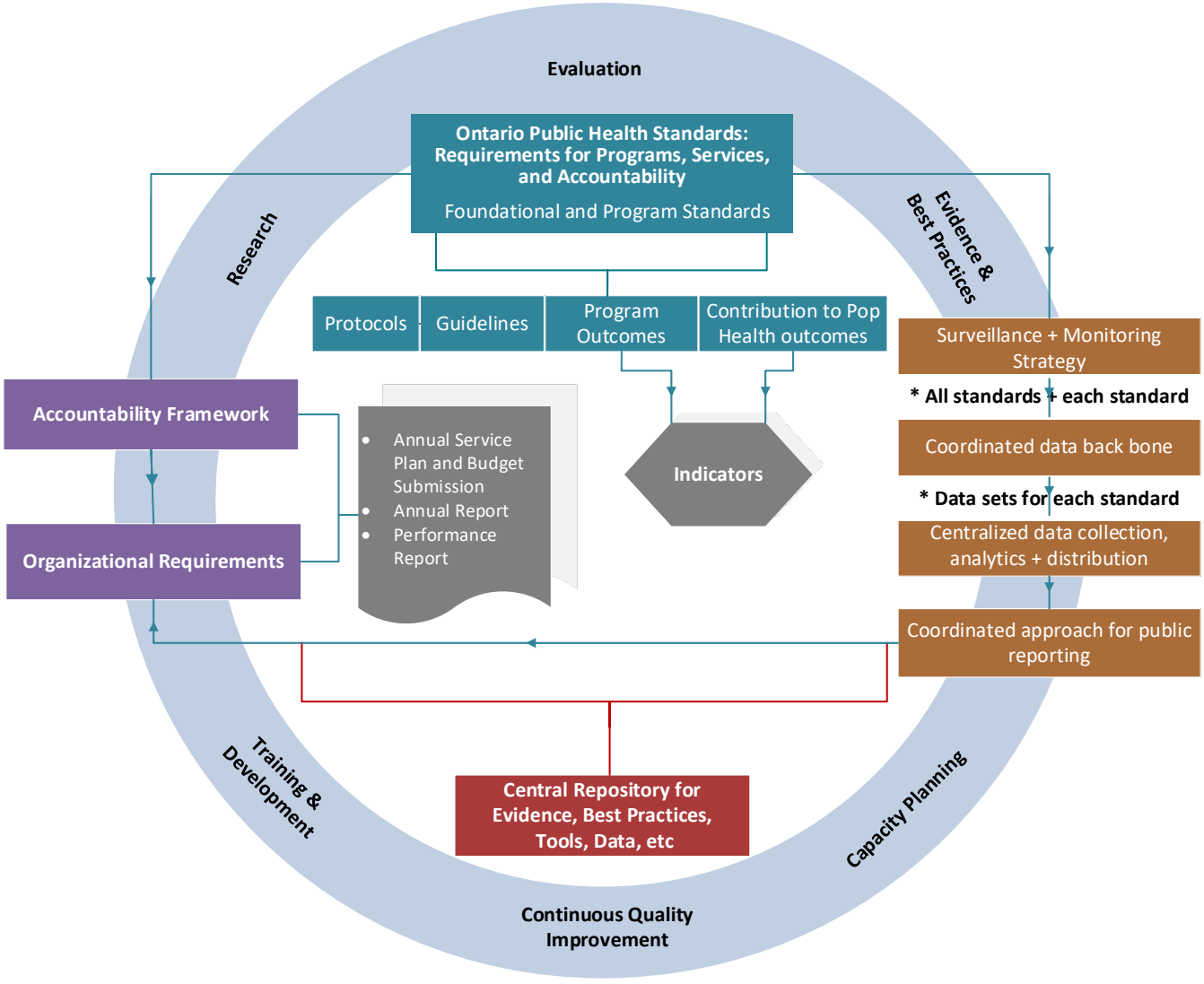
The Standards consist of the following sections:

- Defining the Work: What Public Health Does, which includes the Foundational and Program Standards;
- Strengthened Accountability, which includes the Public Health Accountability Framework and Organizational Requirements; and
- Transparency and Demonstrating Impact, which includes the Public Health Indicator Framework for Program Outcomes and Contributions to Population Health Outcomes and Transparency Framework: Disclosure and Reporting Requirements.

A Coordinated Approach to the Standards and Accountability

The **Coordinated Approach** (Figure 3) diagram illustrates how specific processes and tools will enable and support the implementation of the Standards and ensure that implementation is informed by research, evidence, and best practices.

Figure 3: Coordinated Approach



Defining the Work: What Public Health Does

Boards of health are responsible for the assessment, planning, delivery, management, and evaluation of a range of public health programs and services that address multiple health needs and respond to the contexts in which these needs occur. The Foundational and Program Standards articulate only those programs and services that all boards of health shall provide and are not intended to encompass the total potential scope of public health programming in Ontario. They include a broad range of population-based activities designed to promote and protect the health of the population as a whole and reduce health inequities.

Many of the requirements in the Foundational and Program Standards are supported by protocols and guidelines. Protocols and guidelines are program and topic specific documents which provide direction on how boards of health shall operationalize or approach specific requirements.

Strengthened Accountability

The Public Health Accountability Framework articulates the scope of the accountability relationship between boards of health and the ministry and establishes expectations for boards of health in the domains of Delivery of Programs and Services; Fiduciary Requirements; Good Governance and Management Practices; and Public Health Practice. The ministry's expectation is that boards of health are accountable for meeting all requirements included in legislation (e.g., *Health Protection and Promotion Act*, *Financial Administration Act*, etc.) and the documents that operationalize them (e.g., the Standards, Ministry-Board of Health Accountability Agreement, etc.). The Organizational Requirements specify those requirements where reporting and/or monitoring are required by boards of health to demonstrate accountability to the ministry.

Accountability is demonstrated through the submission of planning and reporting tools by boards of health to the ministry, including the Board of Health Annual Service Plan and Budget Submission, performance reports, and an annual report. These tools enable boards of health to demonstrate that they are meeting defined expectations and provide appropriate oversight for public funding and resources.

Transparency and Demonstrating Impact

The Foundational and Program Standards identify requirements that should result in specified program outcomes and ultimately contribute to population-based goals and

population health outcomes.[1] The achievement of goals and population health outcomes builds on achievements by boards of health, along with those of many other organizations, governmental bodies, and community partners. Measurement of program outcomes and population health outcomes will help to assess the impact and success of public health programs and services and demonstrate the collective contribution towards population health outcomes. The Public Health Indicator Framework for Program Outcomes and Contributions to Population Health Outcomes describes the indicators that will be used to monitor our work and measure our success.

An integrated surveillance and monitoring strategy enables the planning, implementation, monitoring, and evaluation of public health programs and services. Identification of common measures and centralized coordination of data access, collection, analysis and distribution facilitates efficient utilization of resources and effective, coordinated actions.

Enhanced transparency is a key priority for the ministry and public sector in general. Boards of health are required to ensure public access to key organizational documents that demonstrate responsible use of public funds and information that allows the public to make informed decisions about their health. The Transparency Framework: Disclosure and Reporting Requirements articulates the expectations of public disclosure by boards of health to support enhanced transparency and promote public confidence in Ontario's public health system.

Bringing available data together with other information, such as best practice and research evidence, in a central repository assists with analytics required at provincial, regional, and local levels. This can support each board of health in managing its own governance, administration, and effective program and service planning, as well as demonstrating the value of public health and impact on overall health and wellness of the population.

[1]Refer to Figure 4 for a definition of program outcomes and goals. The population health outcomes are specified in the Policy Framework for Public Health Programs and Services (Figure 2).

Defining the Work: What Public Health Does

2

Foundational and Program Standards

This section includes the Foundational and Program Standards. The Foundational Standards articulate specific requirements that underlie and support all Program Standards. Population health assessment and surveillance requirements are also included in each Program Standard. The Foundational Standards include:

- Population Health Assessment
- Health Equity
- Effective Public Health Practice, which is divided into three sections:
    - Program Planning, Evaluation, and Evidence-Informed Decision-Making
    - Research, Knowledge Exchange, and Communication
    - Quality and Transparency
- Emergency Management

The Program Standards are grouped thematically to address Chronic Disease Prevention and Well-Being; Food Safety; Healthy Environments; Healthy Growth and Development; Immunization; Infectious and Communicable Diseases Prevention and Control; Safe Water; School Health; and Substance Use and Injury Prevention. Boards of health shall assess, plan, deliver, manage, and evaluate programs and services cohesively across thematic areas, impacting multiple settings and meeting needs across the lifespan.

Both the Foundational and Program Standards articulate broad population-based goals and program outcomes, and specific requirements. These concepts are described in Figure 4.

Figure 4: Description of the Components of each Standard

Components of Each Standard		
Goal	**Program Outcomes**	**Requirements**
The goal is a statement that reflects the broadest level of results to be achieved in a specific standard. The work of boards of health, along with other parts of the health system, community partners, non-governmental organizations, governmental bodies, and community members, contributes to achieving the goal.	Program outcomes are the results of programs and services implemented by boards of health. Outcomes often focus on changes in awareness, knowledge, attitudes, skills, practices, environments, and policies. Each board of health shall establish internal processes for managing day-to-day operations of programs and services to achieve desired program outcomes.	Requirements are the specific statements of action. Requirements articulate the activities that boards of health are expected to undertake. Some requirements are core to public health practice and are expected to be adhered to consistently across the province, while others are to be carried out in accordance with the local context through the use of detailed population-based analyses and situational assessments. All programs and services shall be tailored to reflect the local context and shall be responsive to the needs of priority populations.[2] Protocols are named in many requirements to provide further direction on how boards of health must operationalize specific requirement(s). Guidelines are also named in many requirements and provide direction on how boards of health must approach specific requirement(s).

The requirements in the Standards balance the need for standardization across the province, with the need for variability to respond to local needs, priorities, and contexts. This flexible approach accommodates greater variability where there is an opportunity to plan programs to decrease health inequities and address the needs of priority populations.

[2]Priority populations as defined in the Population Health Assessment Standard.

Foundational Standards

Public health programs and services that are informed by evidence are the foundation for effective public health practice. Evidence-informed practice is responsive to the needs and emerging issues of the health unit's population and uses the best available evidence to address them.

- Population health assessment is integral to public health practice.
- A focus on health equity is important to the delivery of all public health programs and services in order to support people to reach their full health potential.
- Effective public health practice requires boards of health to apply skills in evidence-informed decision-making, research, knowledge exchange, program planning and evaluation, and communication, with a continued focus on quality and transparency.
- Emergency management is a critical role that boards of health play in ensuring that they have the capacity to respond to new and emerging events and cope with a range of disruptions.

Population Health Assessment

Population health assessment includes the measurement, monitoring, analysis, and interpretation of population health data and knowledge and intelligence about the health status of populations and subpopulations, including social determinants of health and health inequities. Population health assessment provides the information necessary to understand the health of populations through the collaborative development and ongoing maintenance of population health profiles, identification of challenges and opportunities, and monitoring of the health impacts of public health practice.

Population health assessment also includes a monitoring role, described as epidemiological surveillance. This is the systematic and ongoing collection, collation, and analysis of health-related information that is communicated in a timely manner to all who need to know, so that action can be taken. It contributes to effective public health program planning, delivery, and management. Dissemination of analyses may take the form of reports, advisories, healthy public policy recommendations, alerts, or warnings.

Goal

Public health practice responds effectively to current and evolving conditions, and contributes to the public's health and well-being with programs and services that are informed by the population's health status, including social determinants of health and health inequities.

Program Outcomes

- The board of health is aware of and uses data to influence and inform the development of local healthy public policy and its programs and services.
- Planning and delivery of local public health programs and services align with the identified needs of the local population, including priority populations.
- Resources are allocated to reflect public health priorities and reallocated, as feasible, to reflect emergent public health priorities.
- Relevant public health practitioners and community partners receive timely information regarding risks in order to take appropriate action.
- The public, Local Health Integration Networks (LHINs), community partners, and health care providers are aware of relevant and current population health information.
- LHINs and other relevant community partners have population health information, including information on health inequities, necessary for planning, delivering, and monitoring health services that are responsive to population health needs.

Requirements

1. The board of health shall conduct surveillance, including the ongoing collection, collation, analysis, and periodic reporting of population health information, as required by the *Health Protection and Promotion Act* and in accordance with the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).
2. The board of health shall interpret and use surveillance data to communicate information on risks to relevant audiences in accordance with the *Healthy Environments and Climate Change Guideline, 2018* (or as current); the *Infectious Diseases Protocol, 2018* (or as current); and the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).
3. The board of health shall assess current health status, health behaviours, preventive health practices, risk and protective factors, health care utilization relevant to public health, and demographic indicators, including the assessment of trends and changes, in accordance with the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).
4. The board of health shall use population health, social determinants of health, health inequities, and other sources of information to assess the needs of the local population, including the identification of populations at risk of negative health outcomes, in order to determine those groups that would benefit most from public health programs and services (i.e., priority populations).[3]
5. The board of health shall tailor public health programs and services to meet identified local population health needs, including those of priority populations.
6. The board of health shall provide population health information, including social determinants of health, health inequities, and other relevant sources to the public, community partners, and other health care providers in accordance with the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).
7. The medical officer of health of a board of health shall formally engage with the chief executive officer from each LHIN within the geographic boundaries of the health unit on population health assessment, joint planning for health services, and population health initiatives in accordance with the *Board of Health and Local Health Integration Network Engagement Guideline, 2018* (or as current).

[3]Priority populations are those that are experiencing and/or at increased risk of poor health outcomes due to the burden of disease and/or factors for disease; the determinants of health, including the social determinants of health; and/or the intersection between them. They are identified using local, provincial and/or federal data sources; emerging trends and local context; community assessments; surveillance; and epidemiological and other research studies.

Health Equity

Health is influenced by a broad range of factors - genetics, individual lifestyles and behaviours, and the physical, social, and economic environments in which we live. These factors contribute to health experienced by individuals and to the overall level of health in a community or population. Factors beyond an individual's biology and behaviours - those that form the conditions in which people are born, grow up, live, and work - are known as the social determinants of health. Any differences or variations in health status between groups are known as health inequalities. When health inequalities have the potential to be changed or decreased by social action, they are called health inequities.

Health inequities are health differences that are:

- Systematic, meaning that health differences are patterned, where health generally improves as socioeconomic status improves;
- Socially produced, and therefore could be avoided by ensuring that all people have the social and economic conditions that are needed for good health and well-being; and
- Unfair and/or unjust because opportunities for health and well-being are limited.

Health equity means that all people can reach their full health potential and are not disadvantaged from attaining it because of their race, ethnicity, religion, gender, age, social class, socioeconomic status or other socially determined circumstance.

The social determinants of health can be used to gain a deeper understanding of the population health needs of communities. Data can be used to examine various health outcomes (e.g., childhood obesity) from the perspective of social determinants of health (e.g., family income, family education level, etc.) and this information helps boards of health identify priority populations. Programs and services tailored to meet the needs of priority populations, policy work aimed at reducing barriers to positive health outcomes, and activities that facilitate positive behaviour changes to optimize health for everyone, are all important components of a program of public health interventions. By assessing the social determinants of health, boards of health have a better understanding of the impact of various social constructs within their communities, and are better able to plan programs and services that can help address health inequities. In some instances, there is sufficient data to demonstrate disparities in health outcomes for populations at the provincial level, such as Francophone and Indigenous communities.

Indigenous Communities and Organizations

The Indigenous population in Ontario is comprised of First Nations, Métis, and Inuit people. There are many different Indigenous communities across the province, including many different First Nation governments each with their own histories, cultures, organizational approaches, and jurisdictional realities that need to be considered.

Relationships between boards of health and Indigenous communities and organizations need to come from a place of trust, mutual respect, understanding, and reciprocity. It is important to acknowledge that as part of this relationship building, First Nations in Ontario believe that Canada, in its fiduciary capacity and as a Treaty partner, also has an obligation to continue to contribute to the improvement of health care and health outcomes for these communities.

One important first step for boards of health in beginning to build and/or further develop their relationships with Indigenous communities and organizations is to ensure it is done in a culturally safe way. The *Relationship with Indigenous Communities Guideline, 2018* (or as current) provides boards of health with information about the different Indigenous communities that may be within the area of jurisdiction of the board of health.

Goal

Public health practice results in decreased health inequities such that everyone has equal opportunities for optimal health and can attain their full health potential without disadvantage due to social position or other socially determined circumstances.

Program Outcomes

- The board of health achieves timely and effective detection and identification of health inequities, associated risk factors, and emerging trends.
- Community partners, including LHINs and the public, are aware of local health inequities, their causes, and impacts.
- There is an increased awareness on the part of the LHINs and other community partners of the impact of social determinants of health on health outcomes and increased support for actions to decrease health inequities.
- Boards of health implement strategies to reduce health inequities.
- Community partners, including LHINs, implement strategies to reduce health inequities.
- Priority populations are meaningfully engaged in the planning of public health interventions.

- Indigenous communities are engaged in a way that is meaningful for them.
- Multi-sectoral collaboration informs development of local strategies to decrease health inequities.

Requirements

1. The board of health shall assess and report on the health of local populations describing the existence and impact of health inequities and identifying effective local strategies that decrease health inequities in accordance with the *Health Equity Guideline, 2018* (or as current) and the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).
2. The board of health shall modify and orient public health interventions to decrease health inequities in accordance with the *Health Equity Guideline, 2018* (or as current), and by:
    a) Engaging priority populations in order to understand their unique needs, histories, cultures, and capacities; and
    b) Designing strategies to improve the health of the entire population while decreasing the health inequities experienced by priority populations.
3. The board of health shall engage in multi-sectoral collaboration with municipalities, LHINs, and other relevant stakeholders in decreasing health inequities in accordance with the *Health Equity Guideline, 2018* (or as current). Engagement with Indigenous communities and organizations, as well as with First Nation communities striving to reconcile jurisdictional issues, shall include the fostering and creation of meaningful relationships, starting with engagement through to collaborative partnerships, in accordance with the *Relationship with Indigenous Communities Guideline, 2018* (or as current).
4. The board of health shall lead, support, and participate with other stakeholders in health equity analysis, policy development, and advancing healthy public policies that decrease health inequities in accordance with the *Health Equity Guideline, 2018* (or as current).

Effective Public Health Practice

Goal

Public health practice is transparent, responsive to current and emerging evidence, and emphasizes continuous quality improvement.

Program Outcomes

- Public health programs and services are reflective of local population health issues, the best available evidence, new public health knowledge, and adapted to the local context.
- Public health programs and services are modified to address issues related to program effectiveness.
- Public health practitioners, policy-makers, community partners, health care providers, and the public are aware of the factors that determine the health of the population.
- Public health research and knowledge exchange activities are reflective of effective partnerships with community researchers, academic partners, and other appropriate organizations.
- Public health communication strategies reflect local needs and utilize a variety of communication modalities to ensure effective communication.
- The public and community partners are aware of ongoing public health program improvements.
- The public and community partners are aware of inspection results to support making evidence-informed choices.
- Ongoing program improvements enhance client and community partner experience and address issues identified through various means.

Program Planning, Evaluation, and Evidence-Informed Decision-Making

Program planning and evaluation are part of an ongoing and iterative cycle of program development and improvement.

A program is a plan of action intended to achieve specific outcomes. Program planning is an ongoing, iterative process that organizations use to develop and modify a program throughout its lifespan.

Program evaluation is the systematic gathering, analysis, and reporting of data about a program to assist in decision-making. It includes quantitative, qualitative, and mixed-method approaches. Program evaluation produces the information needed to support the establishment of new programs and services (needs assessment); assess whether evidence-informed programs and services are carried out with the necessary reach, intensity, and duration (process evaluation); or document the effectiveness and efficiency of programs and services (outcome evaluation).

Evidence-informed decision-making is the process of analyzing and using the best available evidence from research, context, and experience to inform decisions on development and delivery of public health programs and services. Evidence to inform the decision-making process may come from a variety sources including: key facts, findings, trends, and recommendations from published scientific research; data and analyses obtained from population health assessment and surveillance; legal and political environments; stakeholder perspectives; public engagement; and recommendations based on past experiences including program evaluation information.

Requirements

1. The board of health shall develop and implement a Board of Health Annual Service Plan and Budget Submission which:
    a) Demonstrates the use of a systematic process to plan public health programs and services to address the needs of the community by integrating the best available research and evaluation evidence with contextual factors such as local population health issues, priority populations, community assets and needs, political climate, public engagement, and available resources; and
    b) Describes the public health programs and services planned for implementation and the information which informed it.
2. The board of health shall routinely monitor program activities and outcomes to assess and improve the implementation and effectiveness of programs and services, including collection, analysis, and periodic reporting of indicators related to inputs, resources, implementation processes, reach, outputs, and outcomes.
3. The board of health shall ensure a culture of on-going program improvement and evaluation, and shall conduct formal program evaluations where required.
4. The board of health shall ensure all programs and services are informed by evidence.

Research, Knowledge Exchange, and Communication

Exploring an issue or investigating a question is accomplished through research - the organized and purposeful collection, analysis, and interpretation of data. Research may involve the primary collection of new data or the analysis or synthesis of existing data and findings.

Knowledge exchange is collaborative problem-solving among public health practitioners, researchers, and decision-makers. It results in mutual learning through the process of planning, producing, disseminating, and applying existing or new research in decision-making.

Promoting and protecting the public's health require effective communication. Various communication strategies may be needed to ensure the greatest impact, depending on the population, local context, available resources, and local and provincial priorities.

Requirements

5. The board of health shall engage in knowledge exchange activities with public health practitioners across the province, policy-makers, academic and community partners, health care providers, and the public regarding factors that determine the health of the population as informed by population health assessment, surveillance, research, and program evaluation.
6. The board of health shall foster relationships with community researchers, academic partners, and other appropriate organizations to support public health research[4] and knowledge exchange activities, which may include those conducted by the board of health alone or in partnership or collaboration with other organizations.
7. The board of health shall use a variety of communication modalities, including social media, taking advantage of existing resources where possible, and complementing national/provincial health communications strategies.

Quality and Transparency

A public health system with a culture of quality and transparency is safe, effective, client and community/population centred, efficient, responsive, and timely.

[4]Research activities that involve personal health information must comply with the *Personal Health Information Protection Act, 2004* and specifically with Section 44 of that Act.

Requirements

8. The board of health shall ensure a culture of quality and continuous organizational self-improvement that underpins programs and services and public health practice, and demonstrates transparency and accountability to clients, the public, and other stakeholders. This may include:
    a) Identification and use of tools, structures, processes and priorities to measure and improve the quality of programs and services, such as the establishment of a Quality/Practice Committee and/or the development and monitoring of a Quality Improvement Plan;
    b) Measurement of client, community, community partner and stakeholder experience to inform transparency and accountability;
    c) Routine review of outcome data that includes variances from performance expectations and implementation of remediation plans; and
    d) Use of external peer reviews, such as accreditation.
9. The board of health shall publicly disclose results of all inspections or information in accordance with the *Electronic Cigarettes Protocol, 2018* (or as current); the *Food Safety Protocol, 2018* (or as current); the *Health Hazard Response Protocol, 2018* (or as current); the *Infection Prevention and Control Complaint Protocol, 2018* (or as current); the *Infection Prevention and Control Disclosure Protocol, 2018* (or as current); the *Infection Prevention and Control Protocol, 2018* (or as current); the *Recreational Water Protocol, 2018* (or as current); the *Safe Drinking Water and Fluoride Monitoring Protocol, 2018* (or as current); the *Tanning Beds Protocol, 2018* (or as current); and the *Tobacco Protocol, 2018* (or as current).

Emergency Management

Emergencies can occur anywhere and at any time. Boards of health regularly experience new and emerging events ranging from infectious diseases such as SARS, the H1N1 influenza pandemic, and Ebola virus disease to extreme weather events and environmental hazards such as flooding and forest fires.

Effective emergency management ensures that boards of health are ready to cope with and recover from threats to public health or disruptions to public health programs and services. This is done through a range of activities carried out in coordination with other community partners.

This planning, and its associated activities, is a critical role in strengthening the overall resilience of boards of health and the broader health system. Ministry policy and expectations to support a ready and resilient health system will be outlined separately.

Goal

To enable consistent and effective management of emergency situations.

Program Outcome

- The board of health is ready to respond to and recover from new and emerging events and/or emergencies with public health impacts.

Requirement

1. The board of health shall effectively prepare for emergencies to ensure 24/7 timely, integrated, safe, and effective response to, and recovery from emergencies with public health impacts, in accordance with ministry policy and guidelines.[5]

[5]The ministry policy and guidelines for a ready and resilient health system will set expectations across the broader health system. This will include direction for boards of health in the establishment of an integrated program that incorporates emergency management practices.

Program Standards

Chronic Disease Prevention and Well-Being

Goal

To reduce the burden of chronic diseases of public health importance[6] and improve well-being.

Program Outcomes

- The board of health is aware of and uses data to influence and inform the development of local healthy public policy and its programs and services for the prevention of chronic diseases.
- Board of health programs and services are designed to address the identified needs of the community, including priority populations, associated with the prevention of chronic diseases.
- Priority populations and health inequities related to chronic diseases have been identified and relevant data have been communicated to community partners.
- There is a reduction in population health inequities related to chronic diseases.
- Community partners are aware of healthy behaviours associated with the prevention of chronic diseases.
- Community partners have knowledge of and increased capacity to act on the factors associated with the prevention of chronic diseases and promotion of well-being, including healthy living behaviours, healthy public policy, and creating supportive environments.
- Community partners, policy-makers, and the public, including priority populations, are meaningfully engaged in the planning, implementation, development and evaluation of programs and services for the prevention of chronic diseases.
- There is increased public awareness of the impact of risk factors, protective factors and healthy behaviours associated with chronic diseases.

[6]Chronic diseases of public health importance include, but are not limited to, obesity, cardiovascular diseases, respiratory disease, cancer, diabetes, intermediate health states (such as metabolic syndrome and prediabetes), hypertension, dementia, mental illness, and addictions.

- There is an increased adoption of healthy living behaviours among populations targeted through program interventions for the prevention of chronic diseases.
- Youth have decreased exposure to ultraviolet (UV) radiation, including reduced access to tanning beds.
- Tanning bed operators are in compliance with the *Skin Cancer Prevention Act (Tanning Beds), 2013*.
- Food premises are in compliance with the *Healthy Menu Choices Act, 2015*.

Requirements

1. The board of health shall collect and analyze relevant data to monitor trends over time, emerging trends, priorities, and health inequities related to chronic diseases and report and disseminate the data and information in accordance with the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).
2. The board of health shall develop and implement a program of public health interventions using a comprehensive health promotion approach that addresses chronic disease risk and protective factors to reduce the burden of illness from chronic diseases in the health unit population.

    a) The program of public health interventions shall be informed by:

        i. An assessment of the risk and protective factors for, and distribution of, chronic diseases;

        ii. Consultation and collaboration with local stakeholders in the health, education, municipal, non-governmental, and other relevant sectors;

        iii. An assessment of existing programs and services within the area of jurisdiction of the board of health to build on community assets and minimize duplication;

        iv. Consideration of the following topics based on an assessment of local needs:

            - Built environment;
            - Healthy eating behaviours;
            - Healthy sexuality;
            - Mental health promotion;
            - Oral health;
            - Physical activity and sedentary behaviour;
            - Sleep;

- Substance[7] use; and
- UV exposure.

v. Evidence of effectiveness of the interventions employed.

b) The program of public health interventions shall be implemented in accordance with relevant guidelines, including the *Chronic Disease Prevention Guideline, 2018* (or as current); the *Health Equity Guideline, 2018* (or as current); the *Mental Health Promotion Guideline, 2018* (or as current); and the *Substance Use Prevention and Harm Reduction Guideline, 2018* (or as current).[8]

3. The board of health shall enforce the *Skin Cancer Prevention Act (Tanning Beds), 2013* in accordance with the *Tanning Beds Protocol, 2018* (or as current).
4. The board of health shall enforce the *Healthy Menu Choices Act, 2015* in accordance with the *Menu Labelling Protocol, 2018* (or as current).

[7]Substance includes tobacco, e-cigarettes, alcohol, cannabis, opioids, illicit, other substances and emerging products.
[8]The *Substance Use Prevention and Harm Reduction Guideline, 2018* (or as current) provides guidance on alcohol, cannabis, opioids, and illicit substances.

Food Safety

Goal

To prevent or reduce the burden of food-borne illnesses.

Program Outcomes

- The board of health is aware of and uses data to influence and inform the development of local healthy public policy and its programs and services related to food safety.
- Board of health programs and services are designed to address the identified needs of the community, including priority populations, associated with food safety.
- Timely and effective detection, identification, and response to food-borne illnesses, their associated risk factors, emerging trends, and unsafe food offered for public consumption.
- Food-borne illness risks are mitigated.
- Food handlers are educated in food safety to handle and manage food for public consumption in a safe and sanitary manner.
- The public and community partners are aware of safe food-handling practices and food safety issues.
- The public and community partners have the knowledge and skills needed to handle food in a safe manner.
- There is reduced incidence of food-borne illnesses.

Requirements

1. The board of health shall:
    a) Conduct surveillance of suspected and confirmed food-borne illnesses, food premises, and food for public consumption;
    b) Conduct epidemiological analysis of surveillance data including monitoring of trends over time, emerging trends, and priority populations; and
    c) Respond by adapting programs and services

in accordance with the *Food Safety Protocol, 2018* (or as current); the *Operational Approaches for Food Safety Guideline, 2018* (or as current); and the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).

2. The board of health shall ensure food handlers in food premises have access to training in safe food-handling practices and principles in accordance with the *Food Safety Protocol, 2018* (or as current) and the *Operational Approaches for Food Safety Guideline, 2018* (or as current).
3. The board of health shall increase public awareness of food-borne illnesses and safe food-handling practices and principles in accordance with the *Food Safety Protocol, 2018* (or as current) and the *Operational Approaches for Food Safety Guideline, 2018* (or as current) by:
    a) Adapting and/or supplementing national/provincial food safety communications strategies where local assessment has identified a need; and/or
    b) Developing and implementing regional/local communications strategies where local assessment has identified a need.
4. The board of health shall provide all the components of the Food Safety Program in accordance with the *Food Safety Protocol, 2018* (or as current) and the *Operational Approaches for Food Safety Guideline, 2018* (or as current).
5. The board of health shall ensure 24/7 availability to receive reports of and respond to:
    a) Suspected and confirmed food-borne illnesses or outbreaks;
    b) Unsafe food-handling practices, food recalls, adulteration, and consumer complaints; and
    c) Food-related issues arising from floods, fires, power outages, or other situations that may affect food safety in accordance with the *Health Protection and Promotion Act*; the *Food Safety Protocol, 2018* (or as current); the *Infectious Diseases Protocol, 2018* (or as current); and the *Operational Approaches for Food Safety Guideline, 2018* (or as current).

Healthy Environments

Goal

To reduce exposure to health hazards[9] and promote the development of healthy built and natural environments that support health and mitigate existing and emerging risks, including the impacts of a changing climate.

Program Outcomes

- The board of health is aware of and uses data to influence and inform the development of local healthy public policy and its programs and services related to reducing exposure to health hazards and promoting healthy built and natural environments.
- Board of health programs and services are designed to address the identified needs of the community, including priority populations, associated with health hazards and healthy built and natural environments.
- There is a decrease in health inequities related to exposure to health hazards.
- Timely and effective detection, identification, and response to health hazards and associated public health risks, trends, and illnesses.
- The public and community partners are aware of the risks of health hazard incidents.
- The public and community partners are aware of health protection and prevention activities related to health hazards and conditions that create healthy built and natural environments.
- Community partners and the public are engaged in the planning, development, implementation, and evaluation of strategies to reduce exposure to health hazards and promote the creation of healthy natural and built environments.
- Community partners have the information necessary to create healthy public policies related to reducing exposure to health hazards and creating healthy built and natural environments.
- There is reduced public exposure to health hazards.

[9]Health hazard, as defined in s.1(1) of the *Health Protection and Promotion Act*, means "(a) a condition of a premises, (b) a substance, thing, plant or animal other than man, or (c) a solid, liquid, gas or combination of any of them, that has or is likely to have an adverse effect on the health of any person."

Requirements

1. The board of health shall:
   a) Conduct surveillance of environmental factors in the community;
   b) Conduct epidemiological analysis of surveillance data, including monitoring of trends over time, emerging trends, and priority populations; and
   c) Use information obtained to inform healthy environments programs and services

   in accordance with the *Health Hazard Response Protocol, 2018* (or as current); the *Healthy Environments and Climate Change Guideline, 2018* (or as current); the *Infectious Diseases Protocol, 2018* (or as current); and the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).
2. The board of health shall identify risk factors and priority health needs in the built and natural environments.
3. The board of health shall assess health impacts related to climate change in accordance with the *Healthy Environments and Climate Change Guideline, 2018* (or as current).
4. The board of health shall engage in community and multi-sectoral collaboration with municipal and other relevant partners to promote healthy built and natural environments in accordance with the *Healthy Environments and Climate Change Guideline, 2018* (or as current).
5. The board of health shall collaborate with community partners to develop effective strategies to reduce exposure to health hazards and promote healthy built and natural environments in accordance with the *Health Hazard Response Protocol, 2018* (or as current) and the *Healthy Environments and Climate Change Guideline, 2018* (or as current).
6. The board of health shall implement a program of public health interventions to reduce exposure to health hazards and promote healthy built and natural environments.
7. The board of health shall, as part of its strategy to reduce exposure to health hazards and promote healthy natural and built environments, effectively communicate with the public by:
   a) Adapting and/or supplementing national/provincial health communications strategies where local assessment has identified a need;
   b) Developing and implementing regional/local communications strategies where local assessment has identified a need; and
   c) Addressing the following topics based on an assessment of local needs:

- Built and natural environments;
- Climate change;
- Exposure to hazardous environmental contaminants and biological agents;
- Exposure to radiation, including UV light and radon;
- Extreme weather;
- Indoor air pollutants;
- Outdoor air pollutants; and
- Other emerging environmental exposures

in accordance with the *Healthy Environments and Climate Change Guideline, 2018* (or as current).

8. The board of health shall assess and inspect facilities where there is an elevated risk of illness associated with exposures that are known or suspected to be associated with health hazards in accordance with the *Health Hazard Response Protocol, 2018* (or as current).
9. The board of health shall investigate potential health hazards and respond by preventing or reducing exposure to health hazards in accordance with the *Health Hazard Response Protocol, 2018* (or as current).
10. The board of health shall ensure 24/7 availability to receive reports of and respond to health hazards in accordance with the *Health Hazard Response Protocol, 2018* (or as current).

Healthy Growth and Development

Goal

To achieve optimal preconception, pregnancy, newborn, child, youth, parental, and family health.

Program Outcomes

- The board of health is aware of and uses data to influence and inform the development of local healthy public policy and its programs and services related to achieving optimal preconception, pregnancy, newborn, child, youth, parental, and family health.
- Board of health programs and services are designed to address the identified needs of the community, including priority populations, associated with healthy growth and development.
- There is a decrease in health inequities related to healthy growth and development.
- Community partners have knowledge of the factors associated with and effective programs for the promotion of healthy growth and development, as well as managing the stages of the family life cycle.
- The board of health collaborates with and fosters collaboration among community partners, children, youth, and parents in the planning, development, implementation and evaluation of programs, services, and policies, which positively impact the health of families and communities.
- Individuals and families are aware of the factors associated with healthy growth and development, and the importance of creating safe and supportive environments that promote healthy growth and development.
- Individuals and families have increased knowledge, skills and access to local supports to effectively foster healthy growth and development at different life stages, and progress through the transitions between these stages.
- Youth have knowledge of contraception, healthy sexuality, healthy fertility, and healthy pregnancies.

Requirements

1. The board of health shall collect and analyze relevant data to monitor trends over time, emerging trends, priorities, and health inequities related to healthy growth

and development and report and disseminate the data and information in accordance with the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).

2. The board of health shall develop and implement a program of public health interventions using a comprehensive health promotion approach to support healthy growth and development in the health unit population.

   a) The program of public health interventions shall be informed by:

      i. An assessment of risk and protective factors that influence healthy growth and development.

      ii. An assessment of existing programs and services within the area of jurisdiction of the board of health to build on community assets and minimize duplication.

      iii. Consultation and collaboration with local stakeholders in the health, education, municipal, non-governmental, social, and other relevant sectors with specific attention to:

         - School boards, principals, educators, parent groups, student leaders, and students;
         - Child care providers and organizations that provide child care services such as Community Hubs and Family Centres;
         - Health care providers and LHINs;
         - Social service providers; and
         - Municipalities.

      iv. Consideration of the following topics based on an assessment of local needs:

         - Breastfeeding;
         - Growth and development;
         - Healthy pregnancies;
         - Healthy sexuality;
         - Mental health promotion;
         - Oral Health;
         - Preconception health;
         - Pregnancy counselling;
         - Preparation for parenting;
         - Positive parenting; and

- Visual health.

v. Evidence of the effectiveness of the interventions.

b) The program of public health interventions shall be implemented in accordance with relevant guidelines, including the *Health Equity Guideline, 2018* (or as current); the *Healthy Growth and Development Guideline, 2018* (or as current); and the *Mental Health Promotion Guideline, 2018* (or as current).

3. The board of health shall provide all components of the Healthy Babies Healthy Children Program in accordance with the *Healthy Babies Healthy Children Program Protocol, 2018* (or as current) (Ministry of Children and Youth Services).

Immunization

Goal

To reduce or eliminate the burden of vaccine preventable diseases through immunization.

Program Outcomes

- Timely and effective detection and identification of children susceptible to vaccine preventable diseases, their associated risk factors, and emerging trends.
- Children have up-to-date immunizations according to the current Publicly Funded Immunization Schedules for Ontario, and in accordance with the *Immunization of School Pupils Act* and the *Child Care and Early Years Act, 2014*.
- Timely and effective detection and identification of priority populations facing barriers to immunization, their associated risk factors, and emerging trends.
- Eligible persons, including underserved and priority populations, have access to provincially funded immunization programs and services.
- Improved uptake of provincially funded vaccines among Ontarians.
- Reduced incidence of vaccine preventable diseases.
- Effective inventory management for provincially funded vaccines.
- Health care providers report adverse events following immunization to the board of health.
- Timely and effective outbreak management related to vaccine preventable diseases.
- Increased public confidence in immunizations.

Requirements[10]

1. The board of health shall, in accordance with the *Immunization for Children in Schools and Licensed Child Care Settings Protocol, 2018* (or as current), assess, maintain records, and report on:
    a) The immunization status of children enrolled in licensed child care settings, as defined in the *Child Care and Early Years Act, 2014*;

[10]For requirements related to school-based immunization programs and services, refer to the School Health Standard.

b) The immunization status of children attending schools in accordance with the *Immunization of School Pupils Act;* and

c) Immunizations administered at board of health-based clinics as required in accordance with the *Immunization for Children in Schools and Licensed Child Care Settings Protocol, 2018* (or as current) and the *Infectious Diseases Protocol, 2018* (or as current).

2. The board of health shall conduct epidemiological analysis of surveillance data for vaccine preventable diseases, vaccine coverage, and adverse events following immunization, including monitoring of trends over time, emerging trends, and priority populations in accordance with the *Infectious Diseases Protocol, 2018* (or as current) and the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).
3. The board of health shall work with community partners to improve public knowledge and confidence in immunization programs and services by:

a) Adapting and/or supplementing national/provincial health communications strategies where local assessment has identified a need;

b) Developing and implementing regional/local communications strategies where local assessment has identified a need; and

c) Addressing the following topics based on an assessment of local needs:

- Diseases that vaccines prevent;
- Immunization for travelers;
- Introduction of new provincially funded vaccines;
- Legislation related to immunizations;
- Promotion of childhood and adult immunization, including high-risk programs and services;
- Recommended immunization schedules for children and adults, and the importance of adhering to the schedules;
- Reporting immunization information to the board of health as required;
- The importance of immunization;
- The importance of maintaining a personal immunization record for all family members;
- The importance of reporting adverse events following immunization; and
- Vaccine safety.

4. The board of health shall provide consultation to community partners on immunization and immunization practices, based on local needs and as requested.
5. The board of health shall promote and provide provincially funded immunization programs and services to eligible persons in the health unit, including underserved and priority populations.
6. The board of health shall have a contingency plan to deploy board of health staff capable of providing vaccine preventable diseases outbreak management and control, such as mass immunization, in the event of a community outbreak.
7. The board of health shall provide comprehensive information and education to promote effective inventory management for provincially funded vaccines in accordance with the *Vaccine Storage and Handling Protocol, 2018* (or as current). This shall include:
    a) Training at the time of cold chain inspection;
    b) Distributing information to new health care providers who handle vaccines; and
    c) Providing ongoing support to health care providers who handle vaccines, including guidance on effective inventory management.
8. The board of health shall promote appropriate vaccine inventory management in accordance with the *Vaccine Storage and Handling Protocol, 2018* (or as current) in all premises where provincially funded vaccines are stored. This shall include:
    a) Prevention, management, and reporting of cold chain incidences; and
    b) Prevention, management, and reporting of vaccine wastage.
9. The board of health shall ensure that the storage and distribution of provincially funded vaccines, including to health care providers practicing within the health unit, is in accordance with the *Vaccine Storage and Handling Protocol, 2018* (or as current).
10. The board of health shall:
    a) Promote reporting of adverse events following immunization by health care providers to the local board of health in accordance with the *Health Protection and Promotion Act*; and
    b) Monitor, investigate, and document all suspected cases of adverse events following immunization that meet the provincial reporting criteria[11] and promptly report all cases.

[11]The provincial reporting criteria are specified in Appendix B – Provincial Case Definitions of the *Infectious Diseases Protocol, 2018* (or as current).

Infectious and Communicable Diseases Prevention and Control

Goal

To reduce the burden of communicable diseases and other infectious diseases of public health significance.[12,13]

Program Outcomes

- The board of health is aware of and uses local data to influence and inform the development of local healthy public policy and its programs and services for the prevention of infectious and communicable diseases.
- Board of health programs and services are designed to address the identified needs of the community, including priority populations, associated with infectious and communicable diseases.
- Timely and effective detection, identification, and management of exposures and local cases/outbreaks of infectious and communicable diseases of public health significance, including diseases of public health significance, their associated risk factors, and emerging trends.
- Effective case management results in limited secondary cases.
- Priority populations have increased access to sexual health and harm reduction services and supports that prevent exposure to and the transmission of sexually transmitted infections and blood-borne infections.
- Reduced transmission of infections and communicable diseases.
- Reduced progression from latent tuberculosis infection (LTBI) to active tuberculosis (TB) disease.
- Reduced development of acquired drug-resistance among active TB cases.

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[12]Infectious diseases of public health significance include, but are not limited to; those specified as diseases of public health significance as set out by regulation under the *Health Protection and Promotion Act* and include zoonotic and vector-borne diseases. Emerging infectious diseases may be considered of public health significance based on a variety of criteria, including their designation as an emerging disease by international, Federal, and/or Provincial/Territorial health authorities, their potential for preventability or public health action, and the seriousness of their impact on the health of the population and potential spread.

[13]Communicable diseases are communicable diseases defined in the legislation as set out by regulation under the *Health Protection and Promotion Act*.

- The public, community partners, and health care providers report all potential rabies exposures.
- Veterinarians report all animal cases of avian chlamydiosis, avian influenza, novel influenza, and Echinococcus multilocularis infection for appropriate follow up of human contacts of infected animals.
- Effective and efficient management and mitigation of public health risks associated with infection prevention and control lapses.
- Increased awareness and use of infection prevention and control practices in settings that are required to be inspected.

Requirements

1. The board of health shall conduct population health assessment and surveillance regarding infectious and communicable diseases and their determinants. These efforts shall include:
   a) Reporting data elements in accordance with the *Health Protection and Promotion Act*; the *Infectious Diseases Protocol, 2018* (or as current)*;* the *Rabies Prevention and Control Protocol, 2018* (or as current)*;* the *Sexual Health and Sexually Transmitted/Blood-Borne Infections Prevention and Control Protocol, 2018* (or as current)*;* and the *Tuberculosis Prevention and Control Protocol, 2018* (or as current);
   b) Conducting surveillance and epidemiological analysis, including the monitoring of trends over time, emerging trends, and priority populations in accordance with the *Infectious Diseases Protocol, 2018* (or as current); the *Population Health Assessment and Surveillance Protocol, 2018* (or as current); the *Rabies Prevention and Control Protocol, 2018* (or as current); the *Sexual Health and Sexually Transmitted/Blood-Borne Infections Prevention and Control Protocol, 2018* (or as current); and the *Tuberculosis Prevention and Control Protocol, 2018* (or as current);
   c) Responding to international, Federal/Provincial/Territorial and local changes in diseases epidemiology by adapting programs and services; and
   d) Using the information obtained through assessment and surveillance to inform program development regarding diseases of public health importance and other emerging infectious diseases.
2. The board of health shall provide public education to increase awareness related to infection prevention and control measures, including respiratory etiquette, and hand hygiene. These efforts shall include:

a) Adapting and/or supplementing national/provincial health education/ communications strategies where local assessment has identified a need; and/or

b) Developing and implementing regional/local communications strategies where local assessment has identified a need.

3. The board of health shall work with community partners and service providers to determine and address the need for knowledge translation resources and supports in the area of infection prevention and control. These efforts shall include:

   a) Adapting and/or supplementing national/provincial health education/ communications strategies where local assessment has identified a need; and/or

   b) Developing and implementing regional/local communications strategies where local assessment has identified a need.

4. The board of health shall work with appropriate partners to increase awareness among relevant community partners, including correctional facilities, health care, and other service providers, of:

   a) The local epidemiology of communicable diseases and other infectious diseases of public health significance;

   b) Infection prevention and control practices; and

   c) Reporting requirements for diseases of public health significance, as specified in the *Health Protection and Promotion Act*.

5. The board of health shall communicate, in a timely and comprehensive manner, with all relevant health care providers and other partners about urgent and emerging infectious diseases issues.

6. The board of health shall, based on local epidemiology, supplement provincial efforts in managing risk communications to appropriate stakeholders on identified risks associated with infectious diseases and emerging diseases of public health significance.

7. The board of health shall use health promotion approaches to increase adoption of healthy behaviours among the population regarding sexual practices and injection drug use to prevent and reduce exposures to sexually transmitted and blood-borne infections by collaborating with and engaging health care providers, community and other relevant partners, and priority populations.

8. The board of health shall collaborate with health care providers and other relevant partners to ensure access to, or provide based on local assessment, clinical services (e.g., sexual health/sexually transmitted infection [STI] clinics) for priority populations to promote and support healthy sexual practices and the

prevention and/or management of sexually transmitted infections and blood-borne infections.

9. The board of health shall collaborate with health care providers and other relevant partners to ensure access to, or provide based on local assessment, harm reduction programs in accordance with the *Substance Use Prevention and Harm Reduction Guideline, 2018* (or as current).
10. The board of health shall collaborate with health care providers and other relevant community partners to:
    a) Create supportive environments to promote healthy sexual practices,[14] access to sexual health services, and harm reduction programs and services for priority populations; and
    b) Achieve a comprehensive and consistent approach, based on local assessment and risk surveillance, to address and manage sexually transmitted infections and blood-borne infections in accordance with the *Sexual Health and Sexually Transmitted/Blood-Borne Infections Prevention and Control Protocol, 2018* (or as current).
11. The board of health shall provide public health management of cases, contacts, and outbreaks to minimize the public health risk in accordance with the *Infectious Diseases Protocol, 2018* (or as current); the *Institutional/Facility Outbreak Management Protocol, 2018* (or as current); the *Management of Potential Rabies Exposures Guideline, 2018* (or as current); the *Rabies Prevention and Control Protocol, 2018* (or as current); the *Sexual Health and Sexually Transmitted/ Blood-Borne Infections Prevention and Control Protocol, 2018* (or as current); and the *Tuberculosis Prevention and Control Protocol, 2018* (or as current).
12. The board of health shall facilitate timely identification of active cases of TB and referrals of persons through immigration medical surveillance in accordance with the *Tuberculosis Prevention and Control Protocol, 2018* (or as current) and *Tuberculosis Program Guideline, 2018* (or as current), and shall provide or ensure access to TB medication at no cost to clients or providers.
13. The board of health shall receive and respond to all reported cases of potential rabies exposures received from the public, community partners, and health care providers in accordance with the *Health Protection and Promotion Act*; the *Management of Potential Rabies Exposures Guideline, 2018* (or as current); and the *Rabies Prevention and Control Protocol, 2018* (or as current).
14. The board of health shall address the prevention and control of rabies threats as per a local Rabies Contingency Plan and in consultation with other relevant

[14]Healthy sexual practices include, but are not limited to, contraception and the prevention and/or management of sexually transmitted infections and blood-borne infections.

agencies[15] and orders of government, in accordance with the *Management of Potential Rabies Exposures Guideline, 2018* (or as current) and the *Rabies Prevention and Control Protocol, 2018* (or as current).

15. The board of health shall receive and respond to all reported animal cases of avian chlamydiosis (infection of birds with the causative agent of psittacosis in humans), avian influenza, novel influenza, and *Echinococcus multilocularis* infection, in accordance with the *Health Protection and Promotion Act*; the *Management of Avian Chlamydiosis in Birds Guideline, 2018* (or as current); the *Management of Avian Influenza or Novel Influenza in Birds or Animals Guideline, 2018* (or as current); and the *Management of Echinococcus Multilocularis Infections in Animals Guideline, 2018* (or as current).
16. The board of health shall develop a local vector-borne management strategy based on surveillance data and emerging trends in accordance with the *Infectious Diseases Protocol, 2018* (or as current).
17. The board of health shall participate on committees, advisory bodies, or networks that address infection prevention and control practices[16] and policies of, but not limited to, hospitals and long-term care homes in accordance with the *Institutional/Facility Outbreak Management Protocol, 2018* (or as current).
18. The board of health shall receive reports of complaints regarding infection prevention and control practices and respond to and/or refer to appropriate regulatory bodies, including regulatory colleges[17], in accordance with applicable provincial legislation and in accordance with the *Infection Prevention and Control Complaint Protocol, 2018* (or as current); the *Infection Prevention and Control Disclosure Protocol, 2018* (or as current); and the *Personal Service Settings Guideline, 2018* (or as current).
19. The board of health shall inspect and evaluate infection prevention and control practices in personal service settings in accordance with the *Infection Prevention and Control Complaint Protocol, 2018* (or as current); the *Infection Prevention and Control Disclosure Protocol, 2018* (or as current); and the *Personal Service Settings Guideline, 2018* (or as current).
20. The board of health shall inspect settings associated with risk of infectious diseases of public health significance in accordance with the *Healthy Environments and Climate Change Guideline, 2018* (or as current); the *Infection*

[15]Currently these agencies include the Ministry of Natural Resources and Forestry (MNRF), the Canadian Food Inspection Agency (CFIA) and the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA).

[16]Infection prevention and control practices that may be addressed could include having current evidence-informed infection prevention and control policies and conducting regular staff education sessions to communicate and enhance awareness about the content of the policies.

[17]For the purposes of requirement 18, a “regulatory college” means the college of a health profession or group of health professions established or continued under a health professions Act named in Schedule 1 to the *Regulated Health Professions Act, 1991*.

Prevention and Control Complaint Protocol, 2018 (or as current); the *Infection Prevention and Control Protocol, 2018* (or as current); and the *Personal Service Settings Guideline, 2018* (or as current).

21. The board of health shall ensure 24/7 availability to receive reports of and respond to:

    a) Infectious diseases of public health significance in accordance with the *Health Protection and Promotion Act*; the *Mandatory Blood Testing Act, 2006*; the *Infectious Diseases Protocol, 2018* (or as current); and the *Institutional/Facility Outbreak Management Protocol, 2018* (or as current);

    b) Potential rabies exposures in accordance with the *Health Protection and Promotion Act*; the *Management of Potential Rabies Exposures Guideline, 2018* (or as current); and the *Rabies Prevention and Control Protocol, 2018* (or as current); and

    c) Animal cases of avian chlamydiosis, avian influenza, novel influenza, or *Echinococcus multilocularis* infection, in accordance with the *Health Protection and Promotion Act*, the *Management of Avian Chlamydiosis in Birds Guideline, 2018* (or as current); the *Management of Avian Influenza or Novel Influenza in Birds or Animals Guideline, 2018* (or as current); and the *Management of Echinococcus Multilocularis Infections in Animals Guideline, 2018* (or as current).

Safe Water

Goals

- **To prevent or reduce the burden of water-borne illnesses related to drinking water.**
- **To prevent or reduce the burden of water-borne illnesses and injuries related to recreational water use.**

Program Outcomes

- The board of health is aware of and uses data to influence and inform the development of local healthy public policy and its programs and services related to safe water.
- Board of health programs and services are designed to address the identified needs of the community, including priority populations, associated with safe water.
- Timely and effective detection, identification, and response to drinking water contaminants and illnesses, their associated risk factors, and emerging trends, including levels of fluoride outside the recommended range.
- Water-borne illness risks are mitigated.
- Members of the public who use private drinking water supplies (e.g., private wells) are aware of how to safely manage their own drinking water systems.
- The public is aware of drinking water safety, including the potential risk of illnesses related to unsafe drinking water.
- Owners/operators of recreational water facilities and owners/operators of small drinking water systems operate in a safe and sanitary manner.
- The public is aware of potential risk of illnesses and injuries related to recreational water facilities and public beach use.
- Public exposure to recreational water-related illnesses and hazards is reduced.

Requirements

1. The board of health shall:
   a) Conduct surveillance of:

- Drinking water systems and associated illnesses, risk factors, and emerging trends;
- Public beaches and water-borne illnesses associated with recreational water, risk factors, and emerging trends; and
- Recreational water facilities;

b) Conduct epidemiological analysis of surveillance data, including monitoring of trends over time, emerging trends, and priority populations; and

c) Use the information obtained to inform safe water programs and services

in accordance with the *Infectious Diseases Protocol, 2018* (or as current); the *Population Health Assessment and Surveillance Protocol, 2018* (or as current); the *Recreational Water Protocol, 2018* (or as current); the *Safe Drinking Water and Fluoride Monitoring Protocol, 2018* (or as current); and the *Small Drinking Water Systems Risk Assessment Guideline, 2018* (or as current).

2. The board of health shall provide information to private citizens who operate their own private drinking water supplies (e.g., private wells) to promote awareness of how to safely manage their own drinking water systems.
3. The board of health shall ensure the availability of education and training for owners/operators of small drinking water systems and recreational water facilities in accordance with the *Operational Approaches for Recreational Water Guideline, 2018* (or as current); the *Recreational Water Protocol, 2018* (or as current); the *Safe Drinking Water and Fluoride Monitoring Protocol, 2018* (or as current); and the *Small Drinking Water Systems Risk Assessment Guideline, 2018* (or as current).
4. The board of health shall increase public awareness of water-borne illnesses and safe drinking water by working with community partners and by:
   a) Adapting and/or supplementing national/provincial safe drinking water communications strategies, where local assessment has identified a need; and/or
   b) Developing and implementing regional/local communications strategies where local assessment has identified a need.
5. The board of health shall provide all the components of the Safe Water Program in accordance with:
   a) The *Safe Drinking Water and Fluoride Monitoring Protocol, 2018* (or as current) and all applicable statutes and regulations to protect the public from exposure to unsafe drinking water; and
   b) The *Operational Approaches for Recreational Water Guideline, 2018* (or as current) and the *Recreational Water Protocol, 2018* (or as current), to reduce

the risks of illness and injuries at public beaches and recreational water facilities.

6. The board of health shall inform the public about unsafe drinking water conditions and provide the necessary information to respond appropriately in accordance with the *Safe Drinking Water and Fluoride Monitoring Protocol, 2018* (or as current) and the *Small Drinking Water Systems Risk Assessment Guideline, 2018* (or as current).
7. The board of health shall review drinking water quality reports for its municipal drinking water supplies where fluoride is added in accordance with the *Safe Drinking Water and Fluoride Monitoring Protocol, 2018* (or as current).
8. The board of health shall ensure 24/7 availability to receive reports of and respond to:
    a) Adverse events related to safe water, such as reports of adverse drinking water of drinking water systems, governed under the *Health Protection and Promotion Act* or the *Safe Drinking Water Act, 2002*;
    b) Reports of water-borne illnesses or outbreaks;
    c) Safe water issues arising from floods, fires, power outages, or other situations that may affect water safety; and
    d) Safe water issues relating to recreational water use including public beaches in accordance with the *Infectious Diseases Protocol, 2018* (or as current); *Operational Approaches for Recreational Water Guideline, 2018* (or as current); the *Recreational Water Protocol, 2018* (or as current); the *Safe Drinking Water and Fluoride Monitoring Protocol, 2018* (or as current); and the *Small Drinking Water Systems Risk Assessment Guideline, 2018* (or as current).

School Health

Goal

To achieve optimal health of school-aged children and youth through partnership and collaboration with school boards and schools.

Program Outcomes

- The board of health is aware of and uses data to influence and inform the development of local healthy public policy and its programs and services related to the health of school-aged children and youth.
- Board of health programs and services are designed to address the identified needs of the community, including priority populations, associated with the health of school-aged children and youth.
- There is a decrease in health inequities related to the health of school-aged children and youth.
- School boards and schools are aware of relevant and current population health needs impacting students in their schools.
- School boards and schools are meaningfully engaged in the planning, development, implementation, and evaluation of public health programs and services relevant to school-aged children and youth.
- School boards and schools have the knowledge, skills, and capacity needed to act on the factors associated with the health of school-aged children and youth.
- School-based initiatives relevant to healthy living behaviours and healthy environments are informed by effective partnerships between boards of health, school boards, and schools.
- School-aged children, youth, and their families are aware of factors for healthy growth and development.
- There is an increased adoption of healthy living behaviours among school-aged children and youth.
- The board of health achieves timely and effective detection and identification of children and youth at risk of poor oral health outcomes, their associated risk factors, and emerging trends.
- Children and youth from low-income families have improved access to oral health care.
- The oral health of children and youth is improved.
- The board of health and parents/guardians are aware of the visual health needs

of school-aged children.

- Students and parents/gaurdians are aware of the importance of immunization.
- Children and youth have up-to-date immunizations according to the current Publicly Funded Immunization Schedules for Ontario and in accordance with the *Immunization of School Pupils Act*.

Requirements

1. The board of health shall collect and analyze relevant data to monitor trends over time, emerging trends, priorities, and health inequities related to the health of school-aged children and youth and report and disseminate the data and information in accordance with the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).
2. The board of health shall provide population health information, including social determinants of health and health inequities, relevant to the school population to school boards and schools to identify public health needs in schools.
3. The board of health shall develop and implement a program of public health interventions using a comprehensive health promotion approach to improve the health of school-aged children and youth.
   a) The program of public health interventions shall be informed by:
      - An assessment of the local population, including the identification of priority populations in schools, as well as school communities at risk for increased health inequities and negative health outcomes;
      - Consultation and collaboration with school boards, principals, educators, parent groups, student leaders, and students;
      - A review of other relevant programs and services delivered by the board of health; and
      - Evidence of the effectiveness of the interventions employed.
   b) The program of public health interventions shall be implemented in accordance with relevant guidelines, including the *Chronic Disease Prevention Guideline, 2018* (or as current); the *Health Equity Guideline, 2018* (or as current); the *Injury Prevention Guideline, 2018* (or as current); the *Healthy Growth and Development Guideline, 2018* (or as current); the *Mental Health Promotion Guideline, 2018* (or as current); the *School Health Guideline, 2018* (or as current); and the *Substance Use Prevention and Harm Reduction Guideline, 2018* (or as current).
4. The board of health shall offer support to school boards and schools, in accordance with the *School Health Guideline, 2018* (or as current), to assist with the implementation of health-related curricula and health needs in schools, based on need and considering, but not limited to:

a) Concussions and injury prevention;
b) Healthy eating behaviours and food safety;
c) Healthy sexuality;
d) Immunization;
e) Infectious disease prevention (e.g., tick awareness, rabies prevention, and hand hygiene);
f) Life promotion, suicide risk and prevention;
g) Mental health promotion;
h) Oral health;
i) Physical activity and sedentary behaviour;
j) Road and off-road safety;
k) Substance[18] use and harm reduction;
l) UV exposure;
m) Violence and bullying; and
n) Visual Health.

