Pandemic Influenza Response Plan

A Sub-Plan of the Emergency Health Plan

Revised

October 2004



HALTON REGION HEALTH DEPARTMENT

Your source for community health

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Halton Region Pandemic Influenza Response Plan

1.0 Background

Influenza has been with us for centuries. It causes severe illness and death every winter in North America, attacking the elderly and the debilitated with particular ferocity. A novel strain of the influenza virus, to which the population has no immunity, emerges three or four times a century. The novel virus spreads quickly, causing large-scale outbreaks of influenza over a large geographical area, often worldwide. Epidemics of this nature are known as pandemics. Pandemic influenza tends to occur in two or three waves, sometimes over a long period, before finally abating.

Three influenza pandemics occurred in the 20th century – the Spanish (1918), Asian (1957) and Hong Kong (1968) pandemics. The Spanish pandemic killed an estimated 20 million people world-wide.

Experts are predicting that another pandemic will occur soon, although the timing and pattern of the pandemic is unpredictable. When it occurs, the impact will be devastating. It has been estimated that in Ontario alone up to 8 million people will be infected, of which up to 4 million will be clinically ill and 12,000 will die – an emergency of catastrophic proportions!

Based on information taken from previous pandemics and on a population of 400,000 residents, the impact of pandemic influenza in Halton could be that:

- 279,000 people become infected
- 142,000 people become clinically ill
- 63,000 people require outpatient care
- 1200 people require hospitalization
- 400 deaths occur

The World Health Organization (WHO) has identified phases of an influenza pandemic (see Table 1). Canada and Ontario have adapted these phases into three segments, preparedness, response and recovery, to guide contingency planning and to define responsibilities of the various levels of government (see Appendix 10 Tables of Federal, Provincial and Local Responsibilities during Preparedness, Response and Recovery to a Pandemic Influenza). By utilizing the same response structure for developing Halton Region's Pandemic Influenza Response Plan, there will be consistency in reference to phases and communication that will be forthcoming from Health Canada, the Ministry of Health and Long-Term Care for Ontario, and Halton Region.

Table 1WHO Pandemic Phases

Phase 0, Preparedness Level 0Inter-pandemic periodNo indications of any new virus type have been r periodPhase 0, Preparedness Level 1Appearance of a new influenza strain in a human caseThis Preparedness Level will exist following the report(s) of isolation of a novel virus sub-type, w clear evidence of spread of such a virus or outbre activity associate with the new virus.Phase 0, Preparedness Level 2Human infection confirmedThis Preparedness Level will exist when it has be confirmed that two or more human infections har occurred with a new virus sub-type, but where th ability of the virus to readily spread from person- person and cause multiple outbreaks of disease le to epidemics remains questionable.Phase 0, Preparedness Level 2Human transmission confirmedThis Preparedness Level will exist when it has be confirmed that two or more human infections har occurred with a new virus sub-type, but where th ability of the virus to readily spread from person- person and cause multiple outbreaks of disease le to epidemics remains questionable.Phase 0, Preparedness Level 3Human transmission confirmedThis Preparedness Level will exist when human transmission of the new virus sub-type has been confirmed through clear evidence of person-to-p spread in the general population, such as seconda cases resulting from contact with an index case, least one outbreak lasting for a minimum two-weak	first rithout eak een ve ee -to- eading erson ary
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period in one country.	
Phase 1 Confirmation of The onset of a new pandemic will be declared will be will be declared will be declar	nen
onset of pandemic WHO has confirmed that a virus with a new	4
haemagglutinin sub-type, compared to recent epi	
strains, is beginning to cause several outbreaks in	
one country and to have spread to other countries	
consistent disease patterns indicating that serious	
morbidity and mortality is likely in at least one so of the population.	egment
Phase 2 Regional and multi- This phase will exist when outbreaks and epidem	vias ara
regional epidemics occurring in multiple countries, and spreading re	
region across the world.	gion by
Phase 3 End of first The increase in outbreak activity in the initially a	offected
pandemic wave countries or regions has stopped or reversed, but	
outbreaks and epidemics of the new virus are still	
occurring elsewhere.	1
Phase 4 Second or later Based on past experiences, at least one second s	vere
waves of the wave of outbreaks caused by the new virus woul	
pandemic expected to occur within 3-9 months of the initia	
epidemic in many countries.	
Phase 5 End of the pandemic WHO will report when the Pandemic Period has	ended
(Back to Phase 0) (Back to Phase 0)	chucu,

Source: World Health Organization, 1999.

In anticipation of the eventuality of an influenza pandemic, Halton Region has compiled the Pandemic Influenza Response Plan. The Plan is based on the following key assumptions:

- Ontario will have a lead time of at most three months, and quite possibly less, between when a pandemic is first declared by the World Health Organization (WHO) and when it spreads to the province.
- At the time of the pandemic, decisions and actions of international, federal and provincial levels of government will influence the implementation of this plan.
- Pandemic response is a responsibility shared across the health care and community services sectors. Therefore, respective stakeholder agencies will develop and maintain complementary pandemic influenza response plans.
- Unlike most other emergency scenarios, a pandemic will not be a localized phenomenon and resources of all regions will be simultaneously strained. Therefore, Halton Region must be able to demonstrate a large amount of self-sufficiency.
- As the pandemic is likely to occur in waves, which may occur over one to two years, this self-sufficiency will need to be sustained over a prolonged period.
- A vaccine will not be available for at least three to four months (and possibly six to nine months) after the virus has been identified and therefore unlikely to be available during the first wave.
- It is likely that everyone will require two doses of the vaccine to induce immunity to the novel influenza virus.
- The province, following the recommendations set out by the national recommendations, will set priorities for those who would receive the limited supplies of antiviral drugs and the vaccine.

2.0 Legislation

Emergency management in Ontario is governed by the <u>Emergency Management Act</u>, RSO, 1990, Chapter E.9. Administration of the Act is assigned to the Solicitor General of Ontario under whom the Director of Emergency Management Ontario is responsible to co-ordinate, monitor, and assist in the formulation and implementation of emergency plans.

Under the Act, the Premier of Ontario may declare that an emergency exists throughout Ontario or in any part thereof. The Premier or a designated Minister may take such action as necessary to implement emergency plans and to protect the health, safety, welfare, and property of the inhabitants of the emergency area. The Premier of Ontario may require any municipality to provide such assistance, as is considered necessary, to an emergency area or part thereof that is not within the jurisdiction of the municipality and may direct and control the provision of such assistance. The Premier may at any time declare that an emergency has terminated.

Locally, Halton Region has developed and maintains a number of emergency plans to guide emergency management officials and community partners in their decision-making efforts during the events of a significant emergency. The Emergency Health Plan is an

integral component of the Region's Emergency Plan. It is anticipated that municipal and regional emergency plans will be activated as local conditions escalate and the need for response measures increase.

The specific purpose of the Emergency Health Plan is to identify roles, responsibilities and actions for the Health Department personnel to protect the health of the public. The Plan is applicable to public health emergencies, such as extensive communicable disease outbreaks, as well as municipal or regional emergencies. The level of response may vary with the type of emergency.

The *Health Protection and Promotion Act* provides legislative requirements for physicians, laboratories, school principals and others to report certain diseases, including influenza, to the Medical Officer of Health. Included in the reporting requirements is the identification of the individual by name, address and the treatment prescribed, if any. The Act also provides authority for implementing appropriate actions that may be taken to prevent, eliminate or decrease a health risk including establishing temporary isolation facilities and closure of premises. It also provides authority to a Medical Officer of Health to order persons individually or as classes to take certain actions to reduce the risk of disease transmission.

The *Ambulance Act* includes provisions concerning education, protection, prevention of disease transmission, reporting of possible exposures and the sterilization of equipment. It also addresses issues surrounding immunization of emergency medical attendants.

Other legislations that provide legal authority to implement the pandemic influenza plans include:

- Public Hospitals Act
- Private Hospitals Act
- Nursing Homes Act
- Charitable Institutions Act
- Homes for the Ages and Rest Homes Act
- Health Facilities Special orders Act
- Long-Term Care Act
- Community Care Access Corporations Act
- Health Information Protection Act
- Personal Health Information Protection Act
- Regulated Health Professions Act
- Medicine Act
- Nursing Act
- Medical Laboratory Technology Act

Halton's Pandemic Influenza Response Plan is a sub-plan of the Emergency Health Plan and will be activated in whole or in part on the direction of the Commissioner and Medical Officer of Health (referred to hereafter as the Medical Officer of Health).

3.0 Purpose of the Pandemic Influenza Response Plan

- 1. To establish procedures and identify roles and responsibilities for Halton Region personnel and other stakeholders in the community for the effective management of an influenza pandemic.
- 2. To identify and implement communication and response measures with other Federal, Provincial, Regional and Municipal Departments and various local agencies during an influenza pandemic.

4.0 Activation of the Pandemic Influenza Response Plan

The Medical Officer of Health for Halton Region or alternate may activate this plan when:

(a) An influenza pandemic is declared by the Premier for Ontario or the Ministry of Health and Long-Term Care (MOHLTC)

Or

(b) A local case(s) or outbreak of the pandemic strain of influenza is confirmed. This occurrence and the expected impact of illness in the population will require the coordinated efforts of most of the Health Department's staff and resources

Or

(c) The Emergency Plans for the Halton Region, City of Burlington, Town of Oakville, Town of Milton or Town of Halton Hills are implemented as a result of pandemic influenza in the community.

In the event that activation of the Pandemic Influenza Response Plan becomes probable, the emergency notification system may be initiated prior to activating the Plan.

The Health Department Emergency Plan shall be activated in conjunction with the Pandemic Influenza Response Plan by the Medical Officer of Health.

The Medical Officer of Health shall notify the Regional Chairman upon activation of the Pandemic Influenza Response Plan. The Regional Chair or alternate shall activate the Region of Halton Emergency Plan and/or declare an emergency should local circumstances warrant.

5.0 Emergency Notification System

(a) In the event that an influenza pandemic is declared, the Medical Officer of Health or alternate will be notified by the Chief Medical Officer of Health for Ontario or designate.

- (b) Upon notification of a declared influenza pandemic, the Medical Officer of Health or his alternate shall notify the Regional Chairman, the Chief Administrative Officer, the Emergency Planning Co-ordinator, and the Directors of Health Protection, Community Health Services and Ambulance Services or their alternates.
- (c) Upon notification, the Division Directors or their alternates shall notify their senior staff according to the Notification List (Appendix A of the Emergency Plan).
- (d) Health Department personnel who have not been officially notified that the Pandemic Influenza Response Plan has been activated and who have become aware of its implementation, via public announcements, etc., should contact their manager by phone and advise of their whereabouts and availability.
- (e) Upon activation of the Pandemic Influenza Response Plan, the Medical Officer of Health shall convene the **Pandemic Influenza Management Group.**

6.0 Pandemic Influenza Management Group

- (a) The Pandemic Influenza Management Group will be responsible for the overall management of the pandemic emergency, including:
 - i. Obtaining and analyzing international, national and local surveillance data to inform local impact and response activities
 - ii. Implementing the pandemic influenza communication plan to ensure the timely dissemination of the best possible information to health care providers, the media and the general public
 - iii. Providing access to influenza vaccine and antiviral agents, when available, to individuals on a priority basis as determined by the MOHLTC
 - iv. Convening stakeholder groups as necessary
 - v. Reviewing the control and co-ordination of essential services, emergency response services, and public order and safety in conjunction with local authorities during the pandemic influenza emergency
 - vi. Advising and collaborating with the Halton Region Emergency Measures Control Group
 - vii. Deploying personnel based on assessment of need
 - viii. Documenting decisions and actions associated with managing the pandemic emergency
- (b) The Pandemic Influenza Management Group consists of the following members:
 - i. Medical Officer of Health, Chair
 - ii. Associate Medical Officer of Health
 - iii. Director, Health Protection Services

- iv. Director, Community Health Services
- v. Director, Ambulance Services
- vi. Emergency Planning Co-ordinator
- vii. Manager, Communicable Disease Control
- viii. Senior Adviser Special Services
- ix. Manager, Community Health Services
- x. Manager, Health Promotions and Communications, and
- xi. Director, Community Relations
- xii. Epidemiologist
- (c) In the event of a declared influenza pandemic, the Halton Regional Centre will serve as the operations location for the management of the pandemic emergency. The following meeting rooms have been assigned for the use of regional staff, external partners and media that are involved. The meeting rooms listed below are equipped with network and telephone connections:
 - i. Pandemic Influenza Management Group: Glenorchy/Dakota Room
 - ii. Regional Emergency Control Group: Glen Lawson/Mansewood Room
 - iii. Health Department Emergency Management Group: Merton Room
 - iv. Social and Community Services Emergency Control Group: Scotch Block Room
 - v. Media Centre: Halton Room or Council Chambers
 - vi. Communications: Palermo Room
 - vii. Emergency Measures/External Stakeholders: Nelson Room
 - viii. Surveillance: Tansley Room
 - ix. Antiviral Distribution: Sheridan Room
 - x. Vaccine Administration Clinics Coordination Site: Appleby
 - xi. Access Halton
- (d) Additional staff resources will be required as the pandemic escalates. Activation of the following activities in whole or in part will be determined by the Pandemic Influenza Management Group:
 - i. Surveillance (see page 15)
 - ii. Communication (see page 15)
 - iii. Antiviral Administration/Distribution (see page 16)
 - iv. Vaccine Administration (see page 17)

- v. Emergency Measures (see page 18)
- (e) Other municipal/regional plans will be activated as needed.

7.0 Response Activities By Phase

The following sections will outline the major activities that will be undertaken by Halton Region and local agencies during an influenza pandemic. The response is based on the phases identified by the WHO and those that have been adopted by Canada and Ontario.