Oral Health

5. The board of health shall conduct surveillance, oral screening, and report data and information in accordance with the *Oral Health Protocol, 2018* (or as current) and the *Population Health Assessment and Surveillance Protocol*, *2018* (or as current).
6. The board of health shall provide the Healthy Smiles Ontario (HSO) Program in accordance with the *Oral Health Protocol, 2018* (or as current).

Vision

7. The board of health shall provide, in collaboration with community partners, visual health supports and vision screening services in accordance with the *Child Visual Health and Vision Screening Protocol, 2018* (or as current).

Immunization

8. The board of health shall enforce the *Immunization of School Pupils Act* and assess the immunization status of children in accordance with the *Immunization for Children in Schools and Licensed Child Care Settings Protocol, 2018* (or as current).

[18]Substance includes tobacco, e-cigarettes, alcohol, cannabis, opioids, illicit, other substances and emerging products.

9. The board of health shall work with school boards and schools to identify opportunities to improve public knowledge and confidence in immunization for school-aged children by:
    a) Adapting and/or supplementing national/provincial health communications strategies, where local assessment has identified a need;
    b) Developing and implementing regional/local communications strategies, where local assessment has identified a need; and
    c) Addressing the following topics based on an assessment of local needs:
        - Diseases that vaccines prevent;
        - Introduction of new provincially funded vaccines;
        - Legislation related to immunizations;
        - Promotion of childhood immunization, including high-risk programs and services;
        - Recommended immunization schedules for children, and the importance of adhering to the schedules;
        - Reporting immunization information to the board of health as required;
        - The importance of immunization;
        - The importance of maintaining a personal immunization record for all family members;
        - The importance of reporting adverse events following immunization; and
        - Vaccine safety.
10. The board of health shall promote and provide provincially funded immunization programs to eligible students in the health unit through school-based clinics.

Substance Use and Injury Prevention

Goal

To reduce the burden of preventable injuries and substance[19] use.

Program Outcomes

- The board of health is aware of and uses data to influence and inform the development of local healthy public policy and its programs and services for preventing injuries, preventing substance use, and reducing harms[20] associated with substance use.
- Board of health programs and services are designed to address the identified needs of the community, including priority populations, associated with the prevention of injuries, preventing substance use, and reducing harms associated with substance use.
- Priority populations and health inequities related to injuries and substance use have been identified and relevant data have been communicated to community partners.
- There is a reduction in population health inequities related to injuries and substance use.
- Community partners are aware of healthy behaviours associated with the prevention of injuries and substance use, which includes reducing the harms associated with substance use.
- Community partners have knowledge of and increased capacity to act on the factors associated with the prevention of injuries, including healthy living behaviours, healthy public policy, and creating supportive environments.
- Community partners have knowledge of and increased capacity to act on the factors associated with preventing substance use, and reducing harms associated with substance use, including healthy living behaviours and developing personal skills, healthy public policy, and creating supportive environments.

[19]Substance includes tobacco, e-cigarettes, alcohol, cannabis, opioids, illicit, other substances and emerging products.
[20]Harm reduction refers to policies, programs and practices that aim primarily to reduce the adverse health, social, and economic consequences of the use of legal and illegal psychoactive drugs without necessarily reducing drug consumption.

- Community partners, policy-makers, and the public, including priority populations, are meaningfully engaged in the planning, implementation, development and evaluation of programs and services for preventing injuries and substance use, and harm reduction.
- There is increased public awareness of the impact of risk and protective factors associated with injuries and substance use.
- There is increased public awareness of the benefits of and access to harm reduction programs and services.
- There is an increased adoption of healthy living behaviours and personal skills among populations targeted through program interventions for preventing injuries, preventing substance use, and reducing harms associated with substance use.
- Youth have reduced access to tobacco products and e-cigarettes.
- Tobacco vendors and other organizations that are subject to the *Smoke-Free Ontario Act* are in compliance with the Act.
- E-cigarette vendors are in compliance with the *Electronic Cigarettes Act, 2015*.

Requirements

1. The board of health shall collect and analyze relevant data to monitor trends over time, emerging trends, priorities, and health inequities related to injuries and substance use and report and disseminate the data and information in accordance with the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).
2. The board of health shall develop and implement a program of public health interventions using a comprehensive health promotion approach that addresses risk and protective factors to reduce the burden of preventable injuries and substance use in the health unit population.
    a) The program of public health interventions shall be informed by:
        i. An assessment of the risk and protective factors for, and distribution of, injuries and substance use;
        ii. Consultation and collaboration with local stakeholders in the health, education, municipal, non-governmental, and other relevant sectors, including LHINs;
        iii. An assessment of existing programs and services within the area of jurisdiction of the board of health to build on community assets and minimize duplication;
        iv. Consideration of the following topics based on an assessment of local needs:

- Comprehensive tobacco control;[21]
- Concussions;
- Falls;
- Life promotion, suicide risk and prevention;
- Mental health promotion;
- Off-road safety;
- Road safety;
- Substance use; and
- Violence.

v. Evidence of the effectiveness of the interventions employed.

b) The program of public health interventions shall be implemented in accordance with relevant guidelines, including the *Health Equity Guideline, 2018* (or as current); the *Injury Prevention Guideline, 2018* (or as current); the *Mental Health Promotion Guideline, 2018* (or as current); and the *Substance Use Prevention and Harm Reduction Guideline, 2018* (or as current).

3. The board of health shall enforce the *Smoke-Free Ontario Act* in accordance with the *Tobacco Protocol, 2018* (or as current).
4. The board of health shall enforce the *Electronic Cigarettes Ac*t, *2015* in accordance with the *Electronic Cigarettes Protocol, 2018* (or as current).

[21]Comprehensive tobacco control includes: preventing the initiation of tobacco; promoting quitting among young people and adults; eliminating exposure to environmental tobacco smoke; and identifying and eliminating disparities related to tobacco use and its societal outcomes among different population groups.

Strengthened Accountability

Public Health Accountability Framework

The **Public Health Accountability Framework** (Figure 5) outlines the parameters and requirements to hold boards of health accountable for the work they do, how they do it, and the results achieved. It articulates the expectations of the ministry of boards of health to promote a transparent and effective accountability relationship. Enhanced accountability supports the implementation of public health programs and services by ensuring boards of health have the necessary foundations related to the delivery of programs and services, financial management, governance, and public health practice. It also supports a strong public health sector that can provide evidence of the value of public health and its contribution to population health outcomes leading to better health for Ontarians.

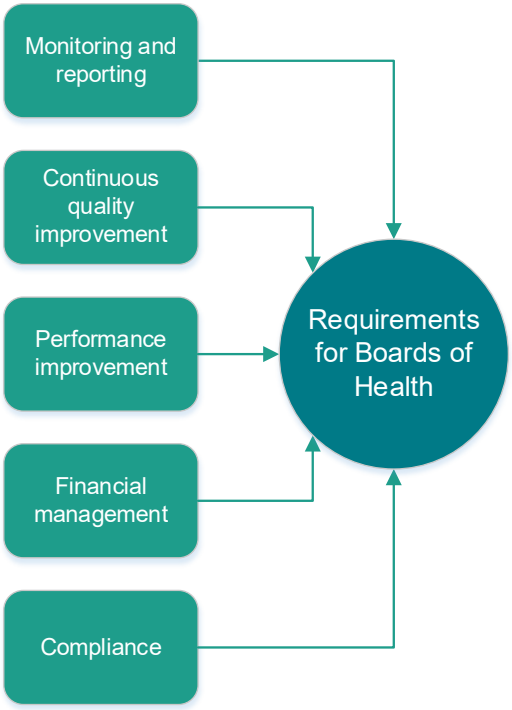
The Organizational Requirements specify the requirements where monitoring and/or reporting are required of boards of health to demonstrate accountability to the ministry. They are organized according to the following four domains of the accountability framework:

- Delivery of Programs and Services;
- Fiduciary Requirements;
- Good Governance and Management Practices; and
- Public Health Practice.

Figure 5: Public Health Accountability Framework

The Accountability Framework is composed of four Domains				
Domain	**Delivery of Programs and Services**	**Fiduciary Requirements**	**Good Governance and Management Practices**	**Public Health Practice**
Objectives of Domain	Boards of health will be held accountable for the delivery of public health programs and services and achieving program outcomes in accordance with ministry published standards, protocols, and guidelines.	Boards of health will be held accountable for using ministry funding efficiently for its intended purpose.	Boards of health will be held accountable for executing good governance practices to ensure effective functioning of boards of health and management of public health units.	Boards of health will be held accountable for achieving a high standard and quality of practice in the delivery of public health programs and services.

Organizational Requirements incorporate one or more of the following functions:



The Accountability Framework is supported by:	
Accountability Documents	• **Organizational Requirements:** Set out requirements against which boards of health will be held accountable across all four domains. • **Ministry-Board of Health Accountability Agreement:** Establishes key operational and funding requirements for boards of health.
Planning Documents	• **Board of Health Strategic Plan:** Sets out the 3 to 5 year local vision, priorities and strategic directions for the board of health. • **Board of Health Annual Service Plan and Budget Submission:** Outlines how the board of health will operationalize the strategic directions and priorities in its strategic plan in accordance with the Standards.
Reporting Documents	• **Performance Reports:** Boards of health provide to the ministry regular performance reports (programmatic and financial) on program achievements, finances, and local challenges/issues in meeting outcomes. • **Annual Report:** Boards of health provide to the ministry a report after year-end on the affairs and operations, including how they are performing on requirements (programmatic and financial), delivering quality public health programs and services, practicing good governance, and complying with various legislative requirements.

Organizational Requirements incorporate one or more of the following functions:

- **Monitoring and reporting** to measure the activities and achievements of boards of health and assess the results (to demonstrate value and contribution of public health);
- **Continuous quality improvement** to encourage changes in processes, address identified problems, and improve efficiency and effectiveness;
- **Performance improvement** to ensure boards of health achieve the best results possible and contribute to local, provincial, and population health outcomes;
- **Financial management** to ensure that resources are used efficiently and in line with local and provincial requirements; and
- **Compliance** to ensure boards of health meet ministry expectations for required activities articulated in legislation, standards, funding agreements, and policies.

Accountability across the domains is demonstrated through accountability, planning, and reporting tools, including: Ministry-Board of Health Accountability Agreements; Board of Health Strategic Plan; Board of Health Annual Service Plan and Budget Submission; performance and other ad hoc reports; and an annual report. These tools enable boards of health to demonstrate that they comply with all legal requirements and provide appropriate oversight for public funding and resources. They also support the achievement of a high standard and quality of public health practice and good governance and management practices that provide the foundation for the effective delivery of public health programs and service. Furthermore, they demonstrate the value that Ontarians receive for the funding invested in public health, and how that investment contributes to population health outcomes for all Ontarians.

Organizational Requirements

The Organizational Requirements are those requirements where reporting and/or monitoring are required of boards of health to demonstrate accountability to the ministry.

The ministry uses a range of reporting and measurement approaches to assess board of health compliance with these requirements, including:

- Routine board of health audits and year-end attestations;
- Narrative reports and documentation; and
- Indicators and other metrics.

Delivery of Programs and Services Domain

Boards of health are held accountable for the delivery of public health programs and services and achievement of program outcomes in accordance with the Foundational and Program Standards and incorporated protocols and guidelines.

Objective of Requirements

The ministry has a responsibility to ensure that boards of health are delivering mandated programs and services that reflect a level of provincial consistency and local flexibility, and that the services delivered are effective in achieving their intended purposes.

Requirements

1. The board of health shall deliver programs and services in compliance with the Foundational and Program Standards.
2. The board of health shall comply with programs provided for in the *Health Protection and Promotion Act*.
3. The board of health shall undertake population health assessments including identification of priority populations, social determinants of health and health inequities, and measure and report on them.
4. The board of health shall describe the program of public health interventions and the information used to inform them including how health inequities will be addressed.

5. The board of health shall publicly disclose results of all inspections or other required information in accordance with the Foundational and Program Standards.
6. The board of health shall prepare for emergencies to ensure 24/7 timely, integrated, safe, and effective response to, and recovery from emergencies with public health impacts, in accordance with ministry policy and guidelines.
7. The board of health shall collect and analyze relevant data to monitor trends over time, emerging trends, priorities, and health inequities, and report and disseminate the data and information in accordance with the Foundational and Program Standards.
8. The board of health shall have a strategic plan that establishes strategic priorities over 3 to 5 years, includes input from staff, clients, and community partners, and is reviewed at least every other year.

Fiduciary Requirements Domain

Boards of health are held accountable for using ministry funding efficiently for its intended purpose.

Objective of Requirements

The ministry has a responsibility to ensure that public health funding is used in accordance with accepted accounting principles, legislative requirements, and government policy expectations.

The ministry must also ensure that boards of health make efficient use of public resources by delivering high quality, effective program interventions, ensuring value for money.

Requirements

1. The board of health shall comply with the terms and conditions of the Ministry-Board of Health Accountability Agreement.
2. The board of health shall provide costing information by program.
3. The board of health shall submit budget submissions, quarterly financial reports, annual settlement reports, and other financial reports as requested.
4. The board of health shall place the grant provided by the ministry in an interest bearing account at a Canadian financial institution and report interest earned to the ministry if the ministry provides the grant to boards of health prior to their immediate need for the grant.
5. The board of health shall report all revenues it collects for programs or services in accordance with the direction provided in writing by the ministry.
6. The board of health shall report any part of the grant that has not been used or accounted for in a manner requested by the ministry.
7. The board of health shall repay ministry funding as requested by the ministry.
8. The board of health shall ensure that expenditure forecasts are as accurate as possible.
9. The board of health shall keep a record of financial affairs, invoices, receipts and other documents, and shall prepare annual statements of their financial affairs.
10. The board of health shall comply with the financial requirements of the *Health Protection and Promotion Act* (e.g., remuneration, informing municipalities of financial obligations, passing by-laws, etc.), and all other applicable legislation and regulations.
11. The board of health shall use the grant only for the purposes of the *Health Protection and Promotion Act* and to provide or ensure the provision of programs

and services in accordance with the *Health Protection and Promotion Act*, Foundational and Program Standards, and Ministry-Board of Health Accountability Agreement.

12. The board of health shall spend the grant only on admissible expenditures.
13. The board of health shall comply with the *Municipal Act, 2001* which requires that boards of health ensure that the administration adopts policies with respect to its procurement of goods and services. All procurement of goods and services should normally be through an open and competitive process.
14. The board of health shall ensure that the administration implements appropriate financial management and oversight which ensures the following are in place:
    a) A plan for the management of physical and financial resources;
    b) A process for internal financial controls which is based on generally accepted accounting principles;
    c) A process to ensure that areas of variance are addressed and corrected;
    d) A procedure to ensure that the procurement policy is followed across all programs/services areas;
    e) A process to ensure the regular evaluation of the quality of service provided by contracted services in accordance with contract standards; and
    f) A process to inform the board of health regarding resource allocation plans and decisions, both financial and workforce related, that are required to address shifts in need and capacity.
15. The board of health shall negotiate service level agreements for corporately provided services.
16. The board of health shall have and maintain insurance.
17. The board of health shall maintain an inventory of all tangible capital assets developed or acquired with a value exceeding $5,000 or a value determined locally that is appropriate under the circumstances.
18. The board of health shall not dispose of an asset which exceeds $100,000 in value without the ministry's prior written confirmation.
19. The board of health shall not carry over the grant from one year to the next, unless pre-authorized in writing by the ministry.
20. The board of health shall maintain a capital funding plan, which includes policies and procedures to ensure that funding for capital projects is appropriately managed and reported.
21. The board of health shall comply with the Community Health Capital Programs policy.

Good Governance and Management Practices Domain

Boards of health are held accountable for executing good governance practices to ensure effective functioning of boards of health and management of public health units.

Objective of Requirements

The organizational requirements within this domain support the use of recommended best practices in governance and organizational processes. By adhering to these practices, boards of health are able to improve the quality and effectiveness of programs and services, prioritize the allocation of resources, improve efficiency, and strive for resiliency in their organizational culture.

Requirements

1. The board of health shall submit a list of board members.
2. The board of health shall operate in a transparent and accountable manner, and provide accurate and complete information to the ministry.
3. The board of health shall ensure that members are aware of their roles and responsibilities and emerging issues and trends by ensuring the development and implementation of a comprehensive orientation plan for new board members and a continuing education program for board members.
4. The board of health shall carry out its obligations without a conflict of interest and shall disclose to the ministry an actual, potential, or perceived conflict of interest.
5. The board of health shall comply with the governance requirements of the *Health Protection and Promotion Act* (e.g., number of members, election of chair, remuneration, quorum, passing by-laws, etc.), and all other applicable legislation and regulations.
6. The board of health shall comply with the medical officer of health appointments requirements of the *Health Protection and Promotion Act*, and the ministry's policy framework on medical officer of health appointments, reporting, and compensation.
7. The board of health shall ensure that the administration establishes a human resources strategy, which considers the competencies, composition and size of the workforce, as well as community composition, and includes initiatives for the recruitment, retention, professional development, and leadership development of the public health unit workforce.
8. The board of health shall ensure that the administration establishes and implements written human resource policies and procedures which are made

available to staff, students, and volunteers. All policies and procedures shall be regularly reviewed and revised, and include the date of the last review/revision.

9. The board of health shall engage in community and multi-sectoral collaboration with LHINs and other relevant stakeholders in decreasing health inequities.
10. The board of health shall engage in relationships with Indigenous communities in a way that is meaningful for them.
11. The board of health shall provide population health information, including social determinants of health and health inequities, to the public, community partners, LHINs, and health care providers in accordance with the Foundational and Program Standards.
12. The board of health shall develop and implement policies or by-laws regarding the functioning of the governing body, including:
    a) Use and establishment of sub-committees;
    b) Rules of order and frequency of meetings;
    c) Preparation of meeting agenda, materials, minutes, and other record keeping;
    d) Selection of officers;
    e) Selection of board of health members based on skills, knowledge, competencies and representatives of the community, where boards of health are able to recommend the recruitment of members to the appointing body;
    f) Remuneration and allowable expenses for board members;
    g) Procurement of external advisors to the board such as lawyers and auditors (if applicable);
    h) Conflict of interest;
    i) Confidentiality;
    j) Medical officer of health and executive officers (where applicable) selection process, remuneration, and performance review; and
    k) Delegation of the medical officer of health duties during short absences such as during a vacation/coverage plan.
13. The board of health shall ensure that by-laws, policies and procedures are reviewed and revised as necessary, and at least every two years.
14. The board of health shall provide governance direction to the administration and ensure that the board of health remains informed about the activities of the organization on the following:
    a) Delivery of programs and services;
    b) Organizational effectiveness through evaluation of the organization and strategic planning;
    c) Stakeholder relations and partnership building;

d) Research and evaluation;

e) Compliance with all applicable legislation and regulations;

f) Workforce issues, including recruitment of medical officer of health and any other senior executives;

g) Financial management, including procurement policies and practices; and

h) Risk management.

15. The board of health shall have a self-evaluation process of its governance practices and outcomes that is completed at least every other year. Completion includes an analysis of the results, board of health discussion, and implementation of feasible recommendations for improvement, if any.

16. The board of health shall ensure the administration develops and implements a set of client service standards.

17. The board of health shall ensure that the medical officer of health, as the designated health information custodian, maintains information systems and implements policies/procedures for privacy and security, data collection and records management.

Public Health Practice Domain

Boards of health are held accountable for achieving a high standard and quality of practice in the delivery of public health programs and services.

Objective of Requirements

The organizational requirements within this domain include some of the key requirements of the Effective Public Health Practice Standard within the Foundational Standards, and support the fostering of a culture of excellence in professional practice with boards of health.

A culture of quality and continuous organizational self-improvement is part of effective public health practice, which underpins effective program interventions, and therefore is necessary for the achievement of the desired goals and outcomes of public health programs and services.

Requirements

1. The board of heath shall ensure that the administration establishes, maintains, and implements policies and procedures related to research ethics.
2. The board of health shall designate a Chief Nursing Officer.
3. The board of health shall demonstrate the use of a systematic process to plan public health programs and services to assess and report on the health of local populations describing the existence and impact of health inequities and identifying effective local strategies to decrease health inequities.
4. The board of health shall employ qualified public health professionals in accordance with the *Qualifications for Public Health Professionals Protocol, 2018* (or as current).
5. The board of health shall support a culture of excellence in professional practice and ensure a culture of quality and continuous organizational self-improvement. This may include:
    a) Measurement of client, community, and stakeholder/partner experience to inform transparency and accountability; and
    b) Regular review of outcome data that includes variances from performance expectations and implementation of remediation plans.

Common to All Domains

The following list of organizational requirements contains those that are relevant to all four domains of the Public Health Accountability Framework, and have been grouped together here to avoid duplication.

Requirements

1. The board of health shall submit an Annual Service Plan and Budget Submission to include all programs and services delivered by boards of health and program costing for ministry-funded programs.
2. The board of health shall submit action plans as requested to address any compliance or performance issues.
3. The board of health shall submit all reports as requested by the ministry.
4. The board of health shall have a formal risk management framework in place that identifies, assesses, and addresses risks.
5. The board of health shall produce an annual financial and performance report to the general public.
6. The board of health shall comply with all legal and statutory requirements.

Transparency and Demonstrating Impact

Transparency and Demonstrating Impact

In addition to the accountability planning and reporting tools, the ministry uses indicators to monitor progress and measure success of boards of health. The **Public Health Indicator Framework for Program Outcomes and Contributions to Population Health Outcomes** (Figure 6) describes the indicators that are used to monitor progress in the delivery of public health programs and services, measure achievement of program outcomes, and assess public health's contributions to population health outcomes.

Measurement at the program outcome level measures the impacts achieved through direct delivery of public health programs and services by boards of health (i.e., by meeting the requirements in the Foundational and Program Standards). Impacts can include changes in awareness, knowledge, skills, and behaviours of populations, service delivery agents, and community partners, as well as changes in environments and policies. Indicators that will be used at the provincial level to measure achievement of outcomes per standard are listed in the **Public Health Indicator Framework for Program Outcomes and Contributions to Population Health Outcomes** (Figure 6). Boards of health shall establish program outcome indicators locally for those standards that allow for variability to respond to local needs, priorities, and contexts (i.e., Chronic Disease Prevention and Well-Being, Healthy Environments, Healthy Growth and Development, School Health, and Substance Use and Injury Prevention). The Foundational Standards underlie and support all Program Standards; therefore, it is expected that the outcomes of the Foundational Standards will be achieved through the effective delivery of programs and services.

It is expected that the achievement of program outcomes will contribute to the achievement of population health outcomes. Measurement at the population health outcome level includes measures of improved health and quality of life, reduced morbidity and premature mortality, and reduced health inequities amoung population groups as articulated in the **Framework for Public Health Programs and Services** (Figure 2).

Figure 6: Public Health Indicator Framework for Program Outcomes and Contributions to Population Health Outcomes

Goal	To provide an evidence-informed basis for monitoring progress and measuring success of boards of health in achieving program outcomes, and understanding the contribution to population health outcomes
Objectives	• Monitoring progress in the delivery of public health programs and services • Measuring board of health success in achieving program outcomes • Assessing public health's contributions to population health outcomes

Indicator and Information

Contribution to Population Health Outcomes	Program Outcomes	

Improved Health & Quality of Life
• Adoption of healthy lifestyle behaviours
• Perceived health
• Health expectancy
• Life satisfaction
 	
Reduced Morbidity and Mortality
• Overweight/Obesity
• Incidence and prevalence of chronic diseases
• Chronic disease and substance use related morbidity and mortality
• Life expectancy
• Avoidable deaths
• Infant mortality
• Small for gestational age
• Rate per 100,000 of VPD outbreaks by disease
• Incidence rates of reportable VPDs
• % of the public with confidence in immunization programs
 	
Reducing Health Inequities among Population Groups
• Relative index of inequality associated with:
  ○ Chronic Diseases
  ○ Injuries
  ○ Substance Use
  ○ Healthy Growth and Development
• Vulnerability associated with:
  ○ Early development
  ○ School readiness
• Deprivation Index
• Food Security
• Disability Rates
	Chronic Disease Prevention and Well-Being; Healthy Environments; Healthy Growth and Development; School Health; Substance Use and Injury Prevention	• Locally determined program outcome indicators
		• Indicators will be developed in accordance with locally determined programs of public health interventions

	Food Safety	• # of reported cases of foodborne illness • % reported cases of foodborne illness attributed to exposure settings of (i.e., food premises, daycares, homes, etc.) • % of food handlers trained and certified in food safety • % food-borne illness caused by unsafe food handling in the home
	Immunization	• % of doses wasted annually by publicly funded vaccine • % of 7 and 17 year olds whose vaccinations are up-to-date for all ISPA designated diseases • % of students with a valid religious or conscience exemption for ISPA designated diseases • % of immunization providers of publicly funded vaccines indicating they have adequate information to support optimal immunization practices, including AEFI reporting • % of inspected vaccine storage locations that meet storage and handling requirements • % of health units that meet the provincial reporting rate for adverse events following immunization (AEFI) for the three vaccines administered through school-based programs (HPV, Meningococcal, and Hepatitis B)
	Infectious and Communicable Diseases Prevention and Control	• # of Ceftriaxone prescriptions distributed for treatment of gonorrhea annually • # and type of IPAC lapse by sector (PSS, dental office, community laboratories or independent health facility) • # and rate per 100,000 of new active TB infections annually • # of cases of acquired drug-resistance among active TB cases • # of cases of identified LTBI that are initiating prophylaxis and/or the number completing treatment • # of potential rabies exposures investigated by health units annually • # of animals investigated that are current on their rabies vaccination • # of persons given rabies post-exposure prophylaxis (PEP)
	Safe Water	• # of days that fluoride levels were below recommended levels at municipal drinking water systems that add fluoride • # of drinking water advisories (DWAs) and boil water advisories (BWA) issued by days advisories were in effect • % of the public who use private drinking water supplies (e.g., private wells) who are aware of how to safely manage their own drinking water systems • # of small drinking water systems where risk categories change from high risk to moderate or low risk indicating improvement in system performance • % of days per season beaches are posted

To support enhanced transparency in the public sector and promote public confidence in the public health system, boards of health are required to ensure public access to pertinent information through disclosure. The purposes of public disclosure include: helping the public to make informed decisions to protect their health; and sharing information about the work of boards of health and associated level of investment. The **Transparency Framework: Disclosure and Reporting Requirements** (Figure 7) summarizes the types of information that boards of health are required to publicly disclose in accordance with the Foundational and Program Standards and Organizational Requirements.

Figure 7: Transparency Framework: Disclosure and Reporting Requirements

Goal	Promote awareness, understanding, and public confidence in Ontario's public health system.	
Domains	**Protecting the Public's Health**	**Public Reporting**
Objectives	The public knows of the work of public health to protect and promote individual and community health	The public knows how Boards of Health are responding to local community needs

BOH Responsibilities	Post on the board of health website:
	• Results of routine and complaint based inspections of:
	  ○ Food Premises
	  ○ Public Pools and Spas
	  ○ Recreational Water Facilities
	  ○ Personal Services Settings
	  ○ Tanning Beds
	  ○ Recreational Camps
	  ○ Licensed Child Care Settings
	  ○ Small Drinking Water Systems
	• Convictions of tobacco and e-cigarette retailers
	• Infection prevention and control lapses
	• Drinking water advisories for small drinking water systems
	• Status of beach water quality
		Post on the board of health website:
		• Strategic Plan
		• Annual performance and financial report

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Ontario

This is Exhibit **4** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

Ministry of Health and Long-Term Care

Health Equity Guideline, 2018

Population and Public Health Division,
Ministry of Health and Long-Term Care

Effective: January 1, 2018 or upon date of release

Ontario

TABLE OF CONTENTS

1 Preamble

The Ontario Public Health Standards: Requirements for Programs, Services, and Accountability (Standards) are published by the Minister of Health and Long-Term Care under the authority of section 7 of the *Health Protection and Promotion Act* (HPPA) to specify the mandatory health programs and services provided by boards of health.[1,2] The Standards identify the minimum expectations for public health programs and services. Boards of health are accountable for implementing the Standards including the protocols and guidelines that are referenced in the Standards. Guidelines are program and topic-specific documents which provide direction on how boards of health shall approach specific requirement(s) identified within the Standards.

2 Purpose

This Guideline is intended to assist boards of health in implementing the requirements established in the Health Equity Standard within their processes for planning, implementation, and evaluation. It establishes the minimum expectations for strategies and approaches that boards of health shall consider. Content is organized as follows:

- Sections 1 Preamble, 2 Purpose, and 3 References to the Standards provide a brief orientation to this guideline.
- Section 4 Context provides a high-level introduction to health equity, and a brief overview of key concepts and frameworks to inform public health practice.
- Section 5 Roles and Responsibilities identifies core links between requirements for health equity and related requirements in the foundational and program standards.
- Section 6 Required Approaches outlines required approaches that boards of health shall consider in implementing the *Health Equity Standard*. This includes considerations for assessing and reporting on population health, modifying and orienting public health interventions, engaging in multi-sectoral collaboration, and advancing healthy public policies.

Approaches to board of health engagement with Indigenous communities and organizations share many common factors with a health equity approach. However, there are many different Indigenous communities across the province, including many different First Nation governments, each with their own histories, cultures, organizational approaches, and jurisdictional realities that need to be considered. These relationships must be fostered in a culturally safe way, building on trust, mutual respect, understanding, and reciprocity, and are well served by the provision of a separate guideline. Where appropriate, references will be made throughout this Guideline to related advice within the *Relationship with Indigenous Communities Guideline, 2018* (or as current), as well as other relevant protocols and guidelines under the Standards.

3 Reference to the Standards

This section identifies the standards and requirements to which this guideline relates.

Health Equity Standard

Requirement 1. The board of health shall assess and report on the health of local populations describing the existence and impact of health inequities and identifying effective local strategies that decrease health inequities in accordance with the *Health Equity Guideline, 2018* (or as current) and the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).

Requirement 2. The board of health shall modify and orient public health interventions to decrease health inequities in accordance with the *Health Equity Guideline, 2018* (or as current), and by:

a) Engaging priority populations in order to understand their unique needs, histories, cultures, and capacities; and
b) Designing strategies to improve the health of the entire population while decreasing the health inequities experienced by priority populations.

Requirement 3. The board of health shall engage in multi-sectoral collaboration with municipalities, LHINs, and other relevant stakeholders in decreasing health inequities in accordance with the *Health Equity Guideline, 2018* (or as current). Engagement with Indigenous communities and organizations, as well as with First Nation communities striving to reconcile jurisdictional issues, shall include the fostering and creation of meaningful relationships, starting with engagement through to collaborative partnerships, in accordance with the *Relationship with Indigenous Communities Guideline, 2018* (or as current).

Requirement 4. The board of health shall lead, support, and participate with other stakeholders in health equity analysis, policy development, and advancing healthy public policies that decrease health inequities in accordance with the *Health Equity Guideline, 2018* (or as current).

4 Context

This section provides a high-level introduction to **health equity**,* along with an overview of key concepts and frameworks that boards of health shall consider to inform planning, implementation, and evaluation of health equity within public health practice. In order to support the establishment of a common understanding of health equity throughout Ontario's public health sector, additional terms and concepts are defined in the Glossary. Health equity must be grounded in an understanding of a particular **community's** values, identities, and lived experiences, as well as the economic, social, environmental, and

* Terms marked **in bold** are defined the Glossary.

political context, in order to be inclusive and responsive to diverse partners and community members.

Health equity means that all people can reach their full health potential without disadvantage due to social position or other socially determined circumstance, such as ability, age, culture, ethnicity, family status, gender, language, race, religion, sex, social class, or socioeconomic status.[3]

Systemic differences in health status exist across population groups, and these are often referred to as health inequities. **Health inequities** are health differences that are:

- Systematic, meaning that health differences are patterned, where health generally improves as socioeconomic status improves;
- Socially produced, and therefore could be avoided by ensuring that all people have the social and economic conditions that are needed for good health and **well-being**; and
- Unfair and/or unjust because opportunities for health and well-being are limited.[3]

Health is influenced by a broad range of factors, including social determinants that affect the conditions in which individuals and communities live, learn, work, and play. At the provincial level, health equity is linked to the following key **social determinants of health**:[4,5]

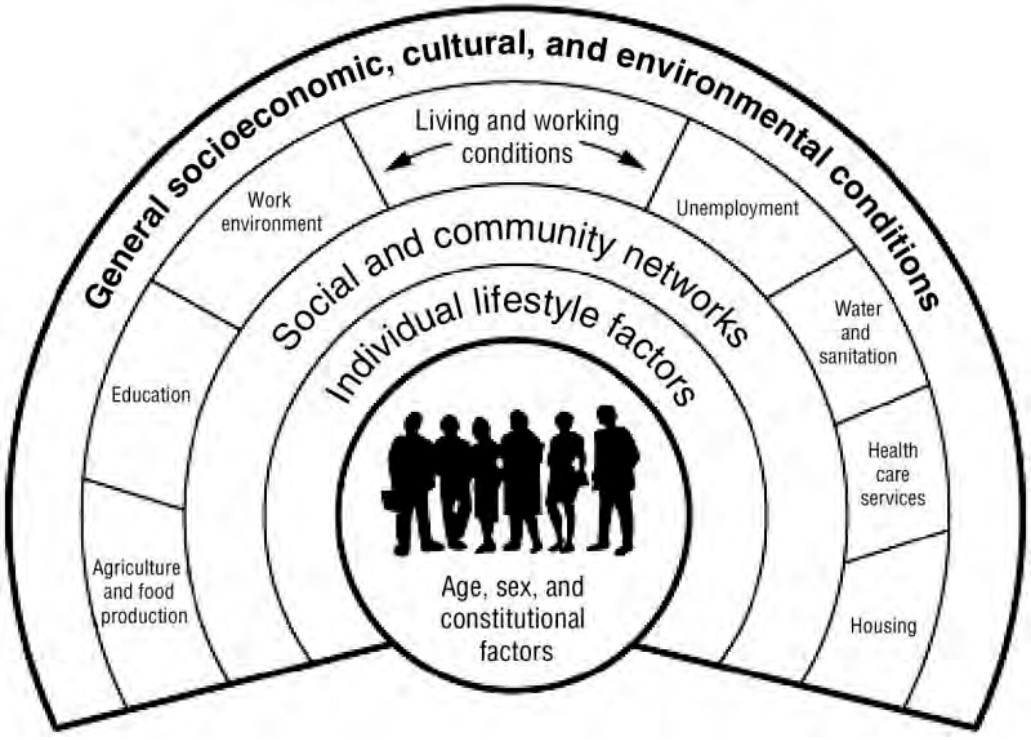
Table 1: Key Social Determinants of Health

- Access to health services
- Culture, race, and ethnicity
- Disability
- Early childhood development
- Education, literacy, and skills
- Employment, job security, and working conditions
- Food insecurity
- Gender identity and expression
- Housing
- Income and income distribution
- Indigenous status
- Personal health practices and **resiliency**
- Physical environments
- Sexual orientation and attraction
- Social inclusion/exclusion
- Social support networks

Individuals, communities, and populations may experience these factors differently based on social or economic conditions, putting some at a disadvantage and greater susceptibility to poor health outcomes. Reducing the negative impact of social determinants that contribute to health inequities is fundamental to the work of public health. The *Wider Determinants of Health Model* (Figure 1) below illustrates how various health-influencing factors are embedded within the broader aspects of society.[6]

Additional frameworks for consideration may be found in the Canadian Council on the Determinants of Health's "A Review of Frameworks on the Determinants of Health."[7]

Figure 1: Wider Determinants of Health Model



Used under terms of license[6]

Evidence-based “upstream" approaches to health—those that address people's access to the social determinants of health—are imperative to decreasing health inequities (see Table 2). A health equity approach applies to all levels, with interventions tailored to the needs and **assets** of locally-identified **priority populations**.

Table 2: Levels of Interventions[8]

Upstream Interventions	Midstream Interventions	Downstream Interventions
Seek to reform the fundamental social and economic structures that distribute wealth, power, opportunities, and decision-making. These changes generally happen at the macro policy level: national and transnational. ***They are about diminishing the causes-of-the-causes.***	Seek to reduce exposure to hazards by improving material working and living conditions, or to reduce risk by promoting healthy behaviours. These changes generally occur at the micro policy level: regional, local, community or organizational. ***They are about changing the causes.***	Seek to increase equitable access, at an individual level, to health and social services. These changes generally occur at the service or access to service level. ***They are about changing the effects of the causes.***

5 Roles and Responsibilities

Boards of health are required to engage in public health practice that results in decreased health inequities such that everyone has equal opportunities for optimal health and can attain their full health potential without disadvantage due to social position or other socially determined circumstances. As goals and outcomes related to health equity are established in a foundational standard, as well as within the overarching Policy Framework for the Standards, boards of health are responsible for applying a health equity approach systematically, as an integral part of all aspects of their work.

In addition to the specific requirements of the *Health Equity Standard*, which are addressed directly in Section 6 of this guideline, the foundational standards on *Population Health Assessment* and *Effective Public Health Practice* outline requirements that are relevant to the topic of health equity, including the following:

- Under the *Population Health Assessment Standard*, boards of health are required to assess and report on the health of local populations, which includes assessing health inequities and social determinants of health, priority populations and demographic indicators, **risk and protective factors**, and other information relevant to public and **population health**.
- Under the *Effective Public Health Practice Standard*, boards of health are required to employ public health practice that is transparent, responsive to current and emerging evidence, and which emphasizes continuous quality improvement. This requirement supports awareness among public health practitioners, policy-makers, community partners, and health care providers of the factors that determine the health of the population, which includes factors relating to health equity and the social determinants of health.

Additionally, board of health roles and responsibilities for health equity apply holistically to the planning, implementation, and evaluation of all public health services and **programs of public health interventions**. Various program standards articulate additional requirements relating to the overarching goal of reducing health inequities, and program/topic-specific guidance regarding required approaches is provided in corresponding protocols and guidelines.

6 Required Approaches

This section provides an overview of the approaches that boards of health shall consider, at minimum, when implementing the requirements established in the foundational *Health Equity Standard*. Board of health decision-making and prioritization regarding health equity shall be guided by the four principles established by the overarching Policy Framework: Need; Impact; Capacity; and Partnership, Collaboration, and Engagement.

As a foundational standard, health equity represents a cross-cutting vision and fundamental philosophy to guide public health practice in Ontario. It is recognized that the

public health sector is one of many contributors to health equity, and action across multiple sectors is required in order to fully realize this vision.

In order to operationalize the four requirements under the *Health Equity Standard*, boards of health shall apply a health equity approach to continuously identify and address systemic and institutional factors affecting health equity, including the underlying causes. Boards of health shall apply a health equity approach within all aspects of their work, including processes for community inclusion and engagement, training, planning, implementation, and evaluation, by:

- Recognizing how the social determinants of health, and their root causes, influence the distribution of health and well-being across communities;[9]
- Seeking opportunities to address population diversity when planning, implementing, adapting, and evaluating public health programs and policies;[9]
- Enhancing capacity to apply **anti-racist**, **anti-oppressive**, and **culturally safe** approaches to public health practice;[9-12]
- Fostering organizational capacity for health equity action; [13]
- Planning and implementing public policy approaches to support health equity;
- Undertaking **community engagement** and inter-sectoral action strategies to address health inequities;
- Considering the use of performance management and quality improvement principles to continuously improve policies, processes, programs, and services that advance health equity; and
- Promoting the use of health equity tools for assessment, audit, program planning, and evaluation.

6.1 Assessing and Reporting

Requirement #1 of the *Health Equity Standard* requires boards of health to assess and report on the health of local populations[†] describing the existence and impact of health inequities and identifying effective local strategies that decrease health inequities.

In operationalizing this requirement, and in alignment with board of health requirements under the *Population Health Assessment Standard*, boards of health shall:

- Employ relevant assessment and surveillance tools for health equity, to identify and communicate the needs and assets of priority populations;
- Seek opportunities to conduct or participate in local or provincial evaluation studies, or research on new and existing public health programs and services developed and implemented for priority populations;
- Seek opportunities to engage priority populations in the design and implementation of assessment, surveillance, research, and evaluation processes, including the collection, maintenance, and disposition of data.

[†]For guidance on assessing and reporting on population health, refer to the *Population Health Assessment and Surveillance Protocol*, *2018* (or as current).

- Distribute and/or make available to the public, as appropriate, population health assessment and surveillance information products with respect to health equity, in accordance with the *Population Health Assessment and Surveillance Protocol, 2018* (or as current).

6.2 Modifying and Orienting Public Health Interventions

Requirement #2 of the *Health Equity Standard* requires boards of health to modify and orient public health interventions to decrease health inequities by:

a) Engaging priority populations in order to understand their unique needs, histories, cultures, and capacities; and
b) Designing strategies to improve the health of the entire population while decreasing the health inequities experienced by priority populations.

In operationalizing this requirement, boards of health shall consider alignment with related requirements under the *Effective Public Health Practice Standard*, as referenced above.

6.2.1 Engaging Priority Populations

In operationalizing the requirement to engage priority populations in order to understand their unique needs, histories, cultures, and capacities, boards of health shall consider the ways in which these communities experience the root causes of health inequities that affect the social determinants of health.

Informed by principles of anti-oppressive practice and cultural safety, boards of health shall develop and implement strategies to engage priority populations in the planning, implementation, and evaluation of public health programs and services, in order to advance health equity. The board of health shall employ community engagement frameworks and approaches that are informed by evidence and best practice, and are responsive to local needs and assets. In particular, community engagement strategies shall be guided by the following principles:

- Sustainable community engagement is supported and promoted by encouraging local communities to get involved in all stages of public health planning, implementation, and evaluation;
- Relationships are built on trust, commitment, leadership, and capacity across local communities, recognizing that relationship building is a continuous process that takes time;
- Decision-making groups include members of local communities who reflect the diversity of those communities; and
- The results of community engagement are reported back to the local communities concerned, as well as other partners.[13,15]

For guidance on required approaches to engaging First Nations and Indigenous communities, refer to the *Relationship with Indigenous Communities Guideline*, *2018* (or as current).

6.2.2 Designing Strategies to Improve the Health of the Entire Population while Decreasing Health Inequities

In operationalizing the requirement to design strategies to improve the health of the entire population while decreasing health inequities, boards of health shall:

- Apply the concept of proportionate universalism within all processes for planning, implementation, and evaluation. **Proportionate universalism** is an approach that can be used to address the **health gap** and **health gradient** by making health actions or interventions available to the whole population, but with a scale, intensity, and delivery that is proportionate to the level of need and disadvantage in specific populations. It balances **targeted** and **universal** population health perspectives and recognizes that programs, services, and policies must include a range of responses that address varying needs, assets, and the social determinants of health.[16,17] While some programs are universal (e.g., immunization), there will be groups within the general population that require additional resources and targeted actions to fully realize the intended health benefit.
- Employ the most appropriate tools, processes, and resources for health equity assessment within the local context, such as health impact assessments (HIA), equity focused health impact assessments (EFHIA), health equity impact assessments (HEIA), situational assessments, and health equity audits (HEA).

6.3 Engaging in Multi-Sectoral Collaboration

Requirement #3 of the *Health Equity Standard* requires boards of health to engage in multi-sectoral collaboration with municipalities, LHINs, and other relevant stakeholders in decreasing health inequities. As many factors and upstream interventions for addressing health equity and the social determinants of health lie outside the purview of the public health sector, it is particularly important that stakeholders and partners across multiple sectors be engaged to contribute to effective local strategies that decrease health inequities.

In operationalizing this requirement, and in alignment with the *Effective Public Health Practice Standard,* boards of health shall engage relevant partners in the health and non-health sectors. The board of health shall also consider effective stakeholder engagement strategies such as:

- Establishing and participating in collaborative partnerships and coalitions which address public health issues and social determinants with:
    - Key health sector partners, including but not limited to: LHIN(s), hospital administrators, long-term care facility administrators, community health centre administrators; and
    - Non-health sector partners, including but not limited to: community planning organizations, school boards, social housing authorities, labour organizations, grassroots and civic organizations, children and youth services, and local chambers of commerce.

- Establishing relationships with schools of public health and/or other related academic programs to promote collaborative research projects and knowledge exchange activities that advance the evidence and knowledge base for health equity; and
- Monitoring and evaluating these partnerships to determine their effectiveness and identify and address gaps.

Additional partner-specific considerations for addressing health equity are articulated in the relevant protocols and guidelines, such as the *Board of Health and Local Health Integration Network Engagement Guideline, 2018* (or as current) and the *Relationship with Indigenous Communities Guideline, 2018* (or as current).

6.4 Health Equity Analysis, Policy Development, and Advancing Healthy Public Policies

Requirement #4 of the *Health Equity Standard* requires boards of health to lead, support, and participate with other stakeholders in health equity analysis, policy development, and advancing healthy public policies that decrease health inequities.

In operationalizing this requirement, and in alignment with the *Effective Public Health Practice Standard,* boards of health shall engage in various forms of research, knowledge exchange, and communication modalities regarding factors that determine the health of the local population, including consideration of the following actions:

- Gathering and disseminating data;
- Developing health reports and policy statements that address social determinants of health and health inequities experienced by local priority populations;
- Providing the health and health equity context to the analysis of local issues;
- Participating in partnerships/coalitions organized to advance specific policy issues to decrease health inequities;
- Identifying organizational and community-level enablers and barriers to policy change; and
- Assessing and/or supporting the use of assessments and tools to evaluate the health impact of all policies with a health equity approach.

Additional guidance to support public health practice in advancing healthy public policies may be found in Public Health Ontario's "At a Glance: The Eight Steps to Developing a Healthy Public Policy," or the World Health Organization's "Health in All Policies: Helsinki Statement; Framework for Country Action."[18,19]

Glossary

Anti-colonialism/decolonization refers to a movement or approach that seeks to disrupt, dismantle, and unlearn colonialist structures and processes in support of Indigenous sovereignty and self-determination, which has been cited as the most important determinant of health among Indigenous peoples.[20,21]

Anti-oppressive practice refers to the strategies, theories, actions, and practices that seek to recognize the systems of privilege and oppression that exist in society, to actively mitigate their effects, and to equalize power imbalances over time.[9] This requires individuals and institutions to acknowledge and accept responsibility for their role in perpetuating oppression, whether intentionally or unconsciously.

Anti-racism is an active approach to identifying, challenging, and changing the systems, behaviours, and values that uphold racism at all levels of society. It "is intended to promote an equitable society in which people do not face discrimination on the basis of their actual or perceived race, however defined".[21]

Bias refers to ingrained ideas, prejudices, stereotypes, and assumptions that we are often unaware. These ideas influence our perceptions, expectations, judgments, and behaviours. All people have biases which are developed through socialization and personal experience.

Colonialism refers to "a process that includes geographic incursion, socio-cultural dislocation, the establishment of external political control and economic dispossession, the provision of low-level social services, and ultimately, the creation of ideological formulations around race and skin colour that position the colonizer at a higher evolutionary level that the colonized." "While neo-colonialism detrimentally influences the health of contemporary Indigenous peoples, historic, successively traumatic events continue to affect generations through what has been referred to as 'historic or cultural trauma'". Colonialism impacts the health of Indigenous peoples by producing social, political, and economic inequalities that 'trickle down' through the construction of unfavourable intermediate and proximal determinants.[20-23]

Community refers to "a group of people who have common characteristics or interests. Communities can be defined by: geographic location, race, ethnicity, age, occupation, a shared interest or affinity (such as religion and faith) or other common bonds, such as health need or disadvantage."[24]

Community assets "include not only buildings and facilities but also people, with their skills, knowledge, social networks, and relationships."[24]

Community engagement "is a process, not a program. It is the participation of members of a community in assessing, planning, implementing, and evaluating solutions to problems that affect them. As such, community engagement involves interpersonal trust, communication, and collaboration. Such engagement, or participation, should focus on, and result from, the needs, expectations, and desires of a community's members."[25]

Comprehensive health promotion approach applies diverse strategies and methods in an integrated manner—one of the preconditions for health promotion to be effective. Health promotion addresses the key action areas identified in the Ottawa Charter in an integrated and coherent way.

Cultural safety refers to "an environment which is safe for people: where there is no assault, challenge or denial of their identity, of who they are and what they need." Cultural safety is conceptualized on a continuum that begins with unsafe practises, moving to cultural competence, and culminating in culturally safe practices that account for the role and consequence of power in relationships between providers and communities, and in which the needs and voices of communities take a prominent role.[11,12 ,26]

Health equity means that all people can reach their full health potential and are not disadvantaged from attaining it because of their race, ethnicity, religion, gender, age, social class, socioeconomic status or other socially determined circumstance.[3]

Health gap refers to the difference between those who are most and least healthy in a society.[27]

Health gradient refers to the consistent pattern formed by the health gap at every step of the socioeconomic spectrum, where those with higher status are healthier than those below them.[27]

Health inequity is a sub-set of health inequality and refers to differences in health associated with social disadvantages that are modifiable, and considered unfair.[3]

Intersectionality recognizes that individuals and communities must be related to as complex and heterogeneous, rather than one dimensional.[21] It acknowledges that identities and forms of oppression intersect to produce unique and often unpredictable experiences, as one form of oppression can be shaped by and influence another.[28] Additionally, one individual or community's experiences of privilege and oppression can shift over time and in different contexts.

Oppression refers to institutionalized power that is historically formed over time. It allows certain groups to assume a dominant or privileged position over other groups and identities, either knowingly or unconsciously, and this dominance is maintained and continued at individual/interpersonal, cultural, and structural/institutional levels.[9,29,30]

Population health is the health of the population, measured by health status indicators. Population health is influenced by physical, biological, behavioural, social, cultural, economic, and other factors. The term is also used to refer to the prevailing health level of the population, or a specified subset of the population, or the level to which the population aspires. Population health describes the state of health, and public health is the range of practices, procedures, methods, institutions, and disciplines required to achieve it. The term also is used to describe the academic disciplines involved in studies of determinants and dynamics of health status of the population.[31]

Priority populations are those that are experiencing and/or at increased risk of poor health outcomes due to the burden of disease and/or factors for disease; the determinants

of health, including the social determinants of health; and/or the intersection between them. They are identified by using local, provincial, and/or federal data sources; emerging trends and local context; community assessments; surveillance; and epidemiological and other research studies.

Privilege refers to unearned power that gives members of a dominant group economic, social, and political advantages.[29,30]

Program of public health interventions includes the suite of programs, services, and other interventions undertaken by a board of health to fulfill the requirements and contribute to achieving the goals and program outcomes outlined in the Standards.

Proportionate universalism is an approach that balances targeted and universal population health perspectives. This approach makes health actions or interventions available to the whole population, but with a scale, intensity and delivery that is proportionate to the level of need and disadvantage in particular populations.

Racialization refers to the social processes that construct racial categories as "real, different and unequal in ways that matter to economic, political and social life".[32] Racialization is often based on perceived differences in anatomical, cultural, ethnic, genetic, geographical, historical, linguistic, religious, and/or social characteristics and affiliations.

Racism refers to a set of individual, cultural, and institutional beliefs and practices that seeks to construct social differences between groups of people in order to subordinate and oppress one group for the benefit of another.[33-35]

Resiliency refers to the ability of an individual or community to effectively manage or cope with adversity or stress in ways that are not only effective, but increase their ability to respond to future adversity and enable them to thrive.[36]

Risk and protective factors are variables that can be present at the individual, interpersonal, community, and societal levels and that impact mental health and resiliency.[37] **Protective Factors** are determinants that affect health in a positive way. They help with maintaining good health, and can assist in effective management of health conditions.[38] **Risk Factors** are determinants that affect health in a negative way. They can increase the likelihood of developing chronic diseases, or hinder in the management of existing conditions.[38]

Social determinants of health are the interrelated social, political and economic factors that create the conditions in which people live, learn, work and play. The intersection of the social determinants of health causes these conditions to shift and change over time and across the life span, impacting the health of individuals, groups and communities in different ways.[39]

Targeted approaches use selection criteria, such as income, neighbourhood, health, or employment status, to target eligibility and access to programs and services to priority sub-groups within the broader population.[27]

Universal approaches are programs and services that are available to the whole population.[27]

Well-being refers to “the presence of the highest possible quality of life in its full breadth of expression focused on but not necessarily exclusive to: good living standards, robust health, a sustainable environment, vital communities, an educated populace, balanced time use, high levels of democratic participation, and access to and participation in leisure and culture.”[40]

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This is Exhibit **5** referred to in the Affidavit of **Dr. Michael Rachlis.** Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

COVID-19 Vaccine Distribution Task Force

Ministry Solicitor General

Background Order in Council 1546/2020

Order in Council 1547/2020

Function To provide advice to the Minister of Health and the Solicitor General to support the development of a COVID immunization strategy, including the ethical, timely and effective distribution of COVID-19 vaccines in Ontari

Membership The Chair is the Special Advisor, COVID-19 Vaccine Distribution Plan. Two Vice Chairs have been appointed b Order-in-Council. Up to ten additional members to be appointed by Ministers' Letters.

Term November 23, 2020 to August 31, 2021

Remuneration Non-OPS members will be remunerated at $398 per diem

Appointments & Vacancies

No.	Position	Member	Term	Location
1.	Chair (Part-Time)	RICK HILLIER	04-Dec-2020 - 31-Mar-2021	Ottawa
2.	Vice-Chair (Part-Time)	HELEN ANGUS	23-Nov-2020 - 31-Aug-2021	
3.	Vice-Chair (Part-Time)	MARIO DITOMMASO	23-Nov-2020 - 31-Aug-2021	
4.	Member (Part-Time)	ANGELA MONDOU	04-Dec-2020 - 31-Aug-2021	Flesherton
5.	Member (Part-Time)	DIRK HUYER	04-Dec-2020 - 31-Aug-2021	Toronto
6.	Member (Part-Time)	HOMER TIEN	04-Dec-2020 - 31-Aug-2021	Mississauga
7.	Member (Part-Time)	ISAAC BOGOCH	04-Dec-2020 - 31-Aug-2021	Toronto
8.	Member (Part-Time)	KIERAN MOORE	08-Jan-2021 - 31-Aug-2021	Kingston
9.	Member (Part-Time)	MARK SAUNDERS	04-Dec-2020 - 31-Aug-2021	North York
10.	Member (Part-Time)	MAXWELL SMITH	04-Dec-2020 - 31-Aug-2021	London
11.	Member (Part-Time)	REGIS VAILLANCOURT	04-Dec-2020 - 31-Aug-2021	Ottawa
12.	Member (Part-Time)	ROSEANNE ARCHIBALD	04-Dec-2020 - 31-Aug-2021	Cochrane
13.	Member (Part-Time)			

This is Exhibit **6** referred to in the Affidavit of **Dr. Michael Rachlis.** Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

: Stay at home ot for essential travel and follow the **restrictions and public health measures**

Français

Home COVID-19

Safe and effective vaccines will help protect us against COVID-19. Learn about them and when they will be available in Ontario for you and your family.

This page will be updated regularly. Last updated March 15, 2021.

Booking a vaccination

Ontario's vaccine booking system is now available.

How to book a vaccine

On this page

+ Show all

When you can get the vaccine

Ontario has a three-phase plan that prioritizes vaccines for those at greatest risk of severe illness and those who care for them. We are currently completing Phase 1 of the plan.

Phase 1

High-risk populations
(approximately 1.8 million people)

December 2020 – March 2021

- Congregate living for seniors
- Health care workers
- Adults in First Nations, Métis and Inuit populations
- Adult chronic home care recipients
- Adults over 80 years old

Distribution through:
hospital site clinics, mobile teams, site-specific clinics, mass vaccination clinics (late March)

Phase 2

Mass deliveries of vaccines
(approximately 9 million people)

April 2021 – July 2021

- Adults aged 60 to 79, in 5-year increments
- High-risk congregate settings (such as shelters, community living)
- Individuals with high-risk chronic conditions and their caregivers

- Those who cannot work from home
- At-risk populations

Distribution through:
mass vaccination clinics, pharmacies, primary care, site-specific clinics, mobile teams, mobile sites, public health units

Phase 3
Steady state

July 2021 onwards

- Adults 59 years and younger

Distribution through:
mass vaccination clinics, pharmacies, primary care, site-specific clinics, mobile teams, mobile sites, public health units

If there is limited supply, we will vaccinate people in the order in which they are listed. Learn how the priorities are determined.

All timelines are subject to change depending on vaccine supply.

Check with your public health unit

Each public health unit is developing a vaccine plan tailored to their own community's needs. Local plans will align with Ontario's vaccine distribution plan and ethical framework. Find your public health unit and check their website for details about vaccination in your area.

Find your public health unit

Our three-phased vaccination plan

Phase 1: high-risk populations (current phase)

Phase 2: mass deliveries of vaccines

Phase 3: steady state

How we are prioritizing vaccinations

Ontario's plan prioritizes vaccines for those at greatest risk of severe illness and those who care for them.

Our strategy to vaccinate the population is based on:

- age
- risk due to:
  - health conditions
  - congregate settings
  - hot spots (areas with higher rates of death, hospitalization and transmission)
  - not being able to work from home

This is because evidence shows that vaccinating primarily based on age, with some adjustment for high risk groups, will prevent more:

- deaths
- hospitalizations
- ICU admissions
- cases of COVID-19

To make sure Ontario's vaccine program is equitable and fair, decisions about priority are guided by:

- an ethical framework for COVID-19 vaccine distribution
- guidance from the:
  - Ontario COVID-19 Vaccine Distribution Task Force
  - National Advisory Committee on Immunization
- Ontario's guidance for prioritizing health care workers for COVID-19 vaccination
- engagement with health and community partners working with communities at greater risk
- evidence from clinical trials and Health Canada approvals

Collecting sociodemographic data

As part of our commitment to building safe and healthy communities, Ontario is collecting sociodemographic data on a voluntary basis from individuals who get the COVID-19 vaccine. We are collecting this data to:

- get a more complete picture of who is being vaccinated across the province
- make sure vaccines are provided in a way that is equitable
- show us where we need to provide more information to address any gaps
- help ensure that we are reaching everyone who wants to be vaccinated

When you get the vaccine, you may be asked to share information about your:

- race
- ethnicity
- language
- income
- household size

Providing this information will be completely voluntary, and safeguards will be in place to protect your privacy.

You will be able to receive the vaccine whether you provide the information or not.

If you change your mind about allowing your information to be used, you can contact the Ministry of Health at heia@ontario.ca. If you withdraw your consent, we will stop using your

sociodemographic data in the future.

Why get vaccinated

Safe and reliable vaccines can help protect you and your family from COVID-19. They are an important tool to help stop the spread of the virus, build immunity in Ontario and allow us to safely resume normal life.

When a large percentage of the population becomes immune to COVID-19, the spread of the virus will slow down or stop.