The response activities are further divided into phases:

- i. Preparedness
- ii. Response
- iii. Recovery

8.0 Preparedness Phase

In this phase there is no evidence that a pandemic influenza is imminent. However, it is an opportunity to establish basic preparedness and to "sensitize" the community to the issue. Although the declaration of a pandemic will not occur until cases are confirmed, a detailed account of the preparedness phase is included as a critical component of the overall management of the emergency. (see Appendix 1 Preparedness Phase Overview and Checklist)

8.1 Preparedness Phase: Surveillance

The Health Department, in conjunction with local stakeholders, will establish surveillance procedures for the early identification of a novel influenza virus in the community. Surveillance systems must be established in advance of a pandemic, as there will be little time to augment capacity at the time a pandemic is declared. Identification of a novel strain of influenza anywhere else in the world will heighten surveillance activities in Halton. These systems will improve the ability to detect the emergence of a novel strain of influenza in Halton. As a minimum, surveillance systems will include:

- (a) Year-round reporting of influenza isolates from hospitals, long-term care settings, laboratories, and primary care physicians (see Appendix 4 Reportable Diseases List)
- (b) Maintaining sentinel physician program in Oakville, Burlington and Milton from October to April each year
- (c) Attendance monitoring in sentinel schools and day cares from October to April annually including defining level for heightened surveillance
- (d) Investigating respiratory outbreaks in hospitals, long-term care settings and schools (see Appendix 4 Reportable Diseases List)
- (e) Investigating reported cases of influenza according to MOHLTC requirements
- (f) Maintaining up-to-date protocols for managing cases and contacts of influenza

The Health Department will maintain the following standards of practice to ensure early detection and response to local conditions:

- (a) Reinforcing the requirement for prompt reporting of reportable diseases with medical practitioners, hospitals, school principals and laboratories
- (b) Establishing communications and data analysis system with hospital infection control practitioners and sentinel physicians regarding surveillance results
- (c) Investigating and maintaining surveillance data on all reports of febrile respiratory illness (FRI) consistent with the current *Infection Control and Surveillance Standards for Febrile Respiratory Illness in Non-Outbreak Conditions* for acute and community-based health care settings.
- (d) Ensuring long-term care facilities are following the MOHLTC respiratory outbreak guidelines
- (e) Investigating respiratory outbreaks in hospitals and long-term care settings according to established guidelines (reference "A Guide to the Control of Respiratory Disease Outbreaks in Long-Term Care Facilities", Ontario Ministry of Health and Long-Term Care, October 2001)
- (f) Defining attendance monitoring results that would indicate need for heightened surveillance
- (g) Maintaining a directory of current fax numbers for physicians, acute and long-term care settings, rest and retirement homes, pharmacies and community nursing services for prompt notification of positive influenza results.
- (h) Maintaining training materials for nasopharyngeal swab collection, e.g., video, diagrams, instructions, indications, etc.
- (i) Maintaining current medical directive for nasopharyngeal swab collection, testing procedures and equipment, including available rapid tests for influenza viruses.

8.2 Preparedness: Communication

The Medical Officer of Health, or designate, is the official spokesperson for pandemic influenza.

The Health Department will develop and maintain a communication plan for the timely dissemination of the best possible information as part of the Pandemic Influenza Response Plan. A critical component is liaising with the MOHLTC communications group. Key components of the communication plan are to:

(a) Educate:

- Provide regular information on relevant symptoms targeted to the general public
- Explain steps the general public can take to prevent and treat influenza
- Describe the measures required for those at greater risk

- (b) Reassure:
 - Demonstrate that a pandemic influenza response plan has been developed that includes involvement with key community stakeholders
 - Acknowledge the work of health care workers
 - Encourage vigilance
- (c) Be Accountable:
 - Acknowledge and fulfill the public's right to know
 - Report on the public health system's ability to respond to the emergency

Preparedness activities include:

- (a) Circulating copies of the Pandemic Influenza Response Plan and associated contingency plans to key stakeholders
- (b) Posting the Pandemic Influenza Response Plan on the Health Department's web site.
- (c) Developing and maintaining listserves, group email addresses or group fax numbers for external partners and facilities such as long-term care facilities, retirement homes, nursing agencies, etc.
- (d) Sensitizing key target groups to the potential for pandemic influenza through
 - (i) Reports to Regional Council
 - (ii) News releases, opinion pieces
 - (iii) Newsletter articles in "in-house" newsletters, Health Notes for Professionals, etc.
 - (iv) Presentations at physician and other health profession meetings by Health Department staff
- (e) Defining potential members for the Joint Media Centre (JMC), drawing communications specialists from Regional departments, municipalities, school boards and hospitals
- (f) Designing a Joint Media Centre (JMC) at the Halton Regional Centre (see Appendix 5 Joint Media Centre (JMC) Equipment List) and providing training for staff
- (g) Negotiating with a local media outlet to be part of the key communication network for the pandemic
- (h) Centralizing the release of public information relating to the pandemic as it is happening locally will lessen confusion for the public, and will remove pressure from stakeholders managing other aspects of the pandemic, and will facilitate access for news media reps.

8.3 Preparedness Phase: Antiviral Distribution and Administration

The Health Department, through the Communicable Disease Control Services, is responsible to ensure the dissemination of information on the use of antiviral medications

to manage pre-exposure and post-exposure prophylaxis and cases of influenza. Antivirals may be available during a pandemic prior to a vaccine becoming available, however, the supply will be very limited.

Preparedness activities will focus on:

- (a) Addressing security issues around the antiviral drug supply
- (b) Developing plans to distribute available antiviral drugs to priority groups consistent with the direction provided by the MOHLTC
 - Defining roles and responsibilities of staff
 - Informed consent and other legal considerations
 - Record of administration and documentation
 - Eligibility screening
 - Central distribution site
 - Medical and/or delegation directives
 - Equipment, supplies and staff requirements
 - Training and orientation
 - Central distribution requirements and inventory management
 - Waste control
 - Risk management
 - Security
- (c) Monitoring the use, impact and resistance to antiviral drugs
- (d) Ensuring other health care facilities and agencies have current policies regarding the use of antiviral drugs during an influenza outbreak
- (e) Developing fact sheets for antiviral drugs that may become available during a pandemic
- (f) Projecting numbers of people who may fall within priority groups for antiviral agents (see Appendix 8 Antiviral Priority Groups Projections)
- (g) Developing reporting and tracking systems for adverse drug reaction
- (h) Developing record management processes

8.4 Preparedness Phase: Vaccine Administration

The Health Department, through the Communicable Disease Control Services, is responsible to ensure the promotion of vaccines and to control the spread of vaccine preventable illnesses including influenza. The objectives of vaccine preparedness include:

- (a) Promoting annual influenza immunization in the general public
- (b) Improving vaccination coverage rates in the National Advisory Committee on Immunization priority groups
- (c) Increasing pneumococcal vaccination rates amongst eligible individuals
- (d) Projecting numbers of people who may fall within priority groups for immunizations defined by the MOHLTC (see Appendix 9 Vaccine Priority Groups Projections)
- (e) Projecting human and material resource needs
- (f) Developing tracking system for those immunized
- (g) Developing reporting and tracking system for adverse vaccine events
- (h) Developing records management processes
- (i) Developing a mass immunization campaign framework for Halton Region including policies, procedures, processes and/or guidelines on:
 - Roles and responsibilities
 - Informed consent and other legal considerations
 - Immunization records and other documentation
 - Site requirements and selection
 - Clinic operations
 - Medical directives
 - Eligibility screening requirements
 - Equipment, supplies and staffing requirements
 - Staff recruitment, scheduling, training and orientation
 - Volunteer recruitment
 - Vaccine security, transportation, and storage
 - Vaccine distribution and inventory management
 - Vaccine cold chain maintenance
 - Biohazardous waste control
 - Risk management

8.5 Preparedness Phase: Emergency Measures

The Health Department will collaborate and develop a contingency plan with local stakeholders, including first response agencies, that identifies roles and responsibilities in managing a pandemic.

The Health Department will establish ongoing communications with local agencies for the purposes of:

- (a) Assisting individual agencies to develop contingency plans
- (b) Identifying essential services
- (c) Assisting with impact assessment of local primary and secondary health care capacity
- (d) Assisting with developing plans to deal with the impact of high mortality rates (Mass Casualty Response Plan)
- (e) Assisting with development of recovery plans and guidelines
- (f) Reviewing local infrastructure of response capacity (ie: hospital beds, ICU beds, equipment, supplies, staff resources, etc.) and assessing surge capacities of hospitals, and assisting with determining potential alternate care sites and other facilities
- (g) Identifying where current emergency measures procedures specific to a pandemic influenza emergency need to be updated and adapted including:
 - i) use of external facilities as "alternate care centres"
 - ii) use of extra-ordinary actions in response to a pandemic influenza emergency
 - iii) development of specific pandemic influenza emergency control and operations structure
- (h) Identifying volunteer agencies that would assist during a pandemic
- (i) Clarifying roles and responsibilities of local health care, volunteer and emergency measures agencies who will respond to a pandemic influenza emergency
- (j) Conducting simulation exercise
- (k) Reviewing the emergency measures strategy annually and revise as necessary

The Emergency Planning Co-ordinator will review and update existing regional emergency plans and ensure notification and resource lists are up to date.

The Emergency Planning Co-ordinator in conjunction with Health Department personnel will conduct simulation exercises to prepare regional personnel and other stakeholder groups for a pandemic influenza as required.

9.0 Response Phase

The response phase begins when a novel influenza virus begins to cause widespread illness somewhere in the world resulting in an influenza pandemic. This has been identified as Phase 1 under the WHO definitions for pandemic planning. The response phase may be prolonged depending on the number of waves and the interval between the waves. (see Appendix 2 Response Phase: Overview and Checklist)

9.1 Response Phase: Surveillance

When an influenza pandemic is declared the Health Department in conjunction with local stakeholders will implement enhanced surveillance activities including:

- (a) Prioritizing ongoing and activating additional surveillance activities e.g., schools, day-cares and/or workplace absenteeism
- (b) Investigating reported cases of severe respiratory illness and increased deaths
- (c) Maintaining a database of individuals who have recovered from the pandemic influenza strain
- (d) Investigating all reports for emergence of resistance to antiviral agents
- (e) Monitoring and assessing significance, timeliness and completeness of data, and disseminating findings to MOHLTC and local partners
- (f) Collaborating with local stakeholders to review enhanced surveillance activities and modify plan as needed
- (g) Communicating virology, epidemiology, and clinical findings associated with novel strain to local health care providers through bulletins, newsletter, e-mail, etc.
- (h) Reviewing case definition accepted by Health Canada and/or MOHLTC with health care providers
- (i) Reviewing protocols for special studies and establish dedicated teams to activate studies in collaboration with the MOHLTC

9.2 Response Phase: Communication

The Health Department will implement the communication plan as defined in the preparedness phase (see Appendix 7 Communication Plan). A critical component is liaising with the MOHLTC communications group for timely, relevant and accurate information. Key components of the communication plan are to:

- (a) Educate: Upon the declaration of an influenza pandemic, accurate, relevant and timely information shared with and released to the general public, media and healthcare providers and agencies will be the central focus for education. Messaging will address topics such as:
 - Infection control practices to prevent influenza
 - Disease information
 - Pandemic updates
 - Available services and how to access them
 - Vaccine availability
- (b) Reassure: Messages will focus on the collaboration between all levels of government and the partnership of key community agencies and businesses. The messaging will also advise of local actions taken to address the pandemic influenza.
- (c) Be Accountable: The public and the media will be kept informed, through web based updates and public information lines, of the emergency response and local impact.

The Pandemic Influenza Management Group will immediately activate the communications responses activities in whole or in part depending on the extent of illness in the community. Activities include:

- (a) Establishing the Joint Media Centre (see Appendix 5 Joint Media Centre (JMC) Equipment List)
- (b) Implementing the notification procedures and staffing schedule for the Centre
- (c) Activating the key communication network to deliver information related to the pandemic and public services being maintained throughout the Pandemic Phase
- (d) Advising all media via group fax of the establishment of the Joint Media Centre and the key communication network that will provide local information
- (e) Holding daily (or as necessary) media briefings at Regional Headquarters (JMC)
- (f) Preparing/holding regular briefings for key stakeholders, e.g., hospitals, physicians, municipal/regional council, local Members of the Legislature, first responders, school boards, etc.
- (g) Establishing information and emergency phone lines
- (h) Providing regular updates on the Health Department web site with information on the pandemic
- (i) Collaborating with Community Relations Communications staff in accordance with the Halton Region Emergency Plan
- (j) Establishing a Public Inquiry Centre in collaboration with Access Halton in accordance with the Halton Region Emergency Plan
- (k) Finalizing drafted materials.

9.3 Response Phase: Antiviral Distribution

Limited quantities of antiviral agents, if proven effective against the particular strain of virus, may be available immediately to priority groups of individuals as identified by Health Canada and/or the Ontario MOHLTC, namely:

- Treatment of persons hospitalized for influenza
- Treatment of ill health care workers
- Treatment of emergency service workers and key health decision-makers
- Prophylaxis of front line health care workers
- Treatment of ill high risk persons in the community
- Prophylaxis of remaining health care workers
- Manage outbreaks in high risk residents of institutions
- Prophylaxis of workers providing necessary community services
- Prophylaxis of high risk persons hospitalized for illnesses other than influenza
- Prophylaxis of high risk persons in the community

9.3.1 Distribution of Antiviral Agents

On receipt of the antiviral agents and eligibility criteria, the Health Department will implement the mass antiviral distribution plan, including:

- (a) obtaining necessary supplies and equipment
- (b) ensuring security of the supply of antiviral agents
- (c) communicating to priority groups the availability of and access to the antiviral agents
- (d) distributing antiviral agents to priority groups
- (e) monitoring coverage of the priority groups
- (f) monitoring effectiveness of the antiviral agents
- (g) activating surveillance for adverse reactions to antiviral agents.

9.4 Response Phase: Vaccine Distribution

Limited supplies of pneumococcal vaccine will to be available for the immunization of high risk individuals. It is unlikely that a vaccine, specific to the novel influenza strain, will be available for 3 to 4 months (and possibly as long as six to nine months) after the pandemic influenza virus is isolated.

Limited supplies of the pandemic vaccine will become available to immunization priority groups as identified by the MOHLTC (see Appendix 9 Vaccine Priority Group Projections).

Priority Group No. 1:	Healthcare workers, emergency medical services, public health workers
Priority Group No. 2:	Emergency service providers
Priority Group No. 3:	Persons at high-risk of severe or fatal outcomes following influenza infection
Priority Group No. 4:	Healthy adults
Priority Group No. 5:	Children 24 months to 18 years of age

9.4.1 Distribution of Vaccine

Once available, the Halton Region Health Department will implement the mass immunization campaign, including:

- (a) obtaining necessary supplies and equipment
- (b) ensuring security and integrity of the vaccine supply
- (c) overseeing the distribution of and/or administering the vaccine
- (d) tracking immunization coverage of the priority groups
- (e) monitoring effectiveness of the vaccine

- (f) ensuring that documentation of vaccine administration is kept current
- (g) activating surveillance for adverse vaccine events.