The vaccines approved for use in Canada:

- require two doses for your body to develop infection-fighting response
- will help prevent death and serious illness due to COVID-19
- are anticipated to be effective against the original strain of the virus and the identified variants

Until vaccines are widely available and enough people have been fully vaccinated to stop the spread of the virus, we all must:

- continue to follow local public health advice and restrictions
- practise physical distancing
- use masks or face coverings
- stay home as much as possible and only go out for necessities

---

COVID-19 Vaccine Distribution Task Force

The COVID-19 Vaccine Distribution Task Force is advising Ontario as it plans the immunization program and delivers vaccines.

The task force is advising and providing recommendations on:

- how to deliver, store and distribute vaccines
- support for partners in the health care system to deliver vaccinations in phases, beginning with vulnerable populations

- clinical guidance to administer the vaccine and track vaccine uptake
- reporting data and technology to provide timely, relevant and accurate information to health care providers, decision-makers and the public
- public education and community outreach efforts to encourage people to get the vaccine

Members

- General (retired) Rick Hillier, former Chief of Defence Staff for the Canadian Forces (chair)
- Mario Di Tommaso, Deputy Solicitor General, Community Safety, Commissioner of Emergency Management (vice-chair)
- Helen Angus, Deputy Minister of Health (vice-chair)
- Ontario Regional Chief RoseAnne Archibald of Taykwa Tagamou Nation
- Dr. Isaac Bogoch, infectious diseases consultant and internist, Toronto General Hospital
- Dr. Dirk Huyer, Ontario's Chief Coroner and Coordinator of Provincial Outbreak Response
- Angela Mondou, President and CEO, TECHNATION
- Mark Saunders, former Toronto Police Chief
- Dr. Maxwell Smith, bioethicist and assistant professor, Western University
- Dr. Homer Tien, trauma surgeon and President and CEO, Ornge
- Dr. Regis Vaillancourt, Director of Pharmacy, Children's Hospital of Eastern Ontario
- Dr. Kieran Moore, Medical Officer of Health, Kingston, Frontenac, Lennox & Addington

Ex-officio members

- Dr. David Williams, Chief Medical Officer of Health, Public Health
- Matt Anderson, President and CEO, Ontario Health
- Shawn Batise, Deputy Minister, Indigenous Affairs Ontario
- Lynn Betzner, Deputy Minister, Intergovernmental Affairs & Associate Secretary of the Cabinet
- Laurie LeBlanc, Deputy Minister, Ministry of Transportation
- Giles Gherson, Deputy Minister, Ministry of Economic Development, Job Creation and Trade
- Karen Hughes, Deputy Minister, Ministry of Government and Consumer Affairs

- Richard Steele, Deputy Minister, Ministry of Long-Term Care
- Denise Cole, Deputy Minister for Seniors and Accessibility

Related

- The latest announcements about COVID-19 vaccines
- COVID-19 vaccine safety
- What you need to know about the COVID-19 vaccine for Canada
- COVID-19 in Ontario
- General information about vaccines and immunizations
- COVID Alert mobile app

This is Exhibit **7** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

Stay at home except for essential travel and follow the restrictions and public health measures.

Ontario

Ethical framework for COVID-19 vaccine distribution

Learn about the ethical framework for COVID-19 vaccine distribution.

Download PDF (https://files.ontario.ca/moh-ethical-framework-for-covid-19-vaccine-distribution-en-2020-12-30.pdf)

Using the ethical principles outlined below to guide COVID-19 vaccine prioritization and distribution decisions and decision-making processes is critical for ethical and effective distribution and will help to promote consistency, stewardship, accountability, and public trust.

Appreciating that the application of the following principles will to an extent be context-dependent and that other values and principles may be relevant to decision-making, this framework should serve as a guide and be adapted where appropriate.

All levels of government have a legal obligation to take preventative steps to stop the spread of COVID-19 and treat people without discrimination. Vaccine distribution and prioritization decisions must comply with existing human rights protections and take additional steps necessary to prevent and treat COVID-19 among vulnerable groups. This Ethical Framework therefore should be read in conjunction with the Ontario Human Rights Commission's Policy statement on a human rights-based approach to managing the COVID-19 pandemic (http://www.ohrc.on.ca/en/policy-statement-human-rights-based-approach-managing-covid-19-pandemic) .

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 [1]
- 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 [2]
- 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) [3]
- 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 COVID19 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

Updated: January 11, 2021
Published: December 30, 2020

Footnotes

- [1] ^ See Ontario's Human Rights Code (https://www.ontario.ca/laws/statute/90h19#BK1) and specifically Part 1 for Code-protected groups
- [2] ^ Consider applying the Ministry of Health's Health Equity Impact Assessment (http://www.health.gov.on.ca/en/pro/programs/heia/) decision support tool to identify potential health equity impacts
- [3] ^ See Jordan's Principle (https://www.sac-isc.gc.ca/eng/1568396042341/1568396159824)

This is Exhibit **8** referred to in the Affidavit of **Dr. Michael Rachlis.** Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

COVID-19 Vaccine Distribution Task Force

General (Ret'd) Rick Hillier
Chair

25 Grosvenor Street
11th Floor
Toronto ON M7A 1Y6
COVID-19VaccineTaskForce@ontario.ca

Groupe d'étude de la distribution des vaccins contre la COVID-19

Général (à la retraite) Rick Hillier
Président

25, rue Grosvenor
11e étage
Toronto ON M7A 1Y6
COVID-19VaccineTaskForce@ontario.ca

Ontario

132-2020-5444
By email

February 3, 2021

Ena Chadha
Chief Commissioner
Ontario Human Rights Commission
180 Dundas Street West, 9th Floor
Toronto ON M7A 2R9
cco@ohrc.on.ca

Dear Ena Chadha:

Thank you for your letter providing valuable views on how human rights principles play an important role in Ontario's COVID-19 vaccine program.

On December 14, 2020, Ontario launched the first phase of the three-phased implementation plan of Ontario's COVID-19 vaccine program. As recommended by the COVID-19 Vaccine Distribution Task Force and in alignment with the National Advisory Committee on Immunization, the province has identified key populations to receive the vaccine first, including long-term care and retirement home residents and the staff who provide care to these groups.

The government's approach is informed by science and prioritizes population groups that are at greatest risks of COVID-19, which was the basis of the ethical framework for COVID-19 vaccine distribution. We have actively engaged with bioethicists and clinical specialists as part of a prioritization sub-group to understand risk and help to inform allocation decisions in Ontario.

The development of the ethical framework was informed, in part, by the Ontario Human Rights Commission's Policy Statement on a human rights-based approach to managing the COVID-19 pandemic and related guidance. The importance of human rights protections and non-discrimination have been explicitly reflected in the province's ethical framework.

The ethical framework explicitly emphasizes the legal obligation that all levels of government must take preventative steps to stop the spread of COVID-19 and treat people without discrimination, and to take additional steps necessary to prevent and treat COVID-19 among vulnerable groups.

…/2

The framework states that it should be read in conjunction with the OHRC Policy Statement on a human rights-based approach to managing the COVID-19 pandemic, and when referencing the commitment to non-discrimination, references the Ontario Human Rights Code (and in particular, Part 1 on *Code*-protected groups).

In addition to encouraging the use of a health equity impact assessment for all decision-making, the ethical principles enumerated in the province's ethical framework emphasize key ethical commitments that are also reflected in human rights principles and protections:

- Respecting the equal moral status and human rights of all individuals;
- Distributing vaccines without stigma, bias, or discrimination;
- Aiming not to create, and actively working 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;
- Ensuring benefits for groups experiencing greater burdens from the COVID-19 pandemic;
- Ensuring 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;
- Ensuring jurisdictional ambiguity does not interfere with vaccine distribution (in alignment with Jordan’s Principle);
- Ensuring inclusive, consistent, and culturally safe and appropriate processes of decision-making, implementation, and communications, including ensuring input from affected parties, including those historically under-represented.

I appreciate that when it comes to human rights, it is not our intentions that matter, but rather the impact (intended or unintended) that our decisions have. The Prioritization subgroup of the Task Force, co-chaired by Dr. Dirk Huyer and Dr. Maxwell Smith, would welcome participation by the OHRC to ensure that ethical and human rights obligations are reflected in decisions and in the vaccine rollout in communities. The subgroup will reach out to you to start this conversation.

I also understand that on January 15, 2021, you and your colleague Raj Dhir met with Deputy Solicitor General Deborah Richardson and the Assistant Deputy Minister of the Anti-Racism Directorate, Nosa Ero-Brown, to discuss the ministry’s preliminary thinking on the vaccine rollout for at-risk communities. I’m told the conversation was a productive one and that the OHRC will be providing expert advice on data and community outreach.

The Vaccine Distribution Task Force values the OHRC’s perspective and guidance and looks forward to working with you in the future as the COVID-19 vaccine rollout in Ontario continues.

…/3

Thank you again for your letter.

With kind regards,

General (Ret'd) Rick Hillier
Chair of the COVID-19 Vaccine Distribution Task Force

c: The Honourable Christine Elliott, Deputy Premier and Minister of Health

The Honourable Sylvia Jones, Solicitor General

The Honourable Doug Downey, Attorney General

This is Exhibit **9** referred to in the Affidavit of **Dr. Michael Rachlis.** Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

Policy statement on a human rights–based approach to managing the COVID–19 pandemic

+ show tags

Under the Ontario Human Rights Code (Code), the Ontario Human Rights Commission (OHRC) has the mandate to make policies that provide guidance on human rights obligations under the Code and to make recommendations that promote human rights during situations of tension or conflict.

This policy statement provides guidance to all levels of government on the principles that underlie a human rights-based approach to managing the COVID-19 pandemic. It offers high-level guidance that applies across a range of potential policy, legal, regulatory, public health and emergency-related responses to the COVID-19 pandemic.

This policy statement is meant to be read in conjunction with the OHRC's Actions consistent with a human rights-based approach to managing the COVID-19 pandemic, which sets out proposed government actions, drawn from a range of human rights organizations, that are broadly consistent with a human rights-based approach to managing the COVID-19 pandemic and the principles contained in this policy statement.

Background and context

As the COVID-19 pandemic has swept across the globe, it has touched all 7.8 billion of us in some way. The COVID-19 pandemic has led the Ontario government, as well as governments across Canada and around the world, to respond in innovative and often unprecedented ways. Extensive public health campaigns, restrictions on freedom of movement and social interaction, and targeted economic stimulus packages are just a few of these steps.

However, measures to protect public health and individuals' right to health can have a negative impact on another person's right to health or on other human rights, such as freedom of movement and assembly, and rights to education, employment and non-discrimination.

It is essential that responses to COVID-19 be aligned with Canada's international human rights treaties, domestic human rights laws and the UN Declaration on the Rights of Indigenous Peoples. The laws governing declarations of emergency in Ontario and at the federal level expressly recognize the importance of complying with existing human rights protections, even in emergency circumstances.

The pandemic also offers a generational opportunity to more effectively realize rights protected in the International Covenant on Economic, Social and Cultural Rights. Many groups are particularly vulnerable to negative impacts from COVID-19 **precisely because** their economic, social and cultural rights, right to equality and Indigenous rights have not been effectively protected or realized in Ontario and Canada over many decades.

Implementing programs and policies that align with this policy statement will help protect public health and human rights during the COVID-19 pandemic. Entrenching governments' responses to the pandemic in a human rights-based approach offers a unique opportunity to benefit everyone, including vulnerable groups, during the pandemic and for generations to come.

Human rights-impacts of the COVID-19 pandemic on vulnerable groups

The most vulnerable groups in Canadian society are disproportionately negatively affected by the COVID-19 pandemic. People with multiple, intersecting identities may be particularly vulnerable (for example, Indigenous women and girls, older East Asian people, etc.). Throughout this policy statement, the OHRC refers to "vulnerable groups" to include:

- First Nations, Métis and Inuit peoples and communities, including urban, rural, remote and Northern communities
- East Asian and other racialized communities
- Workers in precarious employment and foreign-temporary workers
- People experiencing poverty, living in shelters, who are street-involved or at risk of homelessness
- Women and children facing domestic violence and/or child abuse
- Single parents
- People with disabilities, mental health needs and/or addictions
- LGBTQ2+ people
- Older persons
- People living alone or in government-run institutions
- Prisoners.

The human rights impacts of COVID-19 on vulnerable groups include:

- Higher risk of contracting COVID-19 due to social conditions
- Hateful acts, racism, discrimination and/or harassment
- Loss of employment leading to loss of household income and increased poverty
- Loss of housing
- Disruption of education
- Family violence and threats to safety and well-being
- Separation from caregivers
- Potential involvement of child welfare agencies
- Negative impacts on the treatment or management of pre-existing disabilities, mental health needs and/or addictions
- Restricted access to medical or other support services
- Potential discriminatory enforcement of emergency or public health-related measures
- Risk of forcible return (refoulement) for refugees who are deported or denied entry to Canada
- Social exclusion.

Without a deliberate human rights-based approach to managing COVID-19, including independent oversight, the pandemic will further exacerbate existing inequalities for vulnerable groups. Consistent with the Truth and Reconciliation Commission's Final Report, governments must also acknowledge that Indigenous communities are among the most vulnerable groups largely due to the pre-existing and ongoing impacts of colonialism and racism.

Principles for a human rights–based approach to managing the COVID–19 pandemic

1. Approach preventing and treating COVID–19 as a human rights obligation

a. Recognize that the COVID-19 pandemic engages the right to health and life under Canada's international and domestic human rights laws.
b. Recognize that all levels of government have a legal obligation to take preventative steps to stop the spread of COVID-19 and treat people who have the virus, without discrimination. This may require governments to take additional steps necessary to prevent and treat COVID-19 among vulnerable groups.
c. Recognize that human rights laws require mitigating potential impacts on rights that are interdependent with the rights to health and life, including the rights to food, housing, work, education, equality, privacy, access to information, freedom from cruel, inhuman or degrading treatment or punishment, and the freedoms of association, expression, assembly and movement.
d. Recognize that Canadian and international human rights laws prohibit discriminatory action, including harassment, against any persons or communities because of an association with the COVID-19, perceived or otherwise.

2. Respect the rights of First Nations, Métis and Inuit (Indigenous) peoples

a. Adopt respectful, nation-to-nation engagements and partnerships with diverse Indigenous governments, communities, organizations and knowledge-keepers to ensure that the COVID-19 pandemic in addressed in a culturally-appropriate and safe manner.
b. Recognize that the impact of COVID-19 will be exacerbated by the ongoing negative impact of colonialism on Indigenous communities and will have a unique, intersectional impact on Indigenous women and children, people with disabilities, people with addictions and older persons.
c. Take extra steps and provide funding to protect Indigenous peoples' health and human rights, including providing funding for:
    - Adequate housing
    - Culturally safe health care and mental health care
    - Safe water and sanitation
    - Services to support women and children, people with disabilities, people with addictions and older persons
    - Any other services that are essential to addressing COVID-19.

d. Provide funding consistent with Jordan's principle where there is potential for jurisdictional disputes.
e. Obtain the "free, prior and informed consent" of affected Indigenous peoples before adopting and implementing legislative, administrative, policy, budgetary or regulatory measures in response to COVID-19 that may impact them, consistent with the UN Declaration on the Rights of Indigenous Peoples.
f. Respect Indigenous peoples' right to self-government and allow Indigenous peoples to continue to govern themselves during the COVID-19 pandemic. This includes respecting Indigenous communities' authority to restrict entry to their communities as a measure to prevent the spread of COVID-19 to their residents.
g. In consultation and cooperation with Indigenous peoples, take effective measures to ensure that Indigenous peoples that are divided by national or international borders are able to maintain and develop contacts, relations and cooperation, consistent with the UN Declaration on the Rights of Indigenous Peoples.

3. Set strict limits on measures that infringe rights

a. Ensure that any public health or emergency-measures that are deemed necessary to prevent the spread of COVID-19 and that restrict the exercise of rights, are time-bound and subject to regular reviews.
b. Recognize that the Charter of Rights and Freedoms and Canada's domestic and international human rights obligations require that any measures that restrict the exercise of rights must be demonstrably justified as necessary, legitimate and proportionate.
c. Recognize that any restrictive measures that deprive persons of their right to liberty must be carried out in accordance with the law and respect for fundamental human rights. This includes but is not limited to measures related to:
    - Prisoners
    - Individuals in immigration detention
    - People detained in mental health institutions
    - Youth in custody
    - Children in care
    - Older persons in long-term care homes
    - Foreign-temporary workers who are required to reside on the premises of their employer.
d. Ensure that rights-based, legal safeguards govern the appropriate use and handling of personal health information.

4. Protect vulnerable groups

a. Anticipate, assess and address the disproportionate impact of COVID-19 and related restrictions on vulnerable groups that already disproportionately experience human rights violations.
b. Make sure vulnerable groups have equitable access to health care and other measures to address COVID-19, including financial and other assistance.
c. Make decisions with input from vulnerable groups and the most affected communities.
d. Take steps to mitigate gendered impacts and ensure that responses to COVID-19 do not perpetuate gender inequity.
e. Ensure that public health and emergency measures consider accessibility and other needs of people with disabilities who face heightened susceptibility to contracting COVID-19 and may face extra challenges to obtaining services and supplies, and accessing food and other basic needs because of restrictive measures.
f. Safeguard and address the needs of persons with drug and alcohol addictions who are already more vulnerable to diseases and serious health consequences if infected with COVID-19, including adopting a public health approach to drug and alcohol addiction (i.e. ensuring access to safe consumption sites, placing a moratorium on arrests and prosecution of drug-related offences, etc.).
g. Ensure that any law enforcement of public health or emergency measures does not disproportionately target or criminalize Indigenous peoples, racialized communities, people who are precariously housed or who cannot self-isolate, or people with mental health disabilities and/or addictions.

5. Respond to racism, ageism, ableism and other forms of discrimination

a. Ensure that steps taken in response to COVID-19 are based on evidence, and deliberately challenge, reject and dispel stereotypes.
b. Anticipate and take into account the potential for certain communities to experience increased racism, ageism and ableism as a result of the government's response to the COVID-19 pandemic.
c. In collaboration and cooperation with vulnerable groups, take all necessary steps to proactively protect individuals and communities from hate, racism, ageism, ableism and discrimination propagated by private individuals.
d. Monitor and report on any trends in hate and discrimination related to the COVID-19 pandemic and pursue appropriate sanctions, including criminal prosecution where appropriate.

6. Strengthen human rights accountability and oversight

a. Consult with human rights institutions and experts, Indigenous leaders and knowledge-keepers, vulnerable groups, as well as persons and communities affected by COVID-19, when making decisions, taking actions and allocating resources.
b. Institute formal advisory roles for Indigenous knowledge-keepers and representatives of human rights commissions within governmental COVID-19 task forces, special committees and working groups.
c. Take a deliberate and comprehensive approach to independent human rights accountability and oversight, coordinated across jurisdictions, that ensures violations are anticipated, prevented and mitigated from the outset.
d. Collect health and other human rights data regarding the response to the COVID-19 pandemic, disaggregated by the grounds of Indigenous ancestry, race, ethnic origin, place of origin, citizenship status, age, disability, sexual orientation, gender identity, social condition, etc.
e. Regularly monitor and report publicly on the human rights impacts, outcomes and inequalities related to the COVID-19 pandemic and its management.

This is Exhibit **10** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

HEIA

Health Equity Impact Assessment

HEIA is a flexible and practical assessment tool that can be used to identify and address **potential unintended health impacts** (positive or negative) of a policy, program or initiative on specific population groups.

Note: The *HEIA Template* is designed to be used alongside the accompanying *HEIA Workbook*, which provides definitions, examples and more detailed instructions to help you complete this template.

Date:	
Organization:	
Name and contact information for the individual or team that completed the HEIA:	
Project Name:	
Project Summary:	
Objective for Completing the HEIA: (e.g., to determine where to best invest resources in a new policy, program, or initiative?)	
Note: This section to be filled in after completing the following HEIA template.	
Conclusions: (e.g., what decisions were made following completion of the HEIA tool?)	

HEIA Template

The numbered steps in this template correspond with sections in the HEIA Workbook. The workbook with step-by-step instructions is available at www.ontario.ca/healthequity.

Step 1. SCOPING		**Step 2. POTENTIAL IMPACTS**			**Step 3. MITIGATION**	**Step 4. MONITORING**	**Step 5. DISSEMINATION**
a) Populations* Using evidence, identify which populations may experience significant unintended health impacts (positive or negative) as a result of the planned policy, program or initiative.	**b) Determinants of Health** Identify determinants and health inequities to be considered alongside the populations you identify.	**Unintended Positive Impacts**	**Unintended Negative Impacts**	**More Information Needed**	**Identify ways to reduce potential negative impacts and amplify the positive impacts.**	**Identify ways to measure success for each mitigation strategy identified.**	**Identify ways to share results and recommendations to address equity.**
Aboriginal peoples (e.g., First Nations, Inuit, Métis, etc.)							
Age-related groups (e.g., children, youth, seniors, etc.)							
Disability (e.g., physical, D/deaf, deafened or hard of hearing, visual, intellectual/developmental, learning, mental illness, addictions/substance use, etc.)							
Ethno-racial communities (e.g., racial/racialized or cultural minorities, immigrants and refugees, etc.)							
Francophone (including new immigrant francophones, deaf communities using LSQ/LSF, etc.)							
Homeless (including marginally or under-housed, etc.)							
Linguistic communities (e.g., uncomfortable using English or French, literacy affects communication, etc.)							
Low income (e.g., unemployed, underemployed, etc.)							
Religious/faith communities							
Rural/remote or inner-urban populations (e.g., geographic/social isolation, under-serviced areas, etc.)							
Sex/gender (e.g., male, female, women, men, trans, transsexual, transgendered, two-spirited, etc.)							
Sexual orientation (e.g., lesbian, gay, bisexual, etc.)							
Other: please describe the population here.							

*Note: The terminology listed here may or may not be preferred by members of the communities in question and there may be other populations you wish to add. Also consider intersecting populations (i.e., Aboriginal women).

Ontario

This is Exhibit **11** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

City of Toronto
Toronto Public Health
Playbook for the
COVID-19 Vaccination Program

January 2021 – Version 1.2
(Updated March 9, 2021)

TORONTO

Executive Summary

Ontario Public Health Standards require public health units to develop and implement an emergency management program consisting of emergency plans, training programs, exercises, and public education, as well as infrastructure to support emergency responses. Toronto Public Health's emergency planning aims to enhance the City of Toronto's resilience to emergency incidents, planned events and business disruptions.

In the fall 2016, as part of routine emergency response planning work, Toronto Public Health coordinated an internal emergency planning exercise called EpicTO. Through this exercise, staff simulated a public health immunization clinic that would be executed during a public health emergency or infectious disease pandemic.

EpicTO was the largest emergency exercise ever undertaken at Toronto Public Health. The exercise engaged staff from across the organization to help Toronto Public Health strengthen its ability to respond to a public health emergency. Following an evaluation of the exercise, staff reviewed the lessons learned and identified areas to continue to enhance Toronto Public Health's emergency responsiveness.

Toronto Public Health implemented many of the recommendations from this exercise that have been reflected throughout the City's COVID-19 response and are now being used to inform planning for the safe and efficient distribution of COVID-19 vaccines, when they are available.

Toronto Public Health is also using lessons learned from our annual influenza vaccine clinics, experiences from the H1N1 influenza pandemic in 2009 and current scientific evidence to inform this critical mass immunization planning work with our city, health sector, community and government partners.

This playbook represents the culmination of Toronto Public Health's experience and expertise and describes the policies and procedures, strategies and tactics that will be used to effectively and efficiently deliver a successful COVID-19 vaccination program.

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Introduction

The COVID-19 pandemic emerged in late 2019 and began spreading around the world by early 2020. COVID-19 was declared a global pandemic in March 2020 due to its extraordinary viral transmission, and continues to pose a major public health threat, impacting the economic, social and emotional wellbeing of Canadians, Ontarians and Torontonians.

As a result, jurisdictions around the world, and provinces and municipalities in Canada, have intermittently imposed stringent non-pharmaceutical measures (NPIs), often termed "lockdowns", that have impacted public administration and services, economies, and communal activities in an effort to stop the spread of the virus.

Approval of the first two of several vaccines to prevent COVID-19 in late 2020 provided another public health measure for pandemic response. At the time of writing, three vaccines had been approved in multiple countries around the world. Of these, Health Canada has approved the Pfizer-BioNTech and Moderna COVID-19 vaccines. More vaccines may be available in the future. Manufacturers are producing millions of vaccine doses, including over 40 million, which have been purchased for Canadians.

A safe and effective vaccine for COVID-19 offers protection against this novel coronavirus. All levels of government have a role to play in the effective and efficient delivery of COVID-19 immunization across the country. Figure 1 outlines the responsibilities for vaccines among the Government of Canada, Province of Ontario, and the City of Toronto.

Canada	Ontario	City of Toronto
• Approve vaccines for use in Canada • Procure vaccines nationally • Distribute vaccines to Provinces / Territories • Provide National Advisory Committee on Immunization (NACI) recommendations on prioritization of vaccine administration to the Provinces / Territories	• Receive vaccine from Government of Canada • Prioritize roll-out and distribution across Ontario • Distribute vaccine to Local Public Health Authorities • Responsible for vaccine tracking and healthcare records management NOTE: Only in the City of Toronto, does the Province of Ontario distribute vaccine directly to both Toronto Public Health and healthcare providers, including physicians and pharmacies.	• Receive vaccine from Province of Ontario • Administer vaccines in accordance with the Provincially mandated prioritization framework • Fulfill liaison role between Ministry of Health and Healthcare providers

Figure 1. Balance of responsibilities for vaccines among the three levels of government

As shown above, the Government of Canada is responsible for the approval and acquisition of vaccines; the Government of Ontario is responsible for prioritizing who should receive the vaccines and for distributing the vaccines to local public health units. Toronto Public Health is responsible for administering the vaccines in accordance with provincially mandated priorities.

Figure 2 shows the three-phased COVID-19 vaccine distribution plan developed by the Province of Ontario, which identifies:

- Priority populations;
- Varied vaccination sites and methods; and,
- Anticipated timelines and doses.

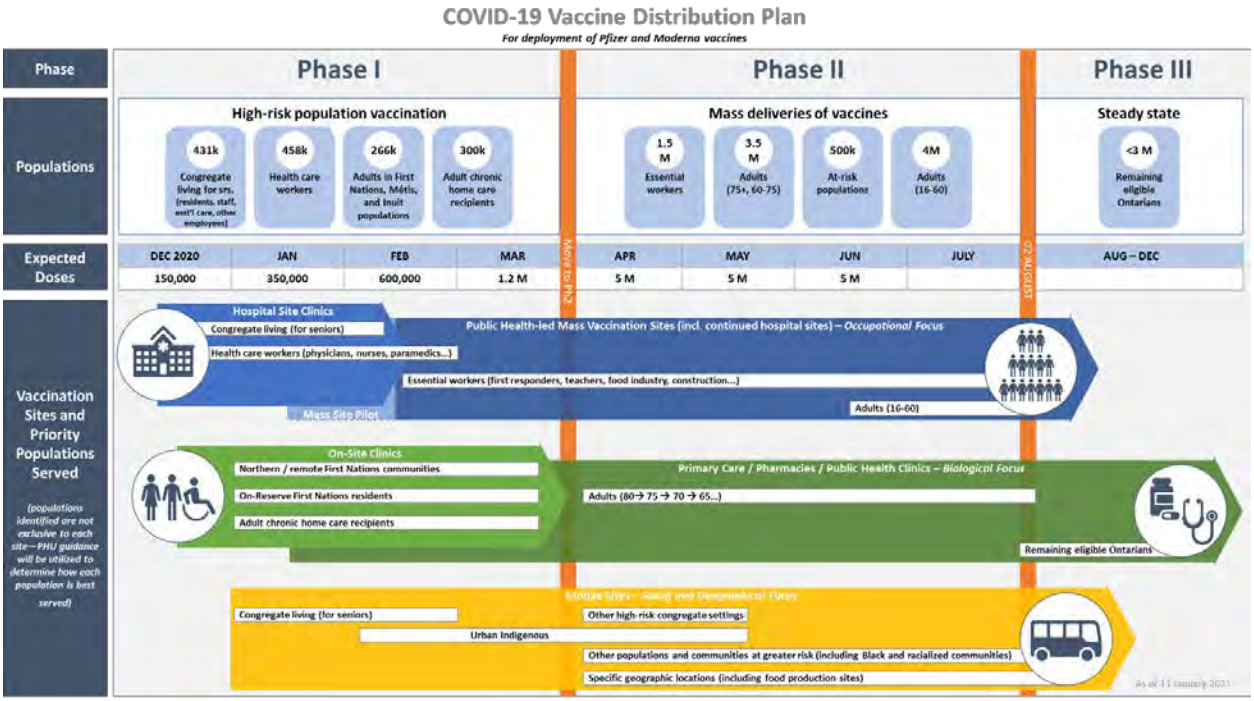

Figure 2. Ontario COVID-19 vaccine distribution plan

In alignment with Ontario's COVID-19 vaccine distribution plan, the City of Toronto and Toronto Public Health have built a robust plan for the administration of vaccines. The City of Toronto's COVID-19 Vaccination Program is founded on medical and clinical expertise and guidance, and is informed by engagement and collaboration with partners and diverse populations and communities. The plan is supported by a fulsome communications campaign.

The general Concept of Operations for the City of Toronto's COVID-19 Vaccination Program builds on the Toronto Public Health 2016 Mass Immunization Clinic Plan, which was tested in 2017 through the EpicTO exercise. The Vaccination Program is also informed by Toronto Public Health's longstanding success in delivering immunization clinics and supporting internal and external partners to deliver vaccinations within their communities. The Vaccination Program describes how the City of Toronto and Toronto Public Health will:

- Identify and support access to vaccines and vaccination information for resident and worker populations for which it is responsible;
- Operate immunization clinics to vaccinate members of these populations during the Province of Ontario's phased approach to COVID-19 vaccine roll-out;

- Concurrently and intermittently operate mobile immunization clinics and specialized, targeted immunization teams;
- Implement interventions to address the specialized needs of vulnerable populations;
- Support ongoing vaccination of these populations as the Province of Ontario's healthcare system transitions into permanent vaccination for COVID-19, as may be required in the coming months and years; and,
- Collaborate and plan with community and health system partners.

This Playbook presents the City of Toronto's COVID-19 Vaccination Program, which has been developed by Toronto Public Health in collaboration with numerous City Divisions and in consultation with community partner agencies and organizations. The City's Vaccination Program is guided by Ontario's COVID-19 vaccine distribution plan. The successful implementation of the Program is dependent on receipt of vaccines in accordance with provincial priorities and successful engagement with health sector partners. The impact of the Program will be measured by the rate of immunization, population coverage, and the reduction and eventual elimination of community spread of COVID-19.

1. Governance

In March 2020, the City of Toronto activated its Emergency Operations Centre and created a city-wide COVID-19 Task Force to coordinate all aspects of the City's response to the COVID-19 pandemic. The primary aim of the COVID-19 Task Force is to reach across and manage City services, to ensure that both the safety and the needs of Torontonians remain top priorities.

With the impending announcement of COVID-19 vaccines, the COVID-19 Task Force directed its focus to immunization. The result was the establishment of the City of Toronto COVID-19 Immunization Task Force.

Immunization Task Force

The City of Toronto's Immunization Task Force (ITF) functions to plan for the mass immunization of residents and workers within the City of Toronto. The overarching structure of the COVID-19 ITF is shown in Figure 3.

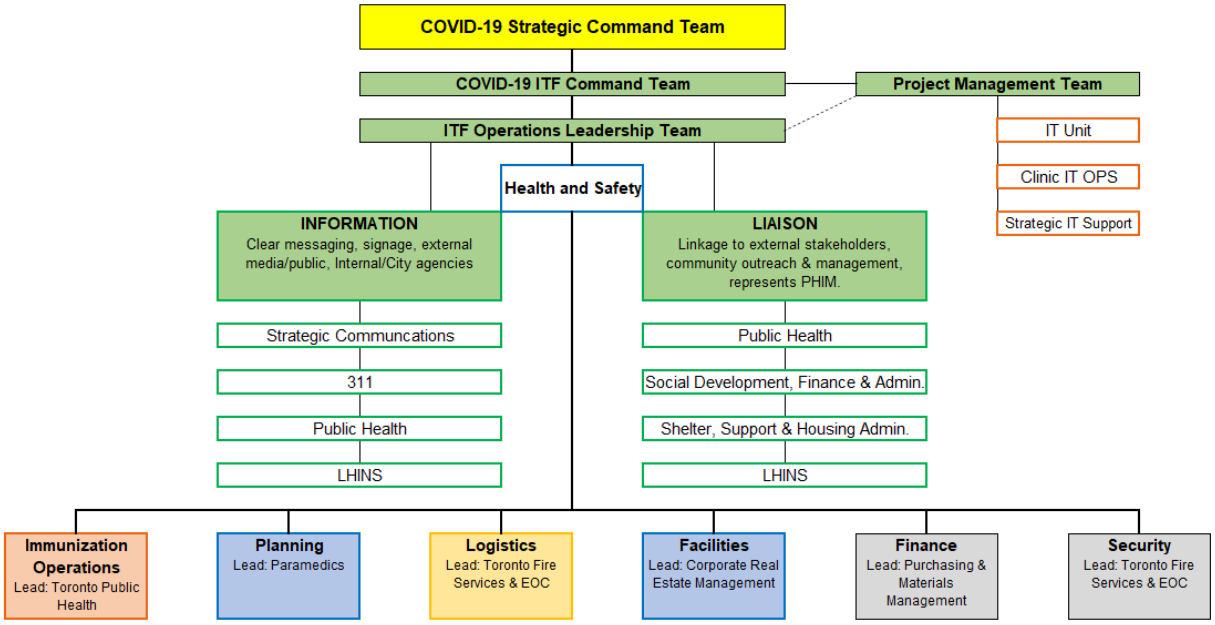

Figure 3. City of Toronto COVID-19 Immunization Task Force

The ITF's structure is based on a modified Incident Management System (IMS), which adopts a provincial standard for emergency management team building and operations, expanding on some functions and adding new functional areas as required to address the extraordinary and unprecedented demand that COVID-19 is placing on the City.

The ITF is a necessarily large structure, combining numerous functions, areas of expertise, skills, and experiences and knowledge from across the City. Information sharing and communication follow a "chain of command" through the IMS; at the same time, lateral communication is equally important and encouraged.

The ITF and its activities are not intended to replace nor impede existing healthcare systems and providers that expertly manage and provide care including vaccination.

The ITF is a temporary, short term, emergency response organization, operating with the primary mandate of expediency and in accordance with the overarching COVID-19 incident management system. The Task Force's IMS is subject to change as needed. If and when change is needed, the IMS and the ITF itself can and will be modified to ensure close coordination and a common operating framework for action. The ITF will be disbanded when the City of Toronto's leadership is confident that those residents and staff for which it is responsible have been or can be vaccinated through other means.

Roles and Responsibilities

The ITF's Command Team is comprised of the:

- Medical Officer of Health;
- COVID-19 Incident Commander;
- City Manager;
- City Solicitor; and,
- Chief Communications Officer.

Public health oversight and guidance are the main drivers of the activities of the ITF, and all activities are ultimately undertaken to support the public health outcome of vaccination. Various personnel supporting each of the roles identified on the ITF Command Team participate on an as-required basis. For example, Legal Services staff are consulted to provide opinions on many aspects of the work of the ITF, such as on employment, lease agreements, and privacy legislation, among others.

The ITF Command Team is supported by an Operations Leadership Team and a Project Management Team.

Additional supports within the ITF include the following, with responsibilities for:

- Health and Safety – development, guidance and implementation of training on policies that affect occupational health and safety, public health protection, and cleaning and disinfecting related to immunization clinic spaces and personnel.

- Information – (alternately "Communications") internal communications within the City of Toronto and external communications to the public and other stakeholders about the Vaccination Program, vaccine characteristics, and other COVID-19 vaccine related issues, relying existing or new channels and mediums of delivery.

- Liaison – sharing information on public health issues, social constructions of vulnerability, precarious housing and homelessness, and Provincial healthcare systems; gathering information and relaying it from subject matter experts and community partners in these areas; and, acting as the primary points of contact with their counterparts and serving as representatives of the City and the ITF in matters of immunization for these populations and communities.

ITF Roles and Responsibilities are differentiated from the City of Toronto and Toronto Public Health.

In the City of Toronto, the Medical Officer of Health, in collaboration with the Deputy MOH, Associate Medical Officers of Health, and supported by TPH staff, is responsible for providing oversight, support, and guidance on public health issues including COVID-19 pandemic response operations and policies, and for informing and guiding the ITF's program of activities. This responsibility includes receiving specific medical and health guidance from national and provincial health authorities, and for overseeing its implementation within the City of Toronto.

The ITF Command Team itself undertakes engagements with organizations that are external to the City of Toronto. For example, the Medical Officer of Health along with senior staff and others at Toronto Public Health are responsible for interfacing with their counterparts at the Ontario Ministry of Health, Public Health Ontario, other public health units, local hospitals, Local Health Integration Networks and others, as and when required.

In addition to existing health system linkages, the COVID-19 Incident Commander and the ITF Planning Chief are responsible for interfacing with the Province of Ontario's Vaccine Distribution Task Force and communicating non-privileged information to the ITF and the City of Toronto corporate leadership as appropriate.

ITF Functional Areas

The Task Force's IMS comprises multiple functional areas, or sections, that report to the ITF Command Team through the Operational Leadership Team. Each section is dedicated to specific activities in support of the City's COVID-19 Vaccination Program. Details about the contributors to each section are shown in Figure 4.

Participation within each section includes TPH medical doctors, nurses, and emergency management experts and the functional expertise of many staff from a variety of City Divisions. Accordingly, coordination with the City's wider operational and administrative structure is strong. The individual functional areas and tactical accountabilities for each are described as follows:

Immunization Operations

The ITF Operations Section is responsible for developing and operationalizing specific plans and tactics for the operation of mass immunization clinics, mobile clinics, and other interventions; seeking appropriate public health guidance; administration and management of vaccination operations; and, identifying resource needs in coordination with the ITF Logistics, Finance, and Facilities sections.

Planning

The ITF Planning Section is responsible for maintaining broad situational awareness and oversight on vaccine distribution; planning for distribution to priority groups and vulnerable populations based on public health guidance; and tracking resources and capabilities available to or required by the ITF. It is responsible for leading the development of the concept of operations and the comprehensive immunization plan, which includes TPH's updated MIC plan.

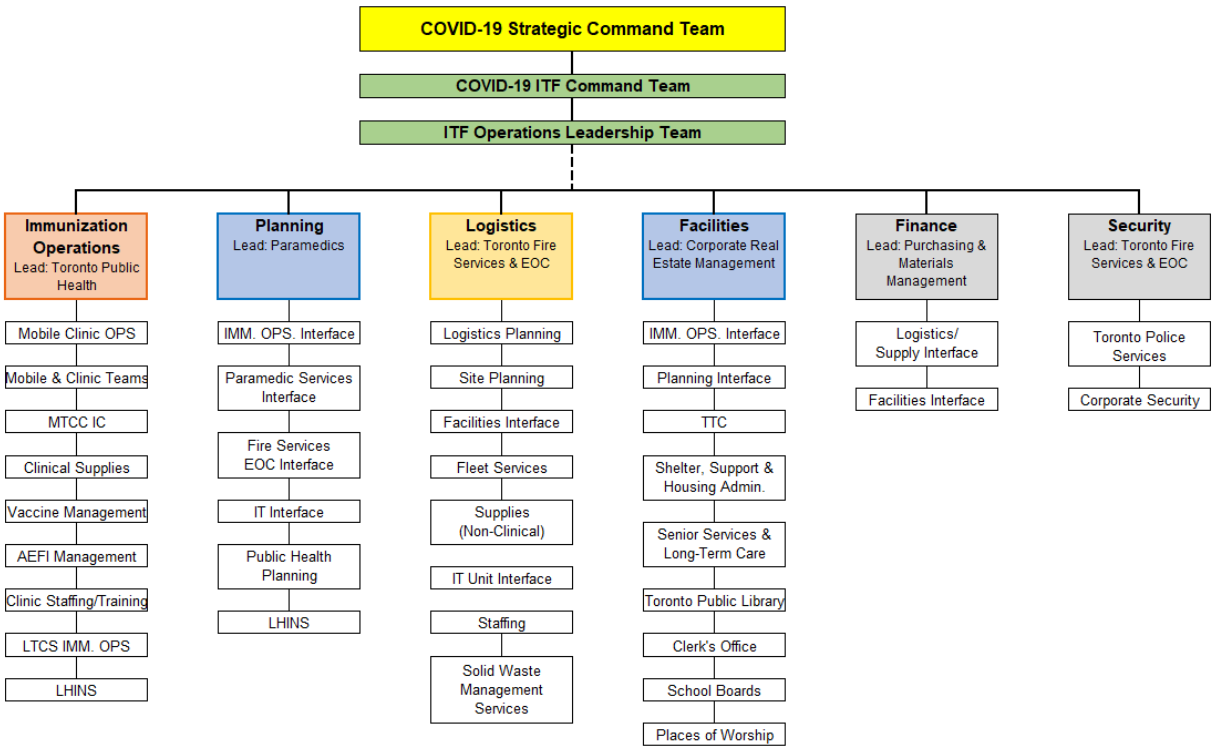

Figure 4. City of Toronto COVID-19 Immunization Task Force tactical accountabilities

Logistics

The ITF Logistics Section is responsible for vaccine inventory management; acquisition, storage, and deployment of medical and non-medical supplies, including personal protective equipment; transportation of resources and personnel; and, supporting the People & Equity Division in recruiting human resources needed for immunization operations.

Facilities

The ITF Facilities Section is responsible for siting and securing fixed sites through lease agreements or City real estate sharing options; siting and securing mobile clinic testing sites; and, siting and securing resting and staging areas as required.

Finance

The ITF Finance Section is responsible for planning and accounting for all workforce scheduling, procurement, compensation, and expenditures, in accordance with applicable regulations and standards; information management of all records of value except for the final immunization plan document; and, ensuring staff scheduling for clinics and other immunization operations.

Security

The ITF Security Section is responsible for the security of clinic sites, operations, information, and especially vaccines; risk mitigation for potential anti-vaccination or other protests and for enforcing public health guidance including physical distancing and wearing of appropriate masks in clinics; and, line management at all clinic sites.

Responsibilities and Accountabilities

All members at all levels of the ITF are responsible for adhering to its IMS, escalating emerging issues and risks to ensure safe and efficient vaccine delivery, and ensuring clear and open lines of communication are maintained.

Unity of Command

Unity of command is a key principle of emergency management. In the ITF, unity of command is exercised through its IMS: each section agrees to take instruction from and report to their Section Lead; and, Section Leads agree to take instruction from and report to the ITF Operations Leadership Team. The COVID-19 Incident Commander has overall accountability and responsibility for the ITF exercised through the ITF Operations Leadership Team; and is, in turn, accountable to the City's Strategic Command Team. At any time when information appears unclear or an emergent, potential or perceived risk is identified, ITF members are expected to use the IMS "chain of command" to escalate questions, problems, or concerns for collaborative and responsive resolution.

2. Communications and Community Engagement Approach

The City of Toronto's Strategic Communications Division's mission is to provide excellent communications services that ensure the public, employees, media, as well as local, national and international audiences have a clear understanding of the City of Toronto's policies, priorities and programs. The division is responsible for providing strategic and corporate communications planning and project management and media relations support to Council, committees, task forces, senior City staff and divisions. The goal of the division is to assist the Mayor, Members of Council and City divisions to inform the public about City programs, services and emerging issues of interest and to encourage civic participation in municipal government.

In the context of the COVID-19 Vaccination Program, the City of Toronto's Strategic Communications Division works in partnership with Toronto Public Health to ensure messages and published materials about the safety, efficacy and availability of the vaccines is accurate, timely, and broadly disseminated. The overall concept of the communications campaign is captured in Figure 5:

Figure 5. City of Toronto communications campaign concept

Guiding Principles

The communications plan to support roll-out of the COVID-19 vaccination program relies on a number of key guiding principles; specifically, the Communications plan is intended to:

- Reach every resident, in every community, in every corner of Toronto;
- Be agile, to allow for responsiveness and quick pivots;
- Be centralized and unified, so that there is consistent messaging through a single voice;
- Align to provincial and federal messages, including timing of announcements and direction; and,
- Be based on evidence-based research to promote trust in the safety and efficacy of the vaccines, address misinformation, and guide communications messages, spokespersons and campaign spending.

Strategy Overview

The City's COVID-19 Vaccination Program communications plan relies on the following proven strategies:

- Leveraging all communications channels (traditional, digital, in-person);
- Using consistent design and branding;
- Continuing to drive public to toronto.ca/covid19;
- Collaborating with the COVID-19 ITF Liaison team to connect with community leaders;
- Using multiple languages, share vital information with community leaders and City Councilors for dissemination;

- Monitoring and listening to public sentiment, using data and analytics to drive decision-making, and appropriately tailoring messages and tactics; and,
- Undertaking research to guide messages, ensuring use of the best sources of information, and proactively dispelling misinformation before it can be disseminated.

Audiences

Three main categories of audience have been identified and used to inform the City's COVID-19 Vaccination Program communications plan.

First, and foremost, the communications plan aims to reach all Toronto residents, with a focus on:

- The "moveable middle', that is, those who may not understand the vaccine, or who may be hesitant for various reasons, but can be educated and persuaded to be immunized;
- Vulnerable and racialized communities, especially Black and Indigenous;
- Non-English-speakers and new Canadians;
- Youth; and,
- Seniors, who may need help to understand the logistics of accessing the vaccine.

Second, the communications plan envisages leveraging the work of the ITF Liaison team with community partners, third parties and others to:

- Educate and influence residents in specific communities, who may prefer to seek counsel from their own community leaders; and,
- Engage with the medical community, in response to data which shows that 80% of individuals are most influenced to receive a vaccine by their primary care physician.

The third audience is the Toronto Public Service, to provide:

- Regular updates and resources to staff and leadership
- Assist the City's People and Equity division with recruitment efforts
- Communicate City policies related to vaccination
- The materials to ensure an informed public service, which will in turn ensure an informed public.

Key Messages

Key messages have been and continue to be developed by the City's Strategic Communications team in collaboration with Toronto Public Health. The messaging will evolve in response to when vaccines become available:

- **Why and How:** leading up to the wider availability of vaccines, educating about why individuals should be vaccinated and how the City plans to deliver vaccines as they become available.

- **Come and Get It**: once vaccines become available, an explanation about why and how individuals can be immunized against COVID-19.

- **It's Not Too Late**: at this stage, vaccines will have been widely available for several months, so this phase of the communications plan will invoke messaging to push individuals who are hesitant to take action and get the vaccine to help achieve the wider goal of "herd" immunity that contemplates at least 70% of the population being vaccinated.

Tactical Overview

The City of Toronto Communications Plan is founded on a **Pink Bandage Campaign** to brand the COVID-19 Vaccination Program. This social campaign aims to excite, promote and encourage immunization through a pink bandage.

A pink bandage icon is being used in all facets of communications materials associated with the COVID-19 Vaccination Program, such as on social media, for communications templates, and in advertising. At immunization clinics, there will be an opportunity for individuals to apply a pink bandage to their social media avatar once they have been vaccinated, and the City is working to provide a sticker of a pink bandage to vaccine recipients. Figure 6 shows the bandage along with an illustrative example of a social media avatar (the individual shown in the figure had not been vaccinated as at January 31, 2021).

Figure 6. City of Toronto pink bandage icon and social media avatar example

Starting with the first Toronto Public Health immunization clinic, which initially operated on January 18 and 19, 2021 as a "proof of concept" clinic, there will be pink bandage "selfie stations" positioned near clinic exits. This tactic uses social influence to help address vaccine hesitancy. Clinic clients will be encouraged to take a selfie at the selfie station to show off that they were vaccinated via social media, as shown in the illustrative example in Figure 7.

Figure 7. Selfie station illustrative example

Communications Materials

A suite of templates with a consistent design will be used to further brand the City's COVID-19 Vaccination Program, and will be used for a range of communications vehicles, including:

- Key messages;
- FAQs (frequently asked questions, with answers);
- Tip sheets and brochures;
- Posters;
- On-site signage at immunization clinic locations;
- Videos about, for example, demonstrating the process to get vaccinated and testimonials on the ease of the vaccination process;
- Updating stakeholders, as well as regular updates to 311 and 211;
- Communications to City Council, whereby matte stories and other content can be created for information sharing with Councilors' constituents; and,
- Possible direct mail/householder flyers.

All key communications materials will be translated into multiple languages

The City's Strategic Communications team has developed communications products with a consistent branded look and feel as a means of ensuring easy public recognition of information about Toronto's COVID-19 Vaccination Program. Templates are being developed for use by the City, Toronto Public Health and by partners, such as hospital partners, for posters, pop-up banners and signage for immunization clinics. Examples are shown in Figure 8.

Figure 8. Vaccination program branding

Communication Modes and Media Platforms

The communications plan for Toronto's COVID-19 Vaccination Program involves a public education campaign that has been developed so as not to duplicate provincial and federal government efforts.

Advertising channels that are planned for use include:

- Transit shelters;
- Digital billboards;
- Multi-residential elevator screens;
- Digital media, which will be programmed based on geotargets and demographic targets;
- Social media, including TikTok, Facebook, Instagram and Twitter (geotarget and potentially demographic target);

- Multilingual and specialized media, to include traditional, digital and social in the top languages, as well as for communities identified in conjunction with the City's COVID-19 Vaccination Program Liaison team;
- Radio advertising, which is planned to be broad and targeted;
- Free advertising as is available and through in-kind partnerships; and,
- Leveraging space at properties of City Agencies and Corporations, such as TTC spaces.

The Communications plan is founded on effective and timely **Media Relations and Issues Management** that involves:

- Proactive outreach to media, including multilingual media;
- Spokespeople who are conversant in multiple languages to ensure target populations are reached;
- Anticipating issues that may arise and addressing them proactively;
- Social listening (on Twitter, Facebook, Instagram, WhatsApp, TikTok) to monitor for the spread of misinformation and address quickly;
- Use of a daily issue tracker to monitor, share information, and address issues;
- Media site tours and visits, such as for the opening of the Proof-of-Concept Immunization Clinic at the Metro Toronto Convention Centre, or supplied video when in-person visits are not possible; and,
- Regular updates via media briefings and news releases.

The communications team supporting Toronto Public Health will have an active **Social Media** presence. To be as effective as possible, the City's content will be visual, using multimedia, customized for each platform and will be both:

- Proactive: by delivering key messages and information, to persuade and motivate individuals to be vaccinated.

- Reactive: by monitoring for misinformation, confusion and related issues, and correcting these.

Customized content will be used for each platform so as to reach different audiences

The communications plan will also make use of the City's COVID-19 **Web** page to provide ticker updates showing how many people have been vaccinated in Toronto over time. The roll-out will highlight multimedia, visual and key web content and utilize Search Engine Optimization to ensure the public is directed to the relevant pages on the City of Toronto website.

Engagement and Communication to Diverse Audiences

Efforts continue to be expended on engaging with the full range of communities that make up the City of Toronto.

Working in partnership with advertising agencies and relying on vaccine experts, sector leaders, resident leaders, social marketing and communication professionals, and behavioral scientists, the City's engagement and communications efforts are intended to develop a Toronto For All communication campaign that will:

- Target an engagement and marketing campaign to specific groups, including Indigenous, Black and Senior populations;
- Reduce vaccine hesitancy among high-hesitancy population groups;
- Dispel vaccine hesitancy among healthcare workers and other primary caregivers, targeting hotspots; and,
- Collaborate on engagement and mobilization with behavioral scientists using their vaccine demand cognitive segments model.

Throughout the campaign, keen attention will be paid to the social determinants of health such as race, income and food security, housing, and disability, to drive a targeted equity engagement and mobilization strategy.

3. Partnership and Engagement

The City of Toronto recognizes that public health measures can only be effective if individuals and groups believe and accept that the information being presented to them is trustworthy and true. Establishing trust and confidence among the many populations that make up Toronto will enable the City to understand their different and unique needs so as to best support their participation in the COVID-19 Vaccination Program.

Community engagement efforts are built on the City of Toronto's Council-approved TOSupports: COVID-19 Equity Task Force on Vaccines, which is built on the 25 equity actions and targeted and enhanced equity measures that the City of Toronto, Toronto Public Health, and partners are taking to support Torontonians disproportionately impacted by COVID-19.

The City's Social Development, Finance and Administration Division (SDFA) is at the forefront of building trust in communities across Toronto through its leadership and support to:

- Develop and implement a social inclusion and community safety agenda for the City;
- Foster safe and strong neighbourhoods and communities;
- Promote community engagement; and,
- Advance life skill opportunities for youth.

The City, through SDFA, recognizes the importance of community-driven and -implemented solutions to the success of the COVID-19 Vaccination Program. To that end, the Division is working within various communities to facilitate and promote vaccine uptake (Figure 9).

Figure 9. Community-centred approach to facilitate adoption of public health measures including vaccination

To support community efforts and achieve the intended outcomes of the Vaccination Program, the starting point is leveraging internal City resources and external partnerships. Figure 10 presents an overview of resources that are internal to the City, as well as the broad range of external groups that have come forward to work collaboratively to lend support to collective efforts to eradicate COVID-19 through vaccination efforts.

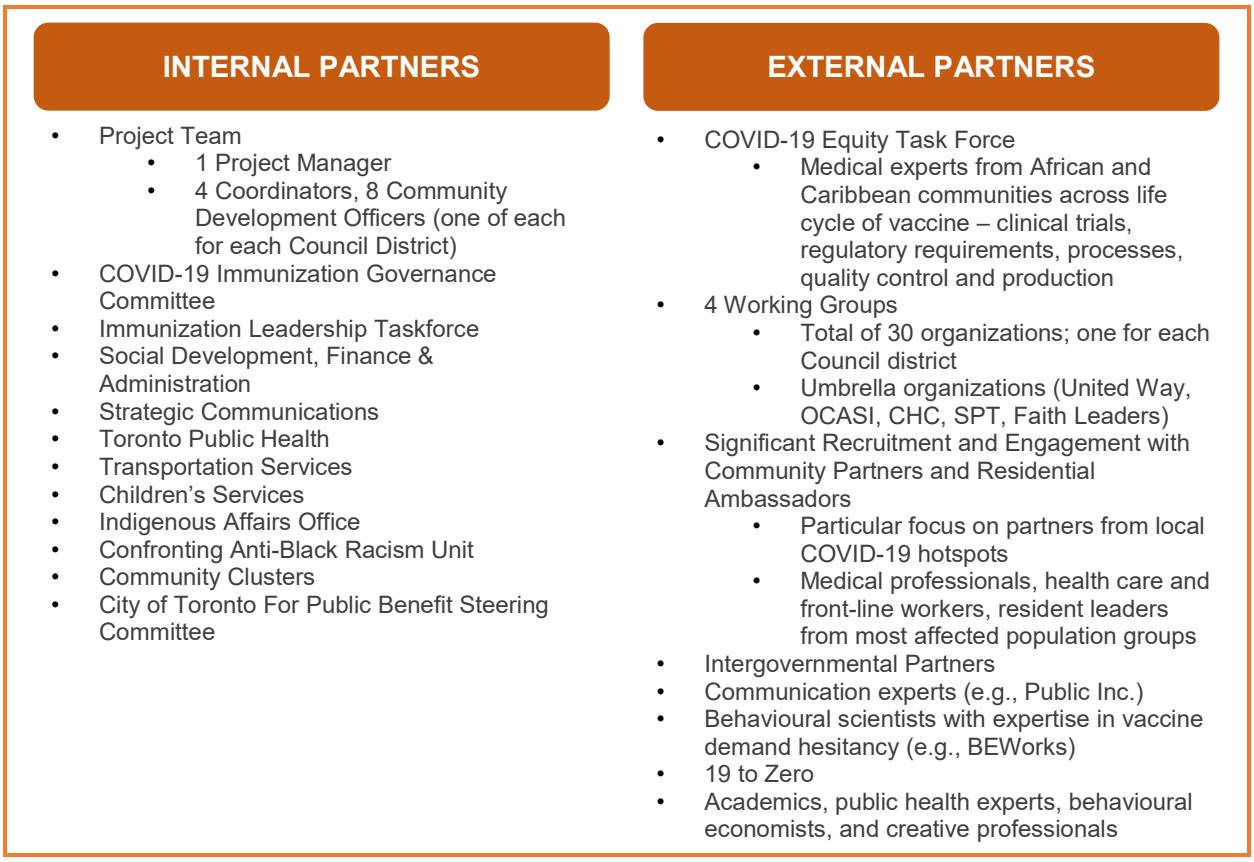

Figure 10. Project resourcing for engaging with Toronto's diverse communities

By working with internal stakeholders and community partners, Toronto is working to:

- Develop a community agency recruitment plan for each of the four Community Council districts that includes:
  - Indigenous community health experts
  - Black community health experts
- Identify and recruit Community Partners to participate in the development and implementation of the COVID-19 Vaccination Program
  - Targeting numerous organizations
  - Led by the City's Social Development, Finance and Administration Division (Community Development Unit, Newcomer Office, Poverty Reduction Strategy, Confronting Anti-Black Racism and Community Funding Unit) with participation from each Community Council District Working Group

Specifically, Community Partners are being invited to team up with the City to:

- Implement immunization mobilization plans for their specific community;
- Recruit and support Resident Champions;
- Provide input into the City's COVID-19 Vaccination Program campaign strategy;
- Amplify City messaging about the safety of vaccines and the benefits to the individual and community of being immunized against COVID-19;
- Provide advice on roll-out of the Vaccination Program; and,
- Act as local/place-based point of contact for local residents.

Also under development is a Resident Ambassador recruitment plan, whereby Resident Champions from target population groups will be recruited and trained on community engagement:

- Front-line workers;
- Medical/health professionals;
- Foreign trained health professionals; and,
- Recognized community and grassroots leaders.

The target is to recruit numerous Resident Ambassadors throughout Toronto's 140 neighbourhoods, particularly in local hotspot communities, who will:

- Leverage the Toronto For All campaign within their population and community;
- Inform planning and provide information about community needs;
- Be deployed (medical professionals) on social media, ethic radio/YouTube and other platforms for interviews; and,
- Act as local/place-based points of contact for local residents.

As shown in Figure 11, roll-out of the campaign to promote community engagement among Toronto's many diverse populations and residents who are ready and willing to be vaccinated began in January 2021 and is planned to continue throughout the year, in tandem with the City's overall timelines for the COVID-19 Vaccination Program; timing is subject to Provincial direction and the supply of vaccine from the Province.

Community Engagement and Resident Mobilization Readiness for Immunization

(across Toronto Council Districts)

INFRASTRUCTURE CREATION

Jan '21

1. Create Project Team
2. Identifying sector leaders and constituency groups
3. Establish Working Groups (4)
4. Establish Governance Committee (Subject Matter Experts - SDFA, TPH, Strategic Communications, SSHA)
5. Develop terms of references

SOCIAL MOBILIZATION PLANNING

Feb – Mar '21

1. Active tailored actions to address social behavioral to vaccine hesitancy
2. Influencer campaigns
3. Communication campaigns
4. Training, workshops, sessions led by behavioural scientists, communication & marketing professionals

IMPLEMENTATION

Apr – Dec '21

1. Engage & Amplify & Mobilize
2. Train community partners & residents
3. 140 community organizations
4. 280 Resident Leaders
5. City-wide marketing campaign

Figure 11. Timelines for community engagement and resident mobilization readiness for immunization

4. Local Prioritization of Populations and Promotion of Vaccine Uptake

As shown earlier in Figure 2, Ontario has developed a three phase COVID-19 immunization plan that focuses first on high-risk populations, then moves toward mass vaccination, and eventually into a steady state for any remaining Ontarians who want the vaccine. Using the province's plan, Toronto Public Health has developed an approach to prioritizing local sub-populations within each phase of the City's COVID-19 Vaccination Program and is working toward promotion campaigns to encourage broad uptake among sub-population community members.

Local Adaptation – Provincial Oversight

Toronto Public Health's Role

Toronto Public Health's (TPH) primary role regarding the sequencing of the City's population including its local Indigenous people in the COVID-19 vaccination campaign is to be a collaborator. TPH will lead the integrated expansion of vaccine delivery channels, including mass vaccination clinics (TPH, primary care-led, pharmacy, hospital-led) on-site immunization and mobile clinics (including local Indigenous mobile healing units).

The Province has tasked Public Health Units (PHUs) with determining the optimal type of clinic to offer each sub-population within Toronto based on the population's health status, geography, accessibility and resources. One way that TPH will determine this is in close consultation with Toronto's health sector and Indigenous communities to better understand logistical and operational considerations in order to provide direction and guidance to support the community's and Indigenous people's vaccine uptake.

TPH has significant operational experience in running other types of vaccination clinics. TPH will follow up with sites to verify and coach on vaccine readiness and connect sites needing support with vaccination partners (primary care, pharmacists, hospital hubs, Toronto Paramedic Services, etc.).

Furthermore, TPH will support local Indigenous communities in the production and dissemination of communication materials tailored for their community members.

Toronto Public Health's Responsibilities

TPH is following the Province's Ethical Framework for Vaccine Distribution, shown in Figure 12, as well as the complementary Ontario Human Rights Commission's Policy Statement on a human rights-based approach to managing the COVID-19 pandemic.

As per Provincial guidance, TPH will prioritize supporting the COVID-19 vaccination of sub-populations such as Toronto's Indigenous people, particularly as it commences in Phase 1 and is completed in Phase 2 of the vaccine campaign. TPH support will be based on local need including the Indigenous communities' needs. As an example, with local Indigenous partners, TPH will assist with the development of promotional campaigns tailored to Toronto's Indigenous communities.

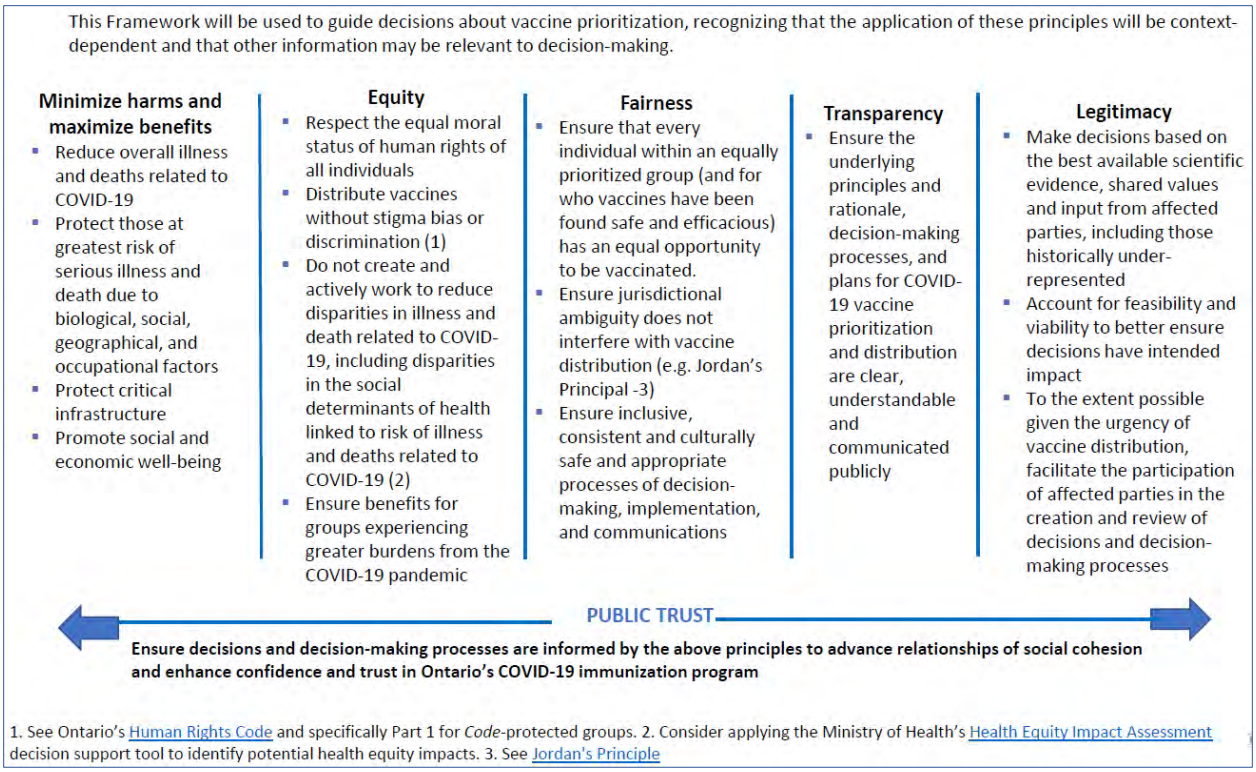

Figure 12. Province of Ontario ethical framework for COVID-19 vaccination distribution

TPH is also responsible for proactive engagement with local Indigenous communities in order to strengthen two-way communication and information-sharing. The benefits of strong partnerships include:

- Improved awareness of Toronto's Indigenous peoples and/or communities' needs regarding COVID-19 vaccination as well as TPH and the communities' leadership's complementary plans and shared responsibilities;
- Optimal support efforts to encourage Indigenous people's vaccination; and,
- The amplification of Indigenous community leaders' messaging to Indigenous residents regarding the COVID-19 vaccine campaign.

Promotion and Recruitment of Eligible Populations

Government of Ontario's Ethical Framework for Vaccine Distribution

Context

The Province's decision to identify key populations to be among the first to receive the vaccine, such as Indigenous communities, is based on the advice of medical experts and ethicists, recommended by the Ontario's COVID-19 Vaccine Distribution Task Force and is aligned with the federal National Advisory Committee on Immunization's recommendations.

The Province's COVID-19 Vaccine Distribution Task Force has a First Nations and Indigenous sub-table to more broadly engage First Nations on the approach to vaccination, including prioritization.

Ethical Framework for Vaccine Distribution

The Framework includes six key principles:

1. Minimize Harms and Maximize Benefits
2. Equity
3. Fairness, including considerations regarding the Indigenous community to:
    - Ensure jurisdictional ambiguity does not interfere with vaccine distribution (e.g., Jordan's Principle); and,
    - Ensure inclusive, consistent, and culturally safe and appropriate processes of decision-making, implementation, and communications.
4. Transparency
5. Legitimacy
6. Public Trust

Ontario Human Rights Commission Policy Statement

The Ethical Framework includes the statement that it should be read in conjunction with the Ontario Human Rights Commission's (OHRC) policy statement on a human rights-based approach to managing the COVID-19 pandemic.

The OHRC's policy statement acknowledges the human rights-impacts of the COVID-19 pandemic on vulnerable groups and that:

- The most vulnerable groups in Canadian society are disproportionately negatively affected by the COVID-19 pandemic, and;
- People with multiple, intersecting identities may be particularly vulnerable (for example, Indigenous women and girls).

The Policy statement further includes principles for a human rights-based approach to managing the COVID-19 pandemic that includes respecting the rights of Indigenous peoples.

- The OHRC specifies that this means adopting respectful, nation-to-nation engagements and partnerships with diverse Indigenous governments, communities, organizations and knowledge-keepers to ensure that the COVID-19 pandemic in addressed in a culturally appropriate and safe manner.

- To recognize that the impact of COVID-19 will be exacerbated by the ongoing negative impact of colonialism on Indigenous communities and will have a unique, intersectional impact on Indigenous women and children, people with disabilities, people with addictions and older persons.

Government of Ontario's COVID-19 Vaccination Priority Timeline

Phase 1

Starting in early 2021 the vaccination campaign will expand to include more than 20 hospitals and PHUs, including TPH, in hot-spot regions.

This part of Phase 1 includes vaccinations for front-line health care workers; essential caregivers; long-term care home and retirement home residents; First Nation communities and urban Indigenous populations.

As part of Phase 1, TPH will work with hospital partners and Long Term Care Home (LTCH) and Retirement Home (RH) licensees to ensure that vaccine is offered to the most vulnerable population in the province: residents of LTCHs and RHs. This population has suffered the most deaths and the highest proportion of severe outcomes from COVID-19. Hospital partners will also assist with the vaccination of staff and essential caregivers, which are the most likely sources of many of the outbreaks in these congregate settings. TPH will ensure that all LTCHs are visited or have the capacity to vaccinate their residents themselves. TPH staff will support ensuring $COVax_{ON}$ (the provincial COVID-19 immunization software) training and on-boarding occurs at all LTCHs/RHs through liaison with the province. TPH will encourage hospitals to enter information promptly if they are not entering information into $COVax_{ON}$ when doses are administered.

Once these populations have been vaccinated, TPH plans to work with health sector partners including Ontario Health Toronto Region and Ontario Health Teams (OHTs) to establish a plan to vaccinate other congregate care locations where seniors are housed. OHTs are well placed to conduct this work as they have close links with their community and partner organizations and often are key funders of these locations.

Phase 2

This phase will begin when more doses of vaccine become available to Ontario. This is expected to be later in winter/early spring of 2021. During Phase 2, vaccinations will include all members of the groups in Phase 1, such as Toronto's Indigenous residents who have not yet been vaccinated. Additional groups include essential workers (to be defined by the province), and at-risk populations such as the Black community. As well, older community-dwelling residents will also be sequenced in this phase as they have suffered more mortality and severe illness. When available, TPH will use provincially-developed software to foster pre-registering of these higher sequenced sub-populations so that they can be invited to mass immunization clinics offered by TPH or other health sector partners.

Phase 3

This phase will begin when vaccine is relatively freely available. All individuals who want to be vaccinated will have access to the vaccine through traditional channels (such as community pharmacies and primary care sites).

Enumeration of Sub-Populations

There are a number of priority sub-populations within Toronto that warrant attention, including Black communities, Indigenous communities, homeless/under-housed and others such as South Asian, Central American, Senior, LGBTQ, and individuals with disabilities. For each of these communities, a focus on the social determinants of health, such as race, income and food security, housing, and disability, contribute to the targeted equity engagement and mobilization strategy. These sub-populations tend to:

- Have a high degree of vaccine hesitancy, based on the most up-to-date research on predictors of vaccine willingness by age and gender;
- Live or work in COVID-19 hotspots;
- Be most impacted by COVID-19; and,
- May be difficult to reach, particularly in a two-dose regime.

With respect to the Indigenous community, TPH is responsible for quantifying this self-identifying population (the estimated approximate number of Indigenous people living in Toronto is 70,000, per the 2016 Census) to appropriately support a vaccination plan's logistics and operations, as well as communications efforts. As necessary, sub-populations within this population may be enumerated in order to better understand disproportionate vaccination rates among these groups. These data can then inform a strategic targeted outreach effort to increase vaccine uptake.

Fulsome engagement between TPH and local Indigenous community leadership is underway. TPH has staff who are in regular discussions with key Indigenous stakeholders, including leadership of:

- The Toronto Region Indigenous Health Table (including TPH having been invited to discuss its roles, responsibilities, and how best to support its community members);
- Anishnawbe Health Toronto;
- The Native Canadian Centre of Toronto; and,
- Toronto Aboriginal Support Services Council.

TPH is also in regular communication with Indigenous physicians at Women's College Hospital and St. Michael's Hospital who are trusted partners of the aforementioned stakeholders.

These discussions ensure that TPH is continuously informed about how best to perform its role and uphold its responsibilities in order to optimally support Toronto's Indigenous peoples' COVID-19 vaccination throughout Phases 1 and 2 in a safe, efficient, and culturally appropriate manner.

5. Supplies Management and Distribution

The safe and secure receipt, storage, and distribution of vaccine, clinical supplies and associated personal protective equipment (PPE) are fundamental components of the City of Toronto's COVID-19 Vaccination Program.

Distribution System (Delivery and Receiving)

Immunization clinic supplies and personal protective equipment (PPE) will be ordered on a biweekly basis from the province (or agreed upon frequency based on consumption and vaccine supply). The City of Toronto will also procure other clinical, and non-clinical supplies through their Purchasing and Materials Management Division to supplement the supplies that will be provided by the Province.

All immunization clinic supplies will be stored at, and distributed from a Central Distribution Warehouse, which is located within a City-owned secure facility.

Vaccine Storage and Cold Chain

Toronto Public Health (TPH) pays strict attention to maintaining cold chain requirements when vaccine is being transported, distributed and stored. All vaccines are stored and handled according to manufacturer and provincial storage and handling requirements, including cold chain and light sensitivity of the vaccine (as applicable).

Toronto Public Health (TPH) and Purchasing and Materials Management (PMMD) staff will be assigned to the Central Distribution Warehouse to coordinate the ordering, receipt, distribution and tracking of all supply inventories related to the City's COVID-19 Vaccination Program. An existing City-wide inventory management system will facilitate the ordering and receiving of inventory, storage and warehousing of materials, and distribution of supplies to the clinic sites.

The City of Toronto's Central Distribution Warehouse also has the capacity and capability to receive, store and distribute vaccines and is operationally ready. The area within the Central Distribution Warehouse dedicated to vaccine storage is appropriately secured.

COVID-19 vaccines are temperature sensitive, and must be stored and handled according to vaccine product monograph instructions. Toronto Public Health has developed clinical procedures and staff training to ensure the vaccine cold storage process is maintained at all times, by following the Ministry of Health and Long-Term Care, Vaccine Storage and Handling Protocol, January 1, 2018 and COVID-19: Vaccine Storage and Handling Guidance – Pfizer-BioNTech and Moderna COVID-19 Vaccines (Version 1.0 – January 6, 2021).

Currently, the City of Toronto's vaccine storage capacity at the Central Distribution Warehouse includes the following equipment, which has been provided to the City by the Province of Ontario:

- 1 x Thermo Fisher Scientific Freezer – TSX3030FA (with expansion to 4 freezers in total, which have been promised for delivery to the City at a later date), which has an internal temperature range between -30 C and -15 C
- 1 x PHCBI, 48.0 cu.ft Pharmaceutical Refrigerator - MPR1412-PA (with expansion to 4 fridges total at a later date), which has an internal temperature range between +2 C and +8 C

All cold storage equipment has multiple layers of temperature monitoring redundancies. These include:

- Physical inspection of the equipment multiple times per day by the City's Corporate Security team; temperature information is logged, and any concerns are communicated to Toronto Public Health.

- Remote temperature monitoring and alarms (hardwire and cellular) are installed on all equipment to ensure temperature is operating within acceptable and programmed parameters.

- Inspection and calibration – All cold storage units are on a regular maintenance schedule whereby inspection and temperature calibration are performed by a qualified external contractor.

The Central Distribution Warehouse is equipped with an emergency generator, which provides uninterrupted power to the entire Warehouse, including the vaccine refrigerators and freezer, should a power outage occur. The generator is tested on a regular maintenance schedule to ensure the critical infrastructure within the building can maintain normal operations during all conditions. Furthermore, there is a secondary generator on-site in case the first unit fails to operate.

The area within the Central Distribution Warehouse that is dedicated to vaccine storage also has a large workspace to process incoming and outgoing vaccine, and associated supplies. The space is equipped with stainless steel tables, computer workstations for inventory management, and shelving for ancillary clinic supplies. A team of City staff who are appropriately trained in the handling of vaccines ensures all clinic supplies are ordered, packed, transported and returned each day (as needed). If required, there is a City staff member who is on 24/7 standby to triage any after-hours issue within the vaccine storage area of the Warehouse or at clinic sites.

Vaccine Storage and Handling at Clinics

COVID-19 vaccine will be transported to clinics sites in strict adherence with the Ministry of Health, COVID-19: Vaccine Storage and Handling Guidance – Pfizer-BioNTech and Moderna COVID-19 Vaccines (Version 1.0 – January 6, 2021).

Toronto Public Health acknowledges its responsibility for managing inventory for both the first and second doses of the currently approved COVID-19 vaccines that are administered at City-operated immunization clinics, mobile clinics and by City response teams. TPH will manage inventory in response to Ministry of Health guidance and directives, through the preparation of four-week inventory planning outlooks, updated weekly to the Ministry of Health to support effective and efficient provincial inventory and distribution management.

6. Vaccination Approaches

The Ontario COVID-19 Vaccination Distribution Plan (Figure 2) includes multiple vaccination site types, including hospital-based clinics, on-site clinics within specific communities, as well as pharmacies, and public health and mobile sites.

In response to the potential need to rapidly scale up the immunization effort, Toronto Public Health has focused on a on a whole-of-government approach using an effects-based operational planning lens. The ethical framework outlined by the Province of Ontario (Figure 12) will be used to guide COVID-19 vaccine distribution, to promote consistency, accountability, and public trust.

Effects-Based Strategies

The City of Toronto and Toronto Public Health COVID-19 Vaccination Program has identified four delivery models to effectively manage immunizations and administer vaccines to populations within the City of Toronto for which Toronto Public Health has both direct and indirect responsibility. The Vaccination Program contemplates mass vaccination clinics, community clinics, immunization response teams and mobile clinics, and aligns with the three phases identified by the province and shown in Figure 2, as follows:

- Effect 1 will be used across all three phases as identified by the Province; and,
- Effects 2, 3 and 4 will primarily be used in Phases 1 and 2 of the Ontario government vaccine distribution plan.

The COVID-19 Vaccination Program that has been developed by the City of Toronto and Toronto Public Health as described herein is reliant on the province to provide the vaccine, including associated clinical supplies and personal protective equipment (PPE).

Effect 1 – Advice, Education and Support to Vaccine Delivery Agents

Effect 1 carries on the mission of Toronto Public Health to reduce health inequities and improve the health of the whole population of Toronto by providing medical expertise, support and guidance including medical oversight to various vaccine delivery agents (VDA).

TPH will develop and share documents to support immunizations for specific vaccines and this information will be provided online through the TPH Health Professionals website, or via emailed communiqués. These documents are expected to include:

- Fact Sheets;
- Sample Medical Directives;
- Readiness Checklists; and,
- Other relevant documents, as required.

Toronto Public Health will work in collaboration and partnership with the five (5) Local Health Integration Networks (LHINs) and eleven (11) hospital corporations serving Toronto, to support immunizations in priority populations in accordance with and as outlined by Ontario's Ethical Framework for COVID-19 Vaccine (Figure 12).

Furthermore, TPH has a team of appropriately qualified personnel to support the reporting and investigation of all adverse events following immunization (AEFI).

Effect 2 – Stand Up of Immunization Clinics

Through data analytics and based on space availability, TPH has identified and sourced nine (9) sites to establish immunization clinics, five (5) of which are relatively large in size. The locations of these sites were chosen upon careful consideration of:

- Accessibility for all individuals who want to be vaccinated, by ensuring compliance with Accessibility for Ontarians with Disabilities Act, 2005 (AODA) requirements;
- Travel modes and times, to and from the site, by both private and public means;
- Overall interior space to stand up a mass immunization clinic in compliance with COVID-19 infection prevention and control (IPAC) measures, for example sufficient waiting and staging spaces that allow for required physical distancing;
- Round the clock (24/7) monitoring and security;
- Environmental services to support the clinic, including cleaning and disposal of medical waste;
- Ability to efficiently layout the clinic and provide clinic workflow to allow for physical distancing, sanitation stations, and compliance with IPAC measures; and,
- Indoor amenities, such as sufficient ventilation, toilets, secure storage and space for supplies and equipment.

It is anticipated that these large clinics can be scaled as necessary to meet vaccination demands within the community and to respond to changes in the quantity of vaccine delivered from the Province.

Effect 3 – Stand Up of Community-Based Immunization Clinics

Through data analytics, TPH will establish clinics in hot zone communities and priority neighbourhoods, in partnership with the City's Parks, Forestry and Recreation division.

These clinics will be smaller in size than the larger immunization clinics and will remain on-site to ensure that vaccination demands are met within the community. When vaccine demands have been met, the vaccination team will move to the next priority community and begin the same process. Presently, TPH will have the resources to establish four (4) of these small community clinics simultaneously. The locations for these clinics will be chosen with consideration to public access, including public transit and parking, and to ensure AODA requirements are addressed.

Effect 4 – Deployment of Response Teams and Mobile Clinics

Supporting immunization of vulnerable and Indigenous populations is a priority for TPH. Using the Provincial ethical framework, TPH will identify strategies to reach vulnerable populations. Additionally, at the time of a large response, dedicated response teams will work on immunization for vulnerable groups. The vulnerable population's immunization strategy includes five (5) mobile teams to provide vaccine clinics at shelters, food programs and drop-ins for homeless/street involved clients as well as high-risk clients living in Toronto Community Housing Corporation residential and senior's buildings.

Depending on vaccine availability and priority groups, vaccine can also be given to shelter Physicians, and Street Health nurses to immunize their clients. Toronto Paramedic Services is able to provide a response team comprised of 10 paramedics to support these plans.

Implementation Principles and Anticipated Throughput

TPH will implement the above effects in a staged approach based on staffing, vaccine availability and established agreements with the host facilities.

For Effects 2 and 3, an estimate of client flow through the immunization clinics has been developed, based on Toronto Public Health's experience delivering flu vaccine clinics. For flu vaccine clinics, Toronto Public Health immunizers (typically a nurse) spends an average of 7.5 minutes with each client; this yields an average of 8 doses per hour per immunizer. During their time with each client, the immunizers are responsible for verifying client information, explaining the vaccine, obtaining consent and then explaining aftercare and AEFI.

The number of immunizers at a clinic site is based on the physical space (including areas for screening, registration, dosing and aftercare), IPAC considerations (safe physical distancing), and available staffing (both clinical and non-clinical).

When Effects 2 and 3 are implemented, the City expects to operate clinics with a range of sizes. Table 2 shows anticipated client throughput based on different clinic sites, ranging from sites that can accommodate only 5 immunizers, up to sites that can accommodate 40 immunizers. At this time, Toronto Public Health estimates a client would spend approximately 30 minutes in the clinic from arrival until departure. To achieve the rates of immunization, clinic management will take into consideration staff scheduling, such as for meal breaks and any Collective Agreement or other requirements, that can affect total flow through a clinic.

As the province transitions to a steady state of vaccine flow in Phase 3, Toronto Public Health will consider demobilizing the immunization clinic model while continuing to focus on Effect 1 and any residual response teams needs as described under Effect 4.

Table 2. Estimated Rates of Immunization

Number of Immunizers	Number of Doses per Day	Number of Doses per Week (7 days)	Number of Doses per Month (29 days average)
45	3,240	22,680	93,960
40	2,880	20,160	83,520
35	2,520	17,640	73,080
30	2,160	15,120	62,640
25	1,800	12,600	52,200
20	1440	10,080	41,760
15	1080	7,560	31,320
12	864	6,048	25,056
10	720	5,040	20,880
5	360	2,520	10,440

Immunization Clinic Proof of Concept

As part of its response to the pandemic, the City of Toronto has developed a robust, scalable plan for the provision of a network of immunization clinics across Toronto that will fill the time between the Phase 1 launch of hospital-administered clinics and the eventual roll-out of widespread, community-based vaccine distribution that includes primary care physicians and pharmacies in Phase 3.

The target date established by the Province of Ontario for launch of the immunization clinics was originally planned for April 1, 2021, which aligns with the provincial phasing of the COVID-19 vaccine roll-out and originally projected COVID-19 vaccine availability.

On December 31, 2020, the Province requested that the City accelerate implementation of one of its immunization clinics, in order to undertake a "proof of concept" to inform and refine the immunization clinic concept of operations, and all associated technologies and processes. The commencement date for the "proof of concept" requested by the Province was Monday, January 18, 2021. The launch of this clinic on January 18, 2021 represented a 10-week acceleration from the City of Toronto and Toronto Public Health's original plans. The clinic was initially scheduled to operate for six to eight weeks to develop an immunization clinic playbook to be provided to the Province and used in establishing other immunization clinics in Toronto and across Ontario.

Current Situation

The "proof of concept" clinic was set up and began operations on Monday, January 18, 2021.

On Monday, January 18, the City was notified by the Province that the clinic would need to pause operations as of Friday, January 22, due to supply issues with the vaccine. The Province was clear that the clinic should proceed to continue operations so as to begin work on developing the playbook.

On Tuesday, January 19, the Province provided an updated directive, requiring the clinic to be paused at the end of operations on January 19, 2021, due to vaccine shortage.

The "proof of concept" COVID-19 immunization clinic at Metro Toronto Convention Centre is now closed until further notice. When vaccine is made available by the Province of Ontario, the "proof of concept" clinic can re-establish operations. When the "proof of concept" clinic resumes operations, the quantity of vaccine that is available to be administered will be determined by the Province.

The following sections provide details about the "proof of concept" clinic for the two days it was in operation and how it will be operated when the clinic resumes.

Location

The clinic was located inside the Metro Toronto Convention Centre (MTCC), in Exhibition Hall A, at 255 Front Street West. All appropriate protocols, such as physical distancing, use of personal protective equipment, masks, and frequent cleaning of touch surfaces, were implemented and observed in accordance with COVID-19 Infection Prevention and Control (IPAC) requirements.

This location was chosen in part because the space had already been secured by TPH for the purpose of operating another vaccination program. It is centrally located in downtown Toronto, is accessible by public transit and has parking on-site. The clinic set-up is being maintained at the site in anticipation of re-starting when vaccine is made available by the Province of Ontario.

Clinic Layout

Figure 15 shows the layout of the "proof of concept" immunization clinic at the MTCC.

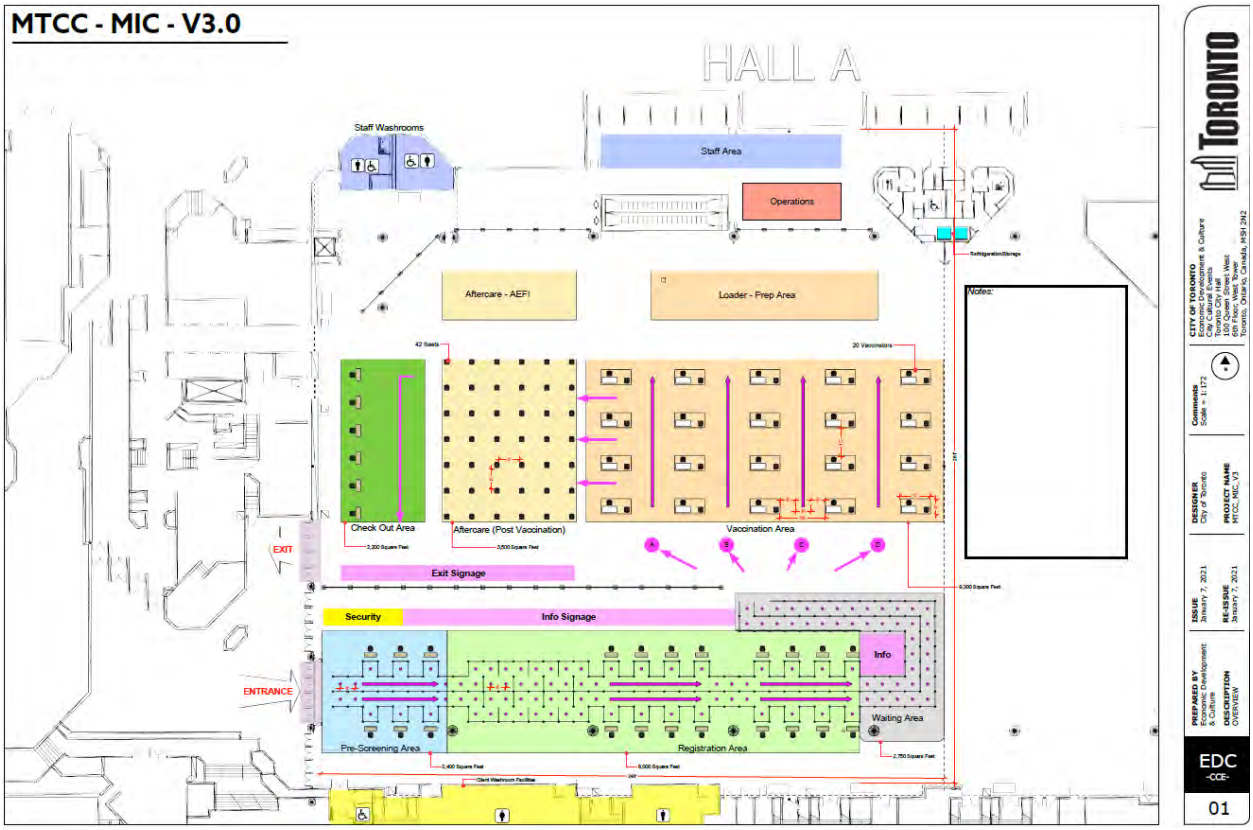

Figure 13. City of Toronto "proof of concept" clinic set-up with 20 immunization stations

The clinic is laid out with 20 immunization stations. Set up of the clinic was determined by Production staff from the Cultural Events Section of the City's Economic Development and Culture Division. The set-up was created such that the number of vaccination stations operating each day could be scaled in accordance with the availability of vaccine and the scheduling of clients.

The "proof of concept" approach will be used to test the City's ability to scale clinic operations (including scaling above 20 immunization stations at the MTCC location) in accordance with vaccine availability, when clinic operations resume.

Eligible Clients and Booking Appointments

Vaccination at the "proof of concept" clinic was based on scheduling healthcare workers who are on the frontlines of the response to COVID-19, specifically frontline shelter workers, including harm-reduction and Streets to Homes personnel, and frontline Toronto Public Health workers. This cohort was prioritized for vaccination by the Province of Ontario as detailed in the Ethical Framework for COVID-19 Vaccination Distribution (Figure 12). Determination of eligibility to participate in the "proof of concept" clinic was made by the healthcare workers' respective supervisors. The clinic was not open to the public.

Both the choice to receive COVID-19 vaccine and the choice to participate in the "proof of concept" immunization clinic was on a voluntary basis, and this was communicated to all healthcare workers who were invited to participate.

Clinic Daily Operations and Staffing

Hours of operation for client immunization appointments were from 11:00 AM through 8:00 PM, and the clinic was planned to operate 7 days per week. Staff were on-site from 10:00 AM to 9:00 PM for daily set up and close-out each day.

Staff roles on-site included:

Clinical Roles	Non-Clinical Roles	
Clinic Manager	Screener	Vaccine Clerk
Clinic Lead	Line Monitor	IT Support
Immunizer	Check-In Clerk	Aftercare Chair Cleaner
Vaccine Loader	Check-Out Clerk	Security
Aftercare Provider	Clinic Support	Custodian
	Supply Clerk	Data Entry Clerk (if required)

Staff were primarily from Toronto Public Health, supplemented by other City of Toronto staff and with support from the Province of Ontario.

Upon arrival at the clinic for their scheduled appointment, each client was screened for COVID-19 symptoms and registered. They were also registered in the Provincial $COVax_{ON}$ system, at which time the date and time of the appointment for their 2nd dose was confirmed, via the $COVax_{ON}$ system.

As part of the registration process, the client was given a vaccine fact sheet. The client was then directed to a vaccination station / dosing booth where a fully qualified immunizer (typically a nurse) reviewed their consent by asking if the client completed all the questions and confirming that that they had read the fact sheet. After confirmation was obtained, the immunizer administered the COVID-19 vaccination.

Next, the client was asked to move to an aftercare area where they were monitored for any adverse, post-immunization effects, for 15 to 30 minutes. Clients were monitored by trained and qualified personnel.

After the observation period, and so long as no adverse effects were observed, the client was then checked out from the clinic and received a receipt confirming they had received the 1st dose of the vaccine and with confirmation of the specific date and time for their 2nd dose appointment.

As stated above, the clinic set-up at the MTCC is being maintained at the site in anticipation of re-starting when vaccine is made available by the Province of Ontario.

The City fully expects to make adjustments and refinements to the different aspects of clinic operations in response to changing conditions, and has already begun to do so based on the preliminary findings from the first two days of operation, and will again when the clinic resumes.

At the end of the "proof of concept" clinic, an Immunization Clinic playbook will be produced and provided to the Province for use by public health units across Ontario.

In accordance with the City of Toronto's COVID-19 Vaccination Program, and following completion of the "proof of concept", Toronto Public Health will continue to operate an immunization clinic at the MTCC site.

7. Human Resources

Staffing models for the City's COVID-19 Vaccination Program were created based on the lessons learned from the 2009-2010 H1N1 influenza response. The current staffing models have been adapted in response to the COVID-19 infection control and prevention (IPAC) guidelines based on the epidemiology of the COVID-19 virus. Staffing models ensure that the recommended social distancing guidelines are followed to protect staff and clients.

Final decisions about staffing resources as required to fully support the City's COVID-19 Vaccination Program will be made in consultation with and under the direction of the City of Toronto Medical Officer of Health and the COVID-19 Strategic Command Team, in collaboration with the City's Senior Leadership Team.

Once the City of Toronto's COVID-19 Vaccination Program reaches full capacity, it is estimated that upwards of 1,300 individual positions will need to be filled. In order to support the Program from its initial stages through to full capacity, the People & Equity Division of the City of Toronto has organized and is carrying out a significant recruitment and redeployment drive to staff the clinics.

Recruitment of Human Resources

Filling the positions required to staff the immunization clinics will involve a combination of:

- Hiring new staff;
- Redeploying existing City of Toronto staff;
- Contracting with agencies to provide staff with specialized skills (e.g., nurses); and,
- Working with community organizations.

Clinical Roles

Clinical roles are being filled using the following approaches:

- Existing and newly hired nurses and registered practical nurses, as employees of the City;
- Nursing agencies, which can provide temporary staffing; and,
- Other healthcare providers, such as staff from Toronto Paramedic Services and students in medical programs.

Volunteers from the healthcare field, such as doctors, nurses, and other specially trained individuals may be considered, if warranted.

Non-Clinical Roles

Filling the non-clinical roles required at the immunization clinics will focus first on redeployment of City of Toronto employees who have the qualifications to undertake the range of non-clinical responsibilities.

In addition, the People & Equity Division will extend recruitment activities to include:

- New hires, both temporary and/or part-time; and,

- Staffing agencies, which can support and supply candidates to the City.

The City's People & Equity Division has begun to focus its hiring on communities that have been most impacted by COVID-19, such as racialized and low-income communities, to attract qualified individuals to fill openings through partnerships with community-based organizations.

The scope for volunteers in non-clinical roles is under development, with a view to providing opportunities for community volunteers to participate in and support the immunization clinics.

Orientation and Training

Providing thorough staff orientation and training is vital to the effective functioning of the immunization clinics.

Training for City of Toronto COVID-19 immunization clinics involves both on-line / in-person training, and on-site orientation.

For on-line / in-person training, the City of Toronto has developed training modules for all staff in both clinical and non-clinical roles. Confirmation of the completion of required training is done prior to allowing staff to attend the clinic.

For the “proof of concept” immunization clinic, the Ministry of Health provided training on the Province’s $COVax_{ON}$ software program.

8. Documentation and Reporting

Key questions being addressed by TPH's COVID-19 vaccine surveillance and reporting strategy:

- What are the estimates for how many individuals meet the criteria for each priority population as defined by the Province?
- What is the current progress with vaccinating priority groups eligible to be vaccinated?
- What do we know about the people who are being vaccinated (priority group, vaccine delivery agent, sociodemographic characteristics, neighbourhood)?
- What do we know about any adverse effects from receiving the vaccine?
- Who is choosing to not receive the vaccine and why?
- What are attitudes and opinions related to receiving the vaccine and how are they changing?
- What is our current estimated immunity level (or how much further to herd immunity)?
- Are there any geographic areas that require access to vaccination at any given time to make the biggest impact?
- How effective is each vaccine?
- Are we meeting the City of Toronto's COVID-19 Targeted Equity Plan

Surveillance and Monitoring

The COVID- Vaccination Surveillance Plan

Vaccination related surveillance activities at Toronto Public Health (TPH) are designed to provide information to assist with planning, assess progress with overall vaccination implementation strategies and goals, and ultimately to provide evidence required for decision making.

The principles that frame this plan include:

- Transparency;
- Evidence based; and,
- Equity centered.

The target audiences include the City of Toronto's Immunization Task Force, TPH staff involved in planning for vaccination clinics, TPH decision-makers, Community partners, and the general public.

Goals of the Vaccination Surveillance Plan

Toronto Public Health's COVID-19 vaccination related surveillance will be focused on addressing the following key areas through the collection of timely, relevant and comprehensive data that can be summarized as indicators, illustrated through data visualization, and further analysed with forecasting tools:

- Vaccine roll-out planning and implementation supports
    - Sub-population estimates
    - Logistics supports;
- Vaccine inventory, distribution and wastage;
- Vaccine safety monitoring and reporting;
- Vaccination coverage, uptake monitoring and reporting;
- Vaccine effectiveness;
- Vaccination barriers, including attitudes, opinions, and hesitancy surveillance; and,
- Evaluation of vaccination efforts.

Reporting Plan

COVID-19 vaccination related surveillance is being planned to address the key questions. These questions reflect the needs, frequency, and format that primarily serve those leading the campaign within the City of Toronto. Reporting to external partners and the public is also considered.

What will be reported?

Specific reports will summarize data and indicators for the key areas, as relevant for situational assessment, decision making, and to inform communications. These may include the development and addition of an indicator for the TPH Monitoring Dashboard, to capture progress with vaccination goals as an indicator of how well the Vaccination Program is performing and the level of susceptibility within our community. If any vaccination uptake goals are defined for a given time, these will also be included.

Frequency of reporting

Reporting will be refreshed, as needed to understand the range of vaccine related information. This may range from daily, weekly, or reported at longer intervals to accrue data and/or get perspective on the broader questions (e.g., evaluation).

Any forecasting or modelling of scenarios that can inform the Vaccination Program will also be shared on an ad hoc basis, as relevant.

Methods for reporting

Where possible, data visualization tools such as dashboards will be utilized, including the built in feature in the provincial $COVax_{ON}$ system. Relevant indicators will also be shared and published on the TPH public facing dashboard.

Use of social media and other communications channels will also be considered for any important findings that may need to be conveyed, especially around vaccine safety.

Data Sources

The ability to link various sources will be instrumental in reporting on many of the key indicators listed. The following data sources will be accessed to support surveillance activities related to COVID-19 vaccination efforts

- $COVax_{ON}$ (as per the section below titled, The $COVax_{ON}$ Solution for Health Units)
  - For booking appointments at immunization clinics
  - TPH immunization clinic vaccine administration
  - Immunization clinic, hospital-based vaccine administration
  - Data from other vaccine delivery agents – e.g., pharmacies and primary care

- CCM/iPHIS/CORES – case and contact management systems used for COVID-19
  - AEFI
  - COVID-19 case activity

- Census data sets – 2016 population numbers collected and maintained by Statistics Canada
  - For planning clinics
  - For prioritization

- Institute for Clinical and Evaluative Sciences (ICES) – for the extensive repository of health administrative datasets
  - For estimating numbers across priority groups

- Hospital databases that may be used to track administration of vaccine on-site (prior to full use and access to $COVax_{ON}$)

- Special ad hoc surveys or survey databases
  - To support additional social determinant data needs
  - For public opinion on vaccine hesitancy or barriers

Social Determinants of Health Collection and Reporting

Client based Socio-Demographic Data Collection

Collecting socio-demographic data helps to identify health inequities and better understand differences in health status and access to services among groups, which allows TPH to plan and allocate resources in a more equitable way. For example, TPH has collected information on ethno-racial identity and income from reported COVID-19 cases since May 2020, which have consistently shown that people from racialized communities and with lower income levels have higher rates of COVID-19.

Reporting on vaccination uptake with an equity lens is dependent on the data that are collected via the provincially-governed information system, $COVax_{ON.}$ TPH has recommended to the province that several socio-demographic characteristics be collected, such as ethno-racial identity, household income, and occupation. TPH has also requested that these data elements be added to the information available to public health units via $COVax_{ON}$.

Geographical Mapping of Vaccine Uptake

Toronto neighbourhood characteristics including age structure, rates of chronic illness, and COVID-19 burden have already been summarized and used to inform priority strategies for vaccination.

Address information collected during the vaccination process will be used to map neighbourhood level coverage rates, to help assess and understand differences in vaccine uptake across the city. This information can be combined with neighbourhood case rates and activities, to help identify any gaps and opportunities in our vaccine priority groups and to inform any options for targeted vaccination (e.g. mobile vaccination).

Mapping by neighbourhood can help mobilize action, through City partners and community agencies, to ensure an equitable vaccination approach is achieved. This can inform deployment of the Neighbourhood Priority Response teams.

For indicators where individual level data are not available, a person can be linked to the geographic area where they live, using small geographical areas such as census tracts, and ecological analysis can be done. This has been effective in monitoring key equity indicators related to COVID-19 cases.

Vaccine Safety

Adverse Events Following Immunization (AEFI) Surveillance

TPH has assembled a team to investigate all AEFIs. Toronto Public Health is following the process for reporting of adverse events following immunization (AEFIs) for COVID-19 vaccines, which is the same procedure as AEFI reporting for all other vaccines. TPH will use the Ontario AEFI reporting form for initial reports of AEFIs and the relevant provincial information management system (iPHIS/CCM) for case management. The AEFI reporting form has been updated to include Adverse Events of Special Interest (AESI) for COVID-19 vaccine safety surveillance identified by the Brighton Collaboration. For questions about AEFI reporting or to notify Public Health Ontario (PHO) of a vaccine safety issue, Toronto Public Health will contact ivpd@oahpp.ca.

Active Vaccine Safety Surveillance

Toronto Public Health will be reviewing findings from Ontario, which will be conducting active vaccine safety surveillance for COVID-19 vaccines through the Canadian National Vaccine Safety Network (CANVAS) beginning in late January. CANVAS conducts active vaccine safety surveillance after implementation of new vaccine programs and will be used by multiple Canadian provinces to gather safety information on COVID-19 vaccines. Individuals who have given their consent to receive electronic communication (i.e. email) about research studies documented in the $COVax_{ON}$ system will receive an email providing information about CANVAS. Clients who consent to participate in CANVAS will complete online questionnaires following vaccination to elicit information about symptoms as well as medically attended events that require reporting as AEFIs. Any AEFIs identified by CANVAS will be referred to local public health agencies for further investigation and entry into the provincial surveillance system. Public Health Ontario will assist CANVAS in referring AEFI reports to the correct local public health agency.

Clinical Advice on Re-Immunization Following Complex AEFIs

Toronto Public Health will use existing relationships with clinical experts across Toronto and consult on re-immunization, as required. This effort will make use of the Canadian Special Immunization Clinic (SIC) Network, of paediatric and adult infectious disease specialists and allergists with expertise in the assessment and management of patients who have experienced a complex AEFI.

The COVax$_{ON}$ Solution for Health Units

Toronto Public Health will be using COVax$_{ON}$, the information system that is being developed by the Province and is intended for use as the common solution for recording all administered doses of COVID-19 Vaccines and tracking of inventory in Ontario. For this to succeed, there has to be a health sector wide commitment to entering data into this system and robust linkages between COVax$_{ON}$ and other data needed to determine coverage rates.

The COVax$_{ON}$ solution has been planned to support the administration of all vaccine preparations (Pfizer, Moderna, others as licensed and available), in all settings including hospital-based clinics, LTCH and RH settings, mass immunization clinics, specialty clinics (e.g., workplaces) and individual settings (pharmacies and primary care). This system is also being designed for booking vaccination appointments and for registration at mass immunization clinics.

Toronto Public Health is committed to working with the COVax$_{ON}$ development team to ensure the system can support a strong Ontario vaccination strategy. The areas still under development for COVax$_{ON}$ include:

- Appointment scheduling module;
- Pathways for COVax$_{ON}$ use with electronic medical record (EMR) systems supporting primary care, etc.;
- Digitalization of COVID-19 Vaccine AEFIs reporting;
- Reporting via an integrated dashboard; and,
- Integration with case and contact management (CCM).

9. Contingency Planning

City of Toronto Emergency Management

Contingency planning is critical to ensure that the City of Toronto's COVID-19 Vaccination Program is maintained, should elements of the primary plan face unforeseen challenges. Continuity of operations is crucial to success.

Toronto has a robust and proven emergency response plan, which has served the City and its residents and businesses well during previous emergencies, such as the 2003 Northeast Blackout and the 2013 ice storm. The emergency plan is governed by the following legal authorities and legislation:

I. City of Toronto Municipal Code, Chapter 59 Emergency Management
II. Provincial Emergency Management and Civil Protection Act

The emergency plan was most recently initiated in response to the COVID-19 pandemic.

The Plan identifies three major categories of hazards that may pose a threat to the City of Toronto:

- Natural hazards are those which are caused by forces of nature; human activity may trigger or worsen the hazard;
- Human-caused hazards are hazards which result from direct human action or inaction, either intentional or unintentional; and,
- Technological hazards are hazards which arise from the manufacture, transportation (including supply systems), and use materials, technology and/or infrastructure.

The City's Emergency Plan adopts the principles of the Incident Management System. The Incident Management System is a standardized approach to emergency management that encompasses personnel, facilities, equipment, procedures and communications operating within a common organizational structure. Incident Management System concepts and principles include comprehensive resource management, action planning, integrated communications, interoperability, a modular and scalable framework, standard terminology, and span of control.

The five major sections of the Incident Management System (Command Team, Operations, Planning, Logistics, and Finance and Administration) can be expanded or contracted to meet requirements as an event progresses.

The response to an emergency in the City is managed using the Toronto Emergency Plan, and its Emergency Support Functions and Risk Specific Plans.

The Toronto Emergency Plan is updated annually and revisions are made per the Municipal Code, Chapter 59 and upon Toronto Emergency Management Program Committee approval.

Vaccination Program Contingency Plans

Preventing Vaccine Wastage

Vaccine Storage, Handling and Transport

All vaccine freezers and refrigerators that will be used for storing COVID -19 vaccines are located in secure locations. Remote monitoring systems are in place to ensure continuous temperature monitoring for each refrigerator and freezer.

Each vaccine refrigerator and freezer is connected to back-up generators in the event of a power failure. In the event of an unusual power outage where the backup generator fails, Toronto Public Health will move vaccines in cold storage to predetermined locations, such as other vaccine depots or to local hospitals.

Vaccine will be transported to various clinic sites in accordance with Ontario Ministry of Health vaccine storage and handling guidelines, and will be done in a secure manner.

Vaccine Administration at Clinics

Vaccine quantity will be strictly determined by the number of daily appointments per clinic. Only the quantity of vaccines required for each day will be moved from the source location.

The Clinic Lead and Vaccine Clerk will determine the number of vials used per hour based on the appointment schedule.

In the event there are unused doses left in a vial, Toronto Public Health will rely on a pre-established stand-by list of individuals who will be called near the end of the clinic day, to ensure no doses of vaccine are wasted. TPH will ensure that the stand-by list adheres as closely as possible to those individuals that fall within the provincial framework for the Phase in which the clinic is operating.

Surge Capacity for Staff

As part of the clinic staffing plans, consideration has been given to the need for additional staff to allow for illness or absenteeism. In the event additional staff are required for clinic operations due to staff absenteeism, Toronto Public Health has established a list of staff who can be called upon as replacements.

Cancellation of Clinics

In the event clinics must be cancelled due to, for example, inclement weather or other circumstances, Toronto Public Health will notify clients via e-mail linked to their appointment. Furthermore, the City's Strategic Communications team, working in concert with Toronto Public Health, will use various social media platforms to ensure that clients are aware of clinic cancellation. Signage will be posted at clinic locations advising visitors that the clinic is closed.

Team Member tests positive for COVID-19

All staff working at TPH clinics will be actively screened daily, upon entry to the clinic. Any staff member who fails any of the screening components (questions, temperature check) will not be permitted to enter the clinic.

Should a clinic staff member test positive for COVID-19 or be identified as a close contact to another individual who has tested positive, TPH will immediately invoke and follow the Ministry of Health's Management of Cases and Contacts of COVID-19 in Ontario procedure to both deal with clinic staff and possible exposure to clients. The Clinic Lead will work in close collaboration with Toronto Public Health's Case and Contact Manager to ensure appropriate steps are followed.

Medical Emergency at Clinic

TPH has policies and procedures in place in the event of a medical emergency related to adverse events following immunization.

All nursing staff at the clinics will have up-to-date cardiopulmonary resuscitation (CPR) certification and will have completed the TPH training on treatment of anaphylaxis following immunizations (see Appendix 8 – TPH Medical Directive for the Treatment of Anaphylaxis and Severe Adverse Effects).

In the event of a medical emergency, the Clinic Manager will take action to determine the safety of other clients and staff to ensure continued operations of the clinic while attending to the emergency. Emergency kits containing epinephrine are readily available at designated areas within each clinic. In addition, each clinic will have support from Toronto Fire Services firefighters who carry defibrillators, oxygen and other equipment to assist in handling medical emergencies. In the event of other medical emergencies, nursing staff at the clinic will be trained to provide basic first aid and CPR and will consult with the Clinic Manager to escalate the emergency by calling 911, if required.

Clinic Security Plan

Security at the immunization clinic starts with a risk assessment and a security assessment, which are used to develop a Security Plan for the specific clinic location.

Security Plans are highly confidential and are only made available on a very restricted and need to know basis.

10. Evaluation Approaches

Evaluation of the COVID-19 vaccination campaign is important as it will assist in timely collection of feedback and identification of lessons learned. TPH is planning to evaluate three key areas of its vaccination efforts: 1) approach to priority populations (equity); 2) vaccine uptake in the general population (outcome); and 3) vaccine administration at the various clinic settings (implementation). The scope of our evaluation will pertain to how well the vaccination campaign worked for the population of Toronto.

These evaluations will be conducted during the implementation of the Vaccination Program. The objective of these evaluations is to identify what worked well, areas for improvement, emerging issues and any unintended outcomes (positive or negative) of various aspects of the Vaccination Program in a timely manner so that adjustments can be made to improve the success of the Program as it is being delivered. The evaluation results may also be leveraged to improve future campaigns. TPH has prioritized key evaluation questions and sub-questions, as illustrated in Table 7, based on their usability and evaluability.

Table 1. Areas of Evaluation and Key Questions

Areas	Evaluation Questions	Sub-questions
Priority populations/ Equity	How equitable was the vaccination campaign?	a) How did equity factors play a role in the identification of priority populations who are more severely impacted by COVID (e.g., health, job loss, economic impact, etc.)? Was the application of the priority population direction equitable, evidence-based and applied consistently? b) What was done to make vaccines accessible for the priority populations identified (e.g., access to booking system, vaccination location, AODA accessibility, translation services, etc.)? c) What factors contributed to vaccine hesitancy in the priority populations and what was done to address these factors (including building on community partnership, influential communication strategy, etc.)? d) What was the uptake and the factors that impacted the uptake of the vaccine in the priority populations? What were the demographics of priority populations who did and did not receive the vaccine? Did they receive it in a timely manner? (e.g., number of people who took single dose and double dose)
Outcome - Vaccine uptake in general population	What was the uptake of the vaccine in the general population and what factors impacted the uptake of the vaccine?	a) What was the uptake of the vaccine in the general population? (i.e.., proportion of eligible people who received single dose and double dose) What were the demographic characteristics of the general population who took the vaccine? b) What are the demographic characteristics of those who are eligible to be vaccinated but don't get vaccinated? c) What were the barriers to vaccination (e.g., access to booking system, vaccination location, translation services, childcare, etc.)? Did these differ by priority group? d) How well did we address the barriers to vaccination for general population (e.g., communication, transportation, etc.)? How did the vaccination campaign impact the ability to achieve herd immunity? What was the campaign's impact on the healthcare system and disease transmission (e.g., hospitalizations, number of ICU beds occupied, number of outbreaks, etc.)?

Table 1. Areas of Evaluation and Key Questions

Areas	Evaluation Questions	Sub-questions
Implementation - Vaccine administration at the various clinic settings	What was the effectiveness of the vaccine administration process?	a) How effective was the use of various clinic settings for administering the vaccines (e.g., pharmacies, MD offices, mobile units, etc.)? How accessible were they (e.g., close to transit/ availability of parking)? b) How effective was the clinics' design/layout, set-up and space usage? c) How efficient was the execution/vaccine administration? (e.g., consent management, wait times, timeliness of services, coverage rates, ability to meet minimum/maximum vaccination rate thresholds) d) How efficient and effective was the staffing model for the clinics? (e.g., was there enough staff to meet needs) e) What were the frequency, intensity and characteristics (including types of vaccines) of the Adverse Events Following Immunization (AEFI)? Were communication and implementation plans adjusted accordingly? f) Were best practices for IPAC and OH&S followed at the clinics? g) How effective was the vaccine and supplies management and distribution? (e.g., timeliness of delivery and receiving, storage and handling, cold chain and wastage, allocation, inventory management, etc.) h) How effective was the internal communication in keeping clinics staff, management, and suppliers informed about clinics operations? i) How sufficient was the external communication? (e.g., general communication about vaccine and coverage to the public, specific pre-vaccine and post-vaccine communication for the clients) j) How well were the roles and responsibilities of the clinic management and staff implemented for the clinics, including support functions such as security, housekeeping, IT, etc.?

Data collection will be integrated into clinic practices where possible. The design of each evaluation activity will account for privacy protections and available resources. Evaluation reports, including evaluation methodologies, findings, lessons learned, and recommendations for refinements to the COVID-19 Vaccination Program and future vaccination planning, will be developed and disseminated to all relevant stakeholders.

Acknowledgments

The City of Toronto is grateful for the work of The Council of Medical Officers of Health's COVID-19 Vaccination Working Group, which, with direct support from the Ministry of Health and Ontario Health Toronto Region Health, established the framework and guidelines for the contents of this Playbook.

Toronto is also grateful for the work of the City's COVID-19 Immunization Task Force, done in conjunction with the Province of Ontario's Vaccination Task Force, led by General (Ret'd) Rick Hillier. The work of the Task Force has been, and continues to be, informed by the public health expertise of Ontario's Chief Medical Officer of Health, Dr. Williams and Toronto's Medical Officer of Health, Dr. de Villa, both leading figures in the City of Toronto's response to the COVID-19 pandemic.

Many individuals contributed to the development of the City of Toronto's COVID-19 Vaccination Program. The City of Toronto, and all Torontonians, thank-you.

Abbreviations

AED	Automated External Defibrillator
AEFI	Adverse Events Following Immunizations
AESI	Adverse Events of Special Interest
AMOH	Associate Medical Office of Health
AODA	Accessibility for Ontarians with Disabilities Act
BCP	Business Continuing Plan
CABR	Confronting Anti-Black Racism
CANVAS	Canadian National Vaccine Safety Network
CCAC	Community Care Access Centre
CCM	Case and Contact Management
CDC	Communicable Disease Control
CDU	Community Development Unit
CFU	Community Funding Unit
CHC	Community Health Centres
CPR	Cardiopulmonary Resuscitation
CNO	Certificate of Competence
CORES	Coronavirus Rapid Entry System

CRC	Community Recreation Centre
DMOH	Deputy Medical Officer of Health
EI	Emergency Information
ELI	Enterprise Learning Initiative
EMR	Electronic Medical Record
EMS	Emergency Medical Services
EOC	Emergency Operation Centre
ESP	Employee Services Portal
F+A	Finance and Administration
HEIA	Health Equity Impact Assessment
HR	Human Resources
ICES	Institute for Clinical and Evaluative Sciences
IMS	Incident Management System
ICU	Intensive Care Unit
IPAC	Infection Prevention and Control
iPHIS	integrated Public Health Information System
IRCC	Immigration, Refugees and Citizenship Canada
IT	Information Technology
ITF	Immunization Task Force
LHINs	Local Health Integration Networks
LMS	Learning Management Software
LTCH	Long Term Care Home
MD	Medical Doctor
MIC	Mass Immunization Clinic
MOH	Ministry of Health
MOHTLC	Ministry of Health and Long Term Care
MOU	Memorandum of Understanding
MTCC	Metro Toronto Convention Centre

NACI	National Advisory Committee on Immunization
OCASI	Ontario Council of Agencies Serving Immigrants
OGP	Ontario Government Pharmacy
OHRC	Ontario Human Rights Commission
OH&S	Occupational Health and Safety
OL	Operations Lead
PHAC	Public Health Agency of Canada
PHIM	Public Health Incident Manager
PHN	Public Health Nurse
PHO	Public Health Ontario
PHU	Public Health Unit
PIDAC	Provincial Infectious Diseases Advisory Committee
PMMD	Purchasing and Materials Management Division
PPE	Personal Protective Equipment
PRS	Poverty Reduction Strategy
RH	Retirement Homes
RN	Registered Nurse
RPN	Registered Practical Nurse
SD	Social Determinants
SDFA	Social Development, Finance and Administration
SIC	Special Immunization Clinic
SPT	Social Planning Toronto
TPH	Toronto Public Health
TPHEP	Toronto Public Health Emergency Plan
TTC	Toronto Transit Commission
VDA	Vaccine Distribution Agents
VPD	Vaccine Preventable Disease

This is Exhibit **12** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

REPORT FOR ACTION

TO Supports: COVID-19 Equity Action Plan

Date: November 30, 2020
To: Board of Health
From: Deputy City Manager, Community and Social Services
Wards: All

SUMMARY

In March 2020, the City of Toronto, in coordination with Toronto Public Health, Toronto Public Library and hundreds of community-based partners, launched an unprecedented emergency response to meet the needs of Torontonians who have been disproportionately impacted by the spread of COVID-19 and by the sudden, serious consequences of the first pandemic "lockdown". The City's Emergency Operations Centre and nearly every City division, agency and corporation has contributed to this massive effort to support Toronto's most vulnerable residents during a time of crisis.

Many of the services, programs and systems mobilized for this effort - ranging from emergency food delivery to mental health supports to free 24/7 child care - are wholly new lines of operation and partnership for the City of Toronto and were designed, developed and then delivered into the community within mere days or weeks of the emergency declaration. These innovations have revealed the City's powerful creative and collaborative capacity. They have also demonstrated the value of maintaining and investing in a deep, interdependent relationship with a strong, activist community-based not-for-profit sector. The sector has continuously delivered front-line services and supports during the pandemic, championed the needs of highly vulnerable communities and held the City accountable to resolve emerging critical issues. Without the work of the community sector over the past 10 months, many Torontonians would be in a much more challenging situation than is currently faced.

The guiding framework to organize this multi-dimensional emergency response was rolled out in March 2020, through Social Development, Finance and Administration Division, under the title: *TO Supports: COVID-19 Equity Action Plan*. *TO Supports* prioritizes ten action areas related to the social determinants of health and contains twenty-five separate actions to stop virus spread and deliver immediate emergency support to the neighbourhoods and populations that have been hardest hit by COVID-19. Since March, this Plan has been constantly evolving, adapting and intensifying in light of new information and data, new partnerships, new resurgence plans and new pandemic conditions.