9.5 Response Phase: Emergency Measures

Upon declaration of an influenza pandemic, it is imperative that essential services, public safety, and security be maintained. Depending on the severity of local impact, municipal emergency plans may be activated to support communication among municipal agencies. This would include Halton Region implementing its Essential Services Plan. Pandemic Emergency Measures activities include:

- (a) Activating the Emergency Measures Plan and establishing communications with local stakeholders, first response agencies and other levels of government (see Appendix 6 Roles and Responsibilities for Emergency Measures Agencies)
- (b) Evaluating community access to essential services and modifying to address any needs
- (c) Activating outbreak directives/protocols as required
- (d) Activating the Region's mass casualty plan
- (e) Reporting on the activation of other contingency plans to ensure health and other essential services including assisting with establishing alternate health care sites as required
- (f) Implementing security measures at key locations such as Emergency Operations Centres, vaccine storage and clinic facilities, hospitals, etc.
- (g) Managing emergency sites for housing, child care, home care and emergency feeding areas (includes responding to needs of persons confined to their homes)
- (h) Assisting with mass vaccination clinics and other related activities, including the setup of clinics and the security of the vaccine
- (i) Enlisting the assistance of volunteer groups as necessary.

10.0 Recovery Phase

The recovery phase starts when the Influenza Pandemic is declared over, which may not take place until all the recurring pandemic waves have passed. It is important to evaluate the Pandemic Influenza Response Plan in preparation for the next influenza pandemic; to return services and infra-structures to normal levels as quickly as possible; and to address long term health and psycho-social needs of the community (see Appendix 3 Recovery Phase Overview and Checklist).

Activities include:

- (a) Evaluating pandemic surveillance systems
- (b) Returning to preparedness surveillance activities
- (c) Assessing impact of the pandemic on the local health care system.

- (d) Standing down the joint media centre team
- (e) Appointing a recovery media spokesperson. This may be a senior member of the Health Department other than the MOH.
- (f) Developing recovery media release for dissemination to media/posting on Health Department web site
- (g) Establishing vaccine inventories of preparedness levels and return to normal operating practices
- (h) Evaluating effectiveness of the Pandemic Influenza Response Plan and revising as necessary
- (i) Evaluating effectiveness of other emergency plans and revising as necessary
- (j) Arranging a debriefing session with key stakeholders and disseminating results to participants
- (k) Assessing remaining resources and supplies and re-establishing inventories to normal levels
- (1) Assessing staffing shortages and other economic issues.

11.0 Termination Of The Pandemic Influenza Response Plan

- (a) The Medical Officer of Health for Halton Region or alternate may terminate the Pandemic Influenza Response Plan when:
 - i. The influenza pandemic is declared over by the MOHLTC
 - ii. Local impact has diminished to a level where normal services may be resumed
- (b) The Medical Officer of Health for Halton Region or alternate shall contact the Regional Chair and advise that the Pandemic Influenza Response Plan has been terminated.
- (c) If a local emergency was declared, the Medical Officer of Health will recommend that it be terminated.
- (d) The Pandemic Influenza Management Group will notify all other response agencies and stakeholders.

12.0 Evaluation And Testing Of The Pandemic Influenza Response Plan

This Plan and related activities will be tested annually through table-top or other simulation exercises. Revisions to the Plan and appendices shall be carried out biannually or as changes are required.

13.0 References

Centers for Disease Control and Prevention. Pandemic influenza: A planning guide for state and local officials. Draft 2.1. *Atlanta*: CDC, 2000.

Communicable Diseases Network Australia New Zealand. A framework for and Australian influenza pandemic plan, Version1 *Canberra*: Commonwealth of Australia, 1999.

Canadian Influenza Pandemic Plan, March 2004

Leeds, Grenville and Lanark District Health Unit. Contingency plan for pandemic influenza. *Leeds, Grenville and Lanark District.* 2001

Ontario Health Pandemic Influenza Plan, May 2004 (working draft)

Ontario Ministry of Health and Long-Term Care. A guide to the control of respiratory disease outbreaks in long-term care facilities. *Toronto:* Government of Ontario. 2001

Region of Peel Health Department. Influenza pandemic contingency plan outline/framework. Draft 1. *Brampton*. 2001

WHO. Influenza pandemic plan. The role of WHO and guidelines for national and regional planning. *Geneva*:WHO, 1999.

References under development:

Halton Region Health Department. Attendance monitoring for child care settings and schools (under development)

Halton Region Health Department. Mass administration of antiviral agents plan (under development)

Halton Region Health Department. Mass administration of influenza vaccine plan (under development)

Halton Region Health Department. Nasopharygeal specimen collection training module (under development)

Halton Region Health Department. Halton sentinel physician program (under development)

14.0 Appendices

Appendices

	Halton Region Emergency Measures Control Group	Pandemic Influenza Steering Committee*	Halton Region Health Department
Surveillance		O Establish and maintain network for surveillance activities within Halton & neighbouring health unit areas	 O Educate health care providers about the importance of surveillance O Maintain sentinel physician program O Conduct attendance monitoring for schools and day cares O Receive and investigate reports of positive influenza results and respiratory outbreaks O Ensure LTCs are following MOHLTC respiratory outbreak guidelines Re: use of antivirals O Ensure other health care agencies have guidelines Re: use of antivirals for influenza outbreaks O Maintain heightened vigilance in screening for SRI/FRI
Communications	 O Define potential members for JMC Build infrastructure for pandemic response O Define local regional networks O Establish a defined communication strategy 	 O Designate official pandemic influenza spokesperson O Identify key target groups & appropriate media channels O Sensitize key target groups to pandemic influenza issues & impact O Develop sample messages for each stage of readiness O Develop and maintain list serves and fax distribution lists O Circulate copies of the Pandemic Influenza Response Plan O Select a local broadcast source O Design JMC 	 O Educate Health Department staff about pandemic influenza and the Health Department's role O Assist in communicating pandemic-related information to physicians, medical staff, patients and the public O Liaise with the MOHLTC on specific public education messaging
Antiviral Administration			 O Identify existing fact sheets O Develop fact sheet template for antiviral agents O Develop protocol for reporting adverse drug reactions O Develop framework for mass distribution of antiviral agents