Attachment 1 to this report summarizes the City's implementation of *TO Supports* from March to November 2020. It includes key advice collected from community-based partners, current status indicators, and the City's work on the intergovernmental front to leverage the funding and legislative tools required to solve urgent problems facing equity-seeking groups during the pandemic. It also highlights plans for new, targeted and enhanced COVID-19 equity measures that were recently launched in conjunction with the announcement of Toronto's second pandemic "lockdown".

RECOMMENDATIONS

The Deputy City Manager, Community and Social Services recommends that:

1. City Council and the Board of Health approve TO Supports: COVID-19 Equity Action Plan and the twenty-five equity actions and targeted and enhanced equity measures that the City of Toronto, Toronto Public Health, and partners are taking to support Torontonians disproportionately impacted by COVID-19, as outlined in Attachment 1 to this report.

2. City Council and the Board of Health approve the inclusion of equity indicators in the Toronto Public Health COVID-19 Monitoring Dashboard in order to facilitate public reporting on the disproportionate impact of COVID-19 infection on certain population groups based on the social determinants of health such as income, racialization, and neighbourhood and to drive equity-focused policy and program actions.

3. City Council and the Board of Health recognize that a comprehensive approach to reducing the disproportionate impact of COVID-19 on Indigenous, Black, and racialized Torontonians, including newcomers, must be central to the COVID-19 emergency response, to COVID-19 immunization planning, and to Toronto's recovery and rebuild efforts.

4. City Council request the Deputy City Manager, Community and Social Services, working with the Medical Officer of Health and Toronto's COVID-19 Incident Commander and in consultation with community stakeholders, to intensify, adapt, or revise the COVID-19 Equity Action Plan as necessary to respond effectively to urgent COVID-19 health disparities as identified by the Medical Officer of Health on the basis of the Toronto Public Health COVID-19 Monitoring Dashboard equity indicators, COVID-19 data from Indigenous-led health organizations, or other COVID-19 evidence and information emerging from the community sector.

5. City Council request the Executive Director, Social Development, Finance and Administration, working with the Medical Officer of Health and the General Manager, Shelter, Support and Housing Administration, and community sector partners, to assess the level of need and optimal services to support families (e.g., adults with dependent children or other dependents) who need to self-isolate due to COVID-19 infection.

6. City Council request the Province of Ontario and the Government of Canada to establish dedicated not-for-profit sector stabilization and bridging funds to ensure the immediate and long-term resilience of the not-for-profit sector which is critical for

inclusive economic and community recovery, including a $680 million Provincial fund, as advocated for by the Ontario Nonprofit Network, and a new $500-$700 million Federal Community Services COVID-19 Relief Fund, as advocated for by national human and community service federations.

7. City Council urge the Province of Ontario to immediately extend, for at least the next six months, eligibility for the Ontario Works Emergency Assistance benefit to include all working age adults who have tested positive for COVID-19 or reside in a household where someone has tested positive and have been advised by an employer, medical practitioner, nurse practitioner, public health official, or other government official to self-isolate and who do not otherwise qualify for either Ontario Works or Federal benefits.

8. City Council forward TO Supports: COVID-19 Equity Action Plan to the Ontario Minister of Children, Community and Social Services, the Ontario Minister of Health, the Ontario Associate Minister of Mental Health and Addictions, the Ontario Minister of Long-Term Care, the Ontario Minister of Municipal Affairs and Housing, the Ontario Solicitor General, the Federal Deputy Prime Minister and Minister of Finance, the Federal Minister of Immigration, Refugees and Citizenship, and the Federal Minister of Health.

FINANCIAL IMPACT

There are no financial impacts resulting from the adoption of the recommendations in this report.

DECISION HISTORY

On November 25, 2020, City Council approved motions to call on the Federal and Provincial Governments to take several actions to mitigate COVID-19 social and health inequities, as follows: (a) to provide financial resources to support increased community outreach in high transmission neighbourhoods to support access to COVID-19 testing, the promotion of voluntary self-isolation facilities, and access to health and social services; (b) to immediately accelerate, expand and make completely accessible and transparent all financial supports directed toward populations disproportionately impacted by COVID-19 such as women, racialized individuals, low-income individuals and those living with disabilities; (c) to ensure that the financial burden of the COVID-19 pandemic is shared equitably across Canadian society; (d) to provide adequate paid sick days and income supports for those who need to isolate but cannot afford to do and for workers and businesses affected by public health restrictions; (e) to reinstate the moratorium on residential and commercial evictions; (f) to assess the impact of the pandemic on mental health and well-being to inform the need for additional supports or programs; and (g) to ensure flu vaccine promotion and distribution is targeted to those higher risk such as racialized and low-income populations.

At the same meeting, City Council authorized the Deputy City Manager, Community and Social Services: (a) to implement targeted COVID-19 Community Education and

Engagement Equity Measures in vulnerable communities with high infection rates and communities disproportionately impacted by COVID-19, including entering into agreements to provide funding up to $5 million to community agencies to deliver programming; (b) to apply for and receive funding for these measures from other governments; (c) to make necessary adjustments to the 2020 Operating Budget and in the 2021 Budget submission for Social Development, Finance and Administration (net $0) for these measures; and (d) to report to Executive Committee in the first quarter of 2021 on program success and money received from the other governments. Further, Council adopted a motion to request the Government of Canada to provide up to $5 million in funding for these measures.
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.HL23.1

On October 27, 28 and 30, 2020 City Council requested the Deputy City Manager, Community and Social Services, in consultation with the Medical Officer of Health, to build on COVID-19 resurgence plans and the findings from the data and consultation with groups that have been disproportionately affected by COVID-19 to prepare a Toronto COVID-19 Response Equity Action Plan that consolidates existing advice, strategies, and initiatives and includes for each recommendation or action the status, timeline, lead division or agency, and requests of other governments, and to report back with an update to the Board of Health in 2020.
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.HL22.1

On October 19, 2020, the Board of Health requested the Medical Officer of Health to review and action the full set of recommendations summarized in the report COVID-19 and the Social Determinants of Health: Community Consultation Report (Attachment 1), as appropriate, including: consulting with city divisions and agencies to collaborate with community partners in order to plan and implement the short-term actions listed in Attachment 1, including: 1. Creating more accessible public health information; 2. Building community agency support; 3. Increasing community testing and health access; 4. Advocating for income supports and eviction protection; 5. Supporting effective isolation; 6. Overdose prevention and harm reduction; and 7. Supporting people experiencing homelessness.
http://app.toronto.ca/tmmis/viewPublishedReport.do?function=getDecisionDocumentReport&meetingId=18761

On September 30, October 1 and 2, 2020, City Council adopted a motion to request the Province of Ontario to immediately re-instate the moratorium on eviction of tenants.
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.PH16.8

On September 21, 2020, the Board of Health requested the Medical Officer of Health to work with the Executive Director, Social Development, Finance and Administration, the Executive Director, Housing Secretariat, and the General Manager, Toronto Employment and Social Services, to explore how to implement strategies such as those identified in the report (September 3, 2020) from the Medical Officer of Health, to address the social determinants of health for the City of Toronto's most vulnerable populations who have been adversely affected by the COVID-19 pandemic.
http://app.toronto.ca/tmmis/viewPublishedReport.do?function=getDecisionDocumentReport&meetingId=18761

On July 2, 2020, the Board of Health requested the Medical Officer of Health to consult with groups that have been disproportionately affected by COVID-19, identify the detailed impacts being experienced by these groups, and recommend actions for the City of Toronto and its governmental partners to reduce these impacts. http://app.toronto.ca/tmmis/decisionBodyProfile.do?function=doPrepare&meetingId=18761#Meeting-2020.HL18

COMMENTS

Since July 2, 2020, the Board of Health has been updated regularly on health disparities associated with COVID-19, first through presentations of area-level and later, individual-level, race-based and income-based data on reported COVID-19 infection and hospitalizations. The Board of Health has also heard from communities most impacted by COVID-19 and the community-based agencies that serve them, to better understand the effects of the pandemic on Torontonians and strategies for intervening.

The City has been taking urgent action on multiple fronts to support vulnerable Torontonians during the pandemic, in strong collaboration with Toronto Public Health and community sector partners. Up to now, however, the Board of Health has not received a consolidated status update on the City's activities to address priority issues identified by the data and in the community.

Launch of TO Supports: COVID-19 Equity Action Plan:
In March 2020, the City of Toronto, in coordination with Toronto Public Health, Toronto Public Library and hundreds of community-based partners, launched an unprecedented emergency response to meet the needs of vulnerable populations that were dramatically and disproportionately impacted by the spread of COVID-19 and by the sudden, serious consequences of the first COVID-19 pandemic "lockdown."

The guiding framework to organize this cross-corporate, multi-partner response was rolled out by Social Development, Finance and Administration Division, under the title: *TO Supports: COVID-19 Equity Action Plan*. The objectives of this Plan are to stop virus spread and deliver immediate emergency support to the neighbourhoods and populations that have been hardest hit by COVID-19. Since March, this Plan has been constantly evolving, adapting and intensifying in light of new information and data, new partnerships, new resurgence plans and new pandemic conditions.

Attachment 1 to this report provides details on the City's implementation of *TO Supports* from March to November 2020. It includes key advice collected from community-based partners, current status indicators and the City's work on intergovernmental fronts to leverage the necessary funding and legislative tools to solve urgent problems facing equity-seeking groups during the pandemic.

TO Supports prioritizes ten action areas related to the social determinants of health and twenty-five separate actions, as follows:

ACTION AREA: HEALTH COMMUNICATION & OUTREACH
1. Communicate sociodemographic data in non-stigmatizing ways.

2. Implement an accessible, multilingual COVID-19 public education campaign for communities most impacted by COVID-19.
3. Expand community outreach with community sector partners, faith groups, landlords and local businesses.

ACTION AREA: COMMUNITY HEALTH ACCESS

4. Expand COVID-19 testing and flu shot clinics in communities most impacted by COVID-19.
5. Operate Canada's first voluntary COVID-19 isolation centre.
6. Improve low-barrier access to harm reduction and overdose prevention.

ACTION AREA: SUPPORT FOR COMMUNITY PARTNERS

7. Direct emergency funding to community partners serving vulnerable residents during the pandemic.
8. Direct emergency donations to community partners serving vulnerable residents during the pandemic.
9. Provide dedicated Infection Prevention and Control supports to community partners serving vulnerable residents during the pandemic.
10. Enable networked leadership and local collective action among community partners serving vulnerable residents during the pandemic.

ACTION AREA: SHELTER AND HOUSING SUPPORT

11. Ensure the shelter system continues to meet COVID-19 public health measures.
12. Meet emerging needs of shelter clients, people living in encampments and those facing housing precarity during the pandemic.
13. Implement the COVID-19 Interim Shelter Recovery Strategy.
14. Implement the Housing and Homelessness Recovery Response Plan to create additional permanent housing opportunities.

ACTION AREA: INCOME SUPPORT

15. Ensure income supports are delivered uninterrupted during the pandemic.
16. Advocate for emergency benefits and eviction prevention during the pandemic.

ACTION AREA; FOOD SECURITY

17. Respond to urgent food insecurity due to service disruptions, isolation and loss of income during the pandemic.

ACTION AREA: CARE FOR SENIORS

18. Prevent and manage outbreaks and provide highest quality care to seniors living in City-operated long-term care homes.
19. Support vulnerable seniors in the community and isolating during the pandemic.

ACTION AREA: DIGITAL ACCESS

20. Increase access to affordable internet and devices to keep people connected during the pandemic.
21. Help residents to access free, high-quality online programming and activities.

ACTION AREA: MENTAL HEALTH AND FAMILY SAFETY
22. Support Torontonians experiencing stress, anxiety and isolation during the pandemic.
23. Respond to the heightened risk of family violence during the pandemic.

ACTION AREA: CHILDREN'S SERVICES
24. Deliver safe high quality child care during the pandemic, with additional supports for child care operators in communities most impacted by COVID-19.
25. Make child care policies flexible for families affected by COVID-19.

Innovations and Impacts:
Many of the services, programs and systems mobilized for the COVID-19 equity response represent dramatic service transformations or wholly new lines of operation and partnerships for City of Toronto. Many were designed, developed and then delivered into the community within mere days or weeks of the emergency declaration. These innovations, detailed in Attachment 1 to this report, have included:

- 40 new shelter locations opened to create physical distancing in the shelter system and provide spaces for more than 1,000 people to move indoor from encampments;
- 2,500 people successfully connected to permanent housing from shelters, through a combination of housing allowances and rent-geared-to-income units (a 50% increase compared to the same time last year);
- Supplying personal protective equipment to community-based shelter and homelessness services operators;
- Free, 24/7 Emergency Child Care Centres for essential workers from March-June
- Opening Canada's first COVID-19 voluntary isolation centre;
- 9,400 new applications for Ontario Works assistance processed and 51,800 Ontario Works clients supported to receive the COVID-related Emergency Benefit;
- Streamlining the income supports application process, enabling financial benefits to be issued at first contact;
- $10.2 Million in emergency funding secured for the community sector serving vulnerable residents during the pandemic, particularly Black-mandated agencies and Indigenous-led agencies.
- Free WiFi enabled in shelters, long-term care homes and in six large apartment buildings in low income neighbourhoods (25 in total to be completed);
- 100s of free high-quality online activities and programs for residents of all ages to "stay at home/play at home/learn at home" during lockdown;
- 16,000 households/46,000 individuals served at emergency food banks in 12 Toronto Public Library locations;
- 33,000 food hampers and 500,000 prepared meals prepared and delivered;
- 60,000 student families provided with grocery gift cards;
- 79,630 mental health contact sessions completed (free, telephone-based, culturally grounded counselling coordinated through TO Supports Mental Health Support Strategy).

Targeted and Enhanced COVID-19 Equity Measures
Public Health data demonstrate that neighbourhoods in the northwest and northeast are experiencing significantly higher rates of COVID-19 infection compared to other places.

Despite the high prevalence of COVID-19 in these neighbourhoods, there may also be a high degree of testing "hesitancy" among residents in these neighbourhoods. The "choice" an individual makes to obtain a COVID-19 test or, if they do test positive, to follow public health directives to self-isolate is informed by a variety of factors, including whether they have access to public health information and access to a testing site; whether they have the ability to isolate at home; and the impact of not working or earning an income, even for a few days or weeks.

In recognition of these challenges that disproportionately impact residents from equity-seeking groups, the City is immediately launching a targeted and enhanced set of COVID-19 equity measures in neighbourhoods that have been hardest hit by COVID-19. This work is being conducted in partnership with not-for-profit agencies that are highly trusted in their home communities, and will build on the broader equity work implemented under TO Supports. These measures will also be implemented with a view to addressing barriers faced by people with disabilities and to support a Black COVID-19 health equity plan in coordination with Black-mandated community agencies and to support an Indigenous-led COVID-19 health equity plan.

Targeted and enhanced COVID-19 equity measures include:

- *Measures to Expand Testing Sites:*

Steps to increasing COVID-19 testing will include: increasing the number of provincial testing sites using City facilities, using buses for mobile testing, providing more transportation to testing sites and extending testing site hours. Implementation of these measures require collaboration between the City and provincial agencies (e.g. Ontario Health/LHINs).

- *Measures to Enhance Community Outreach and Engagement:*

These steps will include: targeting outreach, case management and providing support to residents who face multiple barriers (i.e. food support, income services, provision of masks, etc.), and providing relevant public education to residents and employers. These measures will be supported by targeted public education and communications through the COVID-19 Public Education Working Group as well as through targeted outreach to key employers. In future, they can be mobilized to support the City's mass COVID-19 immunization strategy in key neighbourhoods and with key vulnerable populations. Strong community partners, trusted by residents, are critical to ensuring that these measures are implemented effectively. Eleven community-based agencies have been identified to carry out this work, nine of which are geographically anchored in the neighbourhoods. All are known, trusted service providers that work specifically with: Black, Indigenous and/or racialized residents and/or youth. A team of outreach workers and case managers will provide supports including:

- Enhanced food access through coordinated drop-off points with local food security agencies and broker food delivery to residents and families;
- Increased access to culturally responsive mental health supports
- Extensive distribution and dissemination of masks (goal: 1M masks); and
- Supports to help families with self-isolation (may include a dependent child/elder stream; and an in-home care component).

- *Measures to Add Capacity on Busy TTC Routes*

The TTC continues to implement important measures to reduce crowding for customers on busy bus routes. Resources are being reallocated from lower ridership routes in less busy periods, such as routes that serve primarily downtown-centered office travel patterns (for example, the 140-series Downtown Express routes) to busier routes with higher ridership demand such as the 35 Jane and 54 Lawrence East.

To reduce crowding for customers, starting on November 23, 2020, the TTC restored express bus service on busy corridors, like on Jane Street and Lawrence Avenue East.

- *Measures to Reduce the Risk of Eviction/Loss of Income due to Voluntary COVID-19 Isolation:*

Some low income Torontonians, including newcomers, cannot financially afford to make COVID-19 related testing and self-isolation decisions because they run the risk of losing their job or their income. The most direct way to resolve this challenge is to temporarily adjust and/or review provincial public policies governing: eviction for (short-term) non-payment of rent; job and income protection for anyone required to be absent from work due to COVID-19; and access to emergency financial assistance benefits for all working age adults.

- *Evictions:* Between March and July 2020 the Provincial government effectively directed that eviction orders be suspended. During these months, low income Torontonians did not need to fear eviction if they were unable to pay rent. The temporary suspension of evictions, coupled with other measures introduced by the Government of Ontario, helped thousands of low income residents in Toronto remain safe, housed, clothed, fed and able to comply with public health directives last spring and summer. This critical tool is needed now, too, during the current C-19 resurgence to help save lives and livelihoods, in Toronto and other municipalities. Therefore, in late September, City Council adopted a motion to request the Province of Ontario to immediately re-instate the moratorium on eviction of tenants.

- *Job Protection and Paid Sick Leave:* During the pandemic, is especially important for all working age adults to have the basic financial means to put public health first and be able to stay home when they are sick. Therefore, at its November 2020 meeting, City Council adopted a motion to request the Province of Ontario to provide adequate paid sick days and income supports for those who need to isolate but cannot afford to do so and for workers and businesses affected by public health restrictions.

- *Emergency Income Assistance:* At present, certain Toronto residents who are ineligible for federal income supports like Employment Insurance or the Canada Recovery Sickness Benefit, are also ineligible for the income support program of last resort in an emergency - the Ontario Works Emergency Assistance benefit. It is therefore recommended that the City request the Province of Ontario to extend, for at least the next six months, eligibility for the Ontario Works Emergency Assistance benefit for to include all working age adult residents, who have tested positive for COVID-19 or reside in household where someone has tested positive and have been advised to self-isolate and who do not otherwise

qualify for either Ontario Works or Federal benefits.

Intergovernmental Requests and Actions for COVID-19 Health Equity
The City has actively advocated for intergovernmental cooperation and response to the impact of COVID-19 on equity-seeking groups and vulnerable populations. Recent related intergovernmental requests and actions are reflected in Attachment 1.

Conclusion:
COVID-19 has laid bare and exacerbated long-standing, systemic health inequities related to poverty, racism, and other forms of discrimination. Unequal access to the social determinants of health has created the conditions for COVID-19 to disproportionately impact Torontonians who are: Indigenous, Black or racialized, who are living with disabilities, who are precariously employed or live on a low income, who may experience challenges taking time off from work when ill and who may be living in housing situations where it is more difficult to isolate from others.

Vulnerable Torontonians have also been hardest hit by the unintended consequences of public health measures to flatten the curve, including service disruptions and lockdown. Throughout the pandemic, many have faced acute challenges related to hunger, loss of sanitation facilities, lack of Internet connectivity and barriers to essential social and health services. Many newcomers, including temporary foreign workers, refugees, refugee claimants, and undocumented Torontonians are facing extreme challenges and uncertainty during the pandemic, particularly those without social networks in this country, who do not speak or read English, and who may not be eligible for financial supports or health care coverage.

To support Torontonians who have been hardest hit by COVID-19 and to stop the virus spread, the City is taking urgent action on multiple fronts, in strong collaboration with community partners. Our plan is constantly evolving and intensifying in light of new information, new partnerships, and new pandemic conditions. Progress reports will be submitted on a regular basis to document impacts, gaps and emerging priorities and to serve as an accountability tool with community until the pandemic is resolved and pathways to an equitable recovery in Toronto are in place.

CONTACT

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Tom Azouz, General Manager, Toronto Employment and Social Services, 416-392-8952, tom.azouz@toronto.ca

SIGNATURE

Giuliana Carbone
Deputy City Manager, Community and Social Services

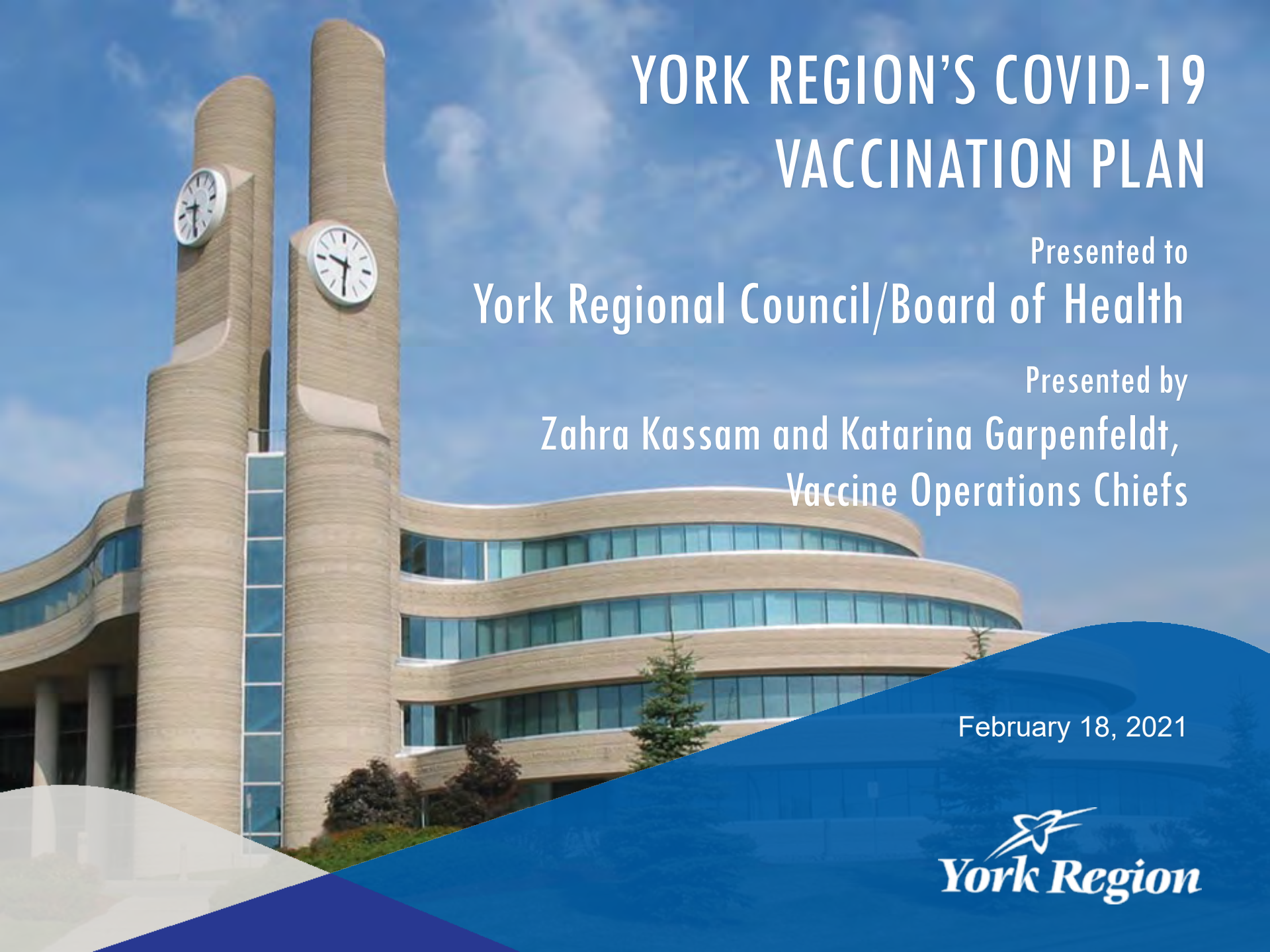
ATTACHMENTS

Attachment 1 - TO Supports: COVID-19 Equity Action Plan

This is Exhibit **13** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.



YORK REGION'S COVID-19 VACCINATION PLAN

Presented to

York Regional Council/Board of Health

Presented by

Zahra Kassam and Katarina Garpenfeldt,
Vaccine Operations Chiefs

February 18, 2021

York Region

AGENDA

- Purpose of presentation
- Immunization Roles & Responsibilities
- York Region Governance model
- York Region Immunization Plan
- Vaccine distribution approach
- York Region planning assumptions
- York Region vaccine program roll out
- Risks and vulnerabilities
- Next steps

Immunization Roles and Responsibilities: Provincial Framework and Direction

COVID-19 PHASE ONE VACCINE ROLLOUT
ROLES & RESPONSIBILITIES

Canada

- Approve vaccines for use in Canada
- Procure vaccines nationally
- Distribute vaccines to Provinces/Territories
- Provide National Advisory Committee on Immunization (NACI) recommendations on prioritization of vaccine administration to Provinces/Territories
- Provide supplies in some cases

Canada.ca/covid19

Ontario

- Receive vaccines from Federal Government
- Prioritize rollout across Ontario, including who gets the vaccine, when and where
- Distribute vaccines to public health units and local hospitals
- Responsible for vaccine tracking and health-care records management
- Provide supplies in some cases

Ontario.ca/covid19

York Region

- In collaboration with the York Region COVID-19 Vaccine Task Force, provide vaccination program support and administer vaccines to prioritized groups
- Vaccine storage and Regional distribution
- Liaison role with Ministry of Health
- Liaison role between Ontario Health and long-term care homes, retirement homes and congregate living settings
- Oversight and leadership in the implementation of public health mass immunization clinics to administer COVID-19 vaccines to priority groups under the provincial vaccine plan (March 2021)

york.ca/COVID19vaccine

LOCAL HOSPITALS

- Receive and store vaccines
- Administer vaccine through hospital clinics, to health care workers, essential caregivers and employees of long-term care and retirement homes

Southlake.ca
Mackenziehealth.ca

LONG-TERM CARE HOMES, RETIREMENT HOMES AND CONGREGATE LIVING SETTINGS

- Long-term care homes receive, handle and administer vaccines to residents, health-care workers and essential caregivers, in partnership with Public Health
- Retirement homes and congregate settings work with Public Health and local hospitals to coordinate administration of vaccines to residents, staff and essential caregivers
- Support residents, families and substitute decision-makers on consent to receive the vaccine

FEDERAL ROLES AND RESPONSIBILITIES

Canada

- **By September 2021, every adult wishing to receive the vaccine will be immunized**
- COVID-19 Vaccine Task Force – provides insight to help the Government of Canada to make evidence base decisions
- Health Canada – Approves vaccines for use in Canada
- Public Services and Procurement Canada – procures vaccines and some supplies
- National Advisory Commission on Immunizations - Provides recommendations on prioritization of vaccine administration

PROVINCIAL ROLES AND RESPONSIBILITIES

Ontario

- COVID-19 Distribution Task Force – provides advise to the Minister of Health and the Solicitor General to support a COVID-19 Immunization strategy
- Ministry of Health (MOH) –Receives vaccines from the Federal Government, Prioritizes the rollout across Ontario, including who gets the vaccine, when and where distributes vaccines to public health units and local hospitals and is responsible for vaccine tracking and Provide supplies in some cases. Supplies and directs use of CoVax eligibility and scheduling tool
- Public Health Ontario – works closely with the MOH, local PHUs and other partners scientific expertise, data and resources

YORK REGION ROLES AND RESPONSIBLITIES

- Support hospitals in operation of vaccine clinics
- Provide overall vaccination program support and administer vaccines to residents, health-care workers and essential caregivers within long-term care, retirement homes and congregate living settings for seniors in the early stages of Phase One of Ontario's vaccine distribution plan
- Vaccine storage and Regional distribution
- Liaison between Ministry of Health and hospitals
- Liaison between Ontario Health and long-term care homes, retirement homes and congregate living settings
- Implement mass immunization clinics to administer vaccines to priority groups in subsequent phases of the vaccine distribution plan

COMMUNITY HEALTH CARE ROLES & RESPONSIBLITIES

LOCAL HOSPITALS

- Receive and store Pfizer vaccine
- Administer Pfizer vaccine, through hospital clinics, to health care workers, essential caregivers and employees of long-term care and retirement homes

LONG-TERM CARE HOMES, RETIREMENT HOMES AND CONGREGATE LIVING SETTINGS

- Work with public health to get the homes ready to receive the vaccine for residents, staff and essential caregivers
- Work with Public Health and local hospitals to coordinate administration of vaccines to residents, staff and essential caregivers

ONTARIO COVID-19 VACCINATION PLAN

Ontario

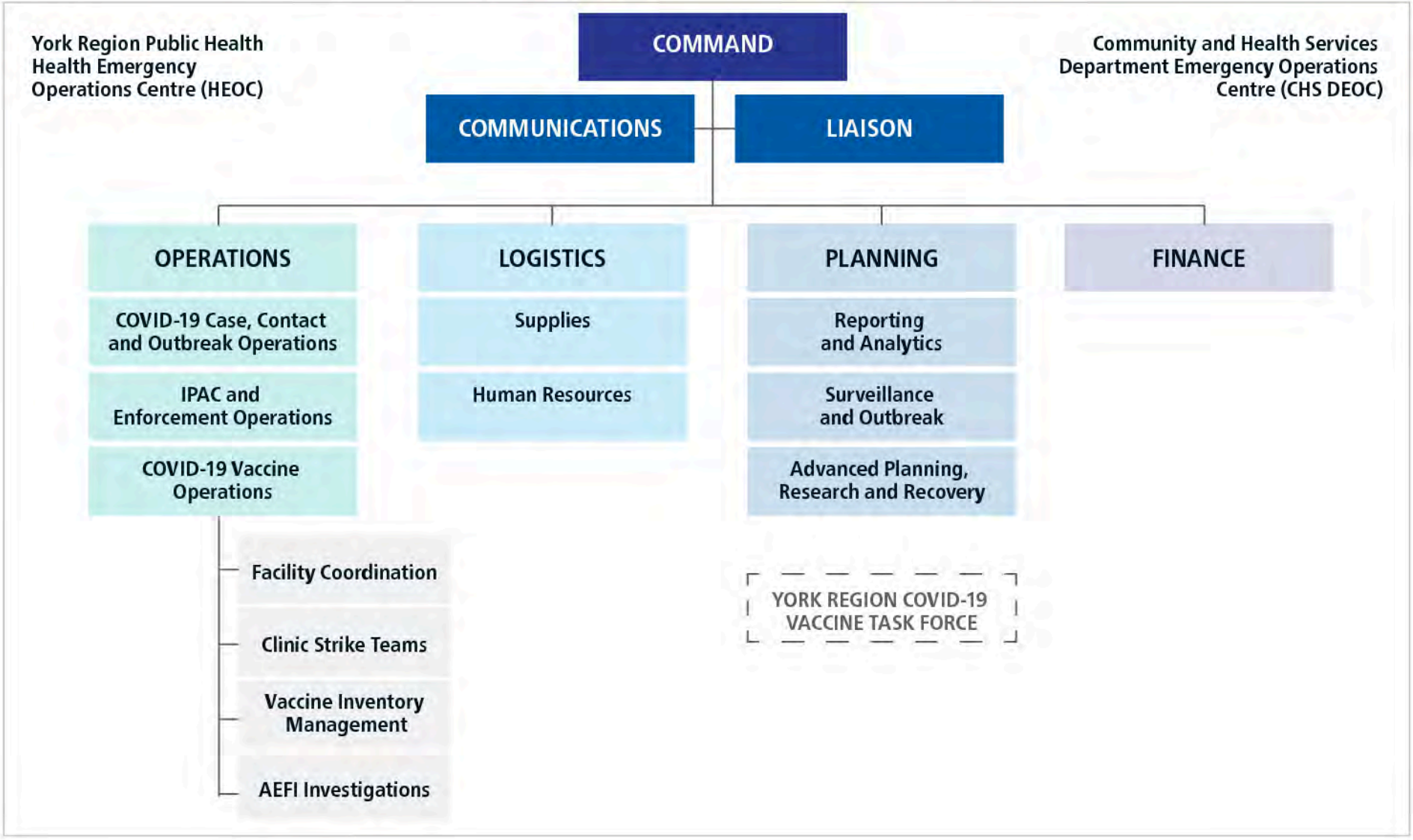
- The Ontario Public Health Playbook for the COVID-19 Vaccination Program tells us what we must cover in our plan
- Ensures that targeted populations will have appropriate and effective access to the vaccine
- Public health and its local health partners will actively and consistently work together to maximize distribution in a safe, timely and equitable manner
- Need to build flexibility and adaptability in the plans to scale delivery as required

York Region Decision Making and Planning Structure

YORK REGION IMS CHART

Board of Health York Regional Council

York Region Regional Emergency Operations Centre and Control Group (REOC/RECG)



MASS IMMUNIZATION ADVISORY GROUP

Purpose

- Plans and executes actions need to support the COVID -19 Mass Immunization Plan for vaccine clinic operations
- Includes cross- departmental representation

Eight Working Groups

1. Data Management, Surveillance, Evaluation and Reporting
2. Communication
3. Software Implementation Task Force
4. Health Equity
5. Practice, Protocols and Training
6. Logistics HR Staffing
7. Onsite Logistics
8. Clinic Planning & Set Up

YORK REGION COVID-19 VACCINE TASK FORCE

Task Force focus

- Identifying how to serve priority populations outlined within the Province's three-phased vaccine distribution implementation plan
- Developing solutions for distributing and administering vaccine various populations and settings
- Providing education and outreach support

Task Force Membership
York Region: Public Health, Corporate Services, Community and Health Services, Social Services
Fire and Police Services
Ontario Health Teams and Leads
Primary Care Providers, Family Health Teams, Pharmacies, Community Health Centres
York Region's three Hospitals
Public Health and Clinical Ethicists
Culturally aligned community organizations and interfaith communities
Indigenous, Black and other racially based communities and organizations

York Region COVID Vaccine Task Force
Terms of Reference

York Region Draft Immunization Plan

YORK REGION MASS VACCINATION PLAN

- Initial draft was submitted to the Ministry of Health on January 21
- Final plan draft submitted to the Ministry of Health on January 31
- The York Region COVID-19 Mass Immunization Plan was presented to General Hillier and his team on February 12
- YRPH presented the Plan to the Provincial Task Force on February 17

PLANNING ASSUMPTIONS

GOAL

to vaccinate at least 75% (910,202) of York Region's 1.2M + residents

Key Drivers

- Vaccine roll-out dependent on vaccine shipment/supply
- Two dose vaccine, 3 weeks apart
- Vaccine distribution will come in stages in 2021
- Provincial direction sets 3 phases

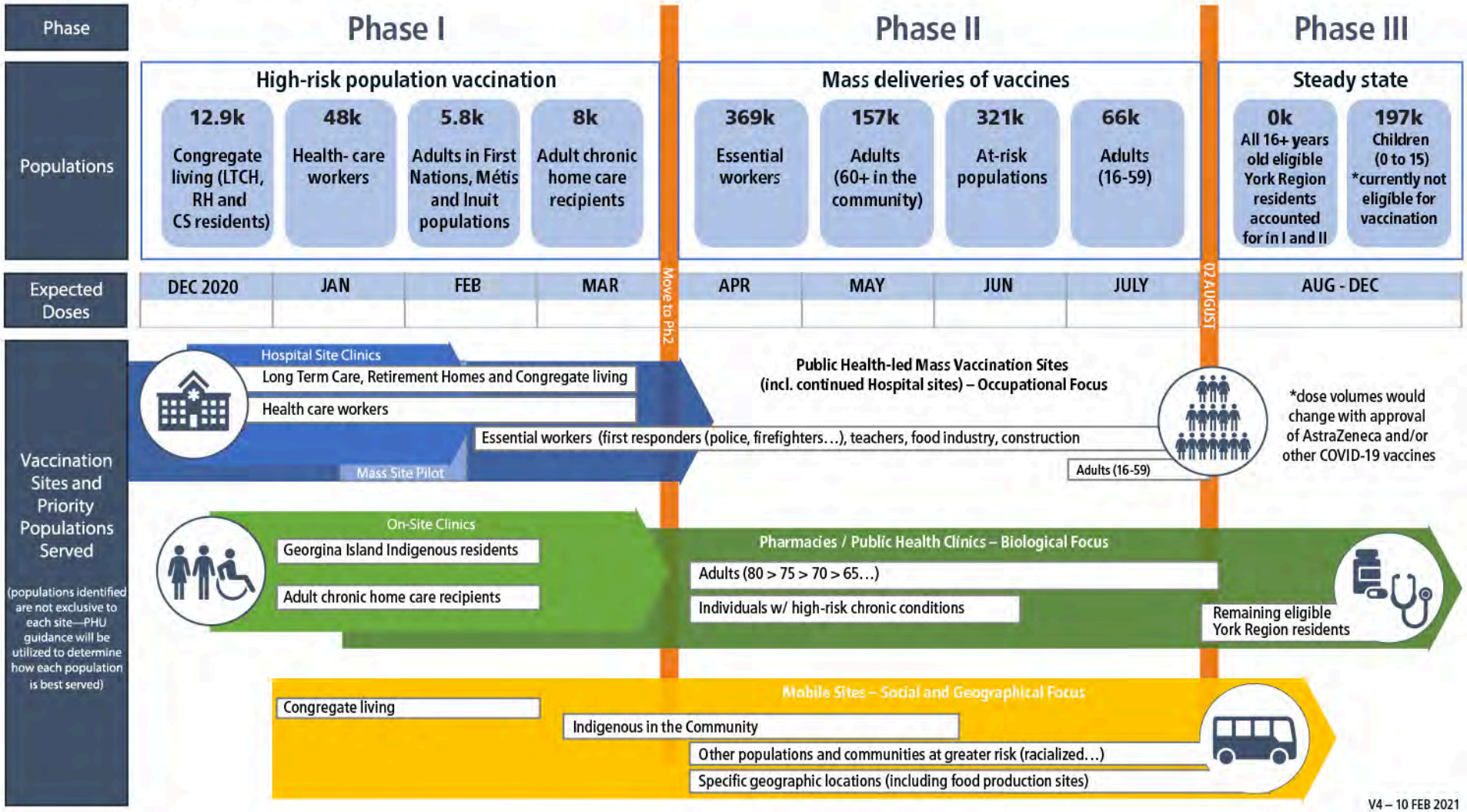
Approach

- Vaccine program delivered by multiple community partners, with oversight by YR PH
    - o 50% of 910,202 York Region residents will be immunized through local pharmacies and partner lead immunization clinics
- Drive-through clinics may operate April through October 2021
- Mix of large, medium and small immunization clinics, mobile clinics, targeted clinics for priority groups

York Region COVID-19 Vaccine Distribution Plan

*For deployment of Pfizer and Moderna vaccines**

Total York Region Population: 1.2 Million
16+ York Region Population: 987,000



V4 – 10 FEB 2021

10,000 DOSE BENCHMARK PLAN

Public Health-Led Clinics	Daily Doses	Other Partner Clinics	Daily Doses
Richmond Green Community Centre City of Richmond Hill	2,280	Ray Twinney Recreation Complex Town of Newmarket	1,200
Aaniin Community Centre City of Markham	2,280	Cornell Community Centre City of Markham	1,700
Maple Community Centre City of Vaughan	1,482	Cortellucci Vaughan Hospital City of Vaughan	1,000
York Region Administrative Centre	684		
Total Daily Doses	**6,726**	**Total Daily Doses**	**3,900**

To surpass the capacity of 10,626 daily doses, would need to add Georgina Ice Palace and/or drive-through clinics

CLINIC LOCATIONS AND TIMELINES

FEBRUARY

Public Health Clinics
- York Region Administrative Centre

Other Partner Led Clinics
- Cortellucci Vaughan Hospital (Mackenzie Health)
- Ray Twinney (Southlake)

Total: 4,620 doses/day

MARCH

Public Health Clinics
- Aaniin Community Centre
- Maple Community Centre
- Richmond Green Sports Centre
- York Region Administrative Centre

Other Partner Led Clinics
- Cornell Community Centre (EYRND OHT)
- Cortellucci Vaughan Hospital (Mackenzie Health)
- Ray Twinney (Southlake

Total: 10,626 doses/day

APRIL - MAY

Public Health Clinics
- Aaniin Community Centre
- Georgina Ice Palace
- Maple Community Centre
- Richmond Green Soccer Club
- Canada's Wonderland (drive thru)

Other Partner Led Clinics *

Total: 13,278 - 14,046 doses/day

JUNE - JULY ++

Public Health Clinics
- Aaniin Community Centre
- Georgina Ice Palace
- Maple Community Centre
- Richmond Green Community Centre
- Markham Fairgrounds (drive thru)

Other Partner Led Clinics *

Total: 13,278 - 14,046 doses/day (plus rotating sites)

* Additional sites may be open based upon vaccine availability

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Population 1
High-risk population and essential workers

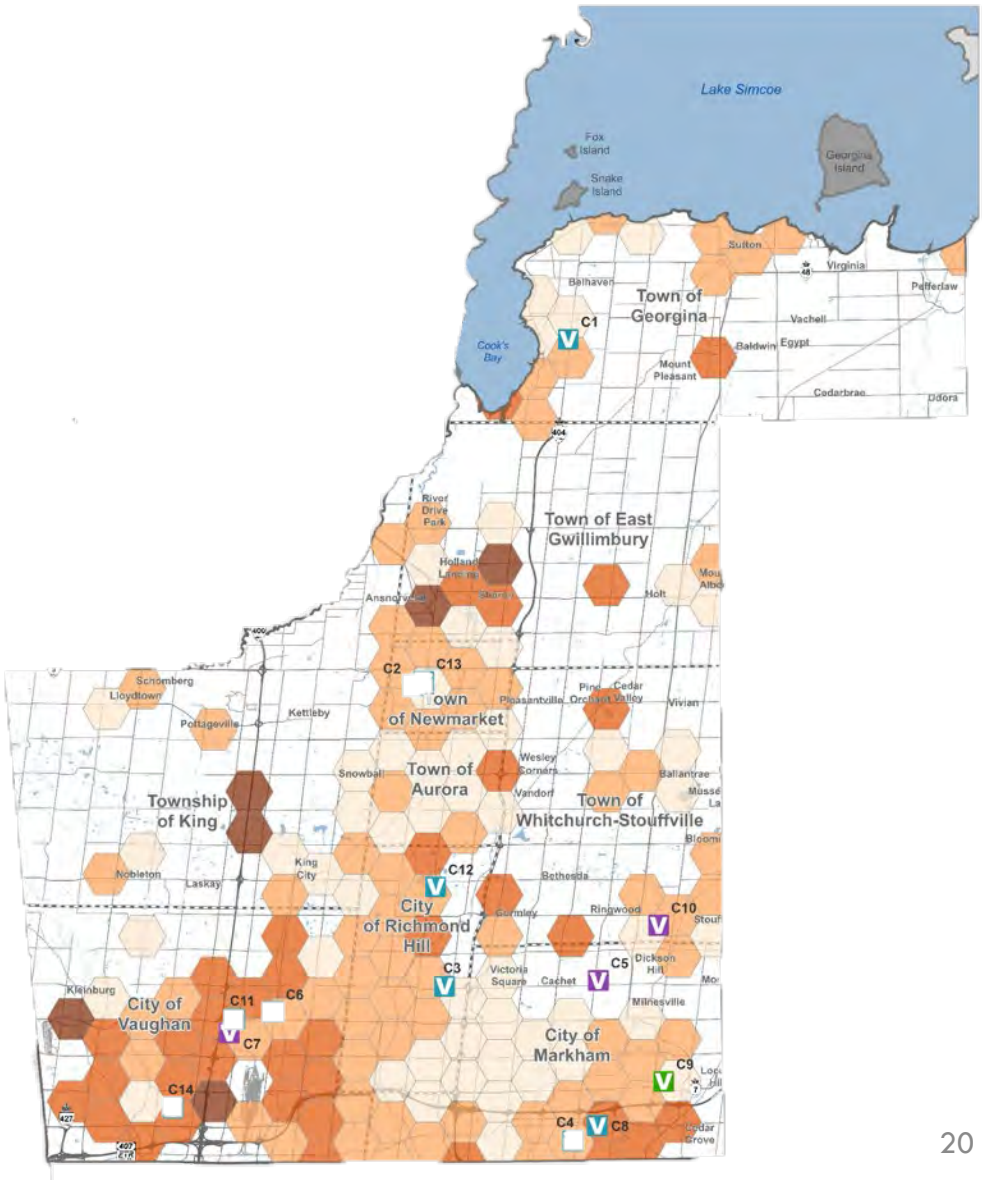
Population 2
Essential workers, seniors (60+), individuals with chronic disease

Population 3
Population 2 + Adults ages 16-60

Clinic Locations

Vaccination Clinics with COVID-19 Community Cases per 100,000 Population per Week in York Region

Cases based on all York Region residents excluding those who live in Congregate Living Facility, reports between Jan 16, 2021 and Feb 12, 2021



COMMUNICATIONS STRATEGY

- Multifaceted communication strategy developed to support three main goals:
  - Increase **awareness and understanding** of COVID-19 vaccines
  - Increase **number of individuals receiving COVID-19** vaccination (goal to vaccinate 75% population)
  - Dispel misinformation, myths, harmful untruths which contribute to **vaccine hesitancy**
- More than **50 internal and external audiences** identified and include York Region residents, Regional Council, community partners, health-care community, COVID-19 task force, municipalities, school boards, Ontario Health Teams, high priority areas and media
- Targeted messaging to be shared via **various communication tactics** and activities including york.ca/COVID19Vaccine, media, social media, newspaper ads, digital tool kit for partners, fact sheets, print resources, translation, Access York
- Plan to align with **provincial and federal campaigns**; updated and adjusted to respond to changing needs

ENGAGEMENT AND STAFFING SOLUTIONS

- **Engagement with local practitioner**s – through Task Force
  - On-site immunization support in Long-Term Care and Retirement Homes
  - Ontario Health Teams lead clinic sites/hubs
- **Engagement with Pharmacies** – through Task Force
  - Collaboration to ensure alignment in prioritization
  - Preferably third-party distribution (flu model)
- **Engagement with Local Municipalities** for staffing support for non-clinical roles
- **High Priority Community Strategy** (West Vaughan, South-East Markham)
  - Lead agencies on task force to determine how to ensure high uptake
- **Teachers and School staff**
  - Work closely with the school boards
  - School vaccine program model
- **Employers and large workplaces e.g., Magna, Honda, YRP**
  - Flu distribution model in place
  - Working in collaboration to ensure operational readiness to immunize on-site at their locations

RISKS & VULNERABILITIES

- Client booking
- Staffing
- Vaccine supply
- Variants
- Vaccine hesitancy – need for streamlined communication
- Access to data and reports

NEXT STEPS

- Continue to work closely with the province to gauge supplies and timeline
- Pilot the client booking system as this will be critical
- Continue to work with partners to complete prioritized groups across Phase 1
- Continue to work with the Province, other jurisdictions, and Task Force to set priorities within Phase 2
- Continue to plan ahead in anticipation of increase in vaccine supply
- Get everyone ready to roll up their sleeves!

QUESTIONS/DISCUSSION

York Region

This is Exhibit **14** referred to in the Affidavit of **Dr. Michael Rachlis.** Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

ALERT: We are currently experiencing a very high volume of calls regarding coronavirus (COVID-19). Please be patient, your call will be returned.

Vaccination rollout in Haldimand and Norfolk

Attention: All persons contacted to attend an upcoming COVID-19 vaccination clinic are to complete this form. Bring a completed paper copy with you to the clinic. Failure to do so may result in a delay for you to receive your vaccination.

Appointments for individuals in these Phase 1 priority groups can be made by calling 519-427-5903 or emailing vaccine@hnhss.ca.

- hnhu.org/covid-19
- http://www.norfolkcounty.ca/covid-19
- https://www.haldimandcounty.ca/covid-19

COVID-19 Vaccine Status Update – March 15, 2021

Key stats

The Haldimand-Norfolk Health Unit is currently vaccinating Phase 1 priority groups: residents 80+ years of age and high-risk healthcare workers in accordance with the province's rollout framework.

- Vaccine doses administered so far: **12,157**
- Number of people completely vaccinated: **1,589**

- New direction from the province has resulted in a change to the COVID-19 vaccination schedule. Starting immediately, the period between the first and second doses of COVID-19 vaccine will be extended. Those who have received their first dose of COVID-19 vaccine and are scheduled to receive the second dose **will not receive the second dose as currently scheduled**. If you have a second appointment, you will be contacted by the HNHU and your appointment will be rescheduled. **Please do not call the HNHU to reschedule.** More information.

- Haldimand & Norfolk counties are currently in the process of vaccinating residents in Phase 1 priority groups as per the province's rollout framework. **At this time, vaccine appointments are only being offered to individuals 80 years of age or older and high-risk healthcare workers.** Residents outside of these groups are being asked to remain patient and await further information regarding vaccine availability. More information.

COVID-19 Vaccine Status Update – March 10, 2021

Key stats

- Vaccine doses administered so far: **10,129**
- Number of people completely vaccinated: **1,580**
- The HNHU is opening a COVID-19 vaccination clinic at the Delhi Arena. Norfolk County has released a statement explaining why the Delhi Arena was chosen.
- The mass vaccination site in Haldimand is being held at the Cayuga Memorial Arena.

COVID-19 Vaccine Status Update – March 9, 2021

In an effort to ensure anyone who wants a COVID-19 vaccination receives one, the Haldimand-Norfolk Health Unit is asking **anyone 80 years of age or older**, as well as **high-risk healthcare workers**, who **do not have a family physician in Haldimand or Norfolk** or who **do not have a family physician at all** to call or email the vaccination team to make an appointment for a vaccination.

Appointments can be made by calling 519-427-5903 or emailing vaccine@hnhss.ca.

For more information, click here.

COVID-19 Vaccine Status Update – March 5, 2021

Key stats

- Vaccine doses administered so far: **6,474**
- Number of people completely vaccinated: **1,580**
- Learn more

Vaccines for those 80 and over

- Haldimand and Norfolk's Vaccine Task Force is preparing to vaccinate up to 5,000 people against COVID-19 in the coming weeks as area vaccination efforts start to ramp up
- In line with the Province's vaccination framework, vaccines are now available to those 80 years of age and older
- In addition to clinics already running at Norfolk General Hospital and the Vittoria Community Centre, the clinic at the Dunnville Lifespan Centre will move to Cayuga Memorial Arena this weekend, vaccinating up to 1,000 people per day
- Additional Health Unit-run clinics will be opened in the coming weeks

Making an appointment

- Family doctors will be in touch with patients 80 years of age and older to discuss vaccination plans and facilitate the appointment booking process
- **Do NOT call your doctor, the Health Unit or area hospitals to book an appointment**
- A vaccination appointment booking process is being developed for those without a family doctor or whose doctor is outside of Haldimand and Norfolk – details to come

Questions about vaccines

- The Health Unit has launched a dedicated COVID-19 vaccine phone line and email address for public questions on vaccinations
  - 519-427-5903
  - vaccine@hnhss.ca
- The phone line and email address are NOT for booking vaccinations

Priority populations

- The Health Unit is working with the Mississaugas of the Credit First Nation to facilitate COVID-19 vaccinations on the reserve

For more information:

- hnhu.org/covid-19

- http://www.norfolkcounty.ca/covid-19
- https://www.haldimandcounty.ca/covid-19

COVID-19 Vaccine Status Update – February 28, 2021

Key stats

- Vaccine doses administered so far: 5,298
- Number of people completely vaccinated: 1,561
- Learn more

Haldimand-Norfolk Vaccine Task Force

- COVID-19 vaccination in Haldimand and Norfolk is being organized by the Haldimand-Norfolk Vaccine Task Force
- The Task Force is comprised of representatives from the Haldimand-Norfolk Health Unit, both counties' emergency services, Norfolk General Hospital, West Haldimand General Hospital, Dunnville War Memorial Hospital, the Delhi Family Health Team and the Haldimand Family Health Team
- The Health Unit's vaccination program is being led by Norfolk County Paramedic Services Chief Sarah Page

Updates

- The province announced projected timelines for the availability of vaccine to members of the general public this week. These dates are subject to the availability of vaccines
- The Haldimand-Norfolk Vaccine Task Force expects to start offering vaccination clinics for those 80 years of age or older beginning next week
- Individuals eligible for vaccination will be contacted by their family doctors in the coming weeks to book a time to visit the clinic.
- The Vaccine Task Force is developing a process to identify those without a family doctor to ensure they have access to vaccination clinics. More details on this process will be shared shortly

For more information:

- hnhu.org/covid-19
- http://www.norfolkcounty.ca/covid-19
- https://www.haldimandcounty.ca/covid-19

Update: Feb. 23, 2021

Haldimand and Norfolk's COVID-19 Vaccine Task Force is preparing for the vaccination of the general public over the coming months.

As per the Province's vaccine rollout plan, vaccines are first being distributed to priority groups, such as acute healthcare workers and residents of long-term care and retirement settings.

Vaccination of Haldimand and Norfolk's long-term care and retirement home residents is complete, while vaccination of healthcare workers continues.

Once the vaccination of healthcare workers is complete, doses will be allocated to community-residing individuals over the age of 80.

Only when all priority groups have had the opportunity to get the vaccine will it be offered to members of the public who wish to receive it.

An announcement will be made when vaccines are available to members of the general public. Updates will be provided to the community on an ongoing basis.

Due to uncertainty regarding vaccine availability and timing, the COVID-19 Vaccine Task Force has been actively working to plan and implement community vaccination clinics.

Large amounts of vaccines could be made available at any time for certain segments of the population and in order to respond quickly, facilities must be equipped to administer a high volume of doses.

In Haldimand County, the Dunnville Community Lifespan Centre and Cayuga Memorial Arena will be utilized as community vaccine clinics.

In Norfolk County, the Vittoria and District Community Centre and Norfolk General Hospital will be used as community vaccine clinics.

For security reasons, vaccines will not be stored at these locations.

The COVID-19 Vaccine Task Force – a joint effort of the Haldimand-Norfolk Health Unit, Haldimand & Norfolk Counties (including Paramedic & Fire services), Norfolk General Hospital and West Haldimand General Hospital, Haldimand War Memorial Hospital and both counties' Family Health Teams – will continue working collaboratively until residents in both counties have had the chance to receive the vaccine.

"Thanks to the guidance, hard work and dedication of the COVID-19 task force, our communities will be ready to respond once vaccines become available. With the help of our partners, we'll be able to provide access to the COVID-19 vaccine safely, widely, and quickly to as many residents as possible – an important step in our collective fight against the virus," said Haldimand County Mayor Ken Hewitt.

"COVID-19 has impacted every part of our lives, from our health and wellbeing to the local economy," said Norfolk County Mayor and Chair of the Board of Health Kristal Chopp. "I'm thrilled that we're starting to see light at the end of what has been a very long tunnel, and look forward to community vaccinations paving the way for a return to a more normal way of living and working."

More information on vaccine availability and community clinics in Haldimand and Norfolk will be shared with residents as soon as details are confirmed. Residents are encouraged to read up on the safety and efficacy of the COVID-19 vaccine via the Ontario Government or Health Unit website.

Office Locations

Simcoe
12 Gilbertson Dr.
P.O. Box 570, Simcoe
ON
N3Y 4N5
P: 519-426-6170
905-318-6623
519-582-3579
F: 519-426-9974
View Simcoe Location on Google Maps

Caledonia
100 Haddington Street
Caledonia, ON
N3W 2N4
P: 905-318-6623
F: 905-765-8905
View Caledonia Location on Google Maps

Dunnville
117 Forest St. E
Dunnville, ON
N1A 1B9
P: 905-318-6623
F: 905-774-1538
View Dunnville Location on Google Maps

Office Hours

We are open Monday through Friday, 8:30 a.m. to 4:30 p.m.

After Hours Emergencies
For public health emergencies or hazards, such as outbreaks, food poisoning, meningitis or rabies, please call our after hours emergency phone number at 1-877-298-5888.

This is Exhibit **15** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

NEWS RELEASE

Ontario Ready to Rollout Phase Two of COVID-19 Vaccine Distribution Plan

Focus Will Be on Older Adults, Those at Risk of Serious Illness and Hot Spot Areas

March 5, 2021
Office of the Premier

TORONTO — The Ontario government is preparing to move into Phase Two of its COVID-19 vaccine distribution plan next month, with a focus on vaccinating populations based on age and risk. This approach is designed to save lives, protect those at risk of serious illness and to stop the virus from spreading.

Details were provided today by Premier Doug Ford, Christine Elliott, Deputy Premier and Minister of Health, Solicitor General Sylvia Jones, and General Rick Hillier (retired), Chair of the COVID-19 Vaccine Distribution Task Force.

"Due to the incredible work of an army of people we have a solid vaccine distribution plan and we are ready to get needles into arms as soon as the doses arrive," said Premier Ford. "This is a true Team Ontario effort and we are mobilizing our greatest asset - the people of Ontario. Vaccines will be administered in hospital clinics, primary care settings, mass vaccination sites, mobile clinics and pharmacies across the province by dedicated, caring and compassionate frontline health care heroes."

With vaccine supply stabilizing and over two million doses of the COVID-19 vaccine expected from the federal government before the end of March, the province will enter Phase Two of its vaccine rollout. Between April 2021 and July 2021, up to nine million Ontarians will be vaccinated.

During Phase Two, groups that will receive the vaccine include:

- Older adults between 60-79 years of age;
- Individuals with specific health conditions and some primary caregivers;
- People who live and work in congregate settings and some primary caregivers;
- People who live in hot spots with high rates of death, hospitalizations and transmission; and,
- Certain workers who cannot work from home.

"Thanks to the hard work of our health care partners and frontline heroes, Ontario's vaccine rollout is making a positive difference and helping to save the lives of some of our most vulnerable," said Minister Elliott. "We continue to ramp up capacity and are committed to administering as many doses, as quickly as possible to every Ontarian who wants a vaccine."

Phase One of Ontario's vaccination rollout is well underway, with 820,000 doses administered and over 269,000 Ontarians fully immunized. Over 80 per cent of long-term care residents are fully immunized and public health units are working with homes to vaccinate staff and essential caregivers as a priority. Some local public health units, based on local context and capacity, have been able to vaccinate some people aged over 80, before the anticipated timeframe of mid-March. By focusing early vaccination efforts on long-term care residents, combined with public health measures, Ontario has notably reduced infections and the daily death rates in long-term care homes.

Starting March 15th, the province will launch an online booking system and a provincial customer service desk to answer questions and support appointment bookings at mass immunization clinics. This will initially support individuals over the age of 80 as part of Phase One, eventually extending to more groups during Phase Two. While some public health units are currently using their own booking systems to vaccinate individuals aged 80 and over, it is anticipated that the majority of public health units will transition to the provincial booking system after it has launched.

"The fight against COVID-19 continues to be our government's top priority," said Solicitor General Sylvia Jones. "With the approval of the AstraZeneca vaccine, and now the Johnson & Johnson vaccine, and with increased supplies coming into the province, this gives us renewed focus to get even more Ontarians vaccinated sooner. We've made tremendous progress and ask that Ontarians continue to stay the course to protect themselves and keep their families, friends and communities safe."

NACI has provided the recommendation to extend the vaccination dose interval up to four months for all Health Canada approved COVID-19 vaccines while while maintaining a strong and sustained level of protection from the virus. This news along with the approval of new vaccines will help us to reforecast and maximize the number of people receiving a first dose in a shorter timeframe, pending supply from the federal government. Ontario has accepted and will follow NACI's recommendations starting March 10th, with some limited exceptions.

As supply increases, Ontarians will be able to get vaccinated with the three Health Canada approved vaccines in several new settings. In addition to hospitals, mobile clinics and mass vaccination clinics, the province is working with the pharmacy sector and with primary care professionals to offer vaccinations in primary care settings and community locations in collaboration with public health units. A pilot for pharmacy vaccine administration is planned for mid-Marchin select regions, including Toronto, Windsor and the Kingston, Frontenac and Lennox & Addington region, followed by specific primary care pilots in collaboration with public health units.

"Being able to announce the Phase Two rollout today is exciting news for everyone. The vaccine developments this week mean that we can expect things to move faster than anticipated which is fantastic," said Gen (Ret'd) Rick Hillier. "To that end government officials are refining the distribution plans, testing the online booking system and implementing a pilot program with pharmacies and primary care providers in select regions to ensure that they are ready for the launch of Phase Two."

Ontario will enter Phase Three when vaccines are available for every Ontarian who wishes to be immunized. While vaccines will not be mandated, during Phase Three, people will be strongly encouraged to get vaccinated.

Quick Facts

- As of March 4, 2021, at 8:00 p.m., over 820,000 vaccine doses have been administered across the province, including over 121,000 doses administered to long-term care home residents. Over 269,000 Ontarians are fully immunized, including over 55,000 long-term care home residents. Ontario is leading the country in the total number of vaccines administered and has fully immunized more individuals than all provinces and territories combined.
- As of this week, all adults in the 31 fly-in First Nations communities and Moosonee have been offered their first dose of the COVID-19 vaccine and second doses have commenced in some communities. As of March 3, 2021, Operation Remote Immunity has administered 13,788 doses as follows – 11,958 first doses, and 1,830 second doses.
- For the month of March, Ontario is expecting to receive 870,480 doses of the Pfizer-BioNTech vaccine and 483,700 doses of the Moderna vaccine. Ontario is also expecting to receive 194,500 doses of the AstraZeneca vaccine the week of March 8, timing pending confirmation from the federal government.
- If you're aged 80 or older and you don't live in a congregate care setting, you may be able to book a vaccine appointment through your public health unit. Find your public health unit and contact them for information.
- Health care professionals who are able to administer the vaccine can register and apply through Ontario's Matching Portal. This could include physicians, nurse practitioners, registered nurses and registered practical nurses, along with pharmacists, pharmacy students, interns and pharmacy technicians.
- As part of its commitment to ensure an equitable vaccine rollout, Ontario will begin collecting sociodemographic data on a voluntary basis from individuals who get the COVID-19 vaccine starting Friday, March 5, 2021. Collecting this data will help the province have a more complete picture of who is being vaccinated, help ensure access to the vaccine for communities who are at-risk and disproportionately impacted by the pandemic, and ensure that everyone who wants to be vaccinated is being reached.
- Only vaccines that Health Canada determines to be safe and effective will be approved for use in Canada and available in Ontario. This means all COVID-19 vaccines being offered: were tested on a large number of people through extensive clinical trials; have met all the requirements for approval, including safety; and will be monitored for any adverse reactions that may occur after vaccination and appropriate measures will be taken.

Additional Resources

- Populations Eligible for Phase Two COVID-19 Vaccination
- Ontario Administers over Half a Million Doses of COVID-19 Vaccines
- Ontario Continues Accelerated Vaccinations of Most Vulnerable Despite Vaccine Delays
- Ontario Adjusts Vaccination Plan in Response to Pfizer-BioNTech Shipment Delays
- Ontario to Vaccinate up to 8.5 Million People in Phase Two
- Ontario Releases Ethical Framework for COVID-19 Vaccine Distribution
- For up-to-date information on the populations currently eligible for vaccination and instructions on how to book an appointment when you are eligible, visit Ontario's vaccine webpage.

- Visit Ontario's website to learn more about how the province continues to protect the people of Ontario from COVID-19.

Related Topics

Government

Learn about the government services available to you and how government works. Learn more

Health and Wellness

Get help navigating Ontario's health care system and connecting with the programs or services you're looking for. Learn more

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Media Contacts

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Alexandra Hilkene

Minister Elliott's Office
Alexandra.Hilkene@ontario.ca

This is Exhibit **16** referred to in the Affidavit of **Dr. Michael Rachlis.** Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

26557 Civic Centre Rd
Keswick, Ontario L4P 3G1

GEORGINA

close

Programming and facility changes amid COVID-19

Mayor Margaret Quirk issued a declaration of emergency on March 19, 2020 in response to COVID-19 in the Town of Georgina. The Town of Georgina continues to work with York Region Public Health and N6 municipal counterparts monitoring the global situation with the COVID-19 pandemic.

COVID-19 vaccinations: The COVID-19 vaccination clinic in Georgina is located at the Georgina Ice Palace.

- **Vaccines for eligible individuals – high priority health care workers who live or work in York Region, and residents who are 80 years of age and older – are delivered by appointment only. Walk-in appointments are not available. Appointment bookings can be made at york.ca/covid19vaccine.**
- **The online booking process requires two steps – first create an Active Net account if you don't have one and then book an appointment. You must complete both steps to be fully registered for an appointment, and will receive a confirmation email with your appointment date and time.**
- **Some residents who are not able or not comfortable booking an online appointment are encouraged to seek out a support person (caregiver, family member, friend or neighbour) who can assist in booking an appointment. If you need assistance booking, call 1-877-464-9675.**
- **York Region Public Health has produced a video on what to expect when visiting a vaccination clinic.**

Town enters 'Red' control classification under the COVID-19 response framework: York Region, including the Town of Georgina, entered the red control classification level within the tiered COVID-19 response framework as of 12:01 a.m. on Feb. 22, 2021, no longer subject to the stay-at-home order. Under the red control classification, residents are reminded to limit contact to your

Georgina Equity a

Home / Municipal Government / Boara

Anti-racism statement from Mayor Marg
Read the full:

statement

Each Term of Office, the Town of Georgin

Terms of Reference:

The Committee's Terms of Reference out
Terms of Reference

The Georgina Equity and Diversity Advisi
and to Town Council relating to the enha

Committee Composition:

The GEDAC consists of a maximum of 7 members including 1 member of Council, 1 representative from the York Regional Police Diversity, Equity & Inclusion Bureau, 1 representative from the Sandgate Women's Shelter of York Region, and 4 citizen appointments.

The length of term for a person appointed to GEDAC shall be for the Council Term of office.

The GEDAC works to:

- Promote mutual trust and respect among Georgina's diverse community groups and the institutions and agencies that serve them
- Provide advice on policy and practices relating to inclusiveness and community building to ensure that the contributions, interests and needs of all sectors of the Town of Georgina's population are reflected in the Town's operations and service delivery.

The GEDAC also, through its membership since 2009 in the Canadian Coalition of Municipalities Against Racism and Discrimination (CCMARD), shares experiences with other municipalities to improve their policies against racism, discrimination, exclusion and intolerance.

- Welcome Centre - Immigration and Citizenship Canada
- York Region - Just the Facts on Diversity
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- The Ontario Human Rights Code
- Diversity and Inclusivity policy

Current GEDAC Members

- Andrew Snowball, Chair
- Berenice Ruhl, Vice Chair
- Kyle Stipanic
- Mayor Margaret Quirk
- Alicia Lauzon, York Region Police Representative
- Lily Pouzand, Sandgate Representative

The GEDAC meets every month in the Civic Centre Council Chambers.

- GEDAC meetings are open to the public.
- Public input is welcome through a Request to Speak form or a Request for Presentation to the Committee
- The location is wheelchair accessible
- Meetings are conducted in accordance with the Town of Georgina's Procedural By-law

For assistance and information please contact the Committee Services Coordinator by email at clerks@georgina.ca or telephone at 905-476-4301.

Agendas and Minutes

Please visit the GEDAC Agendas and Minutes web-page.

Attached Documents:

Attachment	Size
gedac_terms_of_reference_august_15_2018.pdf	425.98 KB
diversity_and_inclusivity_policy.pdf	230.56 KB

Quick Links

- A-Z Services
- Regulatory By-laws
- Contact Us
- Council Meetings
- Committee and Board Meetings
- Licenses and Permits
- Building and Renovating
- News and Public Notices

This is Exhibit **17** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

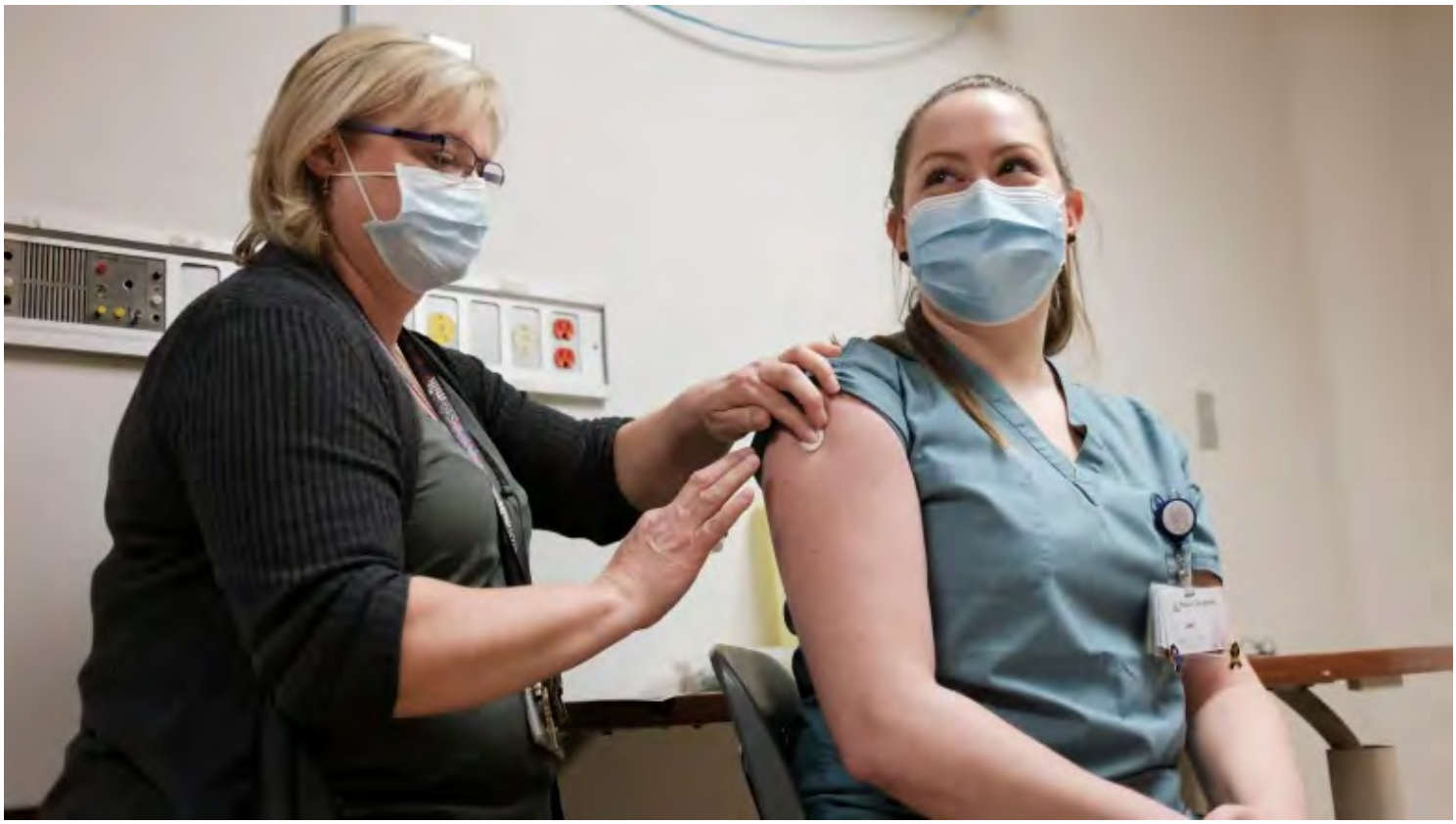
A Commissioner, etc.

News

The pros and cons of online booking portals for COVID-19 vaccines once mass immunization begins

Experts say there's a risk that vaccine booking systems might shut out some vulnerable people who need access

James Dunne · CBC News · Posted: Feb 21, 2021 4:00 AM ET | Last Updated: February 21



Registered nurse Debbie Frier, left, injects Leah Sawatsky, an emergency room nurse, with the Pfizer-BioNTech COVID-19 vaccine at the Regina General Hospital in Regina on Dec. 15, 2020. With vaccinations soon moving past

targetted groups to segments of the general population, most provinces are turning to online portals for sign-ups. (Michael Bell/The Canadian Press)

comments

Most provinces and territories will be using online portals to sign Canadians up for COVID-19 vaccinations as they become more widely available next month, according to a survey by CBC News.

Every province that has shared their plans will use some online sign-up, as will Yukon and the Northwest Territories. The option to book by phone will be available across Canada, and Nunavut is scheduling vaccination appointments strictly by phone.

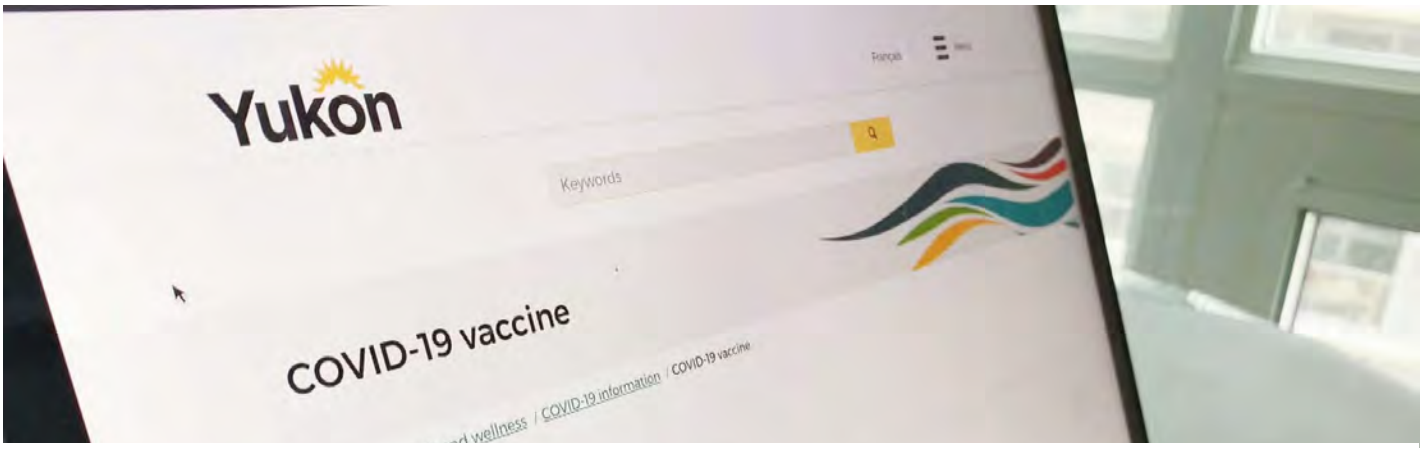
While vaccinations started back in December 2020, what's soon changing is the pace and distribution list — from targetted high-risk groups like seniors in long-term care, to the general population, starting with the oldest first in many jurisdictions.

"That is absolutely what we need to be doing," said epidemiologist Kirsten Fiest, the Director of Research & Innovation in Critical Care Medicine and an assistant professor at the University of Calgary.

"I think the efficiency piece is really the most critical."

But, while health officials and independent experts agree online appointment booking sites will be essential to managing a mass vaccination campaign, they've also raised problematic questions of equity in parts of the U.S.

WATCH | Some say online vaccine portals could shut out most vulnerable:



Some say online vaccine portals could shut out most vulnerable

25 days ago | 2:01

As vaccinations ramp up in Canada, many provinces are talking about using online portals to help organize and register people for their shots. But some people worry that the Canadians who are most vulnerable and have the greatest need for the vaccine could end up getting lower priority. 2:01

Stories in the Los Angeles Times, New York Times and Washington Post have documented how online booking has prevented senior citizens, racialized individuals and poor people from getting fair access to vaccination. In some cases activists have stepped in to book shots for those who lack tech savviness, struggle with communication or cannot afford the devices, data plans or internet service.

The problems seen south of the border concern Fiest.

"You have to worry that something similar could happen here."

Kirsten Fiest, an epidemiologist and assistant professor at the University of Calgary believes online portals to sign up for COVID-19 vaccination will be an essential part of the mass immunization effort, because they're efficient — but not without problems. (Cumming School of Medicine, University of Calgary)

Cross-country picture for online portals

While neither Newfoundland and Labrador nor New Brunswick would confirm plans for online booking options, slots for coronavirus immunizations can already be reserved through web sites in PEI, and the Northwest Territories.

Manitoba, Saskatchewan and Alberta told CBC News they intend to offer web-based sign ups, without providing a timeline.

Quebec, Ontario, and B.C all say they'll launch online sites for booking vaccination relatively soon.

Quebec said its site could be online before the end of the month.

Ontario said it has successfully tested a scheduling site it developed with three American companies in January, but the province's Ministry of Health would only say it expected to launch it "in the coming weeks."

B.C. said its booking site will be launched to the public in March, and has released sample images of the COVID-19 immunization record card citizens will receive.

British Columbia says it will have an online portal open in March for COVID-19 vaccinations for the general population. People will have the option to receive a paper record of their vaccination, like the one above, and a digital record. (Government of B.C.)

Online booking portals currently running in Yukon and Nova Scotia were built by CANImmunize, the Ottawa based tech firm co-founded by Dr. Kumanan Wilson, an internal medicine physician and senior scientist at Ottawa Hospital.

- **Tracking the COVID-19 vaccination progress in Canada**
- **Distribution, lack of national registry top hurdles for Canada's COVID-19 vaccine rollout**

CANImmunize started out as an app for tracking vaccine records a decade ago, and was supported by the Public Health Agency of Canada.

The company has expanded its scope offering more services to help fight the pandemic because "this will be the largest mass healthcare intervention in our lifetime," said Wilson, "and probably the most important."

Wilson says CANImmunize is in talks with other provinces interested in its tech, but declined to name them.

Dr. Kumanan Wilson, an internal medicine physician at Ottawa Hospital is also co-Founder of CANImmunize, the company that created online vaccine sign-up portals for Nova Scotia and Yukon. Wilson says vaccinating people for COVID-19 'will be the largest mass healthcare intervention in our lifetime.' (Kim Barnhadt/CANImmunize)

Perpetuating the 'digital divide'

With millions of Canadians clamouring for COVID-19 vaccines, using technology to help facilitate booking shots will make the process more convenient for many Canadians and more efficient for health departments.

"I think that we have a mass vaccination strategy that will work for a lot of people," said Dr. Kwame McKenzie, a physician and the CEO of the Wellesley Institute, a non-profit group in Toronto that works in research and policy issues to improve health equity.

"The problem is that there are some people who are at highest risk that it won't work for at all."

Dr. Kwame McKenzie, a psychiatrist and CEO of the Wellesley Institute, a Toronto-based think-tank that advises on policy for more equitable health care in urban communities. He's concerned the process to sign-up for vaccines might make existing inequities worse. (Richard Agecoutay/CBC)

McKenzie is concerned the mass vaccination campaigns across Canada built on the power of online booking portals will perpetuate the country's "digital divide."

He says the seniors, racialized groups, low income groups, and people with disabilities who have been at higher risk of getting COVID-19, are exactly the same groups who are less likely to have computers, broadband, and be "digitally savvy."

Having call centres for phone bookings isn't a fix-all, he said, if people using pay-as-you-go credits end up on hold for hours.

"That could be all your credits for a week," he said, "and the most likely scenario is that you'd use your credits before you got through. And that's your opportunity gone."

He also points to Statistics Canada data that shows about 20 per cent of Canadians have a mother tongue other than English or French.

Bookings in Canada's official languages, said McKenzie, could present challenges not just for younger people new to Canada from places like South Asia or Africa, but also for some older Canadians from places like Italy, Portugal or Ukraine, who still function primarily in their first languages.

Alternatives for access

McKenzie wants to see vaccination slots proactively held back for those who will struggle to book online or by phone.

He believes community outreach for at-risk groups should be coupled with no-appointment-necessary walk-up vaccination sites in targeted areas.

> “In Canada, we say diversity is our strength ... that means that we need a diverse vaccine roll out strategy to meet the needs of that diverse population.”
>
> *- Dr. Kwame McKenzie, CEO The Wellesley Institute*

He also said on-the-job immunization clinics for essential workers should be part of vaccine access.

"In Canada, we say diversity is our strength. And that's something I believe, but that means that we need a diverse vaccine roll out strategy to meet the needs of that diverse population."

- **Ottawa doctor says proof of immunity might be only way for fans to return to sports arenas**

Several provinces have announced plans for mobile vaccination clinics, "focused immunizations teams" and community clinics set up by local public health units to reach vulnerable groups.

Fiest believes provinces will have to be careful that "whatever system is going to be rolled out is not making health inequities worse."

A long process and public patience running low

A number of questions have poured into the CBC News COVID@cbc.ca email address in recent days from Canadians anxious for specifics about when and how they can sign up for vaccination.

Linda O'Neil of Barrie, Ont., is one of them.

Linda O'Neil of Barrie, Ont., is concerned about when and how she'll be able to get a COVID-19 vaccination booking for her mother, who is in her late 80s. (Submitted by Linda O'Neil)

She's worried about getting a booking for her mother, who's in her late 80s.

"It's just really frustrating, because my feeling is they've had quite a few weeks to be able to prepare this plan," said O'Neil.

"So I'm just looking to have it publicized now that the vaccine is starting to come in."

While O'Neil and millions more wait for details from their provinces, Wilson sees a silver lining in COVID-19 accelerating what he sees as overdue technological change in Canada's medical system. He acknowledges that older Canadians and others may need help figuring out how online registration works.

"In my mind for immunization, an individual, the health care provider, and the government would have the same immunization information in real time," he said "that's probably true for immunization, but also for all of our health care."

This is Exhibit **18** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

BARRIE | News

'It's ridiculous,' System issues leave many waiting in line for COVID-19 vaccine

Madison Erhardt
CTV News Barrie Videographer
@MadisonCTV | Contact

Published Thursday, March 4, 2021 7:31PM EST
Last Updated Thursday, March 4, 2021 8:51PM EST

BARRIE, ONT. -- What should have been an exciting day quickly turned to frustration for many in line waiting for their vaccine in Newmarket.

On Thursday, dozens of people could be seen lined up around the Ray Twinney Recreation Complex, some waiting for at least four hours. This includes Valary Lyall King and her grand-daughter Alexis who say their experience was anything but pleasant.

"They have young people in there and seniors; it's ridiculous," she says, adding the worst part was waiting out in the cold. "It's freezing. We are dressed warm, but not for this."

While Alexis says she worried for her grandparent's safety.

"So the first two hours was outside, and then you did one hour in a sardine hallway, no distancing, no sanitation, no security, and then you did the half an hour in on the rink which is where you get the vaccine," says Alexis.

In a release, Southlake Regional Health Centre, which oversees the Twinney site, addressed the long lines and wait times, saying, "We recognize that this is a long line for seniors to wait in, and we apologize for that. we appreciate everyone's patience as we work through this. Early this morning, we experienced some system and process issues resulting in delays as we opened the vaccination centre, which continues to cause long lines."

Southlake says they have opened a second arena where there is seating for those who are waiting.

They are also adding more staff and security to help move people through more quickly.

Valary says she already feeling anxious for her second dose which is still weeks away.

"I'm worried about what the next shot is going to be like cause we have to come back for a second one, and surely it won't be like this," she says.

Southlake is also asking that those scheduled to get their vaccine do not arrive more than 10 minutes before their scheduled appointment.

RELATED IMAGES

Seniors in line for COVID-19 vaccine in Newmarket, Ont. on Thurs. March 4, 2021 (CTV News)

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Father of two missing Alberta girls pleads for their return

'Just wrong': Ford on MPP's ties to anti-abortion group

Duchess of Cambridge quietly visits memorial for Everard

Walmart Canada closing 6 stores, will upgrade others

Grey-Bruce 'hockey hub' vaccination model a hit

BARRIE TOP STORIES

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Ontario logs fewer than 1,100 new COVID-19 cases, positivity rate jumps above 4 per cent

One person killed in plane crash on Lake Simcoe

Trailer-towing thief shows up prepared at Barrie auto shop

Manhunt underway for armed and dangerous suspect in Wasaga Beach

UPDATED

NACI expands recommendations clearing use of AstraZeneca's vaccine for people 65 and older

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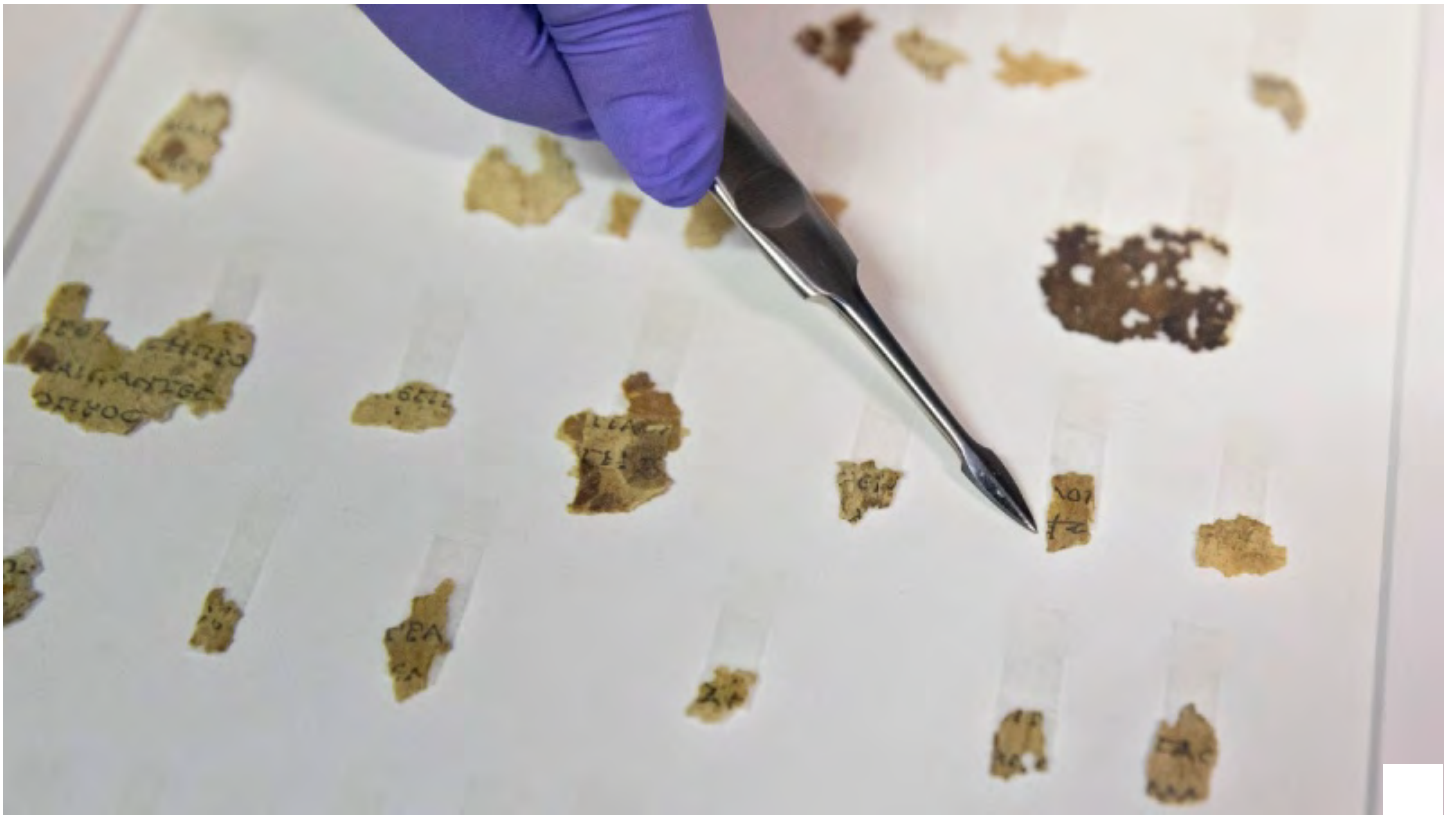


Dozens of new Dead Sea Scroll fragments discovered

Oscar nominations released with diversity front-and-centre

Grandma hugs her grandson for the first time in months

CTVNEWS.CA TOP STORIES

Half of Canadians want first COVID-19 vaccine available: poll

Woman who died after AstraZeneca shot had 'highly unusual' symptoms, officials say

Memorial grows for 17-year-old student killed at Edmonton-area school

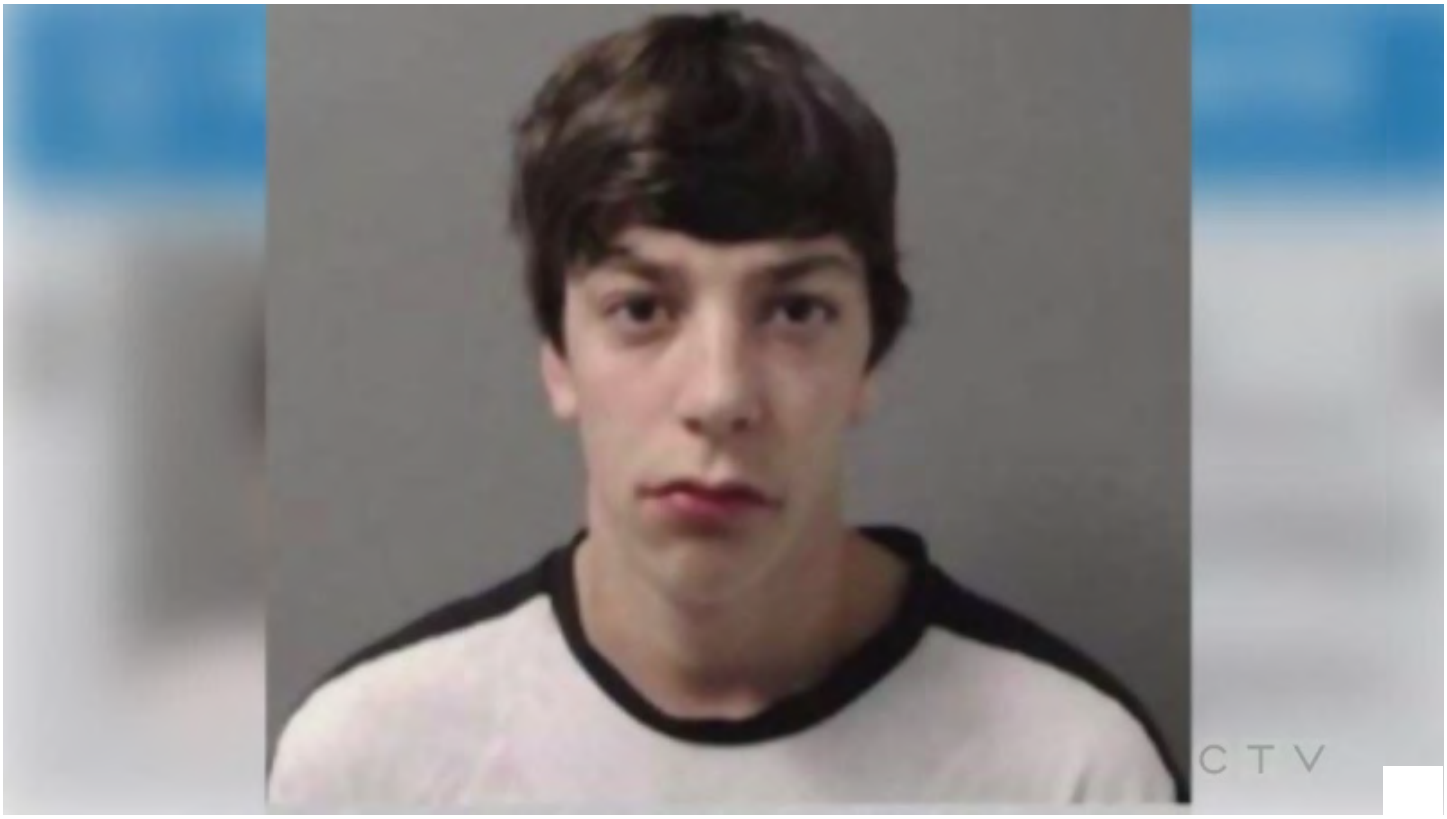
Will Canada use COVID-19 vaccines from Russia and China?

COVID-19 outbreak grows at B.C. care home where most residents have been vaccinated

Ontario now in third wave of COVID-19, province's hospital association says

MOST-WATCHED

Deadly plane crash on Lake Simcoe



Suspect wanted in stabbing in Wasaga Beach

Caught on camera: Vehicle break-ins in Barrie

Dr. Gandhi on Simcoe Muskoka's vaccine rollout

Winners of $70M jackpot: full press conference

MOST-READ

Security cameras capture would-be thieves in Barrie neighbourhood

One person killed in plane crash on Lake Simcoe

Barrie house fire turns fatal

Manhunt underway for armed and dangerous suspect in Wasaga Beach

Simcoe Muskoka health unit logs 120 new COVID-19 cases, 80 new variant cases

This is Exhibit **19** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

https://www.cbc.ca/listen/live-radio/1-39-metro-morning/clip/15830326-got-vaccine-questions-dr.-isaac-bogoch-answers

This is Exhibit **20** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

Court File No. 223/21

ONTARIO
SUPERIOR COURT OF JUSTICE
(Divisional Court)

BETWEEN:

DAVID DANESHVAR

Applicant

- and -

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO AS REPRESENTED BY THE MINISTER OF HEALTH, and the HONOURABLE CHRISTINE ELLIOTT, MINISTER OF HEALTH for the PROVINCE OF ONTARIO

Respondents

STATEMENT OF TRANSCRIPTION ACCURACY

I, Kathleen Osther, of the City of Toronto, in the Province of Ontario confirm that:

1. I am a legal assistant at the law firm *bakerlaw*.
2. On March 11, 2021, from 2:28pm until approximately 3:06pm, I listened to and transcribed a portion of a radio segment from CBC's Metro Morning with Ismaila Alfa from March 10, 2021 entitled "Got vaccine questions? Dr. Isaac Bogoch has answers".
3. The segment was 16:42 minutes long. The portion of the segment I transcribed was from 9:37-13:05 (**Schedule A**).
4. I confirm that I transcribed the contents fully, truly and accurately to the best of my ability.
5. The original audio recording can be listened to here: https://www.cbc.ca/listen/live-radio/1-39/clip/15830326

Date: March 16, 2021

Kathleen Osther

SCHEDULE A

Metro Morning with Ismaila Alfa March 10, 2021 Got vaccine questions? Dr. Isaac Bogoch has answers (16:42) Transcript from 9:37-13:05 https://www.cbc.ca/listen/live-radio/1-39/clip/15830326

Ismaila Alfa = IA

Dr. Isaac Bogoch = DIB

Aldo from Caledon = ALDO

ALDO:	9:37	Good morning
IA:	9:38	What's your question for uh, for uh, Dr. Bogoch?
ALDO:	9:41	So I'm a 69 year old uh with diabetes and chronic lung issues and uh with poor WIFI, spotty WIFI. How do, how do I book an appointment? I've been in contact with my family doctor and he doesn't know anything. Uh you know he's as frustrated as I am
IA:	10:02	So Dr. Bogoch, what's, with no internet how, how will Aldo book uh an appointment?
DIB:	10:07	Great, telephone. There's a telephone uh so there's uh the, so if you go into the public health units' websites uh you can actually sign up but of course if people have spotty WIFI or, or, or no WIFI or intermittent internet connection uh you can also call and then of course when the centralized booking system uh starts to launch I think that's, it's probably next week uh, uh, uh imagine it's around the 15th it, they'll be uh telephone and internet to sign up for this. One other point that's semi-related, we know that, you know, the push is now for community dwelling elder populations. People 80 years and up, and its gradually going to move its way down the age structure til more and more people are vaccinated, but there's a lot of barriers. Right? Some people might have technol.., barriers to technology they might have sight barriers, mobility barriers, language barriers. So we really need everybody to help out. This is an all hand on deck approach. We need family members, we need neighbours, we need community based organizations, we need the whole team here to help identify people who would benefit from vaccination, to help sign them up and to help get them out to vaccine clinics, uh because we just don't want to leave anybody behind
IA:	11:21	You, you know there's uh, uh I've heard this question from more than one person. What about those who were um uh over 80, who are staying in their own homes, who are looking to get in home vaccinations, is there any uh way to do that now?
DIB:	11:37	Yeah, I mean there's programs where certain community based organizations have identified community dwelling uh elder populations and have gone to the home. So for example there are some programs in Toronto that's not wide-spread throughout

the province. Different public health units may have different programs available within. Uh but there is no you know dial up number where you could call to have this delivered to your home like, like Uber Eats for vaccine. That would be amazing, but then there isn't uh there isn't such uh a wide-spread systematic program for that. However, however, there are some uh areas that have been doing that and will continue to do that for example that city of Toronto has, has started that.

IA: 12:18 Okay, an-and I just ask that because I know that I, I've heard of you know uh a couple of people who are 90 and older who are worried about leaving their home and would like to get the shot in their home.

DIB: 12:28 Absolutely, and of course there's mobil… – like we, I, we, we can't ignore the tremendous barriers to care. Right? Like you-can, let's say you, someone helps sign you up or identifies you and signs you up, but then you've got to go to you know a mass vaccine clinic. What if it's raining outside? What if you have to stand for a long period of time? So it's going to be helpful, it's not, it's not a perfect solution but it …

IA: 12:48 Right

DIB: 12:49 …is helpful that there's going to be a lot of mass vaccine sites in, in many cities. Plus community centres, plus pharmacies, plus we're going to start to see more and more uh vaccines offered in primary care.

IA: 12:59 We've got enough time for uh 1 more question here from a caller. We've got Mike on the line from Toronto. Good morning Mike…

Stopped transcribing at time stamp 13:05

DANESHVAR Applicant	and	MINISTER OF HEALTH Respondent	Court File No:

ONTARIO
SUPERIOR COURT OF JUSTICE
(DIVISIONAL COURT)

STATEMENT OF TRANSCRIPTION ACCURACY

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Lawyers for the Applicant

This is Exhibit **21** referred to in the Affidavit of **Dr. Michael Rachlis.** Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

March 1, 2021

To: Premier Doug Ford
Christine Elliott, Deputy Premier, Minister of Health

Cc: General (Ret.) Rick Hillier, COVID-19 Vaccine Distribution Task Force
Dr. Dirk Huyer, Coordinator, Provincial Outbreak Response
Dr. David Williams, Chief Medical Officer of Health
Alison Blair, Associate Deputy Minister, Pandemic Response and Recovery
Patrick Dicerni, Assistant Deputy Minister
Nadia Surani, Acting Director, Primary Care Branch
Loretta Ryan, Executive Director, Association of Local Public Health Agencies

Re: Ensuring Equity in Ontario's Vaccination Campaign

Dear Premier Ford and Minister Elliott,

We are writing today as your partners in Ontario's vaccination rollout plan. We have appreciated the opportunity to consult with the vaccine task force regularly over the last several months, and the recent meetings with Ret. General Hillier. We are encouraged by the leadership role of Public Health Units in the vaccine rollout, and know that health equity is a key consideration in General Hillier's communications and in regional plans to ensure an efficient, equitable access to COVID-19 vaccines. **Our health professionals and teams stand ready to support #TeamVaccine in Ontario**.

As has been seen and talked about for some time among public health units, in media stories, and among community providers at the front lines of testing and community supports, COVID-19's effects have not been felt equally in Ontario. We know that communities who've seen the highest rates of infections during the pandemic, the highest impacts on health and wellbeing, have been communities already marginalized before the pandemic hit, and for whom health and social services can be more difficult to access. **We also know that it's many of these people who will have difficulty accessing online or phone system booking, are home bound, or are otherwise hesitant or unable to visit mass vaccination clinics or pharmacies.** Premier and Minister, we believe it is critical to have a plan to ensure that the people facing the most barriers and risks due to COVID-19 are given particular attention in vaccine plans.

The good news is that throughout the pandemic, community health leaders and their partners have worked hard to build lines of trust, and to work with other community leaders, local ambassadors and others to ensure that their services, including testing and isolation supports, could reach people marginalized due to a variety of factors.

From the experience of implementing COVID-19 testing, we know that one-size-fit-all mass vaccination clinics, even if accessibly located within priority neighbourhoods, will not be effective by themselves. Mobile testing clinics that deliver testing to the door, and smaller testing sites located in trusted community spaces, performed by trusted organizations, have been the keys to success. These lessons can be applied to ensure a successful and equitable rollout of the COVID-19 vaccination campaign.

Premier and Minister, we ask for your leadership in supporting all Public Health Units across Ontario to work with primary care to include and implement the following in the regional vaccination rollout:

1. A comprehensive, multilingual, and culturally safe approach to addressing vaccine hesitancy and building vaccine confidence in communities where distrust and marginalization, as well as language and social barriers can play a role in vaccine uptake, by partnering with and resourcing community organizations that have existing lines with trust and have already been supporting COVID-19 response in these priority neighbourhoods. This might mean flyers in building lobbies, door-to-door visits, local language radios, leveraging faith leaders, and other high touch strategies that have already been used during testing and isolation campaigns in the hardest hit communities.

2. A multi-pronged approach that builds access to the vaccine into existing partnerships, mobile units, community testing sites, and pop-up community campaigns with priority populations. This may include innovative solutions that were successful for testing, such as repurposing public buses to set up vaccination clinics outside of seniors' residences, social housing, and isolated areas within the hardest hit postal codes.

3. Collection, review, and reporting of race-based and socio-demographic data as the rollout takes place across marginalized communities to ensure that the people who are at the highest risk are being helped first by the vaccine, and to prevent future outbreaks. This type of collection and reporting will enable healthcare and community providers to know which of their clients require additional outreach immediately, and inform a more just and equitable system going forward.

We have come this far together, building on the strength of individual, tailored community outreach and supports to help reduce the risk of further outbreaks in the hardest hit areas of Ontario's most marginalized communities. To get Ontario back on its feet, and begin the recovery we all so desperately want to see, we have to start with those who've been pushed the furthest down by this pandemic. Mass vaccination sites alone, however well placed or advertised using social media and traditional advertising buys will only take us so far.

We have to help those at the greatest risk through community approaches that have proven to be successful. We have seen in other jurisdictions, particularly in the United States, that without a coordinated plan to reach the hardest hit communities, vaccination rates in postal codes with the highest number of outbreaks are often the ones with the lowest vaccination rates. We have a chance to write a different story here in Ontario. Together, we can do it.

Sincerely,

Sarah Hobbs, CEO
Alliance for Healthier Communities

Leanne Clark, CEO
Ontario College of Family Physicians

Kavita Mehta, CEO
Association of Family Health Teams of Ontario

Anthony Dale, CEO
Ontario Hospital Association

Dana Cooper, Executive Director
Nurse Practitioners Association of Ontario

Dr. Samantha Hill, President
Ontario Medical Association

Jennifer Clement, CEO
Nurse Practitioner-Led Clinic Association

Dr. Alykhan Abdulla, Chair
Section on General and Family Practice
Ontario Medical Association

This is Exhibit **22** referred to in the Affidavit of **Dr. Michael Rachlis.** Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

Ontario Medical Association

Shining a Light at the End of the Tunnel

Guiding Considerations for a Safe, Accessible and Equitable COVID-19 Vaccination Framework in Ontario

Dec. 15, 2020

OMA*Thoughts*

This document was produced by staff of the Economics, Policy & Research department at the Ontario Medical Association.

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We would like to acknowledge the consultation and input from multiple stakeholders.

Please address requests about the publication to:
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Table of Contents

Executive Summary

As COVID-19 continues to impact the lives, health and well-being of Ontarians and people around the world, the promise of vaccination in reducing the risk of contracting the disease is eagerly anticipated. Now that COVID-19 vaccines are available, the excitement of this long-awaited development must be accompanied by an awareness of the associated requirements for delivery of these vaccines, their supply and public understanding and trust in them. Ontario must prepare as soon as possible to deliver these vaccines in a safe, equitable and accessible manner.

A COVID-19 vaccination strategy needs to include defining and prioritizing populations to ensure the gradually available supply is distributed with transparent criteria that consider protecting those most vulnerable. It must also include plans and guidance for vaccine distribution and administration that consider the specifics of each different vaccine and the different avenues for administration available and/or advisable in different phases of vaccination.

Essential infrastructure in this strategy must include surveillance and evaluation to ensure:

- Ontario has the data to understand where vaccination is and is not reaching populations
- Individuals are receiving all required doses
- Monitoring and responding to adverse events
- Plans and resources for public education, such as vaccine hesitancy, that reach all segments of the population with clear and culturally appropriate information to ensure that the public feels comfortable receiving the vaccine and understands its benefits as well as its potential limitations.

While current vaccines have been shown to protect those vaccinated from experiencing signs and symptoms of the virus, it is not known if they also prevent its spread. Therefore, protective measures (such as masking, physical distancing, hand and respiratory hygiene) will remain imperative even for those vaccinated to ensure Ontarians are protected as much as possible.

This paper lays out considerations for each of these components to support the development of Ontario's COVID-19 vaccine strategy based on the insights and expertise of Ontario's physicians and informed by consultation with key health system stakeholders. These recommendations are intended to begin this important dialogue and will require refinement as more information becomes available. Responding to the pandemic and ensuring high rates of vaccination needs strong multisectoral collaboration with a nimble and transparent approach to an evolving strategy. In addition to the involvement of health system partners, community stakeholders, and industry leaders, public health units and their medical officers of health will be key leaders in COVID-19 vaccination. Provincial financial and administrative support will be essential as, for example, PHUs continue to manage the non-vaccination COVID-19 response concurrently. Provincial public health leadership from the Chief Medical Officer of Health and scientific guidance from Public Health Ontario, will also be required to provide consistent provincial guidance to ensure a co-ordinated, supported, and equitable cross-province response.

Accordingly, this document provides recommendations based on the evidence at the time of release. Certain assumptions and/or recommendations may need to adapt with changing evidence. For further detail and basis for these recommendations, please refer to the paper below.

Key Recommendations

Key Recommendations for Defining Populations

- The government must identify clear criteria for, as well as within, priority populations who will receive a COVID-19 vaccination first. Physicians and others with expertise should inform the clinical and risk criteria to help prioritize within groups.
- Health-care workers including doctors, nurses etc., should be in the first group of identified priority populations to receive the COVID-19 vaccine.
- Real-time data should be used to help identify geographic areas of high spread and target those areas as a priority for vaccine distribution and allocation efforts, particularly where the demand for the vaccine exceeds the supply.
- The government should begin planning now in anticipation of an approved vaccine for children (under the age of 16).
- As part of the Ministers' COVID-19 Vaccine Distribution Task Force, the government must develop and deploy educational material to provide physicians with the information they will need to talk with their patients and provide them with the confidence that the COVID-19 vaccination is safe and effective.
- The government must develop and implement a public awareness campaign to educate providers and the public regarding which populations will be prioritized during the vaccine distribution and administration process.

Key Recommendations for Vaccine Distribution & Administration

Roles of Key Actors

- A key consideration is avoiding overlap in responsibilities and gaps in any plan. Clarify roles of all parties involved, including the federal government, provincial government, Public Health Ontario, public health units, health-care workers including physicians, hospitals, community clinics, long-term care and other congregate settings, and community leaders in developing and implementing the strategy for co-ordinated and safe vaccine delivery in consideration of local needs and contexts. The government should work with PHUs to support capacity for these recommendations on distribution and administration. These roles will change throughout the campaign as vaccines with different distribution characteristics are approved for use in Canada.

- Physicians, PHUs (including medical officers of health), and other primary-care providers impart public health knowledge and have experience in patient care. They must be represented at provincial tables when immunization strategy decisions are being made.

Administration for Priority Populations

- Bring vaccination to priority populations in settings relevant and accessible to them (e.g., in hospitals for health-care workers, in schools for school staff and students, mobile vans for individuals unable to leave home). Government and local PHUs should work with providers to investigate the desirability of various options for the vaccination of key priority groups such as community-based physicians, nurses and other workers in community health-care settings.
- Plans must be made for how and where community-based health-care workers will be vaccinated. Hospitals and other public health-led clinics in local communities should maintain capacity and co-develop plans to ensure access to the vaccine for all health-care providers, which will allow them to stay healthy to continue to care for Ontarians including those with COVID-19. Hospitals and Public Health Units seem an appropriate location for these individuals to get vaccinated.
- Clear and consistent guidance for vaccine administrators on administering the COVID-19 vaccines and the specifics of each product , including followup dose requirements, should be developed with leadership by Public Health Ontario and the Ministers' COVID-19 Vaccine Distribution Task Force in consultation and collaboration with end users. The OMA can support with knowledge translation support of guidance and dissemination to physicians.

Administration for the General Population

- Once fridge-stable vaccines become available and widespread, and wider population vaccination is required, PHUs should work with local physician leaders and primary-care providers to design innovative collaborations to enhance access to the vaccine at places that are easily accessible to patients.
- Traditional settings for vaccine administration (physician clinics, PHU vaccination clinics, etc.) should be considered for COVID-19 vaccine administration for the general population as vaccine availability and characteristics allow.
- Distribution channels for delivering vaccine doses to physicians need to be determined (i.e., if utilizing influenza vaccine distribution channels through PHUs). These distribution channels must entail clear and timely communication to physicians with transparency around supply and a commitment to delivery timing and quantity of doses. Physicians should identify the number of doses required for their practices.
- Clear and consistent guidance for vaccine administrators on administering the COVID-19 vaccine in traditional settings and the specifics of each product that will be available, including follow up dose requirements, should be developed with leadership by Public Health Ontario and the Ministers' COVID-19 Vaccine Distribution Task Force in consultation and collaboration with end users. The OMA can support with knowledge translation support of guidance and dissemination to physicians.
- When utilizing innovative strategies, spaces (e.g., arenas, convention centres) should be secured for large-scale and/or innovative vaccination clinics, and needed health human resources, supplies, and equipment should be determined and sourced.
- PHUs should develop a roster of vaccine providers who are willing and able to administer the COVID-19 vaccine in clinics outside of primary care. PHUs should recruit vaccine providers within their regions, with the government helping where recruitment from other areas of the province may be necessary.

- Local physician leaders and other primary-care providers can set an example for peers by supporting their local vaccination delivery process through contribution of time to the efforts of vaccinating clients at various venues.
- The government should engage with industry leaders on scheduling appointments for large-scale vaccination clinics to leverage existing available technologies and expertise for planning attendance for large-scale events.

Key Recommendations for Integrated Information Systems, Surveillance & Monitoring

Integrated Information Systems for Patients & Providers

- The government should make available an electronic appointment, registration and record management and patient notification system for multi-dose vaccination. This should be mobile phone-enabled and aligned with each type of COVID-19 vaccine along with non-smart phone notification mechanisms to attempt to reach all patients. This system should be patient-facing and provider-facing.
- The government should use this system to allow patients to book their vaccination appointment(s) online and provide them with needed information. Additionally, it should account for patient differences in access to technology and digital literacy, ensuring that use of this system does not exclude some patients, particularly those who may be most vulnerable.
- This system must meet providers' needs, facilitating appointment booking on their end, the provision of information and needed forms, facilitating appointment reminders, notifying providers if their patients have received each dose of the vaccine outside of a patient's family physician's office, and tracking which vaccine a patient received and the specific follow up timeline . The system must be co-developed with end users to ensure that it can be seamlessly integrated into workflow. Where possible, notifications should be sent directly to the primary care provider's EMR system.
- In light of the need for multi-dose vaccination, this system must record and track which vaccine a patient has been administered for their first dose, record and ensure that a patient's follow up appointment is booked for the same vaccine, ensure that it prompts patients for follow up in the right timeline for each specific vaccine, and that it allows patients to book appointments where the vaccine they need is available. This is especially necessary for patients who receive the first and second doses from different providers.

Information Systems for Surveillance & Monitoring

- Establish and proactively utilize vaccination surveillance and program monitoring to identify potential gaps in administration strategies. A comprehensive, centralized and accessible digital vaccine registry for data collection that aims to document each COVID-19 vaccine administered should be established at the national level. Such a system would allow vaccination rates and coverage to be easily tracked, enable the distribution of potentially scarce vaccines to be optimized, facilitate a comparison of vaccine coverage with disease rates across the provinces, and enable monitoring for effectiveness particularly in the longer term with a single database to easily know if individuals experiencing COVID-19 might already have been vaccinated.

- Collect demographic data on vaccine distribution to identify gaps in population reach and access, and monitor effectiveness and safety amongst different populations, particularly marginalized populations that have experienced a disproportionate rate of COVID-19 infection.
- Ensure that the existing AEFI (adverse effects following immunization) reporting structure has sufficient capacity to monitor reports related to C-19 vaccines, and that there is a federal-provincial-territorial strategy to monitor and act quickly on potential trends . Ensure vaccine providers including physicians have clear and efficient means to report AEFIs to their local PHUs and are resources to counsel patients around AEFIs.

Key Recommendations for Public Education & Vaccine Hesitancy

- Clear and consistent communication/education campaigns must be developed and implemented by government with the support of stakeholders to assist in building public trust in the vaccine.
- Leaders and health-care workers should be early and visible recipients of vaccines to reassure the public of vaccine safety.
- Continuous updates/guidance on vaccine-related developments must be provided to health-care workers.
- Health professional associations and respected community-based and nongovernmental groups/organizations should be used to disseminate COVID-19 related information because this will help to build public trust in the vaccine. Targeted interventions must be developed for populations more at risk for contracting COVID-19 and groups who are more prone to vaccine hesitancy.
- Regular monitoring of vaccine confidence levels (and dissemination of data to vaccine administrators) is necessary.
- The vaccination experience should be as comfortable and convenient as possible.
- Public education for protective measures including masking, physical distancing and hand and respiratory hygiene must continue. It must encourage people who have been vaccinated to continue these other measures so they can continue protecting those not yet vaccinated.

Introduction

As COVID-19 (C-19) vaccines begin receiving authorization and begin rolling out, it is imperative that Ontario develop a safe, accessible and equitable plan for the distribution and allocation of vaccines, including:

- The strategic prioritization of key populations;
- The logistics of administering vaccines;
- Systems for surveillance and monitoring; and,
- Public awareness, including vaccine hesitancy.

Ontario's immunization strategy must ensure effective rates of immunization; ongoing clear, consistent and transparent messaging from credible and trustworthy leadership (including physicians); and sustained disease-prevention strategies (masking, physical distancing, hand washing) as the population slowly achieves widespread vaccination.

Physicians are critical to the success of this immunization strategy along with Public Health Ontario, public health units, others in primary care, community organizations, pharmacists, employers and other vaccine providers. Further, the province must support vaccine providers with the necessary tools, resources and infrastructure to safely administer COVID-19 vaccines using traditional and innovative models at a community level.

To create and implement such a strategy, multisectoral collaboration is essential, including not only health-system partners but also industry partners with proven expertise in operations, logistics and information technology; and community stakeholders to advise on equitably and accessibly reaching all populations. The initiation of the Ministers' COVID-19 Vaccine Distribution Task Force is an important first step to ensure ethical, timely, equitable and effective distribution of COVID-19 vaccines in Ontario. The OMA and Ontario's physicians share this goal. Taking into consideration guidance from other jurisdictions and building off lessons learned from Ontario's influenza vaccine administration and its complexities during the pandemic, this document seeks to provide strategic considerations and recommendations from the perspective of Ontario's physicians and other stakeholders for the rollout of the COVID-19 vaccine in Ontario.

We must begin developing and implementing a comprehensive and coordinated COVID-19 vaccination strategy immediately, because vaccines have already begun to arrive. It must be nimble and able to adapt to changing information and availability and new considerations. These include variables such as the timing of vaccines to market; the number of vaccines approved or anticipated with differing profiles; rates of vaccine production; time required for distribution; required dose(s) to be effective; different administration schedules for different vaccines; variable effectiveness among different populations; duration of immunity after vaccination; vaccine characteristics and administration route; required cold-chain management/shelf life of vaccine; population-based risk/benefit analysis; and the COVID-19's epidemiological curve when each vaccine and its batches of supply become available. Plans for each of these unknowns must adapt to the best available evidence. As well, communication to the public should

be transparent about the limitations of planning based on these unknown factors at this time, to prepare the public for the likelihood that elements of the vaccination strategy will evolve. Accordingly, this document provides recommendations based on the currently available evidence at the time of release, and certain assumptions and/or recommendations may need to adapt with changing evidence.

Additionally and significantly, data on the currently developing vaccines focuses on whether those vaccinated are protected from the signs and symptoms of the virus, but it does not demonstrate whether these vaccines also prevent its spread (13).[1] This significant unknown must be acknowledged and must temper the nonetheless positive impacts anticipated by vaccine availability. The importance of protective measures will therefore continue, including masking, physical distancing and hand and respiratory hygiene, to ensure a person's contacts are protected from the virus, even if one has been vaccinated themselves.

Key Assumptions

This paper is informed by the following key assumptions:

- The COVID vaccine(s) approved for use in Canada are safe, effective and of high quality
- Multiple vaccines are in development and different vaccines will be approved for use at different times
- Different vaccines will require different conditions for storage, distribution and use
- When COVID-19 vaccines begin to roll out, supply will be limited
- Populations must therefore be prioritized to determine who is eligible for the COVID-19 vaccine first, and a phased approach to distribution/allocation is therefore necessary.

Mindful of these assumptions, this paper will focus on: Defining Populations, Vaccine Distribution & Administration, Surveillance & Evaluation and Public Education & Vaccine Hesitancy focusing on the vital role of physicians in every step of the framework. It will discuss key challenges that may be faced by the province upon rolling out the COVID-19 vaccination program and will outline recommendations for implementation based on public health best practices. Key learnings from the COVID-19 Preparedness and Management Special Report of the Ontario auditor general, and other stakeholders and jurisdictions that have implemented vaccination programs throughout the pandemic, including lessons from Ontario's influenza response, have been considered.

Defining Populations

With Health Canada approvals of COVID-19 vaccine candidate(s) for use across the country, we anticipate that the initial supply of a vaccine(s) will be relatively limited, and deliveries will be staggered. Given that we will have restricted resources, the province has identified key populations to vaccinate first. The National Advisory Committee on Immunization has developed an initial framework to prioritize populations (10). To implement this, clear criteria for prioritized population groups, as well as how to prioritize within groups, will need to be developed. This important work is being led by the Ministers'

[1] The vaccine by AstraZeneca is the only developing vaccine with any evidence, albeit it limited and early, that its vaccine may impact somewhat on transmission (21).

COVID-19 Vaccine Distribution Task Force. It is critical that both the planning and related communication begin now, so that appropriate stakeholders can inform and support implementation plans, and the population can anticipate and understand the rationale for their relative place within the phased approach. Clear detailed lists within each group, along with principles, must be defined immediately. Specifically, it is conceivable that there will be insufficient supply to address the vaccination of an entire group, and thus clear criteria for prioritizing within groups is needed. For example, we must account for other risk factors, including, but not limited to, existing co-morbidities and age, and likelihood of exposure due to living and work arrangements. Public health data has shown the disproportionate impact of the virus on low-income and racialized Ontarians, as well as the ways in which the COVID-19 pandemic has exacerbated pre-existing health and social inequities. It is therefore apparent that equity measures (e.g., targeted outreach initiatives) must be embedded within every step of a vaccine rollout strategy to ensure that vulnerable populations are being effectively vaccinated. We must have a plan ready to implement immediately. Real-time data should be used to identify key geographic areas where high amounts of spread are occurring so that targeted approaches can be implemented rapidly and effectively.