14.1 Appendix 1: Preparedness Phase: Overview And Checklist

	Halton Region Emergency Measures Control Group	Pandemic Influenza Steering Committee*	Halton Region Health Department
			 O Project numbers of potentially eligible people and maintain a tracking system O Assess current supply
Vaccine Administration			 O Develop mass immunization campaign framework including record keeping and training O Develop guidelines for release of vaccine to other providers O Project supplies & equipment needs and negotiate retainer arrangement O Communicate & maintain AVE reporting system O Project numbers of potentially eligible people & maintain coverage tracking system O Collaborate with stakeholders to increase flu vaccine coverage through the universal influenza program and the Big Shot Challenge O Collaborate with stakeholders to increase pneumococcal vaccination rate of high risk O Explore impact on essential Health Department services if workers refuse to be immunized
Emergency Measures	O Review & revise Emergency Measures Strategy annually O Stay informed of progress of the Pandemic Influenza Steering Committee in developing the Pandemic Influenza Response Plan	 O Assist in educating current emergency measures stakeholders regarding pandemic influenza O Update & adapt current emergency measures procedures specific to pandemic influenza O Identify volunteer agencies that would assist during a pandemic O Clarify roles & responsibilities of local agencies who will respond to a pandemic influenza emergency O Identify essential community services/functions O Review contingency plans to ensure maintenance of critical community functions O Review precautions with emergency measures providers to reduce risk of exposure & limit spread of disease O Review environmental assessments of surge capacity of hospitals, alternative care sites & other facilities 	 O Assist in educating current emergency measures stakeholders regarding pandemic influenza O Update & adapt current emergency measures procedures specific to pandemic influenza O Determine essential Health Department services & establish staffing thresholds O Develop contingency plans to ensure maintenance of essential Health Department services O Review precautions with service providers to reduce risk of exposure & limit spread of disease O Conduct simulation exercise O Review & revise Emergency Measures Strategy annually O Collect estimates of current health care personnel based on priority groups

Halton Region Emergency Measures Control Group	Pandemic Influenza Steering Committee*	Halton Region Health Department
	O Provide guidance to other agencies as they develop	
	their contingency plans	
	O Conduct simulation exercise	
	O Provide roll-up numbers of priority groups to the	
	Emergency Measures Unit	

* The Pandemic Influenza Steering Committee is responsible to develop the Pandemic Influenza Response Plan in consultation with key community stakeholders and agencies.

	Halton Region Emergency Control Group	Pandemic Influenza Management Group*	Halton Region Health Department
Surveillance		 Meet with partners & stakeholders to review major elements of enhanced surveillance & modify plan as needed Monitor & disseminate bulletins regarding virologic, epidemiologic, and clinical findings associated with novel strain to local health care providers Review case definition accepted by Health Canada &/or MOHLTC with local health care providers Monitor & assess surveillance reporting & feedback mechanisms 	 O Activate & prioritize enhanced surveillance activities O Communicate surveillance findings to local health agencies O Communicate surveillance findings to MOHLTC
Communications	O Consider teleconference meetings with Emergency Control Group members to prevent potential viral transmission to key decision makers	 Review major elements of communications strategy Establish information & emergency lines Alert key target groups to the status of the pandemic Establish & activate JMC, including cross-training & procedures Advise the media of the JMC & its function Compile fact sheets media releases & templates Alert media & key target groups to the status of the pandemic Provide regular updates Advise others to activate internal emergency response plans Deploy JMC on 24/7 basis if necessary Activate local broadcast source Hold daily (or as necessary) media briefings & regular briefings for key stakeholders Monitor media coverage Update info line & website 	O Provide information to MDs, hospitals, & other health care providers re: the potential pandemic surveillance results, the expected clinical disease and clinic
Antiviral		O Review major elements of the antiviral administration	O Implement plan for mass distribution of antiviral
Administration		plan O Facilitate arrangements for the administration of antivirals, e.g., security, set-up, etc.	agents O Obtain/receive supplies and antiviral agents O Ensure security of supplies/antiviral agents O Communicate eligibility O Release antivirals as directed by MOHLTC O Monitor antiviral coverage of priority groups and adverse drug reactions O Monitor for drug resistance
Vaccine Administration		 Review major elements of the vaccine administration plan Apply national target groups and guidelines to the vaccination plan as directed by the province 	 O Communicate benefit of pneumococcal immunization to high risk groups O Offer currently available flu vaccine to those not immunized if directed by the MOHLTC

14.2 Appendix 2: Response Phase: Overview And Checklist

	Halton Region Emergency Control Group	Pandemic Influenza Management Group*	Halton Region Health Department
Emergency Measures	 Activate Halton Region's Emergency Plan Set-up emergency operations center as required Liaison with municipalities and other relevant agencies Declare/Terminate emergency Confirm Mass Casualty Response Plan Access sources of additional healthcare workers and volunteers as required 	 Convene Emergency Measures Strategy Committee Fully activate Emergency Measures Strategy Ensure communication links with other jurisdictions, levels of government & stakeholders Review needs of persons confined to their homes by choice or by the direction of the Medical Officer of Health Ensure that human resources & logistics are in place to maintain essential community services Establish alternate health care sites as required Revise infection control practices and screening tools based on provincial recommendations 	 Ensure all Health Department staff are vaccinated as per policy and direction from MOHLTC Obtain/receive supplies and vaccines Communicate eligibility for the vaccine to defined population Ensure security of vaccine & supplies Implement mass immunization campaign plan Release vaccine to other providers as per MOHLTC Monitor vaccine coverage rates, effectiveness & AVEs Recall & redistribute vaccine as necessary Activate contingency plan Ensure that staff and processes are in place to manage an increased need for Health Department services Provide resource staff member for the Social & Community Services Support Group Liaise with the Social & Community Services Department to address environmental & CD issues at evacuation centres Act as co-ordinating link for all health services agencies, including MOHLTC Ensure counselling & on-site health care are available to evacuees Ensure policies for use of mandatory isolation orders are in place Review and update national recommendations regarding containment strategies Monitor and track compliance with containment requirements
Other		O Document decisions & actions associated with the pandemic emergency	O Document decisions & actions associated with the pandemic emergency

*The Pandemic Influenza Management Group will be responsible for the overall management of the pandemic.

14.3 Appendix 3: Recovery Phase: Overview And Checklist

	Halton Region Emergency	Pandemic Influenza Management	Halton Region Health Department
Surveillance	Control Group	Group O Evaluate and revise Surveillance Strategy O Return surveillance activities to preparedness levels	 O Evaluate and revise Surveillance Strategy O Return surveillance activities to preparedness levels O Prepare summary report
Communications		 Stand down JMC Develop recovery media release Evaluate Communications Strategy Prepare summary report Evaluate 	
Antiviral Administration			 O Evaluate and revise Antiviral Administration Strategy O Return to preparedness activities and inventory O Prepare summary report
Vaccine Administration			 Evaluate and revise Vaccine Management Strategy Return to preparedness activities and inventory Prepare summary report Evaluate
Emergency Measures	 O Evaluate response O Activate recovery plan O Stand-down emergency operations centre as appropriate 	 O Evaluate and revise Emergency Measures Strategy O Assess remaining resources/supplies & re-establish to normal inventories O Manage critical incidents, facilitate access to stress/grief counselling O Activate recovery plans O Prepare summary report 	 O Evaluate and revise Emergency Measures Strategy O Assess remaining resources/supplies & re-establish to normal inventories

14.4 Appendix 4: Reportable Diseases List

Reportable Diseases 2002

The following specified Reportable Diseases (Ontario Regulation 559/91 and amendments under the Health Protection and Pormotion Act) are to be reported to the Local Medical Officer of Health:

Acquired Immunodeficiency Syndrome (AIDS) Amebiasis

- Anthrax
- **Botulism**
- **Brucellosis** Campylobacter enteritis Chancroid Chickenpox (Varicella) Chlamydia trachomatis infections Cholera
- Cryptosporidiosis
- Cyclosporiasis
 - Cytomegalovirus infection, congenital
- Diphtheria
- Encephalitis, including:
 - 1. Primary, viral (including WNV)
 - 2. Post-infectious
 - 3. Vaccine-related
 - 4. Subacute sclerosing panencephalitis
 - 5. Unspecified
- Food poisoning, all causes
- Gastroenteritis, institutional outbreaks
- Giardiasis
- Gonorrhoea
- Haemophilus influenza b disease, invasive
- Hantavirus Pulmonary Syndrome
- Hemorrhagic fevers, including:
- 1. Ebola virus disease
- 2. Lassa Fever
- 3. Marburg virus disease
- 4. Other viral causes
- Hepatitis, viral
 - 1. Hepatitis A
 - 2. Hepatitis B
 - 3. Hepatitis C
 - 4. Hepatitis D (Delta hepatitis) Herpes, neonatal
- Influenza
- Legionellosis

- Leprosy
- Listeriosis Lyme Disease Malaria
- Measles
- *
- Meningitis, acute
- 1. bacterial
 - 2. viral
 - 3. other
- Meningococcal disease, invasive Mumps Opthalmia neonatorum
 - Paratyphoid fever
 - Pertussis (Whooping Cough)
- Plague
 - Poliomyelitis, acute
 - Psittacosis/Ornithosis
- Q Fever
- Rabies
- Respiratory infection outbreaks in institutions Rubella
 - Rubella, congenital syndrome Salmonellosis
- Shigellosis
- Smallpox
- Streptococcal infections, Group A invasive Streptococcal infections, Group B neonatal
 - Steptococcus pnuemoniae, invasive
 - Syphilis
 - Tetanus
- Trichinosis
- Tuberculosis
- Tularemia Typhoid Fever
- Verotoxin-producing E.coli infection indicator conditions including Haemolytic Uraemic Syndrome (HUS)
- Yellow Fever
- Yersinosis

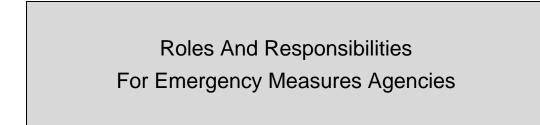
Note: Diseases marked * and all respiratory infection outbreaks in institutions should be reported immediately to the Medical Officer of Health by telephone. Other diseases are to be reported the next working day.

14.5 Appendix 5: Joint Media Centre (JMC) Equipment List

Equipment Needed in the Joint Media Centre

- 1. Workstations
- 2. Briefing tables
- 3. Main events board
- 4. Computers
- 5. Maps, detailed hard copy as well as GIS, over-lays for maps. Verify scale
- 6. Tape recorder
- 7. Clip-boards, paper, pens, pencils
- 8. Back up power system
- 9. Media accreditation cards
- 10. Detailed backgrounders on pandemic influenza
- 11. Fax machine
- 12. Photocopier
- 13. Flip charts, pens
- 14. Blank forms for releases, advisories, etc. (including Template and Sample Messages)
- 15. Name tents for new conferences
- 16. Detailed media contact list
- 17. Corporate & Pandemic fan-out list

14.6 Appendix 6: Roles And Responsibilities For Emergency Measures Agencies



In the event of pandemic influenza, the responsibilities of regional health care, volunteer and emergency service agencies are as follows:

The Halton Region:

The Halton Region Emergency Planning Co-ordinator:

- a) Participating as a member of the Regional or Municipal Emergency Control Groups in addition to the Pandemic Emergency Measures Committee
- b) Representing the Pandemic Emergency Measures Committee as a member of the Pandemic Influenza Management Group
- c) Activating the Pandemic Emergency Measures Strategy when required upon notification from the Pandemic Influenza Management Group
- d) Ensuring the appropriate Emergency Operations Centre is set up and operational and establishing security if required
- e) Liaising with the Pandemic Influenza Management Group and also the Communications, Surveillance and Anti-viral/Vaccine Delivery Committees
- f) Liaising with other agencies/organizations as required
- g) Acting in a resource and advisory capacity to the Pandemic Influenza Management Group and providing guidance and assistance to the various subcommittees, groups and departments
- h) Reviewing and revising the Pandemic Emergency Measures Strategy as required.

The Halton Region Health Department:

- a) Providing advice, expertise and staff resources toward the identification, monitoring and control of environmental hazards and communicable diseases
- b) Providing a resource staff member for the Social & Community Services Support Group
- c) Acting as the lead agency in emergencies involving communicable disease
- Activating and terminating the <u>Halton Region Health Department Emergency</u> <u>Health Plan</u> in its entirety or any part thereof, as required by the Medical Officer of Health

- e) Liaising with the Halton Region Social & Community Services Department to address environmental and communicable disease issues at evacuation centres
- f) Working with the Red Cross and St. John Ambulance in evacuation centre(s)
- g) Acting as the co-ordinating link for all health services agencies, including the MOHLTC, in responding to the emergency
- h) Providing community advisories on public health issues
- i) Liaising with Community Care Access Centre of Halton (CCAC) to ensure coordination of care of residents requiring special medical care at home and in evacuation centres
- j) Ensuring all staff are vaccinated, if eligible
- k) Developing a contingency plan to maintain essential services in situations of significant staff absenteeism.

The Halton Region Social & Community Services Department:

- a) Activating the Regional Emergency Evacuation Centre Plan in its entirety or any part thereof, by activating the notification process outlined within the Evacuation Centre Plan
- b) Providing assistance for any person or persons in need of food, shelter or clothing during an emergency
- c) Co-ordinating the process for receiving and registering persons displaced by the emergency, reuniting them with families or dispatching them to evacuation centres or other suitable accommodation
- d) Providing sufficient Halton Region Social & Community Services staff for the Social & Community Services Support Group
- e) Providing personnel to staff evacuation centre(s) as feasible and as required by the Canadian Red Cross Society in Halton Region
- f) Providing co-ordination and direction to the various volunteer groups identified in this Plan
- g) Where applicable, ensuring provision of emergency income assistance for those persons affected by an evacuation within the Halton Region
- h) Establishing and co-ordinating effective communication services, including two-way radio as a back-up system, at and between key locations, as required
- i) In conjunction with the Health Department, ensuring that counselling and on-site health care are available to evacuees both during and after the emergency as required
- j) Liaising with the Halton Region Health Department, the Halton Regional Police Services, the Halton District School Board and the Halton Catholic District School Board and any other departments or agencies as required
- k) Implementing of the <u>Allendale Emergency and Relocation Plan</u>, when required

1) Developing a contingency plan to maintain essential services in situations of significant staff absenteeism.

The Halton Region Purchasing Services Section

- a) Working with the Halton Co-operative Purchasing Group to ensure the "Emergency Needs Source Book" is current
- b) Identifying additional sources of supply that may be considered from other government and local public agencies
- c) Working with the various agencies/organizations to confirm the list of supplies and services required and refine the list to meet the needs of the pandemic situation
- d) Confirming the suppliers for "specialized" items required
- e) Liaising with local hospitals, CCAC and Ambulance Services to determine inventories and identify what resources may be available
- f) Developing a contingency plan to maintain essential services in situations of significant staff absenteeism.

The Halton Region Asset Management Services:

- a) Setting up the Regional Emergency Operation Centre and the Region's Vaccination Centre
- b) Supporting meeting space needs and other requirements of the Emergency Measures Committee
- c) Ensuring Regional facilities are secure during times of staffing shortages
- d) Ensuring maintenance of building systems to support vaccine storage
- e) Supporting other Regional facilities as required
- f) Developing a contingency plan to maintain essential services in situations of significant staff absenteeism.