Specifying key priority populations presents a unique set of challenges because some vaccine characteristics, clinical trial results for vaccine candidates, the number of different vaccine candidates and the number of available doses are not yet finalized (10). It should also be noted that there will be individuals who will fall into multiple key priority population groups (10). Key populations may change as emerging evidence of COVID-19 evolves, epidemiologic information changes, and vaccine characteristics and supply become clearer (10). Therefore. ongoing evaluation and monitoring are critical (see section on Surveillance & Evaluation for further details).

Health-care workers including physicians and nurses etc. must be prioritized for vaccination. Not only do health-care workers experience significantly higher than average exposure to COVID-19, but as case counts continue to rise, health-care capacity is consumed, and the backlog grows. It is imperative that health-care workers are protected as early as possible in consideration of their vital role in providing COVID and non-COVID care and for the sustainability of the health-care system. As of Dec. 13, 2020, there had been 10 476 cases among health-sector workers, representing approximately 7 per cent of all cases in Ontario (22).

We must also prepare for the likely possibility that the demand for access to vaccination even among health-care workers will exceed the available supply, at least in the early stages. Experts must convene immediately to determine how health-care workers should be prioritized. The prioritization framework should include:
Providers' age and comorbidities (a list of which should be defined by those with clinical expertise)
Likelihood of front-line exposure, along with the areas in which these individuals live and work accounting for highest rates of COVID-19 infection, transmission and spread, particularly those in the red "control" and grey "lockdown" zones.

Alongside the threat of contracting the virus comes the real fear for health-care workers that they might transmit the virus to their loved ones. Prioritization of vaccination of individual health-care workers should help alleviate some of these concerns, as health-care worker inoculation should protect not only that individual, but also their family from any potential health setting exposure. Depending on vaccine

availability, vaccination of close family members at risk from those potentially shedding the virus should be considered.

Children and youth account for roughly 15 to 21 per cent of the population in Ontario (20). There is currently no approved vaccine for individuals under the age of 16. The hope is that vaccinating these children's parents, caregivers, teachers and others who are close to them will help reduce transmission and virus acuity. In addition, for children who are high risk, their parents and/or caregivers, and others who come in contact with them should be prioritized. Additional research must be done on children to develop and administer COVID-19 vaccinations. In the meantime, education of the pediatric population and their parents must begin. Consideration could be given to doing this in schools. Schools should also be considered as a place for vaccinations.

The government will need to develop a campaign to educate both health-care providers and the public about which populations will have priority for vaccines, and when.

When vvaccinating Ontarians in stages , key consideration must be given to the fact that evaluation to date has focused on protection from experiencing the symptoms and signs of COVID-19 for those vaccinated but has not evaluated the impacts of the vaccine on transmission of the virus by those vaccinated. Vaccinating these priority populations must be done in tandem with clear education to recipients that standard protective measures (masks, physical distancing, hand and respiratory hygiene) are still important for them to protect others from the virus because other segments of the population will not yet be vaccinated.

- **Role of Physicians:** It is critical that the public understands that due to limited supply of vaccines, some populations will be prioritized. Even more critical is that f the public understands when it is appropriate to get a vaccine. The public will have significant questions about a phased approach once rolled out by the government, and patients turn to physicians as a trusted voice in health care. Physicians will play a substantial and critical role in the communication and public acceptance of a prioritization strategy, translating the government's plan and counselling patients on the importance of prioritizing populations for the COVID-19 vaccine, as well as in which phase each patients should expect to be included. This important work will support both patients and the health-care system. Physicians must be given adequate resources and materials to communicate with patients regarding the rationale behind the phased approach so they are equipped to explain the reasoning behind an individual's "place in line" for the vaccine. To date, there is limited information on COVID-19 vaccines and how limited doses will be prioritized and distributed. This leaves physicians ill-equipped to inform and support patients.

Key Recommendations for Defining Populations

Recommendation: The government must identify clear criteria for, as well as within, priority populations to receive a COVID-19 vaccination. Physicians and others with expertise should inform the clinical and risk criteria on how to prioritize within groups.

Recommendation: Health-care workers, including doctors, nurses etc., should be in the first group of priority populations to receive the COVID-19 vaccine.

Recommendation: Real-time data should be used to help identify geographic areas of high spread and to target those areas as a priority for vaccine distribution and allocation efforts, particularly in cases where the demand for the vaccine exceeds the supply.

Recommendation: The government should begin planning now in anticipation of an approved vaccine for children under the age of 16.

Recommendation: As part of the Ministers' COVID-19 Vaccine Distribution Task Force, the government must develop and deploy educational material to give physicians the information they need to talk with their patients and give them the confidence the COVID-19 vaccination is safe and effective.

Recommendation: The government must develop and implement a public awareness campaign to educate providers and the public regarding which populations will be prioritized during the vaccine distribution and administration process.

Vaccine Distribution & Administration

Developing a strategic vaccine distribution plan will be critical to the success of an effective and efficient vaccination program in Ontario. The 2020-21 influenza season shed light on the challenges Ontario faces in distributing mass quantities of vaccination in a short period of time (detailed in the Appendix). Ontario must learn from this flu season to ameliorate the hurdles, ensure vaccine distribution and administration can begin as early as possible, and instill public confidence in Ontario's vaccine preparedness and the vaccine itself. Ontario should develop a strategy that factors in the following considerations. The OMA provides these recommendations in our capacity as representing and amplifying insights and learnings from Ontario's doctors about their experiences within the health-care system and the observed experiences of their patients, as well as in our capacity as a key health-system stakeholder.

Roles of Key Actors

The plan for administering COVID-19 vaccinations will need to be nimble, nuanced and context-specific – whether to meet regional, community or population-specific needs. To meet these needs with sufficient resources and co-ordination capacity, balanced with an understanding of local considerations and population contexts, PHUs and their medical officers of health will be key leaders in COVID-19 vaccination planning in their regions. Provincial financial and administrative support will be essential as PHUs continue to manage the non-vaccination COVID-19 response concurrently. Many facets of a vaccination strategy will require significant collaboration between the provincial government, local physicians, pharmacists, nurses, community groups and PHUs among many others. Learnings from the COVID-19 Preparedness and Management Special Report of the Ontario auditor general on the provincial response to COVID-19 should inform these roles and the collaboration between them.

Provincial public health leadership from the Chief Medical Officer of Health and scientific guidance from Public Health Ontario will be essential to provide consistent provincial guidance to support PHUs and ensure a coordinated, supported and equitable cross-province response (19).

Key Recommendations for Roles of Key Actors

Recommendation: A key consideration is avoiding overlap in responsibilities and gaps in any plan. Clarify roles of all parties, including the federal government, provincial government, Public Health Ontario, public health units, health-care workers including physicians, hospitals, community clinics, long-term care and other congregate settings, and community leaders in developing and implementing the strategy for co-ordinated and safe vaccine delivery in consideration of local needs and contexts. The government should work with PHUs to support their capacity for distribution and administration. These roles will change as vaccines with different distribution characteristics are approved for use in Canada.

Recommendation: Physicians, PHUs (including medical officers of health), and other primary-care providers need to be represented at provincial tables where immunization strategy decisions are being made to provide input from the viewpoint of local providers of public health knowledge and patient care experience.

Administration for Priority Populations

The vaccine should be made available to priority populations in these initial phases in ways that are accessible to them to ensure maximum uptake. This will ensure the goal of protecting these populations is met quickly. For example, by vaccination within hospitals for health-care workers and other staff who work or study in hospitals, vaccination for education workers in schools; clinics within vulnerable communities; and vaccination brought into congregate settings. Early plans will need to consider cold storage, recognizing that the vaccines do not have to be kept at extreme temperatures immediately preceding vaccination. Minimal vaccine wastage should be ensured particularly as early supply will be low (3).

Health-care workers, including physicians who work in hospitals or long-term care homes, will likely receive their vaccination at their workplace. This leaves a gap for community-based physicians and their potential to be overlooked when planning for vaccine distribution. This group of physicians must be included when identifying, prioritizing and estimating groups for priority vaccine allocation within hospitals or related health-care facilities, to ensure that providers in the community including physicians have the same access to vaccination services as their institution-based counterparts.

In defining priority populations, strategies should reflect the unique or specific vaccination and accessibility needs of each group. These strategies should be codeveloped with key relevant stakeholders, including physicians, from each relevant population and/or setting to ensure needs are met. For example, the OMA can support the crafting of a targeted delivery approach for health-care workers, including physicians, in collaboration with other relevant health-care worker associations.

Specific needs of patients should also be considered that will enable vaccination to begin more quickly once available for these populations. For example, for some people (such as some long-term care

residents), may have a substitute decision-maker. Their consent for vaccinations should be sought in advance to prevent delays and to ensure that demand is known before the vaccine supply is shipped to mitigate wastage.

Administration strategies must also factor in the need for followup doses and ensure that patients are informed how and when to get them (see section below on Integrated Information Systems for Patients & Providers for more details). It will also be important for patients to understand the potential temporary side effects they may experience from vaccination, which have been reported during vaccine trials, but which have been determined not to impact overall safety of the vaccine (16, 21).

- **Role of Physicians:** Physicians understand certain vulnerable populations' unique needs and have vaccine-provider insight and expertise. They therefore should be involved in the development of strategies to ensure these populations receive the vaccine. Physicians will play a key role in administering vaccines and contribute to triaging patients and identifying patients eligible for priority administration. Physicians can also counsel patients during this phase on the stages of rollout, and counsel those receiving the vaccine on its specifics, its potential temporary side effects and its safety.

Key Recommendations for Administration for Priority Populations

Recommendation: Bring vaccinations to priority populations in settings relevant and accessible to them, as is acceptable and feasible (e.g., in hospitals for health-care workers, in schools for school staff and students, with mobile vans for individuals unable to leave the home). Government and local PHUs should work with providers to investigate the desirability of various options for the vaccination of key priority groups such as community-based physicians, nurses and other workers in community health-care settings.

Recommendation: Plans must be made for how and where community-based health-care workers will be vaccinated. Hospitals and other public health-led clinics in local communities should maintain capacity and co-develop plans to ensure access to the vaccine for all health-care providers, which will allow them to stay healthy to continue to care for Ontarians including those ill with COVID-19. Hospitals and public health units seem an appropriate location for these individuals to get vaccinated.

Recommendation: Clear and consistent guidance for vaccine administrators on administering the COVID-19 vaccines and the specifics of each product that will be available, including followup dose requirements, should be developed with leadership by Public Health Ontario and the Ministers' COVID-19 Vaccine Distribution Task Force in consultation and collaboration with end users. The OMA can support with knowledge translation support of guidance and dissemination to physicians.

Administration for the General Population

In addition to targeted population distribution, capacity will also be required to administer the vaccine to the general population in a safe manner within a relatively short time frame in later stages. Planning and mobilizing vaccinations to large groups and the general population will require collaboration among a wide range of public and private sector partners including immunization and public health emergency preparedness programs, emergency management organizations, health-care organizations, vaccine

providers including physicians, community vaccination partners, infrastructure sectors, and policy makers.

As initial priority populations are vaccinated, careful planning should be undertaken to determine the best way to reach larger population groups and the general population. This may be through typical vaccination settings including family physicians' offices, pharmacies and public health-led vaccination clinics, as well as through other innovative and/or larger scale clinics in community settings in collaboration with other providers.

In all settings it will be important for administration strategies to factor in the need for followup doses and ensure that patients are informed how and when to do so (see section below on Integrated Information Systems for Patients & Providers for more details). It will also be important for patients to understand the potential temporary side effects they may experience, which have been reported through vaccine trials but have not been determined to impact overall safety of the vaccine (16, 21).

Traditional Setting Administration

More familiar and traditional vaccines, which are expected to be available in time for Phase 3 & 4 vaccination, do not have the same extreme cold storage needs as the initial vaccines. Therefore, distribution to and administration through family physicians' offices, and other clinics, will be possible. Patients will benefit from being able to receive the vaccine in a setting in which they feel comfortable.

However, it will be essential that specific lessons are learned from the challenges experienced by family physicians and others in primary care from this and past flu seasons. These primarily centre around the need for clear and timely communication to physicians with transparency around supply and a commitment to delivery timing and quantity. Distribution channels for delivering vaccine doses to physicians will need to be determined (i.e., if utilizing influenza vaccine distribution channels through PHUs). Vaccinating during COVID-19 requires more time, space, health human resources, cleaning supplies and PPE than pre-COVID-19 (see Appendix for further details submitted by the OMA in support of influenza vaccine administration). COVID-19 vaccination will require additional education and counseling about the vaccine including about its followup dose.

In addition to in-office administration, traditional public health-led vaccination clinics will be valuable options. However, the significant burden on health units in responding to COVID-19 may necessitate provincial support for these PHUs. Additional human resources should be recruited to support these efforts, and, as their schedules permit, physicians can support and staff these clinics as vaccine providers.

- **Role of Physicians:** Vaccine providers including physicians can give vaccinations in this later stage in spaces familiar to and trusted by patients and should identify the number of doses required for their practices. Physicians may also be used to staff public health-led vaccination clinics. They will also be able to counsel patients receiving the vaccine on the stages of rollout and on how it works, its potential temporary side effects and its safety.
- **Role of the OMA:** The OMA can provide knowledge translation to physicians around the specifics of the COVID-19 vaccine and its administration and resources to be shared with patients.

Innovative/Large Scale Clinics

In certain areas it may be valuable to consider larger-scale and/or innovative clinics to reach larger numbers of people in more centralized locations (e.g., collaborative vaccination clinics by multiple practices, public health-led large-scale clinics in community settings). The strategy in each area will likely be local in design based on resources and effective working relationships. These plans should leverage local innovative strategies developed to deliver large scale influenza vaccination during the pandemic. Using the process maps created for these successful endeavors will be helpful and avoid duplication of effort.

If non-traditional venues are to be employed, a strategic process will be necessary to decide the appropriate venues for vaccine administration, as ensuring that locations are accessible and convenient is critical to large-scale uptake of the vaccine. These venues should be secured early in planning efforts. Settings that maximize the number of people who can be vaccinated should be prioritized with consideration given to ensuring that physical distancing and other infection prevention and control procedures can be met.

For example, large indoor and outdoor (depending on time of year) community spaces such as arenas and convention centres can and should be utilized to enable mass vaccination with capacity for physical distancing, particularly to allow for a post-vaccination observation period. These venues should be secured and readied by PHUs with support from the provincial government as necessary as soon as possible and in advance of vaccine availability. Venue selection should also consider parking and transit availability, physical accessibility, access to health human resources, and a community's familiarly and comfort with the space.

Physicians and other regulated health-care providers willing and able to administer the COVID-19 vaccine must be recruited, organized and educated on the specifics of the COVID-19 vaccine well in advance of availability to ensure clinics can be operationalized as soon as administration is possible.

Mechanisms for scheduling safe and organized attendance at such clinics are necessary with sufficient staff and resources for efficient and safe registration and limited in-person wait times. Organizing specific appointment times should be considered especially by leveraging existing technological infrastructure used by industry leaders with experience in scheduling large-scale events depending on clinic size. Public health units and the provincial government should also jointly determine the need for additional vaccination settings that ensure equitable access and meet population needs that cannot been addressed within the large-scale vaccine distribution process.

Large-scale vaccination will also require significant amounts of supplies and equipment. The province should support public health units in procuring needed resources to simplify the supply chain, leverage provincial purchasing power and ensure equitable distribution of resources across the province. See Appendix for related recommendations submitted by the OMA in support of large-scale delivery of the influenza vaccine.

- **Role of Physicians:** Resources within PHUs and public health nurse capacity are stretched and limited due to the heavy burden of responding to the pandemic. Physicians can help fill this health human resource gap through staffing and/or developing vaccination clinics and tracking and communicating with patients for followup doses. Once educated themselves, physicians will serve as trusted sources and translators of knowledge and provide counselling to patients

around receiving a vaccine. To ensure that such an endeavor is successful, PHUs and those administering the vaccine or involved in discussing the vaccine with patients must be in alignment regarding vaccination processes, procedures and guidance. See the section on Public Education & Vaccine Hesitancy for further detail.

- **Role of the OMA:** The OMA can leverage its physician communication and information mechanisms to identify opportunities for physicians to support vaccination clinics. The OMA can also provide knowledge translation to physicians around the specifics of the COVID-19 vaccine and resources to be shared with patients.

Key Recommendations for Administration for the General Population

Recommendation: Once fridge-stable vaccines become available and widespread population vaccination is required, PHUs should work with local physician leaders and primary care providers to design innovative collaborations to enhance access to the vaccine at places that are easily accessible to patients.

Recommendation: Traditional settings for vaccine administration (physician clinics, PHU vaccination clinics, etc.) should be considered as settings for COVID-19 vaccine administration for the general population as vaccine availability and characteristics allow.

Recommendation: Distribution channels for delivering vaccine doses to physicians need to be determined (i.e., if utilizing influenza vaccine distribution channels through PHUs). These distribution channels must entail clear and timely communication to physicians with transparency around supply and a commitment to delivery timing and quantity of doses. Physicians should identify the number of doses required for their practices.

Recommendation: Clear and consistent guidance for vaccine administrators on administering the COVID-19 vaccine in traditional settings and the specifics of each product that will be available, including followup dose requirements, should be developed with leadership by Public Health Ontario and the Ministers' COVID-19 Vaccine Distribution Task Force in consultation and collaboration with end users. The OMA can provide knowledge translation support of guidance and dissemination to physicians.

Recommendation: When utilizing innovative strategies, spaces (e.g., arenas, convention centres) should be secured for large-scale and/or innovative vaccination clinics, and needed health human resources, supplies and equipment should be determined and sourced.

Recommendation: PHUs should develop a roster of vaccine providers who are willing and able to administer the COVID-19 vaccine in clinics outside of primary care. PHUs should recruit vaccine providers within their regions with the government helping regions recruit from other areas of the province when necessary.

Recommendation: Local physician leaders and other primary care providers can set an example for peers by contributing their time vaccinating clients at various venues.

Recommendation: The government should engage with industry leaders on scheduling appointments for large-scale vaccination clinics to leverage existing available technologies and expertise for planning attendance for large-scale events.

Integrated Information Systems, Surveillance & Monitoring

Integrated Information Systems for Patients & Providers

Given the volume of patients requiring vaccination within each of the phases, an integrated information system should be utilized that can help patients book appointments, read necessary information, provide consent, be reminded of their appointment, and most importantly book a followup appointment for their second dose. The Pfizer and Moderna vaccines each require two vaccine doses three to four weeks apart and the AstraZeneca vaccine requires two doses at least one month apart (8, 9). Vaccine distribution and administration must therefore consider how to track patients for followup doses. This system should be available online and integrated with a mobile phone application for patients, with other mechanisms for reminders (e.g., automated calls to phone numbers) for those patients or their caregivers who do not have smart phones. It should account for differences in access to technology and in digital literacy, thus ensuring that this system does not exclude those who may be most vulnerable.

This system should also benefit providers, facilitating appointment booking on their end, the provision of information and needed forms, and facilitating appointment reminders. This system should advise family physicians and other primary-care providers if their patients are vaccinated by someone else. For patients who do not have a long-term primary-care provider, this system should still enable appointment and followup reminders and provide key helpful information. For the initial priority vaccination phase in which vaccination will likely take place only in certain settings outside of primary-care offices, this system will be particularly valuable. Where possible, notifications should be sent directly to the primary care provider's EMR system, potentially by OntarioMD's Health Report Manager or via integration to the Digital Health Immunization Repository.

This system must be able to account for the fact that any patient might receive each dose at two different locations and/or from two different providers. The reality of multi-dose vaccination underscores why this integrated information, and a centralized system, is so important. Patients should have to understand and utilize only one system and it is imperative that this system can record and track which vaccine a patient has been administered for their first dose, record and ensure that a patient is booked for a second dose of the same vaccine, ensure that the system prompts patients for followup doses in the right timeline for each vaccine and that it allows patients to book appointments where the vaccine that they need is available.

- **Role of Physicians:** End users including providers must be included as co-developers to ensure that this system can be seamlessly integrated into workflow, as well as provide an actual solution that enables easier facilitation and recording of information, limiting additional administrative burden. As well, if vaccinated by another provider, physicians must be aware if/when their patients are vaccinated against COVID-19. They can also inform how best to reach

patients for followup doses and will have opportunities to contribute to reminding patients and educating them on the importance of receiving each dose.

Key Recommendations for Integrated Information Systems for Patients & Providers

Recommendation: The government should make available an electronic appointment, registration, record management and patient notification system for multi-dose vaccination, that is mobile phone-enabled and aligned with each type of COVID-19 vaccination, as well as with non-smart phone notification mechanisms to attempt to reach all patients. This system should be patient-facing and provider-facing.

Recommendation: The government should utilize this system to allow patients to book their vaccination appointment(s) online and provide them with needed information. Additionally, it should account for patient differences in access to technology and digital literacy, ensuring that use of this system does not exclude some patients, particularly those who may be most vulnerable.

Recommendation: This system must meet providers' needs, such as facilitating appointment booking on their end; the provision of information and needed forms; facilitating appointment reminders; notifying providers of their patients having received each dose of the vaccine outside of a patient's family physician's office; and tracking which of the vaccines a patient received and the specific followup timeline for that specific vaccine. Accordingly, the system must be co-developed with end users to ensure that this system can be seamlessly integrated into workflow. Where possible, notifications should be directly to the primary-care provider's EMR system.

Recommendation: In light of multi-dose vaccination, this system must record and track which vaccine a patient has been administered for their first dose; record and ensure that a patient's followup vaccination appointment is booked for a second dose of the same vaccine; ensure that patients are prompted for follow-up in the right timeline for each specific vaccine; and allows patients to book appointments where the vaccine that they need is available. This is especially necessary for patients who may receive the first and second doses from different providers.

Information Systems for Surveillance & Monitoring

Surveillance of COVID-19 vaccine distribution and administration will be essential to monitor and ensure uptake of first and followup doses. Such surveillance information should be used proactively to advise PHUs and the provincial government where administration and communication strategies may be successful or unsuccessful. Canada lacks a centralized vaccine-tracking system that would allow government and policymakers to keep track of who is vaccinated, what vaccines have been used, where vaccine administration has taken place, and identify gaps in uptake. In the likely circumstance that there is a shortage of COVID-19 vaccinations, it is imperative that the limited number available are distributed to jurisdictions or populations with higher rates of disease transmission and spread, so that vaccine distribution can be optimized. A centralized and integrated digital vaccine registry would enable infection rates and vaccine coverage within specified areas to be tracked and compared and would allow vaccines to be distributed to areas of high need in the case of scarcity.

Further, the pandemic has demonstrated that certain populations experience COVID-19 disproportionately, such as Indigenous, racialized and lower-income individuals. The government should collect and utilize demographic information on who has received the vaccine (both the first and followup doses) to proactively identify populations that may not be getting adequate doses or messaging. This data should be monitored particularly to ensure that these populations are able to access vaccines and feel safe doing so.

In addition to the uptake of the vaccine, surveillance and monitoring of adverse events following immunization (AEFIs) is critical. This is needed for further understanding COVID-19 vaccination once implemented at a large scale. (21) Having this data is important to know if we must adjust course, to build public confidence in Ontario's vaccine strategy, and to help prioritize protection of Ontarians. The typical means of reporting AEFIs in Ontario and in Canada is a multi-level process, in which a patient's experience of an AEFI is reported to an immunization provider and/or health care provider to a local PHU to a federal/provincial/territorial immunization authority and finally to the Public Health Agency of Canada AEFI database (23). The ability and ease for AEFI reports to reach this national database is essential for the safe rollout of the COVID-19 vaccine. This will ensure a larger set of data from which to identify trends more easily and quickly and to change course on administration of a certain vaccine and/or for certain populations as necessary. But the expediency of this information pathway could potentially be inhibited by the anticipated volume of AEFI reports, not related to vaccine safety issues but to known temporary side effects of receiving a COVID-19. Temporary side effects have been reported through vaccine trials, but they have not been determined to impact overall safety of the vaccine (16, 21). While vaccine providers including physicians will be able to inform and counsel patients on these potential side effects, given the novel nature of the initial mRNA vaccines, significant volumes of AEFIs may be reported. This volume will also stem from the sheer scale of this vaccination program, intending to reach the entire population in a relatively short time frame. The government should examine the current reporting process of AEFIs and ensure there is sufficient capacity at each level to allow reports to flow smoothly and to reach the national database. This is especially important given the initial news from the United Kingdom's vaccine rollout, with two individuals to date with histories of severe allergic reactions suffering allergic reactions following vaccination with the Pfizer vaccine. Risks to certain populations must be observable in Canada's AEFI reporting and surveillance structure, and in a timely manner to protect Ontarians as quickly as possible. The provincial and federal governments must have a strategy to utilize this data and to act on potentially identified trends.

- **Role of Physicians:** Physicians should be engaged if surveillance indicates that patients in their regions or communities are not accessing vaccination. Vaccine providers including physicians are also the first element of the AEFI reporting framework and play a critical role in monitoring and reporting AEFIs. They also have an important role in counselling patients on potential AEFIs. Physicians should be made aware of potential trends in AEFIs to be able to support their patients who have been vaccinated.

Key Recommendations for Information Systems for Surveillance & Monitoring

Recommendation: Establish and proactively utilize vaccination surveillance and program monitoring to identify potential gaps in administration strategies. A comprehensive, centralized and accessible digital vaccine registry for data collection that aims to document each COVID-19 vaccine that is administered, should be established at the national level. Such a system would allow vaccination rates and coverage to

be easily tracked; enable the distribution of potentially scarce vaccines to be optimized; facilitate a comparison of vaccine coverage with disease rates across the province; and enable monitoring for effectiveness particularly in the longer term to easily know if individuals experiencing COVID-19 might already have been vaccinated.

Recommendation: Collect demographic data on vaccine distribution to identify gaps in population reach and access, then monitor effectiveness and safety among different populations, particularly marginalized populations who have experienced a disproportionate burden of COVID-19.

Recommendation: Ensure that the existing AEFI reporting structure has sufficient capacity at each level to monitor reports related to COVID-19 vaccines, and that there is a federal-provincial-territorial strategy to monitor and quickly act on potential trends identified. Ensure vaccine providers including physicians have clear and efficient means to report AEFIs to their local PHUs and are provided with resources to counsel patients around AEFIs.

Public Education & Vaccine Hesitancy

In 2015, the World Health Organization Strategic Advisory Group of Experts on Immunization defined vaccine hesitancy as a "delay in acceptance or refusal of vaccination despite availability of vaccination services which can vary in form and intensity based on when and where it occurs" (12). Prior to the COVID pandemic, concerns about vaccine hesitancy were growing, with WHO identifying it as one of the Top 10 threats to global health in 2019 and identifying vaccine hesitancy and misinformation as presenting significant obstacles to achieving coverage and herd immunity (13).

Many people are also uncertain about receiving the COVID-19 vaccine due to its novelty and swift development, as well as the inconsistent and variable messages being conveyed from government and other stakeholders (14). Willingness to get a safe, effective COVID-19 vaccine has decreased in Canada (from 71 per cent in April to 61 per cent in August), with the most-reported reasons being concerns about safety and a lack of trust in a new COVID-19 vaccine (10). Anti-vaccination activists have already been campaigning against the need for a vaccine, with some even denying the existence of the virus (14). Such misinformation, disseminated through multiple channels, could have a considerable effect on the acceptance and uptake of the COVID-19 vaccine across the country. The government, public health professionals and other relevant stakeholders such as PHUs must be able to gauge public levels of willingness to receive a safe COVID-19 vaccine, then identify and address correlates of hesitancy, and build vaccine literacy so that the public will accept immunization and then large-scale distribution can occur. Any intervention must be nuanced and multifaceted to effectively address the multitude of factors that play a role in vaccine hesitancy and resistance.

To accomplish the goal of maximizing uptake and to enhance public trust in the vaccine, several measures must be taken by the provincial government. First, physicians, with support from other health-care professionals, play a critical role in planning and executing public-health education campaigns and patients turn to their physician as a trusted voice on a wide array of health issues, including vaccines. Receiving a recommendation from or being in contact with a physician is linked to increased vaccine

acceptability (15). Accordingly, the government must ensure that vaccine rollout is feasible, efficient and strategic and that providers continue to be well-informed and continuously updated on vaccine-related developments (e.g., timing, dosing, phasing of populations, etc.). This will ensure that public expectations are balanced and will enable physicians and other providers to better guide patients through the vaccination process.

Moreover, given the high degree of trust placed in the knowledge and judgment of physicians by the public, strategies that showcase these providers receiving the vaccine in a public setting and that position them as champions of the vaccine will likely be helpful in promoting public acceptance and uptake of the vaccine. Prioritizing health-care workers during early phases of the rollout will enable these professionals to lead the public by example, advocate for the vaccine within their communities, and educate and counsel their patients from a position of direct experience rather than assumption. The province should work with the OMA and other health associations to provide messaging and communication tools to health-care workers so they can leverage existing relationships with patients, answer patient questions effectively and ensure evidence-based information is easily accessible and understood.

Additionally, it is imperative that the government, in collaboration with key stakeholders who can align messages, develop a robust and comprehensive public education campaign using a public health approach, prior to the deployment of vaccines. General education and awareness campaigns regarding vaccine safety and efficacy as well as vaccination processes (when available) should be geared toward the public, with more-focused public education strategies targeted toward specific populations who are more at risk for contracting COVID-19. Education will be important to ensure that those being vaccinated understand that while this can protect them from the symptoms and signs of COVID-19, there is no information yet on whether the vaccines can help to curb transmission to those unvaccinated. Vaccination education must therefore continue to stress the importance of continued protective measures (masks, physical distancing, hand hygiene) even by those who have been vaccinated, especially as phased vaccination means certain individuals will be vaccinated while others are not. Messaging should be used across different health-care settings (e.g., hospitals, primary care clinics, influenza vaccine clinics, pharmacies, long-term care facilities, PHUs) to ensure it is disseminated to the public on a broad scale.

In any discussion of mass vaccination, the issue of mandatory inoculation, specifically as it relates to liability and consent issues is inherent. Given the questions that remain regarding the effectiveness and safety of the vaccine, the longevity and accuracy of the data surrounding it, and the rapid nature of the rollout, it is critical to consider means to ensure adequate levels of vaccine acceptance to address these concerns.

Though it may seem logical to mandate vaccination in the name of public health, there are fundamental ethical and legal restrictions on doing so. Premier Doug Ford has reiterated this sentiment, indicating his government will not mandate a vaccine (24). Moreover, medical literature demonstrates that vaccine mandates may be undermined by high levels of exemption as they fail to address underlying fears of the population, with studies demonstrating that analogous results may be achieved through strongly

recommending vaccines instead (17). In this way, the process of informed consent, and the physician's role in acting as a trusted voice to patients, is critical in ensuring the success of vaccination strategies and promoting uptake of the vaccine. This is particularly pertinent in light of widespread concerns and anxieties surrounding the efficacy and safety of the vaccine, the short vaccine development time, and global adherence to misconceptions and misinformation that surround COVID-19. All these issues have the capacity to contribute to vaccine hesitancy.

Accordingly, the process of engaging in shared decision-making with patients is of critical importance to obtaining legally valid informed consent as it enables providers to engage in an open dialogue with patients, ease anxieties, answer questions and challenge misinformation surrounding vaccination (18). It is reasonable that the public has questions surrounding the COVID-19 vaccine and thus participation in such a process allows these questions to be answered by an informed professional rather than through inaccurate and unverified sources at the least, and through sources actively spreading misinformation at the worst. Moreover, engagement in an open conversation, as part of the process of obtaining informed consent, can be used as an opportunity to discuss autonomy, not solely in the context of the individual, but also by incorporating social responsibility and ethics. Accordingly, while respecting a patient's right to assume or refuse risk, information surrounding vaccines can be provided from the individual and societal perspective. This will ensure that patients are fully informed regarding the benefits of vaccines for the individual and for society (e.g., the potential for individual and herd immunity). Within this dialogue, it is also important to communicate both known and unknown risks associated with the COVID-19 vaccination (e.g., side effects) and disclose that such immunity may not be enduring or equally efficacious across all age ranges. The risk of not receiving an inoculation must also be disseminated. While there will inevitably still be refusal and hesitancy during and after this process, such an approach will engage those who are ambivalent by combatting misinformation and promoting social unity.

Ultimately, through respecting autonomy and engaging in a process of mutual decision-making and open dialogue, trust in the vaccination process can be improved. Though this approach will require an input of additional counselling time on the part of physicians, it should be viewed in the long term as a public investment because it will assist in improving vaccine acceptance and overall trust in medical science.

- **Role of Physicians:** Ensuring that physicians are confident about the safety and effectiveness of the vaccine is critical for presenting a unified front of strong vaccination support from the medical community. Physicians, who are highly trusted by patients, will play a key role in doing the critical work of translating evidence for patients and encouraging them to safely receive a COVID-19 vaccine. Numerous studies demonstrate that physicians who talk about their personal immunization decisions play a big role in encouraging hesitant individuals to receive vaccinations. For instance, results from an Angus Reid Institute survey reveal that key factors for those willing to be immunized include trust in doctors (84 per cent agree that "we should listen to doctors who recommend vaccines").
- Governments must be continuously informed and update physicians regarding vaccine-related developments so they can effectively counsel vaccine-hesitant patients. Further, physicians should be consulted in the development of widespread public educational campaigns regarding

vaccine safety and efficacy to attain successful inoculation against the disease. Given that physicians are the most trusted advisers and influencers of vaccination decisions, a vaccine-hesitancy campaign, designed and led by physicians, with support from relevant stakeholders such as PHUs, should be considered by government with support from the OMA.

- **Role of the OMA:** The OMA can provide knowledge translation and resources to physicians as well as patient-facing resources to support physicians' communication with patients. It can also advocate for financial and operational support to address vaccine hesitancy effectively in real time.

Key Recommendations for Public Education & Vaccine Hesitancy

Recommendation: Clear and consistent communication/education campaigns must be developed and implemented by government with the support of stakeholders to assist in building public trust in the vaccine.

- Transparent, clear communication regarding vaccine allocation decisions is important to maintain public trust and confidence and improve access to vaccines for key population
- A public education campaign should include explanations regarding how vaccines work; how they are developed, from recruitment to regulatory approval based on safety and efficacy (e.g., level of effectiveness; time needed for protection (with multiple doses, if necessary); and importance of population-wide coverage to achieve community immunity
- Professionals in the area of vaccine hesitancy should be consulted to ensure that messaging in any educational campaign is effective and that the campaign achieves its intended goals in reducing hesitancy, particularly among populations known to have low rates of vaccine uptake or high rates of hesitancy
  It is essential that the dangers of vaccine complacency (e.g., low perceived risk of contracting COVID-19) are addressed to ensure that the public understands the imperative nature of receiving the vaccination

Recommendation: Leaders and health-care workers should be early and visible recipients of the vaccine to reassure the public about vaccine safety.

Recommendation: Continuous updates/guidance on vaccine-related developments must be provided to health-care workers.

- This will enable physicians to better guide patients through the vaccine administration/rollout process assist in minimizing stress for physicians during the period of vaccine rollout

Recommendation: Health professional associations, respected community-based and nongovernmental groups/organizations should be utilized to disseminate COVID-19 related information because this will help to build public trust in the vaccine.

- Vaccine-hesitant individuals and refusers are often skeptical of government but trust doctors. If doctors and other health-care workers voice confidence in the vaccine, their patients and the public are more likely to do the same.
- Media portrayals depicting health-care workers, other trusted groups/individuals, or prominent public figures receiving and displaying trust in the vaccine will be helpful in increasing uptake and influencing public opinion regarding vaccines

Recommendation: Targeted interventions must be developed for populations more at risk for contracting COVID-19 and groups which are more prone to vaccine-hesitancy.

- E.g., parents must be educated regarding the importance of vaccinating themselves and their children (once vaccines are approved for this population)

Recommendation: Regular monitoring of vaccine-confidence levels (and dissemination of data to vaccine administrators) is necessary.

- Continuous and sustained monitoring allow for the detection of trends indicating a need for interventions to sustain confidence in the COVID-19 vaccine or identify populations not being vaccinated
- Provision of this data to physicians and other health-care providers to directly address patient concerns and to help explain the benefits of a vaccine in overcoming the pandemic
- Data monitoring of safety, effectiveness and coverage of vaccines in different key populations, as well as effective and efficient immunization of populations in remote and isolated communities is key to an equitable rollout of the vaccine

Recommendation: The vaccination experience should be as comfortable and convenient as possible.

- Ensuring that the vaccine is made easily accessible (e.g., timing, location) to the public and that pain/discomfort during administration is minimized will likely increase uptake of the vaccine and reduce fear and anxiety in individuals who are afraid of needles or potential side effects of infections

Recommendation: Public education for protective measures including masking, physical distancing and hand and respiratory hygiene must continue. It must encourage people who have been vaccinated to continue these other measures so they can continue protecting those not yet vaccinated.

Additional Considerations & Next Steps

Beyond the development of this initial strategy for COVID-19 vaccination, all health system partners should collectively explore certain next steps, including security and legitimacy of vaccines, the concept of immunity passports and legal liabilities related to new vaccinations. Given the interest, value and high demand among many for the vaccine, coupled with its gradually available supply, consideration should be given to potential security issues related to the vaccine supply, ensuring that those who deliver, store and administer vaccines are protected and not put at risk. Further, consideration should be given to the potential development and distribution of counterfeit vaccines to protect Ontarians from this potential threat. Safeguarding the security of the supply chain, identifying illicit websites selling fake products and ensuring coordination between law-enforcement and health-regulatory bodies will all play a vital role in ensuring the safety of individuals and the well-being of communities.

The province should also explore and determine the best path forward on the popularly discussed notion of “immunity passports.” They should be examined from ethical and equity lenses, and in recognition of evidence gaps related to long-term immunity conferred by the vaccines. As well, while the vaccines protect individuals from the signs and symptoms of the virus, there is no conclusive evidence

yet that they prevent transmission. Finally, the province should investigate the potential legal liabilities at various levels of the health system and vaccine strategy implementation, given the novelty of these vaccines and their technology. Such investigation could include the exploration of no-fault compensation programs for those who experience serious adverse events following immunization utilized by other jurisdictions including Quebec and the G7 countries (not including Canada).

Conclusion

As vaccines begin to come available, Ontario must quickly but thoroughly develop a strategy for safe, accessible and equitable vaccine delivery, starting with those most vulnerable and leading to the general population, while prioritizing public education and combatting vaccine hesitancy. It must also factor in the importance of multi-sectoral collaboration within and outside the health system, including community stakeholders who can assist in making vaccination accessible to different populations as well as industry leaders. Consideration must be given to the key and various roles physicians will play in developing and informing a vaccination strategy. Finally, regardless of the specifics of the strategy, it must be nimble and able to adapt to changing evidence and best practices and learn from success and challenges experienced once implemented.

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Appendix: Excerpt of OMA Recommendations to Ministry of Health on Influenza Immunization

Vaccine Delivery

Issue: Physicians experience significant uncertainty around when flu vaccine doses will arrive and how many they will receive This issue is not unique this year, however, it is more challenging due to COVID 19 complexity.

- This impacts physicians' ability to plan for when they can offer influenza vaccines to their patients and to how many and impacts their ability to schedule larger scale influenza vaccine clinics.
- This is especially problematic this influenza season when influenza vaccination clinics require significantly more advance planning and resources to account for physical distancing and infection prevention and control, and when it is especially important for patients to be vaccinated.
- Several physicians have also noted that there is inconsistent information provided across public health units.
- Some have been informed that pharmacies are being prioritized for flu vaccine this year. While that information has not been provided to the OMA, it is paramount that there be clarity in the messaging across the province, and that all have up-to-date and accurate information.
- We have heard inconsistencies within communities from vaccine providers about their delivery and ordering processes and experiences, especially in terms of ordering the high dose vaccine.

Short-term recommendations:

- Each practice that has ordered flu vaccine should receive an update on their orders from Public Health Units/the government on:
    - Order status;
    - Expected delivery; and,
    - Expected quantity of standard dose and high dose vaccines to be received.
- The province should support public health units and facilitate this information sharing given the significant strain on public health units in responding to COVID-19.

Long-term recommendations:

- The province together with public health units should ensure vaccine quantities and their delivery timing are known in advance and sufficient for a provider's patient population.
- The province should explore how physicians inside and outside of the M (City of Toronto) postal code region experience their different ordering and delivery processes, to ensure that primary care providers and patients across the province benefit from the most efficient and effective system for their local/regional needs. We have heard different accounts based on the reason, so to accomplish this goal, public health units across the province could share best practises in regard to the ordering and delivery of vaccinations. Pharmacies and family physicians, pediatricians, and other physicians should begin to receive communication with expected delivery dates of the flu vaccine within a consistent timeframe.

Traditional Administration

Issue: Due to the need for more time, more space, more staff, more cleaning supplies, and more PPE, the administration of influenza vaccines in the context of COVID-19 is considerably more resource-intensive than in past years and requires certainty that those resources such as PPE are available.

- Flu shot delivery requires supplies of PPE and cleaning equipment to ensure infection prevention and control procedures are met.
- Patient screening and post-visit cleaning mean it takes longer to provide a flu vaccine safely.
- Many physicians have limited physical space to allow for adequate physical distancing, which further extends the amount of time required to see even the same number of patients, let alone a greater number given greater patient demand and provincial vaccination targets due to COVID-19.
- Longer hours for staff and/or more staff are required to accommodate the greater time needed per patient, greater patient demand, and higher provincial vaccination targets.
- These resources require additional costs while many physicians already struggled to stay afloat during the pandemic.

Short-term recommendations:

- The province should provide additional and adequate funding to vaccine providers to support the costs of additional staff and/or longer staff hours, of PPE, of cleaning supplies for infection prevention and control, and to account for the additional time required to administer a flu vaccine to a patient.
- One way to implement this, consistent with some other provinces, would be a temporary increase to the administration fee code.

Innovative Administration Models

Issue: Given the challenges of flu vaccine delivery, innovative models of delivery are needed, requiring investments of time, funding, resources and personnel.

- With 55 per cent of vaccines administered by physicians, there is a critical need for funding and resource allocation to support these providers in delivering alternative and innovative models of administration and to support the infrastructure required for such an undertaking.
- While various models have been proposed, implementation requires local and tailored solutions that consider the context of individual providers.

Short-term recommendations:

- The province must provide adequate funding to vaccine providers to support additional staffing, PPE, and infection prevention and control resources required to support innovative models of vaccine delivery such as drive-through clinics:
    - Facilitation of administration of vaccines in outdoor setting (if weather permits), e.g., in provider's parking lot;
    - Additional refrigeration to support cold chain management;
    - Technology to support documentation;

    - Establishment of mobile clinics in vans or buses to visit neighbourhoods and administer vaccinations;
    - Establishment of outdoor arenas or tents in which vaccines can be administered on a larger scale and face to face interaction and crowding is limited.
- Public health units must gather the infrastructure required to organize centralized large-scale clinics with adequate support and staffing, to assist primary care providers who are unable to develop their own clinics (e.g., several medical practices operating together to form a joint influenza vaccine clinic with dedicated space and staff).
- The province should support the development of a centralized influenza vaccine clinic database led by public health and supported/staffed by primary care providers who do not have capacity within their own practices to meet the increased demand of patients.

Long-term recommendations:

- Given that the influenza vaccine is widely available through different providers and locations, the province should ensure system supports are in place to promote inter-professional communication and information sharing.

This is Exhibit **23** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

Long Term Care Covid-19 Commission Mtg.

Meeting with Dr. Nathan Stall
on Thursday, November 12, 2020

77 King Street West, Suite 2020
Toronto, Ontario M5K 1A1

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MEETING OF THE LONG-TERM CARE COVID-19 COMMISSION

--- Held via Zoom, with all participants attending remotely, on the 12th day of November, 2020, 11:00 a.m. to 12:30 p.m.

BEFORE:

The Honourable Frank N. Marrocco, Lead Commissioner
Angela Coke, Commissioner
Dr. Jack Kitts, Commissioner

PRESENTER:
Nathan Stall, MD, FRCPC Geriatrics and Internal Medicine (Clinical Associate) Sinai Health System and the University Health Network Hospitals Women's College Hospital, PhD Candidate, Clinical

Epidemiology & Health Care Research Institute of Health Policy, Management and Evaluation Women's College Research Institute
Eliot Phillipson Clinician-Scientist Training Program University of Toronto

PARTICIPANTS:

Alison Drummond, Assistant Deputy Minister, Long-Term Care Commission Secretariat
Dawn Palin Rokosh, Director, Operations, Long-Term Care Commission Secretariat
Jessica Franklin, Policy Lead, Long-Term Care Commission Secretariat
Sanjay Bahal, Team Lead for Operations, LTCC
Derek Lett, Policy Director, Long-Term Care Commission Secretariat

ALSO PRESENT:

Janet Belma, Stenographer/Transcriptionist

-- Upon commencing at 11:00 a.m.

COMMISSIONER FRANK MARROCCO (CHAIR): Mr. Stall, you obviously know Dr. Kitts, and do you know Angela Coke, the other Commissioner?

NATHAN STALL: I know them by reputation only, just like you.

COMMISSIONER ANGELA COKE: That sounds scary.

COMMISSIONER FRANK MARROCCO (CHAIR): Better for them than for me, I guess. All right. Doctor, are you waiting for anybody else?

NATHAN STALL: No. I'm flying solo, and --

COMMISSIONER FRANK MARROCCO (CHAIR): Okay.

NATHAN STALL: And --

COMMISSIONER FRANK MARROCCO (CHAIR): Okay.

NATHAN STALL: Sorry about the -- I'm on a clinical service. I'm in my greens today, so...

COMMISSIONER FRANK MARROCCO (CHAIR): That's fine. Thank you. Thank you for being -- for being here. So you know, I guess -- I don't know if you know the basic drill, but with your

permission, we'll interrupt as we go along. If we have questions, there's a transcript which we will publish on the website.

NATHAN STALL: Yeah.

COMMISSIONER FRANK MARROCCO (CHAIR): We're ready when you are.

NATHAN STALL: Sounds good. So thanks very much for having me. Feel free to interrupt me anytime you need clarification about what I'm going to present.

I'm a geriatrician at Sinai Health System, the University Health Network. I practice acute care geriatrics, and I'm also completing a PhD in clinical epidemiology, and throughout the pandemic, have been very involved in research on COVID-19 in long-term care homes. And I sit on the provincial modelling table as well.

And as you will see, I was involved in helping to lead the clinical operations for my hospitals partnership with a long-term care home that experienced a severe COVID-19 outbreak, so I'm able to speak on several aspects which -- so I've titled my talk, Lessons Learned from Research and Clinical Care.

So I'm going to talk about five things:

What risk factors are associated with COVID-19 outbreaks in Ontario long-term care homes as well as the extent and lethality of outbreaks. I have reviewed in detail the interim recommendations, but I do have some additional insights to provide on this.

What is known about the intensity of care provided to Ontario long-term care residents during the COVID-19 pandemic? Again, we have research on that.

What has been the impact of the COVID-19 pandemic on the health and well-being of long-term care residents? I was very pleased to see the interim recommendations, and I reviewed much of the transcripts of testimony given by groups like the Ontario Association of Residents' Councils. But we do have some data on this as well.

I'll speak about some of the work I have been involved in in promoting and implementing family presence, and I do think it's important to describe our hospital's multi-phase emergency response because there are some learnings that, sadly, might become more immediately relevant as the second wave intensifies in Ontario and in our

long-term care homes.

So I know Dr. David Fisman, my colleague, is going to be speaking to you later today, but I think this was really the first study published in JAMA Network Open that turned people's heads and put data to what we were seeing happening, really, at the end of March beginning of April when it really ignited within the long-term care sector.

So he looked at all -- he just looked at two -- he looked at two things with his group of colleagues here. He looked at using data from the tracker, and you've spoken to my colleague, Michael Hillmer, about the tools that were created to track data.

He looked at what's the -- just the incidence rate ratio, so the risk of death for long-term care residents versus community-dwelling adults, and he looked at how did staff infection correspond with resident death in a lagged manner, so sort of putting data to what we knew was -- was staff were unknowingly importing COVID-19 into homes.

So he showed two things, and again, this went to April 10th but really had a huge

impact, I would argue, in the Province. So he showed that if you look just -- if you compare -- if you compare the deaths among the community-dwelling population and the long-term care-dwelling population, all ages -- there's a 90-fold increase risk of death which we've seen bore out now as the pandemic has gone on.

But I think what was most important was infection among long-term care staff was associated with death among residents with a six-day lag. And this really spurned things like single-work policy, universal masking, recognizing how staff may have been involved in the importation of virus. So that was an early finding.

Now, I'm going to talking about two work -- and I was not involved in that study, but I certainly spoke to Dr. Fisman and his colleagues extensively about it.

I'm going to talk about a study that we published in the Canadian Medical Association Journal that is -- looked at this issue that was coming out about for-profit long-term care homes and how they may have fared differently than non-profit and municipal homes.

So we worked with the Ministry through

my role on the modelling table. We got data for all long-term care homes including data from the Ministry of Long-Term Care Tracker which tracks all the COVID-19 cases and outcomes among long-term care residents and other sources of data the Ministry had. We looked during the really intense period of outbreaks in the first wave, and our exposure that we looked at was the profit status.

So, as you'll know, long-term care, they -- residents get under a publicly-funded long-term care program, get nursing care and personal support as well as subsidized accommodation, but they can be operated by for-profit, not-for-profit, or municipal entities.

And we looked at three outcomes of interest: Whether the home was going to experience a COVID-19 outbreak; if it did experience a COVID-19 outbreak, the size of it, so the number of residents infected, and then the number of deaths among homes with outbreaks.

And we looked at that with the primary exposure being the for-profit status of the homes. The motivation for doing this study was, one, we had known from before the pandemic that for-profit homes have shown generally across a number of broad

outcomes to deliver slightly inferior care compared to non-profit homes.

I think the bigger motivation was we were seeing this play out as a narrative in the media, and we wanted to look at this with a deeper dive.

This is a big chart, but I'm going to focus you on -- so these are the homes by profit status. So these are the things you know in terms of the breakdown of for-profit, non-profit, and municipal.

One thing to focus your eye on here is 53% of for-profit homes as compared to 18% of non-profit and 11% of municipal homes have older design standards. So these are design standards that meet or fall below those set in the year 1972. And we know that homes that have older design standards typically have smaller square footage per room, smaller thoroughfares, smaller common areas. They likely have older ventilation systems. We couldn't capture that in this. And we also know that they're more prone to having double or quadruple occupancy in their -- in their homes.

When you look at chains as well, clearly, the for-profit, they're the ones that have

these large national chains, but there are some smaller chains within the non-profit sector.

So these were the deaths crudely without doing any of the modelling, the statistical modelling that I will speak about. And, again, this is by for-profit sector. You know, on the right-hand side is something called the P-value here, and these -- the ones in the top rows here are not significant. But where you see -- so the statistical significance that we set for the study, a priori, was less than 0.05.

What you'll see is that you do notice, if you just look across the sector, that the ones that are significant -- there was -- there was a higher death rate in for-profit homes, and there was a higher percentage of resident deaths in for-profit homes. And there were -- there were -- it didn't meet statistical significance, but there were homes with any resident deaths tended to be, you know, actually not too different between for-profit status.

But what's really, I think, important here is this case fatality rate early of somewhere between one in four to one in three residents dying in the home who got COVID-19 which is consistent

with international evidence that show that about -- a case fatality rate from first waves in many jurisdictions was somewhere between one in four to one in three.

COMMISSIONER FRANK MARROCCO (CHAIR): Doctor, if I can, the fact that the for-profit homes are of an older design, is that -- does that control or influence, really, a lot of the other statistics?

NATHAN STALL: I'm going to -- I'm going to show you that in the modelling because this is --

COMMISSIONER FRANK MARROCCO (CHAIR): Oh, that's fine. I'll wait 'til you get there, then.

NATHAN STALL: Yeah. No. This is the -- this is just looking at it crudely without taking into account any of those factors, but I'm going to show you here in this slide, so the first outcome was the odds of a COVID-19 outbreak, so whether or not you're going to have an outbreak.

We had three models here, okay? So the Model 1 is the only thing you put into the model is the for-profit status. In the second model, we adjusted for health region characteristics, and

you'll see that's the COVID-19 incidence in the community and the population size. That was our primary model of interest.

The third model is what your question, Justice Marrocco, got at which was an explanatory model. We looked at things that may be intrinsic to a for-profit home that might explain some of the things that we're seeing.

So if you actually just look at the odds of a COVID-19 outbreak by profit status, you'll see in Model Number 2, if these -- these are confidence intervals. If these cross 1.00, they're non-significant.

So you'll see that both -- so the reference group here is non-for -- is the non-profit, so we're comparing for-profit to non-profit. You'll see that it actually is not significant, meaning there is no effect of profit status on whether a home is going to experience an outbreak or not which is important.

But what's really important here is that the factor that's most explanatory of whether a home is going to experience an outbreak or not is the COVID-19 incidence in the public health unit region surrounding a home, and that's really

pertinent now as we see surging transmission in the second wave. People keep asking, why are homes experiencing outbreaks? We know that the strongest risk factor for whether a home is going to experience an outbreak is the -- is the transmission of COVID-19 in the communities' surrounding homes. And I'll get to some of the reasons how we can try and prevent that, but as I'll show you later on and as I'll speak to, these are not impenetrable environments despite, you know, the most world-class IPAC measures. And so suppressing community transmission of COVID-19 is really essential if you're going to prevent outbreaks.

These findings, the fact that for-profit status did not impact whether a home is going to go into outbreak or not have been cited by decision-makers, but I will say that they only focused on this outcome, so specifically Minister Fullerton on the -- in the -- actually cited this on the floor of the Government stating that this study specifically showed that for-profit status did not impact how -- home having an outbreak or not which is a true finding, but I would say that what was not discussed in those

comments was the latter two findings of this; is that when you do have an outbreak -- so this is the extent, the size of the outbreak -- those for-profit homes had outbreaks that were twice as large as non-profit homes when you took into account things like the incidence of COVID-19 in the health region.

And then, again, if we move over to the Model Number 3, you'll see that the things that were explanatory here -- so you'll see that actually, you adjust away the effect of for-profit status in this third model. It is no longer significant.

That doesn't mean it's not important, but what it shows is that these findings down here having chain ownership and older design standards, those were the explanatory factors for why we're seeing such large outbreaks in the for-profit homes.

Shown a different way, we plotted all the homes -- this is non-profit, for-profit, municipal. Now, you'll see a bunch of orange triangles at the top. So what are the orange triangles? The orange are the homes that are older design standards, and the triangles are the ones

that are chain ownership. And you'll see a clustering of the older homes with -- old -- the homes of older design standards, again, those that meet or fall below the year 1972, and chain ownership.

But what's important for this is -- and speaking to the motivation of the study, it's not all for-profit homes that did badly. As you'll see, there are many homes that are clustered at the bottom that did reasonably well in terms of containing outbreaks. And similarly, there are some non-profit homes that also had worse outcomes. But it tends to be that there are more homes that have older design standards and chain ownerships that had larger outbreaks, and the majority of those tend to be for-profit homes.

And stop me at any time if I'm confusing you. Yeah, go ahead.

COMMISSIONER JACK KITTS: Yes, so I think what you said is that the factors associated with large outbreaks --

NATHAN STALL: Yes.

COMMISSIONER JACK KITTS: So all homes are susceptible to outbreak because it's what -- what the prevalence and spread in the community

determines --

NATHAN STALL: Yes.

COMMISSIONER JACK KITTS: -- whether it gets into the home. So that's fine.

Once it's in the home, the for-profit status had a much -- twice the size of outbreaks than others, right?

NATHAN STALL: Yes, compared to non-profit, yes.

COMMISSIONER JACK KITTS: Okay. And you're saying that the likely cause and effect or what seems to be a cause and effect is chain ownership and old design homes?

NATHAN STALL: Yes.

COMMISSIONER JACK KITTS: Chain ownership, is that because their homes are much bigger, more crowded, or what's the chain ownership got to do with it?

NATHAN STALL: So it's a good question. You know, we don't have several sources of data that could further illuminate that reason. We do know, from before the pandemic, research shows that homes with chain ownership tend to have lower levels of staffing.

We also wondered, as I'll show you,

whether there was more mobility of staffing amongst homes that had chain ownership where they shared workers within a chain which might have contributed as well.

And furthermore, we wondered as well whether, when you're dealing with a home that has a large national chain, whether there was sort of policy or practices that might have been implemented centrally which may not have worked as a one-size-fits-all solution and the smaller, sort of, tailored-to-the-home solutions were required.

Of course, those are all hypothetical reasons, but this was -- you know, that was the observation we had had.

I'll show you with the number of deaths as well actually quite similar findings. So there were, in homes that had outbreaks, the for-profit homes had 78% more deaths than non-profit homes.

And, again, if I draw your attention to the bottom right corner, older design standards and chain ownership seem to explain that as well.

And similar plot, again, you see a lot of clustering of the orange and the chain homes when you look at homes that had deadlier outbreaks. And this is showing the proportion of residents in

a long-term care home who died of COVID-19, so you see the highest was about 45%.

But again, it's not -- it's unfair to paint the entire for-profit sector with the same brush. It is a reality, though, that there are more older homes than those with chain ownerships in the for-profit sector and that likely explains some of the reasons that they had worse outcomes when it came to COVID-19 outbreaks.

Any questions before I move on to the next major study we did?

COMMISSIONER JACK KITTS: I guess -- I guess just to follow up, so would you -- I can't remember when the visitor policy was implemented, but you'd have to think that the transmission into the home must have been by staff?

NATHAN STALL: It's a good question. I'm going to show you a study coming up where we actually used anonymized cellphone data to track mobility patterns between homes.

The -- we know from outbreak analyses in -- early on in Washington State that staff were definitely importing -- importing COVID-19 into homes unknowingly. The issue of the visitor policy and, you know, the family caregivers, there was

actually no evidence -- there's been two rapid -- actually, three rapid reviews in the literature that have found no evidence that family caregivers or visitors were or have been importing the virus into homes. But, of course, an absence of evidence is not evidence of absence, and so -- but that has been a point of contention.

We do know also early on, which was reported in the media in the outbreak in Bobcaygeon, there was a visitor who actually contracted COVID-19 in the home and expired. Whether they were the -- you know, the original vector into the home, it's unknown at this point, but we definitely -- and as I'll show you later on, we definitely know that staff are very important vectors for COVID-19 into homes.

Okay. So the next -- this was actually published this week in another large General Medical journal called JAMA Internal Medicine. We looked at a different -- it's actually the same data cohort and cut with dates, but we looked at a different factor here.

So the first study looked at for-profit status. It looked at the older design standards chain ownership.

Here, we wanted to know -- and this is actually motivated by clinical work we were doing and really just, I think, fundamental infection prevention and control knowledge that it's probably a bad idea to have a lot of people sharing a room and a bathroom especially when you're in the middle of a pandemic with a highly transmissible infectious agent.

So we looked at something very simple. We said, okay. Let's look at outcomes by something we called the crowding index. So if you just look at what is the average number of residents per room and bathroom in your home. So if you had a home where everyone has their own room and has their own bathroom, your crowding index would be 1.

If you had a home where everyone's in a four-person room and with a bathroom, crowding index goes to 4.

So but, you know, we know that in some homes, they have different formulations of that, so some may have half single rooms and half semiprivate, et cetera, et cetera. So we built a crowding index to be able to assign some sort of -- some sort of measure of how crowded a home was before the pandemic.

We looked at, really, three things. The cumulative incidence, so over that time period of COVID-19 infection and of mortality, and we did what we call a -- or what we called a prespecified falsification analysis or a negative tracer. We had an outcome which a priori we did not think would be influenced by the crowding index, and that was introducing virus into the home.

So much like, you know, we showed that for-profit status didn't impact the virus getting into the home, there's no reason to think that having a more crowded home is going to impact the chances of having a virus come in, but we did think that once it did get in, having a more crowded home was going to lead to more -- to, you know, more widespread transmission and deaths within the home.

Sorry. There's an overhead announcement in my hospital.

So this is the distribution of the crowding index. So if you actually look across the province, and we know at the onset of the pandemic, as is usual in pre-pandemic times, our long-term care system was at or very near capacity.

And so of the resident beds, 36% were -- almost 37% were single; 37.3% were double;

and 25.8% were quadruple bedded rooms, okay? And this is the distribution of crowding index. You'll see that there is no home in our province that has a crowing index of 1 of only single rooms and only single washrooms. And we categorize them as a crowding index less than 2 was a low crowded home, and a crowding index of 2 to 4 was a high-crowded home. And you'll see there are some homes in our province was -- actually have a crowding index of 4, which may not be a surprise to you.

So as of May 20th, we knew that five -- fifty-two -- 5,218 residents developed COVID-19 infection. We knew that 1,452 died, and that case fatality rate was 27.8%. We showed that in the last study.

But what was -- what you may also know is that COVID-19 infection was distributed unequally across the province's home, so 86% of infections occurred in just 63 homes or 10% of homes, which is, you know, quite disproportionate, so these are some of -- some of the outcomes.

Just on a descriptive level, okay, so if you actually just look, okay, if you look at low-crowding versus high-crowding homes, okay, in terms of the home, there are more residents

infected, and there are more residents who die in the high-crowding -- high-crowded homes. And the high-crowded homes, unsurprisingly, have more quadruple occupancy than the low-crowded homes. So that -- that's, again, without doing any modelling, okay?

Now, if you look again, just -- if you just ranked the outbreaks, so compared to homes with low crowding, homes with high crowding, again, had a crowding index of 2 to 4, had a higher COVID-19 incidence of 9.7 versus 4.5%, and homes had a higher mortality rate of 2.7% versus 1.3% meaning that homes that were high crowded, nearly 10% of the residents were infected versus low-crowded homes, 5%. And similarly, you know, nearly 3% died in homes with outbreaks versus 1.3% in low-crowded homes.

And this is shown in a graph as well in terms of the outbreak size, and the high-crowded homes are in the darker colour, and you'll see the outbreak size is clearly lower -- or clearly higher -- I'm sorry -- in the high-crowded versus the low-crowded homes.

Now, we did statistical modelling here, and what I'm showing you here is that compared to

homes with low crowding, those with high crowding had a significantly increased risk of COVID-19 incidents and mortality.

So if you look down here, these are our three outcomes. These are the incidents of infection, so whether you're going to have infection. This is mortality, and then this is the COVID-19 introduction that pre -- that negative tracer or that prespecified falsification analysis.

And you'll see that as the home becomes more crowded -- and these are unadjusted and adjusted. So in the adjusted, we take into account factors like we did in the first study and some resident characteristics.

As your home becomes more crowded, you monotonically increase your risk of having a higher COVID-19 incidence and similar to mortality. So if you look -- if you compared the highest crowding-index homes, they had twice the level of mortality and twice the level of COVID-19 incidence as low-crowded homes, but importantly, our negative tracer analysis showed that crowding didn't impact whether you were going to introduce COVID-19 into the home at all which was what we had hypothesized early on.

Now, what we did was, then we've simulated. And we said, so what would have happened if you had actually converted -- and this just shows -- so in the graph again, you have that relationship that's very clear between cases and deaths as it comes to the crowding index.

But we did a simulation. So what had happened at pre-pandemic, we've actually converted all the four-bedded rooms to two-bedded rooms. We would have averted nearly a thousand COVID-19 cases and 263 deaths, so almost 1/5th of cases and 1/5ths of deaths in our province had we decrowded our long-term care homes before the pandemic, but of course, that would require about 5,070 new two-bedded rooms. So that -- that's the crowding study. I'll wonder -- I'll pause there and see if you have questions.

COMMISSIONER FRANK MARROCCO (CHAIR): Doctor, can you -- in looking at this, to what extent would you say it's hindsight, it's an analysis based on something that happened versus foreseeable?

NATHAN STALL: I think it's totally foreseeable. I mean, the new design standard in 1999 has had construction of homes with no more

than two residents per room. The homes that were the older design standard that had these multiple occupancy rooms needed to be upgraded for years and were not upgraded over a period of more than 20 years. So -- and I think anyone -- the basic infection prevention and control 101 says having multiple residents per room is bad -- and there's evidence for all sorts of any other -- or all sorts of other infectious outbreaks that multiple residents per room leads to worse outcomes. So I don't think it was hindsight.

The other thing which I'll speak about is not only is your, what's called, secondary attack rate higher, so you infect more residents quicker and easier when you have crowding and more residents per room, but one of the things we're really seeing now, and it's unfortunately playing out again in the second wave, is that when your home is more crowded, you actually have no space to isolate and cohort residents.

And so they were doing things like erecting, you know, simple barriers and sheets between multi-occupancy rooms. And so that led to the directive at the beginning of June that no longer permitted admissions to rooms that had three

or four residents. The Government, to their credit, issued that directive.

The challenge was, as has come out, was the directive did not pertain to existing residents, so many of the homes retained their crowdedness throughout the summertime. And subsequent to that, we've learned that some of the hardest-hit homes in the second wave have had their three -- have had their multi-occupancy rooms fully occupied.

COMMISSIONER FRANK MARROCCO (CHAIR): So then, obviously, you can't build, what is it, 5,000 --

NATHAN STALL: Yeah.

COMMISSIONER FRANK MARROCCO (CHAIR): -- beds in a few weeks.

NATHAN STALL: Yes.

COMMISSIONER FRANK MARROCCO (CHAIR): But so what would you do, you know, given this reality, and it's foreseeable --

NATHAN STALL: Yes.

COMMISSIONER FRANK MARROCCO (CHAIR): -- what should you do to deal with it, do you think?

NATHAN STALL: Yeah, so one of the

things we have been calling for -- yes, you can't just -- it's people's homes. You can't move them out. But one of the things we've been calling for is you need to create temporary space in the system to give homes a chance to be able to isolate and cohort residents.

So other jurisdictions have appropriated underused space whether it's hotels, convention centres. This has actually been done in Windsor where they had a field hospital at the onset of the pandemic. And there was a huge need to be -- to urgently decrowd these homes because we know not only is the outbreak going to be much larger in a crowded home, but it's also going to be impossible for them to implement any mitigation strategies when they have no space to actually move residents and isolate and cohort them.

So if you look at the -- at some of the worst outbreaks that have happened, you know, Fairview in Toronto during the second wave, most communication that was uncovered by Jessica Smith Cross in the Toronto Star from Queen's Park briefing, they reached out to them and said that all of their multi-occupancy rooms were all -- were fully occupied with three or four residents per

room.

So that's the suggestion, and it has been done in other jurisdictions, to take your homes that are crowded and particularly, they're the ones, I would argue, that are in the community, situated in communities with the highest incidence of COVID-19 need to think about decrowding those and maybe temporarily moving people to other locations to decrowd these spaces.

COMMISSIONER FRANK MARROCCO (CHAIR): So if you think of the Province as 34 health units or whatever the correct number of health units are, then the challenge -- then what should have been happening -- correct me if I'm wrong -- but in your opinion, what should have been happening is over the last several weeks, they should have been searching in the health unit to find ways to move -- to decrowd, to use your phrase -- word -- to decrowd these crowded homes?

NATHAN STALL: Absolutely.

COMMISSIONER FRANK MARROCCO (CHAIR): And that's really all -- that's what you have to do in order to be able to do something.

NATHAN STALL: Yes, and what we are actually hearing --

COMMISSIONER FRANK MARROCCO (CHAIR): You're forced to, you know --

NATHAN STALL: Sorry to interrupt you, Justice.

COMMISSIONER FRANK MARROCCO (CHAIR): No. No. No. We're both -- that's what you have to do in order to do something about the problem.

NATHAN STALL: Yes. And what we are actually hearing is that because the new admission policy has created a contraction of beds in the system, that limitation to two residents per room, hospitals are now facing increasing pressure to clear their ALC wait times, and we are hearing that -- and I've heard this from the OLTCA -- that hospitals are pressuring homes to admit residents, and regional coordinators, more specifically, are pressuring homes to readmit and -- to homes and fill them up again beyond -- you know, fill them up to dangerous levels of crowding, and there have been -- there have been -- the OLTCA also informed me that there are incidences of homes where they will admit the resident to a two-bedded room and then two weeks later, move them to a three or four-person room because the original writing in June was it was a limit on admissions.

They have subsequently, when this came to light in October, changed the wording to also make it apply to existing occupancy. But there is this competing pressures of making space in the hospital system but also not crowding to dangerous levels again.

COMMISSIONER FRANK MARROCCO (CHAIR): So -- but that's the same -- the only thing that alleviates that pressure is creating additional space, temporary space somewhere.

NATHAN STALL: Absolutely.

COMMISSIONER FRANK MARROCCO (CHAIR): All right.

NATHAN STALL: Yes. Yes.

COMMISSIONER FRANK MARROCCO (CHAIR): Commissioner Coke.

COMMISSIONER ANGELA COKE: Yeah, I just was curious. Obviously, we had had this notion of decanting in our recommendations, but I'm just trying to figure out, from your point of view, what are some of the risks of that. And if you've got staffing challenges, you may find space, but how do you get the people to be able to deliver the care?

NATHAN STALL: Yeah, it's a huge challenge. And as you know, that 70% have

dementia; 90% have cognitive impairment. They have to be spaces that are safe for residents, so it's not a simple as saying just put them in a hotel. You need to set up a hotel or a space like that with the appropriate safety measures.

Other jurisdictions have done it. They have set up field hospitals, and again, there's local expertise from St. Clair College in Windsor that did this early on. But also, there are other jurisdictions that in Massachusetts that have reappropriated spaces like hotels.

Of course, it would require, you know, the necessary health-human resources in the face of a staffing crisis. It would -- it would necessitate an operations team and command to be able to do this. It has been done, though.

And I would argue that leaving homes crowded like this in the face of surging transmission is just leaving them as lame ducks. Like, it's -- we've shown how many deaths could have been averted.

And, you know, I saw, as I'll show you early on, when you have this many residents and you have no vacant rooms, it's impossible to be able to properly implement the mitigation measures to put

out an outbreak.

COMMISSIONER FRANK MARROCCO (CHAIR): Yeah, and so what we've had is several weeks where things were relatively quiet, and the number of cases was not growing in a significant way.

NATHAN STALL: Yes.

COMMISSIONER FRANK MARROCCO (CHAIR): And that was the period of time in which to do this.

NATHAN STALL: Yes, and the commitments that were made by the Government over the summer focused on rebuilding and building new beds in the system, that 30,000 number. But we -- you know, it was always known that those beds weren't going to help the people for the second wave of the pandemic. It was going to help people in years not days or weeks or even months.

COMMISSIONER FRANK MARROCCO (CHAIR): Jack, did you -- you're on mute.

COMMISSIONER JACK KITTS: Yes. Dr. Stall, I want to come back to your comment about the foreseeable. We've talked about what to do in the middle of it if it wasn't foreseen. But I want to go back to your decade or two, the long-term care status.

And as you know, you look very young, so I'm not sure how long you've been in practice, but for some time now there has been a very strong focus on keeping our elders as well and safe at home, and we know that that's not a crowded area.

We've also known that the long-term care homes, as you say, that four beds and three beds is not a good thing, and we've known that for a long time.

I'm just trying to rationalize how when it's elder care and it's keeping them at home and comfortable and safe and they're moving to what many referred to as their last home. Were they somehow forgotten in the home first and home care initiatives, or how did that work?

NATHAN STALL: Yes. So, yeah, I mean, we could, as you know, and I think as has been told earlier in the Commission, we have, you know, quite low funding for home care per capita compared to OECD countries. And other jurisdictions have done, you know, remarkably well to reduce need for their long-term care system by investing in their home and community care systems.

The challenge is that the limits on home and community care for the types of people

that are being admitted to long-term care homes which we know over the last 15 years have increased in complexity, increased in age, need -- have more dementia diagnoses have -- need more assistance for -- extensive assistance for cognitive and functional abilities.

The limits that people can get when I look after patients, when you're talking to families, and they can get, you know, one or two hours a day of care is wholly insufficient for people. And so, really, they don't have a choice between long-term care and community because we don't give them the choice.

So, yes, absolutely, had all these residents not been in congregate care settings which are outdated, crowded, with staff who are underpaid, living often in the COVID hotspots of our city and coming and unknowingly importing virus and facing difficult decisions themselves about whether to work or not because an absence of sick pay, I'm confident we could have avoided hundreds if not thousands of deaths.

But I do think, though, that the knowledge of the homes that had not been rebuilt, that had not been updated, that were left in -- you

know, with design standards that met or fell below the year 1972, that was foreseeable.

I mean, if you look back years and years and years, talking about the beds that are slated for redevelopment, this has been known. So that aspect of it was foreseeable.

The issue of reinventing our long-term care system and, you know, shifting resources to home care, I think, is a valuable conversation, was probably foreseeable but would have required more creative and imaginative thinking over a longer period of time to be able to implement that.

I mean, Denmark is a classic example that's often used about not having to build new long-term care beds because they properly apportioned resources and invested in home and community-care services.

COMMISSIONER JACK KITTS: Thank you.

COMMISSIONER FRANK MARROCCO (CHAIR): But in the reality that we're in, really, you somehow had to create the additional space. And as Commissioner Coke was saying, you had to somehow find people whether they were retired workers or whatever to --

NATHAN STALL: Yeah.

COMMISSIONER FRANK MARROCCO (CHAIR): -- help you through this crisis.

NATHAN STALL: Yeah, I actually think we need to be doing this now as well.

COMMISSIONER FRANK MARROCCO (CHAIR): Well, yeah, I didn't mean to imply.

NATHAN STALL: Yes. Yeah.

COMMISSIONER FRANK MARROCCO (CHAIR): But it does strike me that what you're saying is that several weeks have gone by --

NATHAN STALL: Yes.

COMMISSIONER FRANK MARROCCO (CHAIR): -- when this is what should have been happening.

NATHAN STALL: Several months, right? I mean, we really cooled off in June in our province, right? We've had June, July, August, September, five months already, right?

COMMISSIONER FRANK MARROCCO (CHAIR): Right. Right. Do you know how long it took to erect that field hospital in Windsor?

NATHAN STALL: No, I don't, but it might be an interesting thing for the Commission to explore. No, seriously, because I --

COMMISSIONER FRANK MARROCCO (CHAIR): Yeah, I know. We will.

NATHAN STALL: Yeah.

COMMISSIONER FRANK MARROCCO (CHAIR): Commissioner Coke.

COMMISSIONER ANGELA COKE: I just wanted to ask the question, you know, following up on what you've described as been some of the history of how we've gotten to where we are, if you -- your thoughts about the -- whether we do have some public policy or funding bias against older people.

NATHAN STALL: Yes. So I think in many ways, this has been exemplified during the pandemic. Early on, you know, early on in the pandemic, I would argue we had what Scott Halpern at University of Pennsylvania classified as an identifiable lives bias.

So our response to the pandemic was so lopsided because it prioritized the lives that we most identified with, which at the time were young people on ventilators in New York city and hospitals being overrun in Bergamo, Italy.

At the same time, if you read the news reports, the Spanish military were coming across long-term care homes totally abandoned with residents in their -- dead in their bed. And this

happened in Italy as well.

It's a matter of cognitive biases in public health policy that made us prioritize our responses to those lives that we most identify with. And frankly, for clinicians, the lives that most of us treat when it comes to patients, and most people don't work in long-term care.

So this is why you saw things like tents being erected outside of hospitals that never ended up got -- being used to some degree. And you found this totally lopsided response when it came to long-term care.

I think if you go back into your question, absolutely, long-term care is an easy sector to neglect. The majority of people who live in long-term care with 70% having dementia and 90% having cognitive impairment, are not necessarily able to advocate for themselves. Most of them may not vote, and a lot of them may not be alive for the next election.

So they really are the people who are most vulnerable and also have the least, you know, political power in some ways. And I think that's reflected in things you've heard in this commission that, you know, 21 reports over 30 -- you know,

things that Doris Grinspun has highlighted and things like the Nurse Wettlaufer inquiry that should have, you know, upended the system for fundamental and transformational change, and, yes, it's early from when that commission undertook its work, but absolutely.

And I think, you know, if we think more recently in terms of what's going on in the second wave, you know, the first time, they said they didn't know better which I would argue is not entirely true because, again, we saw concurrently what was going on in Italy in terms of their ICUS, we also saw happening in their long-term care homes.

I think we -- in the second wave, we knew better, but again, it was -- it was a -- really, a choice or a matter of priorities when it came to the second wave. I think we became a little myopic over the summer and focused, again, on one issue for a long time which was schools and schools re-opening which, of course, is very important, but we lost, I think, a little of the focus on long-term care.

And I think now, as I'll speak to later on, there's the challenging issue of trying to

balance the economy with -- with protecting older people, and I think, you know, there's this dangerous fallacy about being able to shield the most vulnerable, which there is no empiric evidence from any jurisdiction that you are able to effectively shield your vulnerable population, contain outbreaks in that setting, while allowing transmission to rage in other parts of society and community.

So I absolutely think that there is a bias, that identifiable lives bias. I think there is the bias -- you know, the people in long-term care have several intersecting forms of discrimination that plague them.

They have the agism, so which was, you know, described as one of the last socially accepted forms of discrimination. There's dementia-related discrimination. We cannot forget that the majority of people who live in long-term care are women, and the majority of people who work there are women.

And then, of course, the issues which you have heard much about on the Commission about why we have not acknowledged and properly remunerated the workforce is the majority of people

are not only women, but many of them are people of colour as well.

So the long-term care sector in many ways is a real, you know, microscope or a laboratory for all the social inequities that -- for many social inequities in our society and a real display of how when these things are left and neglected, things can go very wrong.

I will show you a bit more of the work. I know -- do we have a hard stop at noon?

COMMISSIONER FRANK MARROCCO (CHAIR): Not exactly.

NATHAN STALL: Okay.

COMMISSIONER FRANK MARROCCO (CHAIR): We've got -- I think we're scheduled again at 1 --

NATHAN STALL: Okay.

COMMISSIONER FRANK MARROCCO (CHAIR): -- if I'm not mistaken.

NATHAN STALL: Okay.

COMMISSIONER FRANK MARROCCO (CHAIR): So we've --

NATHAN STALL: Yeah, I will -- I will --

COMMISSIONER FRANK MARROCCO (CHAIR): I suppose all of us can be -- not you, but the rest

of us can be on a diet without any real adverse consequences.

NATHAN STALL: Okay. Well, we need to let the commissioners eat. That's quite important. I think that my friend David Fisman's coming on, I believe, sometime this -- he might be at 1 o'clock. Anyways --

COMMISSIONER FRANK MARROCCO (CHAIR): Yeah.

NATHAN STALL: This is -- you know, this is -- you will know that this is -- this is other work we did working with colleagues at BlueDot who have access to anonymized mobility data from cellphones. So we looked at -- you know, there was this limiting -- I've talked about the motivations for limiting workers to one site.

So on April 22nd, an emergency order came in that restricted employees of long-term care homes from working in more than one long-term care home, congregate care setting, or healthcare setting within a 14-day period. Importantly, it didn't apply to temporary agency staff or other contract staff.

So we used anonymized mobile device location data, and we looked in the time -- the six

weeks before -- the seven weeks before, excuse me, the order came in on April 22nd and the seven weeks following. And we visualized the connectivity and looked at how many homes had connections. And a connection was, so what -- they drew geoboundaries around the homes, and we could know if a home was pinged within one of those geoboundaries or had a check-in, a digital check-in within in two contiguous half-hour periods.

So we knew that they were there throughout the duration of an hour, and we then looked -- were there -- were there individuals with that unique mobile device who had that check-in at another home within a 14-day period. And we then looked at the mobility and the connections between homes throughout these two time periods.

So this is -- this is the table, and I'll show you the graph. So these are homes with a connection. So before that order came in on April 22nd, 42.7% of all homes in the province had a connection which would have lasted at least an hour within a 14-day period.

So see, the public policy was actually quite effective. Afterwards, 20 -- 12.7% of homes had a connection, so there was a 70.3% reduction.

And similarly, the number of connections, so the homes on average had almost four connections, so connections, there were four homes within that network. Afterwards, there was less than 1, so an 80% reduction.

You'll see that the connectivity was highest in the for-profit and non-for-profit homes compared to municipal homes. And the residual connectivity afterwards remained highest at 14.7%.

I think it's actually important to note that still 12.7% of homes after that order came in had mobility that was documented.

And I'll show you -- this is actually a neat network diagram. So this plots all the networks, okay? And the red dots are ones that had an outbreak. The greenish ones, they did not have an outbreak. You'll see there was quite a bit of connectivity. So all these dots are homes, and the lines between them are connectivity. And you'll see there's a marked reduction of connectivity after the -- the order came through.

But I think that 12.7% is quite important to focus on because we know there's a loophole within that public policy that permits temporary agency staff to be able to travel between

healthcare settings. And we have heard that homes are -- you know, in order to close that, you would have to have only full-time staff.

And we have heard that homes are choosing to hire temporary staff and -- rather than have full-time employment, and this is leading to some residual connectivity.

Of course, the other reasons why there could be residual connectivity are people like delivery persons who are going between the homes, but that's why we limited it to that -- at least one hour that they had to spend in each of the locations which I think is less likely.

And the other group of people who are exempt from that order are physicians as well, so it's possible there are some physician contributors, but because of the fact we have heard about and we know that it's a loophole within this policy, that the fact that still 12.7% of our homes in the province have a connection with another home in a 14-day period where someone spends at least an hour in each of those homes is concerning considering what we know about how staff may be vectors for COVID-19.

And you've heard much about, you know,

what could be done to promote more full-time employment and retention in the field which would reduce the reliance on temporary agency staff and then lead to mobility between homes.

Any questions about that study?

COMMISSIONER FRANK MARROCCO (CHAIR): No. Just so I'm clear, what you're suggesting is that if you're trying to prevent outbreaks, you would deal with a temporary staff, the ability of the temporary staff to be in multiple locations?

NATHAN STALL: Yes, within a 14-day period, yes.

COMMISSIONER FRANK MARROCCO (CHAIR): Okay.

COMMISSIONER JACK KITTS: So just to be clear, so because the staff are vectors into the home, you're supporting the one site only for staff?

NATHAN STALL: I mean, this clearly shows that there was a strong reduction of 70% in connectivity, and that was an important and successful public policy. It was probably implemented too late. When you look at when it was implemented in other jurisdictions like British Columbia, it was clearly successful, but

the fact that there's this residual connectivity and this known loophole in the policy is something that I think is another immediate target for action to try and reduce risks in these homes.

COMMISSIONER JACK KITTS: So in the risk-benefit analysis of this, we've heard that the risk was a significantly increased shortage of staff because of this policy, but you feel the risk-benefit ratio is implement this policy and find the staff?

NATHAN STALL: You know, these are the competing crises of trying to, you know, address the long-term care sector. Obviously, you need someone to be able to care for the people at the end of the day. This is empiric data showing this. We know that it's a risk factor. We don't have a comparative analysis showing that you're going to contract the amount of available staff by 'X' much and it's going to lead to this much harm.

But in terms of, you know, immediately identifiable things that could be done now -- you know, we can't build 30,000 new homes -- you can say, well, it's very hard, Dr. Stall, to actually, you know, train up the staff you would need to do that. That's a fair point, but this is just

something that we've identified that's an immediate target. I can't comment specifically on the risk-benefit ratio of that.

COMMISSIONER JACK KITTS: Thank you.

NATHAN STALL: Okay. The last -- the latter studies are -- I know we're just on Item 2 of 5, but I promise you Item 1 was the longest and pithiest.

So this was something that actually came out of reading some of the transcripts of the Commission, specifically the Chartwell Commission. So we know that, and as I spoke about, Canada has the highest proportion of COVID-19 deaths in long-term care residents, about 78, 80% depends when you look. And I've talked about the concerns about a skewed pandemic response that focused on acute and critical care.

There was no official policy denying hospitalizations for long-term care residents with COVID-19, but media reports and testimony from this own commission suggested that resident transfers to hospital were strongly discouraged especially at the onset of the pandemic.

So to investigate this, we looked at whether there were temporal variations in

hospitalizations, and we have compared community dwelling adults to those in long-term care during the first and second waves of the pandemic.

One of the things that I will say that I think was detrimental as well that may have motivated the lack of transfers was early on, there was a triage document that was leaked that has actually never been officially released. And early on, that document, which was in draft form and was later edited to not include this, suggested that in surge levels, residents should not be transferred to hospital. And that was actually taken out. That would be in the spirit of -- it was actually, should not be transferred to hospital to receive critical care. But I think this made the news.

There was also these conversations and letters going out from homes to families strongly discouraging transfers, and this was something I heard -- I read in the Chartwell testimony from your own commission. So we wanted to look at this.

So this is all the people who died of COVID-19 in our province from March to October 2020. There was 3,114. We went to October 28, so relatively recent data. In the left column, the left notes are the dates and some of the

demographics, we had community residents and nursing home residents.

Now, you would always expect community-dwelling residents to be hospitalized at a greater rate than long-term care residents. For the most part, they are more well off because they can still live independently in the community. And many people in long-term care have goals of care or advanced directives that may not include transfer to the hospital.

But what we noticed, in March -- so if you look here, and I'll show this graphically. The proportion of community-dwelling people who were hospitalized prior to death is relatively constant throughout. Somewhere between, you know, 75.9% to 88.8%. But, you know, relatively stable even during March and April when we had the real surge in COVID-19 admissions and use of our acute-care hospital system.

Interestingly, among long-term care residents, we saw that in March and April, it was only 15.5% of all -- out of 1,028 people who died that were transferred, and this has gone up.

In May, it was 26.9%. In June and July, it was 41.2%. And there's limited numbers,

but in August to October, it's 30.8%.

When you look, you can say, well, maybe it's an age thing. It's actually not. So when you look by age as well, the rates in the community-dwelling cohort were relatively, again, stable in the high 80s for community dwelling and low in the -- low -- much lower in the nursing home population.

And what we did find, which is actually consistent with other literature, was that men were more likely to be transferred to hospital than women. And I've shown this pre-pandemic, and it's been known that men, there's gender-based biases where men are more likely to be offered aggressive care.

So this graph -- this shows it that, you know, there is these really large discrepancies and technical variations in the intensity of care that's provided. And so March and April, you know, a really small number of all nursing home residents who died were transferred. That went up once the system was loosened up. Hospital partnerships were made, and it was clear that that first wave was not going to -- not going to overwhelm our hospital system.

I think this is important because that very well may have contributed to the large concentration of death we saw in the first wave, and people were not being transferred to hospital who not only may have benefited from medical care that may have saved their life, but also people were not being transferred for just basic care when homes were in crisis, and people aren't being transferred for palliative care to help them die with dignity during the first wave when homes were totally overwhelmed.

So I'll talk about the conditions I witnessed in the outbreak that I assisted with, but there was clearly this huge temporal variations in the intensity of care that raises concerns that they were unofficially triaged out at the beginning of the pandemic for a number of reasons and although it was never officially said that they shouldn't come to hospital.

Questions about that?

COMMISSIONER FRANK MARROCCO (CHAIR): I don't think so.

NATHAN STALL: Okay. Okay. What has been the impact of the COVID-19 pandemic on the general health and well-being of Ontario long-term

care residents? Again, Commission has done a fantastic job with capturing some of the voices.

My role in a lot of this is to capture the data to corroborate the things that we're hearing.

So one of the things we were hearing was that there was increased prescribing of things like psychotropic medication, so things like antipsychotics, benzodiazepines, antidepressants, that they were, you know, drugging people up, in the most colloquial sense, to allow them to tolerate the conditions of lockdown or because homes were in crisis; there was no one to provide care for them, and they were responding with chemical restraints for these residents. So these were things that we had heard in the news that families had reported, and we wanted to look at.

So we examined the monthly proportion of long-term care residents who were dispensed psychotropics -- I'll describe what those are -- from April 2019 to September 2020. And we looked -- the pre-pandemic period, so, you know, obviously, our first case in Canada was the end of January, but Feb. 26 was the time that we had our first documented case of community transmission in

Ontario, and March 14th is when restrictions on visitors, absences, and congregate dining came into effect.

So the pre-pandemic period was February 2020 earlier, and then we looked March 2020 forward. We looked at the dispensation of four psychotropic medications, so antipsychotics, antidepressants, benzodiazepines, and trazodone. So all these medications are psychoactive. Some of them have -- many of them have sedating properties, and many of them are used to treat what are called responsive behaviours in people with dementia which are also known as the behavioural and psychological symptoms of dementia, things that are known to have been exacerbated during the pandemic because of the lack of interaction, social isolation, the physical activity, fresh air, et cetera, that people endured during the pandemic.

Again, much like other studies, we had a falsification analysis. So we looked at two drugs, metformin, which is used to treat diabetes, statins, which are used to treat high cholesterol, and we did not expect those to change or to go up during the pandemic.

And then again, we looked -- we

looked -- January to February 2020 was the pre -- that was the start of the pre-pandemic period, and then we looked March to September 2020 being the -- being the post-pandemic or pandemic period, apologies.

So what we find for these drugs are some very interesting trends. So antidepressants is in the top left. This is the -- you know, the linear trend of what you expect going back again from -- all the way back from April 2019. So the linear trend, if you were just to draw a line, there's been a general increase, and you'll see the proportions are small, but we're dealing with 70,000 residents. About 50% of all long-term care residents are on an antidepressant, which may surprise you, but this is known.

The general trend has been increased prescribing, but you see this really sharp uptick in that that line here is the start of the pandemic in the prescription of antidepressants. Similarly, also known that trazodone antidepressants and antipsychotics have generally been going up in prescribing where benzodiazepines have been going down. That's been noted pre-pandemic.

But you see for antidepressants,

trazodone and antipsychotics, there's sharp upticks in the -- in the proportion of residents that are being dispensed these drugs.

Benzodiazepines continues on that downward trend, but even so, there is an uptick in prescribing during that time period. Interestingly, the metformin and statins, there's a sharp decline. And you may say, well, there's less residents in long-term care; that's why. We actually controlled for that in the denominator. We looked at the proportion of residents who were prescribed any medication.

So either this means that those medications weren't refills because of the collapse of medical care; the people who are on metformin and statins were the ones who were more likely to die, which is the possibility because they're more -- diabetes and high blood pressure and cardiovascular risk factors are known cardiovascular risk factors for COVID-19 outcomes.

But clearly, there are some sharp increases in the prescribing of psychotropic medications, again, giving evidence to things that family members were telling us were happening during this time. Questions about that?

Okay. So I'm just going to speak -- that's sort of the end of the -- you know, data, data part of the talk. A lot of this you've seen, so I will -- I will go quicker, but I'll just talk about specifically what I have been involved in when it comes to promoting and implementing family presence because I think there are some important additions to be considered to the interim recommendations that have been made.

So, you know, these photos, I've showed to many people. This is from Winnipeg, right? These are sort of the tragic -- I hate to use the word iconic, but the photo that typifies the experience of long-term care residents through glass barriers.

I don't know if you've seen this one. Someone hired a bucket crane at Baycrest in Toronto to be -- because, you know, obviously, window visits disadvantage the people who are in upper levels of the building. Usually, people want to be on upper levels of the building. This is one time you don't want to be, so they hired a bucket crane.

This photo always gets me, and I show it in many talks I do which is the hugging curtain. This is a couple in Barcelona, and, you know, this

is supposed to be an innovation in family presence and connectivity, but honestly, almost makes me choke up every time that I -- that I see this photo.

And then this is sort of someone from Montréal just looking longingly out the window at, really, the rest of the world that was re-opening over the summertime.

We -- there's actually a new disorder that's been characterized. I don't know if someone's described this term to you, the confinement syndrome in the course of the testimony you've heard. But this letter in JAMDA, which is one of the leading long-term care journals, was from French physicians who noted that the confinement disease is probably more deleterious than the COVID -- the coronavirus disease itself.

And what we saw and what I have seen are the collateral damages of this confinement syndrome of the conditions of lockdown that were imposed for months on long-term care residents had really extreme collateral damages. So we saw -- this is a news report. You may have heard that there was actually a resident where the coroner concluded died of malnutrition in our province, so

dehydration and malnutrition.

I've seen people who went from walking who are now wheelchair-bound who needed help with minimal activities who now require help with multiple activities. Certainly, exacerbation of chronic medical conditions and mental health disorders. I have spoken to caregivers who, when they were finally allowed back in, their loved one no longer recognized them anymore. There's been worsening of responsive behaviours; you know, pandemic loneliness and social isolation; and, of course, psychological distress, depression, and anxiety.

So we were really --

COMMISSIONER FRANK MARROCCO (CHAIR): You know, Doctor, on that topic, there's been a lot of -- I don't know if you -- if there's any collateral or analogous connection, but solitary --

NATHAN STALL: Yes.

COMMISSIONER FRANK MARROCCO (CHAIR): -- confinement cases --

NATHAN STALL: Yes. Yeah.

COMMISSIONER FRANK MARROCCO (CHAIR): -- there's a lot of evidence to suggest that more than five days --

NATHAN STALL: Yes.

COMMISSIONER FRANK MARROCCO (CHAIR): -- in solitary confinement is a problem.

NATHAN STALL: Absolutely. And that's where this term comes from, right, which is really insane when you think about it that we're applying terms that are -- you know, there's been the multiple Supreme Court rulings -- I don't need to tell you. It's embarrassing for me to tell you something -- that solitary confinement is unlawful, but this became the default response for our long-term care residents in many ways.

COMMISSIONER FRANK MARROCCO (CHAIR): Yeah, one of them is mine.

NATHAN STALL: Yes. Yes. Sorry. What do you mean by that, one of them -- one of the rulings, yes. Yes, sorry.

COMMISSIONER FRANK MARROCCO (CHAIR): One of the rulings.

NATHAN STALL: Sorry. I thought you meant you had a loved one. Sorry.

COMMISSIONER FRANK MARROCCO (CHAIR): No. No. No.

NATHAN STALL: Yes, absolutely. That's why I said it's embarrassing for me to tell that to

you.

So -- yeah, so one of the things that we did -- and I don't know if you've seen this document, is with my colleague, Samir Sinha, who I know was the first person to testify at this commission, or -- I keep using the word testify; it's not sworn; it's a presentation -- but who gave a presentation.

We worked really hard over the summer to present to government and the world, really, and the province, but actually, this has led to international work -- really, to find a better balance for how we can mitigate what we saw going on.

And we laid out some principles. A lot of this has been captured now in the -- in the -- but we did this in July -- has been captured in your commission. So really, the need to differentiate between family caregivers and general visitors leaving the authority for an autonomy to determine who is essential to support them in their care, that should be the resident substitute decisionmakers and their families.

You know, restricting access to visiting has to balance the risk of social

isolation with the benefits you're getting from -- from preventing COVID-19 infection; having some equity in policies, not just a quality, which was something that was important; recognizing that, you know, the conditions for visiting may be very different for very -- for different residents, and some people may need more, and some people may need less.

I think having regular transparent and evidence-based communication about what's dictating these policies, it's often spoken about, you know, that these are evidence-informed decisions, but really, as I told you, there's an absence of evidence to suggest that visitors or caregivers have been involved in transmission which has been a huge source of frustration, that have data, collect data when you reopen homes, which, unfortunately, hasn't been done in the way that we're aware of so that, you know, our caregivers and visitors, are they being implicated in outbreaks.

And I think something that really frustrated people was have a mechanism for feedback in an appeals process when there was disagreement. People felt like they had no one to go to except the media when it came to what they were seeing

with their loved ones.

I won't go through all of this, but we really spelled out and we looked across the country at what were some of -- and we looked internationally as well at what policies were.

In the end, one of the things I think was really -- and sorry -- we created separate guidance for family caregivers and for visitors.

So one of the things that I think was really to the credit of the Government that they did was they took these recommendations that we had made to heart. And the policy they came out with at the beginning of September really aligned with our recommendations on caregivers in terms of the ability for them to designate their own caregiver, the ability not to place time limits to allow them into homes under conditions of outbreak. That was something -- I would say we have one of the most progressive caregiver policies in the country. Could we do more? Absolutely. But, you know, the things that came out, I think, were very positive from that work.

Now, where do I have ongoing concerns, and I think to add to the work that the Commission has already done, in many ways, I feel that the

course that our government has chosen to pursue with respect to management of our pandemic has been one of trying to, without saying it, segment or shield our vulnerable populations while allowing the rest of society to live their life with some basic hygiene measures.

And so what do I mean by that? You may have heard the Great Barrington Declaration that came out last month where this -- this is a proponent of the shielding strategy where you try and shield these vulnerable individuals and let the people who are less vulnerable to bad outcomes from the disease go on and live their life, so you don't shut down the economy, and you try and get the best of both worlds where you protect those who are most vulnerable.

The counterpoint to that was the John Snow Memorandum which I am clearly more in agreement with which is that shielding is impractical. It's impractical in the Province of Ontario because shielding long-term care residents would require shielding the more than 100,000 long-term care workers who live in the community. And we spoke about how they, themselves, often live in COVID hotspots where -- and often live in

multi-generational households, may not have sick benefits, all the conditions of labour that you have heard about.

But I think it's really unethical. It's also -- sorry -- ineffective. There's no empiric evidence, importantly, from any part of the world that has been able to let COVID-19 transmission continue on without suppressing it, keep their economy open, and be able to prevent deaths disproportionately among older adults and specifically those in long-term care. And it's unethical.

So to segment a community without their consent, really confine them to these indefinite and harmful conditions on confinement, for people who have limited life expectancies and are most susceptible to these conditions of the confinement syndrome is unethical.

So where I see the caregiver policy was a huge -- was a -- was a really big and, I think, important thing, and -- but I think there's really still a need for more balanced and nuanced infection prevention and control.

So right now, what has happened is they've shut -- they've stopped short-term

absences. And again, it's like the visitor policy. There's a difference between people, the caregivers who are going in to feed their loved ones and people like my 3-year-old twins who are going to visit my grandmother who lives in a retirement home for social reasons. Is the latter important and vital? Absolutely, but there's a need to distinguish between these policies.

So one of the things is they're no longer allowing people to go outside for fresh air and walks in the immediate vicinity of homes because they've closed short-term absences. So there can be more balance and nuance, and we could have more humane, you know, public health measures that, you know, okay, we don't want you going to your loved one's house to have dinner indoors, but walking around the block and getting fresh air is a human right I think we should all have.

Similarly, many of the homes that are in the high-alert status, which, you know, if you think about Peel or Toronto are probably with the current strategies that we have in place are going to be on high-alert status indefinitely. And many of them have moved to shut down things like congregate dining and social activities and suspend

them and go back to dining in rooms and not having social things that promote wellness and well-being and quality of life for these people. So again, I think we can have more nuance and balance.

If your home's under outbreak, clearly, you want people in the rooms, and you need to start isolating and cohorting people. But to indefinitely serve people meals in their rooms and not allow them to socialize, again, reflects a lack of balance and nuance.

Similarly, in some of these homes, if a home -- if a unit's on outbreak, and they're totally separate from the other units with no -- with staff being cohorted, you need to think about whether you actually need to shut down the congregate dining and social activities for the whole home as well.

And I think one of the things that was sad to see and personally sad to see -- so -- and I think it's not covered in the -- not necessarily the purview of the Commission, but many of the -- many of the infection prevention and control measures that are for long-term care have been applied to retirement homes.

And they're sort of the lost, I would

say, child in all of this. You know, they have had better outcomes, but the people who live in there are usually a little less functionally dependent -- a little more independent, I should say. They have almost exclusively private rooms and private bathrooms, but they've had much better outcomes.

But these really draconian measures have been also imposed on them, so I think what has been really -- and I'm not sure why this was done, was they stopped outdoor visiting for long-term care homes which we know being outdoors is lower risk. And they were asking people to be masked and distanced. And I think that's another easy thing that can be re-implemented.

So, for example, I'm no longer allowed to see my grandmother who is in a retirement home because we were visiting outdoors because that was -- that was implemented. That was in the fall when cases started to pick up, which I think is something -- again, I can understand why they don't want people going into the homes. Yes, it's impractical to have outdoor visits in Canada in the wintertime, but we're managing to find creative solutions for people to do this for things like restaurants on patios. We should be available to

do this for people in long-term care.

Questions about that?

COMMISSIONER FRANK MARROCCO (CHAIR): No. We're good.

NATHAN STALL: Okay. In the last part, which I've -- again, I think -- I don't think you've heard about this, and I think it's important, is how we executed a response to a home experiencing a COVID-19 outbreak.

So you'll know on April 22nd, also when the order came to limit staff to one home, the Government asked hospitals to develop and deploy these specialized COVID-19 SWAT teams to provide additional staffing, IPAC occupational health and operational support. There was no road map for this. We weren't really told what we needed to do specifically other than to help.

And so we -- I took -- you know, we wrote this up, actually, in the Journal of American Geriatric Society. Actually, we wrote it up in May. The work was done in April and May. And a huge team of individuals who contributed to this -- and I'll show you.

The home we became involved in when we became involved in mid-April, almost the entire

cohort of residents had been infected, 85.8%. We ended up, 1/5th were admitted to acute-care hospital, and 1/5th of all the people ended up dying. So -- and this is the epidemic curve, so it was a really severe outbreak that was experienced by this home.

What we did in the first 72 hours, and I think this might -- and other people have reached out to us to share what we did, and I'm not saying it's the best way or the right way, but it certainly worked, and there was a structure here.

We built -- so we had an environmental scan in our hospital, and their -- what their clinical expertise was, what their staffing was, what their supplies were, and what their equipment needs were.

We built a team with geriatric medicine that I led, one of my palliative care colleagues, and our IPAC or infection prevention and control clinicians. We evaluated their staffing shortages. We determined they're PPE stockpile, their supply chain, and their expected burn rate of personal protective equipment, and we assessed their shortages and expected needs.

My IPAC colleague did -- they reviewed

the outbreak line list that I showed you part of in the last slide, plotted that epidemiological curve I showed you, did a rapid assessment of what the IPAC gaps were. Widespread testing was done of the remainder of the residents.

We built a team, and I think one of the things was we actually drew a lot on the literature of disaster management response, and we came at this from one of team building and trust building and collaboration rather than the hospital was taking over the home as has often been described.

So we built a team, and I'll show you that team -- a clinical and operations team which had senior leadership from our hospital, administrators, nurses. We had -- we were really fortunate to have our hospital fully onboard with clinicians and geriatrics, palliative care, psychiatry, pharmacy, and infection prevention and control.

And one of the things we immediately did was we decanted 15 residents to the acute-care hospital. That speaks to that crowding thing I was speaking about earlier on where there was -- we realized it was so out of control in the home, there was no vacant rooms. There was nowhere to

cohort and isolate people, and they had such a collapse in staffing that there was no one to look after the residents.

So we made the extraordinary decision with the support of the hospital to actually send 15 residents that they chose the home to our hospital and admitted them to Mount Sinai Hospital.

This was the clinical and operations team. We had four, really, arms of this working. There's the clinical team, the IPAC team, the health human resources team, and the PPE supply team.

So in the clinical team, which I help lead with a palliative care physician and the senior nurse administrator, we established the infrastructure for provision of virtual care. So we actually donated iPads to them and had a secure video-conferencing technology.

We rapidly, as I'll show you, went through the home and triaged and assessed all the nursing home residents to figure out whether they wanted to go to hospital, whether they wanted active medical management, or palliative care.

We had a lot of goals of care discussions and advanced-care planning discussions.

As I'll show you, we provided active medical management, palliative care within the home. We provided psychiatric support and care for the residents and psychosocial support for the frontline staff. And we worked with our pharmacists and colleagues of the home to ensure they had access to medical equipment, drugs, and supplies.

I mean, before we came, they were using coat hangers to hang up bags of normal saline. They didn't have enough oxygen tanks. They were looking on Amazon to secure concentrators for the oxygen. So this is -- you know, this is happening in Canada, so this was the level of crisis that this home was in when it came to supply.

There was a really detailed IPAC assessment that was done around education and training that was provided. They coordinated the rooms that they moved residents between, coordinated the cleaning of the room to show -- to advise them this is where you should move this resident and that resident so that we were properly cohorting and isolating. The health human resources team worked with staff at the home to identify who was sick and when they could come back

to work.

We actually deployed from our hospital a dozen RPNs and PSWs and one clinical nurse specialist for a one-month assignment at the home to help with their staffing crisis. And a lot of personal protective equipment was sent over there as well as medical supplies from our hospital.

So in the first seven -- in that -- in the next seven days after we established -- as I showed you, we established that team, everyone was tested. We decanted the residents.

For the people in the home, we actually set up -- because many of us were working in the hospital and doing this as well, and we couldn't travel between the sites, a lot of this was done virtually.

So we -- there was donation of iPads. So we established the infrastructure for virtual care. We brought in the family physicians who were working and who would join the virtual rounds to be able to advise on the care of their residents.

The first 72 hours we got access to their electronic medical record, we triaged all the residents. We laid eyes on all of them, and we made, as I'll show you this, sort of, pandemic

assessment and triage tool. One of the things we found, which is not unique to this home, was that they were screening for COVID using the typical symptoms, the fever and the cough, whereas we know that long-term care residents are more likely to have atypical symptoms. They're more likely to be confused, delirious, not eating.

So we made this tool, and we flagged all the residents that -- they flagged for us who they thought was sick. We laid eyes on all of them, and then we made these decisions in real time often speaking with their substitute decisionmaker, did they want to remain in the home or go to hospital? If they wanted to remain in hospital, we coordinated to take them to Mount Sinai Hospital so there was a smooth transfer of care.

If they wanted to remain in the home, did they want active medical management or palliative care? And we provided both of that to them. We provided -- we arranged stat and in-home laboratory and imaging services. We taxied over a lot of oxygen tanks from Sinai to give them oxygen. One of the fears they had was that low-flow oxygen might aerosolise COVID-19 which has been shown that it cannot.

We used a lot of hypodermoclysis, which, instead of putting it in the intravenous, you actually put the needle subcutaneously, and we rehydrated a ton of residents that way. And we were available -- my colleague Dr. Ramona Mahtani and I were available 24/7 over a period of two months to respond at any time to them for clinical concerns or emergency situations, so we were basically on call for them.

We provided high-quality palliative care. My IPAC colleagues went there and did actual onsite training of donning and doffing, education about modes of transmission. We had talked about the room changes and terminal cleans, setting up donning and doffing stations, and then the occupational health measures.

What I think was really essential about this -- and I think as we think about this wave and the future of long-term care in connection with acute-care hospitals, is we didn't just leave once the -- once the outbreak was declared over. So, yes, we gave them -- there was the deployment of hospital-based staff. I'll just speak about the final things that we did.

We actually had a pharmacist who

consolidated and streamlined medications because if people are getting medications three times a day, it would necessitate the careworker to go in three times a day and don and doff their equipment, so we streamlined medications to twice or once a day, got rid of unnecessary medications.

Our geriatric psychiatry team was phenomenal in providing support for their residents who were having the things I showed you, the exacerbation of mental health conditions, worsening of their responsive behaviours.

One of the things they did and continued to do is they provided support for the frontline nursing home staff who were traumatized, understandably so, by what had gone on.

And then we provided stabilizing IPAC interventions which continue to go on to this day with the home to oversee what's going on with their IPAC procedures and to make sure that they're following the necessary things. To their credit, they have not had another outbreak during the second wave.

And we transitioned care back to the nursing-home staff and physicians, and they actually used the virtual care infrastructure that

we had built. One of the things that had happened and that I think your commission has also heard is that the medical model which was already -- and I'll speak about that in my last two slides -- entirely collapsed in many homes. And in this home, you know, many of the long-term care physicians, they, themselves, are older adults. They were advised by their own physicians not to go into homes, and many of them work at multiple homes that were each experiencing catastrophic outbreaks. So they, themselves, were totally overwhelmed for the most part and unable to capably assist in all of the homes they were involved in.

The final thing I'll say is there was a paper by long-term care physician colleagues on improving medical services in Canadian long-term care homes. They've put out some recommendations which I think are actually essential, some of them at least, about how to improve medical services. One of them is the time commitment, four hours a week for every 25 to 30 residents they've established as a reasonable practice cohort for a physician to have. As I said, many physicians have practices at five, six, long-term care homes where they may be responsible for hundreds of residents.

The necessity of physical presence during outbreak management, that you cannot rely solely on virtual care, that there is a time and a space where you need to actually have boots on the ground to get in there and assess what's going on. They talked about some remuneration that might be required particularly for the medical director role to reflect the increased work during pandemics and outbreaks that that's required.

I think maintenance of competency is a huge thing. A lot of people who work in long-term care don't have care of training -- or don't have training of care of the elderly. They may not have training for long-term care. They may have learned it on the go, but there's also no real -- there's no real maintenance of competency or continuing medical education. And there may be no added training for medical directors to be able to assume this role of leadership, the medical director.

Many of the homes simply rotate the medical director role, and that has to do with rotation of the -- of the extra stipend that they get for the medical director role, not necessarily to rotate leadership to, you know, have fresh leadership. They -- if there's three or four

physicians in the home, they may rotate the medical director role quarterly so that they split the stipend.

I think one of the things we really saw is, you know, often the default is to send somebody to hospital, and that's because there was not -- you know, not availability of things that we were struggling with but were able to secure which is lab services, timely diagnostic imaging, medical supplies. We were lucky -- very fortunate that the staff at the home had just been trained in how to give subcutaneous hydration prior to the pandemic starting, so we were able to literally rehydrate and save the lives of people just by rehydrating them with the expertise that the staff at the home had done.

And I think credentialing, there needs to be a standardized credentialing process because we saw the collapse of the medical model of care and the fact that, you know, physicians in many homes stopped coming in to provide care and were totally overwhelmed. They need to be better trained specifically in care of the elderly and long-term care but also in -- clearly in outbreak management as it relates to the COVID-19 pandemic.

So I know I've talked a lot, and I went over time, but I'm really happy to take questions, and I sincerely appreciate you listening to what I've had to say today.

COMMISSIONER FRANK MARROCCO (CHAIR): I think we asked -- I don't see either of the Commissioners wanting to ask any further questions. I think -- I think we asked the questions as we went along.

And, Doctor, you thanked us for listening, but thank you for the preparation and the obvious work that went into this. It will be a help to us going forward, and thank you for taking the time to do that.

NATHAN STALL: No. Thanks for having me, and I did share my slides, so, please, those can be publicly posted and used as need be.

COMMISSIONER FRANK MARROCCO (CHAIR): All right. And thanks again.

COMMISSIONER ANGELA COKE: Thank you.

COMMISSIONER FRANK MARROCCO (CHAIR): And we may be back.

NATHAN STALL: Okay. Be happy to.

Did you have something to say, Commissioner Kitts?

COMMISSIONER ANGELA COKE: Just thank you.

COMMISSIONER JACK KITTS: I was just going to say that that was extremely clear, and I'm so impressed on how up to date it is. It's -- it was a very good presentation. Thank you, Dr. Stall.

NATHAN STALL: Oh, thank you. That's a benefit of being young.

COMMISSIONER FRANK MARROCCO (CHAIR): We're trying to -- I think you wanted to put an end to agism, so --

NATHAN STALL: I know.

COMMISSIONER JACK KITTS: I'm not sure I was ever that good.

COMMISSIONER FRANK MARROCCO (CHAIR): Goodbye, Doctor. Thanks again.

NATHAN STALL: Okay. Thank you so much. Take care.

COMMISSIONER ANGELA COKE: Thank you.

COMMISSIONER JACK KITTS: Thanks.

NATHAN STALL: Bye-bye.

-- Adjourned at 12:30 p.m.

REPORTER'S CERTIFICATE

I, JANET BELMA, CSR, Certified Shorthand Reporter, certify:

That the foregoing proceedings were taken before me at the time and place therein set forth;

That all remarks made at the time were recorded stenographically by me and were thereafter transcribed;

That the foregoing is a true and correct transcript of my shorthand notes so taken.

Dated this 13th day of November, 2020.

Janet Belma.

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NEESONS, A VERITEXT COMPANY
PER: JANET BELMA, CSR
CHARTERED SHORTHAND REPORTER

Page 6: Jama Network open? Should be JAMA Network Open.

Page 76: Should be "imaging services" and not "emery services"

WORD INDEX

This is Exhibit **24** referred to in the Affidavit of **Dr. Michael Rachlis**. Affirmed before this 16th day of March, 2021.

David Baker LSO# 17674M

A Commissioner, etc.

Report_Data_Extracted	LTC_Homes_with_Active_Outbreak	LTC_Homes_with_Resolved_Outbreak	Confirmed_Active_LTC_Resident_Cases	Confirmed_Active_LTC_HCW_Cases	Total_LTC_Resident_Deaths	Total_LTC_HCW_Deaths	Active_Outbreaks_with_No_Resident_Cases
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12/3/2020	112	294	680	544	2265	8
12/4/2020	107	299	673	541	2270	8
12/5/2020	111	299	686	568	2293	8
12/6/2020	113	298	720	582	2305	8
12/7/2020	116	297	673	611	2326	8
12/8/2020	115	299	618	617	2341	8
12/9/2020	118	299	623	617	2358	8
12/10/2020	131	288	604	632	2366	8
12/11/2020	128	294	585	648	2381	8
12/12/2020	136	287	644	712	2391	8

12/13/2020	137	288	659	737	2400	8	
12/14/2020	134	292	695	761	2424	8	
12/15/2020	135	295	728	788	2442	8	
12/16/2020	140	291	819	827	2446	8	
12/17/2020	139	294	757	843	2471	8	
12/18/2020	145	290	795	902	2481	8	
12/19/2020	154	284	931	900	2502	8	
12/20/2020	160	280	965	959	2508	8	
12/21/2020	159	285	963	972	2537	8	
12/22/2020	161	286	1053	997	2555	8	
12/23/2020	162	286	1075	976	2578	8	
12/24/2020	163	287	1146	990	2596	8	
12/27/2020	183	270	1168	1064	2659	8	
12/28/2020	194	262	1145	1032	2688	8	
12/29/2020	192	264	1188	1057	2721	8	
12/30/2020	187	274	1186	1050	2749	8	
12/31/2020	188	274	1159	1009	2769	8	
1/2/2021	207	260	1140	1130	2781	8	
1/3/2021	219	253	1160	1140	2795	8	
1/4/2021	216	257	1097	1101	2830	8	
1/5/2021	220	255	1180	1162	2877	10	138
1/6/2021	218	259	1258	1230	2909	10	129
1/7/2021	224	256	1350	1269	2929	10	134
1/8/2021	228	254	1412	1224	2952	10	129
1/9/2021	245	241	1432	1236	2967	10	140
1/10/2021	252	235	1502	1260	2980	10	144
1/11/2021	249	239	1553	1244	2995	10	144
1/12/2021	249	242	1542	1278	3029	10	140
1/13/2021	244	249	1603	1297	3063	10	137
1/14/2021	243	250	1650	1336	3085	10	134
1/15/2021	246	248	1632	1302	3112	10	135
1/16/2021	246	248	1622	1313	3123	10	137
1/17/2021	248	246	1615	1272	3150	10	141
1/18/2021	254	242	1488	1241	3179	10	145

1/19/2021	251	245	1497	1223	3239	10	142
1/20/2021	251	245	1441	1185	3256	10	143
1/21/2021	244	252	1346	1130	3298	10	134
1/22/2021	252	244	1298	1142	3322	11	138
1/23/2021	255	242	1253	1196	3336	11	142
1/24/2021	256	241	1266	1200	3365	11	142
1/25/2021	246	252	1164	1095	3389	11	135
1/26/2021	238	262	1039	974	3428	11	131
1/27/2021	229	271	1041	938	3462	11	119
1/28/2021	229	271	956	899	3491	11	120
1/29/2021	227	273	911	883	3516	11	118
1/30/2021	230	270	900	898	3529	11	119
1/31/2021	230	271	931	914	3543	11	115
2/1/2021	224	277	855	838	3578	11	110
2/2/2021	216	286	763	801	3601	11	108
2/3/2021	206	298	701	758	3627	11	106
2/4/2021	208	297	591	730	3640	11	110
2/5/2021	208	298	523	707	3654	11	115
2/6/2021	208	298	521	684	3659	11	117
2/7/2021	213	293	494	686	3669	11	123
2/8/2021	205	301	459	651	3668	11	117
2/9/2021	200	306	394	568	3683	11	115
2/10/2021	194	312	369	501	3694	11	113
2/11/2021	180	326	339	465	3706	11	104
2/12/2021	174	335	294	437	3711	11	105
2/13/2021	171	338	274	401	3714	11	106
2/14/2021	170	339	270	392	3714	11	105
2/15/2021	170	339	269	391	3717	11	106
2/16/2021	155	354	210	333	3728	11	93
2/17/2021	142	367	191	323	3730	11	82
2/18/2021	130	379	164	259	3730	11	77
2/19/2021	126	383	126	243	3733	11	78
2/20/2021	130	381	126	246	3734	11	84
2/21/2021	129	382	126	242	3734	11	83

2/22/2021	127	384	125	228	3736	11	77
2/23/2021	117	394	109	218	3739	11	75
2/24/2021	111	401	105	206	3742	11	69
2/25/2021	111	401	101	202	3743	11	68
2/26/2021	101	411	88	175	3743	11	66
2/27/2021	106	406	80	179	3744	11	71
2/28/2021	106	406	80	179	3744	11	71
3/1/2021	97	415	71	162	3746	11	67
3/2/2021	98	415	65	163	3745	11	72
3/3/2021	94	419	62	163	3745	11	70
3/4/2021	86	427	60	154	3748	11	62
3/5/2021	83	430	55	141	3748	11	59
3/6/2021	84	429	55	139	3748	11	59
3/7/2021	84	429	55	139	3748	11	59
3/8/2021	85	428	56	136	3748	11	60
3/9/2021	84	430	55	134	3748	11	60
3/10/2021	83	431	51	137	3749	11	60
3/11/2021	80	434	45	138	3750	11	59
3/12/2021	84	430	45	139	3750	11	64
3/14/2021	87	427	42	146	3750	11	68
3/15/2021	80	434	43	138	3752	11	61

DANESHVAR Applicant	and	HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO AS REPRESENTED BY THE MINISTER OF HEALTH, and the HONOURABLE CHRISTINE ELLIOTT, MINISTER OF HEALTH for the PROVINCE OF ONTARIO Respondents	Court File No: 223/31

ONTARIO
SUPERIOR COURT OF JUSTICE
(DIVISIONAL COURT)

AFFIDAVIT OF DR. MICHAEL RACHLIS
(Sworn March 16, 2021)

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