The Halton Region Emergency Medical Services (EMS):

- a) Adopting measures to prevent the spread of the outbreak
- b) Ensuring all staff are vaccinated, if eligible
- c) Transporting the ill and injured to a medical facility
- d) Providing assistance at mass emergency field site operations (if applicable)
- e) Co-ordinating staff resources to accommodate shortage
- f) Providing appropriate support to other related agencies in staffing crisis, where operationally applicable
- g) Co-ordinating with other agencies in the distribution of the ill

- h) Maintaining liaison with Central Ambulance Communications Centre in the appropriate distribution of patients
- i) Assisting with the set-up of "alternate health care" sites
- j) Maintaining liaison with other EMS and Emergency Services to co-ordinate the sharing of information and/or resources
- k) Developing a contingency plan to maintain essential services to deal with situations of significant staff absenteeism.

The Halton Region Police Services

- a) Notifying the Commissioner of Social & Community Services (or alternate) of the existence of an emergency in accordance with the appropriate Regional or Municipal Emergency Notification System
- b) Selecting {in conjunction with School Board(s)} and opening an evacuation centre (noting that a high school is preferable), and notifying the Commissioner of Social & Community Services of its location, in the event of a sudden and urgent evacuation
- c) Designating and opening appropriate evacuation centre(s) through the School Board(s), in consultation with the Commissioner of Social & Community Services, in the event of a planned evacuation
- d) Providing policing services in evacuation centre(s), as required and as feasible
- e) Maintaining the security of the vaccination clinics, as required and liaising with the Health Department on matters related to the security of the vaccine
- f) Ensuring all staff are vaccinated, if eligible
- g) Liaising with other Police Services to co-ordinate the sharing of information and/or resources
- h) Developing a contingency plan to maintain essential services in situations of significant staff absenteeism.

Municipal Fire Services:

- a) Providing fire protection services
- b) Providing emergency medical services within the Tiered Medical Response Agreements
- c) Developing a contingency plan to maintain essential services in situations of significant staff absenteeism due to pandemic influenza
- d) Activating the Fire Department and/or Municipal Emergency Plans as required
- e) Liaising with other Municipal Fire Departments, Regional Police and Ambulance for mutual-aid requirements
- f) Adopting "Standard Precautions" for infection control to prevent the spread of the outbreak

- g) Ensuring all staff are vaccinated, if eligible
- h) Maintaining liaison with other Fire Departments, Emergency Services, Provincial Ministries and Fire Associations for the co-ordination of information and/or resources
- i) Assessing the necessary resources and supplies to deal with the pandemic influenza emergency and maintaining the necessary inventories
- j) The Municipal Fire Chiefs are also the Emergency Planning Committee Chairs for their respective communities and have the added responsibility to communicate information to their Emergency Control Group and activate the Municipal Emergency Plan if appropriate.

Hospitals:

- a) Activating and terminating the Hospital's Emergency Plan
- b) Providing advice and/or assistance to the Pandemic Influenza Management Group on matters pertaining to emergency health care
- c) Ensuring hospital facilities are prepared to prevent the spread of influenza contamination
- d) Ensuring the hospital facilities are prepared to handle the potential patient overload
- e) Maintaining the co-ordination of efforts and information with other area hospitals
- f) Assisting in communicating pandemic-related information from the Medical Officer of Health, the Ontario Hospital Association and the MOHLTC to physicians, medical staff, patients and the public
- g) Ensuring all staff are vaccinated, if eligible
- h) Implementing contingency plans to deal with staffing shortages
- i) Assisting to establish alternate health care sites as required
- j) Establishing temporary morgues
- k) Assessing the necessary resources and supplies to deal with the pandemic influenza emergency and maintaining the necessary inventories.

Long Term Care:

- a) Reporting and liaising with the MOHLTC, Medical Officer of Health and the Health Department
- b) Activating contingency plans to prevent the spread of influenza/infection
- c) Immunizing and/or administering antiviral agents to residents, staff and volunteers, if eligible
- d) Activating contingency plans to deal with staff shortages, loss of essential services and supplies

- e) Maintaining communications with staff, residents, family members and volunteer on the status/situation pertaining to the influenza pandemic
- f) Assessing the necessary resources and supplies to deal with the pandemic influenza emergency and maintaining the necessary inventories.

Supportive Housing Programs:

- a) Working in conjunction with contracted agencies to ensure that they have a solid plan in place which includes the provision of adequate staff and supplies to provide contracted services and also includes "Standard Precautions" for infection control to prevent the spread of influenza contamination
- b) Developing a priority system to identify low high risk clients
- c) Developing plans in conjunction with contracted agencies outlining the provision of priority services in cases of staff absenteeism (various plans to be developed depending on staff resources)
- d) Ensuring that essential services are maintained through the cross training of staff
- e) Communicating with families of seniors to ensure adequate provision of food/water for those confined to their homes
- f) Liasing with other Supportive Housing programs/partners in order to co-ordinate efforts, share information and/or resources
- g) Liasing with CCAC, nursing agencies, pharmacies and volunteers to ensure clients are receiving appropriate services
- h) Ensuring all staff are vaccinated, if eligible
- i) Acting as an advocate for those seniors with no family members during the emergency situation
- j) Developing plans in conjunction with suppliers regarding the provision of food services
- k) Developing a plan for community respite services to communicate to potential clients in case of service disruption and/or shut down.

The Canadian Red Cross:

The aim of the Red Cross Society is to alleviate human suffering and to ensure that those people or communities affected or who are the most likely to be affected by emergencies, disasters of conflicts receive assistance and protection to reduce their vulnerability and develop their capacity to effectively cope with these situations.

The Red Cross is a planned emergency response organization designed to provide those basic services considered to be essential for the immediate and continuing wellbeing of persons affected by disaster. The Red Cross offers assistance in the provision of urgent, basic, emergency needs of shelter, food, clothing and personal services as well as family reunification (registration and inquiry).

Red Cross assistance is provided by a wide network of trained volunteers and staff, augmented by new volunteers who can be recruited quickly and given selective training.

The Canadian Red Cross Society is responsible for:

- a) Attempting to confirm the situation with the Co-ordinator of the Social & Community Services Support Group or alternate upon receiving information regarding a major incident. All Red Cross Branches will be on standby, pending further instruction from the Co-ordinator - Social & Community Services Support Group or alternate.
- b) Maintaining evacuation centres with assistance from the Social & Community Services Support Group in local municipalities as required
- c) Notifying and providing sufficient Red Cross volunteers to manage and staff evacuation centre(s) in accordance with this Plan
- d) Arranging for the provision of resources which are required for the care and feeding of people and pets in an evacuation centre(s)
- e) Operating the registration and inquiry service
- f) Notifying and co-ordinating other volunteer agencies required to assist in evacuation centre(s) operations
- g) Taking direction from the Halton District School Board and/or the Halton Catholic District School Board representative(s) regarding the maintenance, use, and operation of school facilities

St. John Ambulance:

The mission of St. John Ambulance is "To enable Canadians to improve their health, safety and quality of life by providing training and community service."

St. John Ambulance Community Service Volunteers are trained in a minimum Standard First Aid and CPR (adult, child and infant) and may have additional training in patient transportation, automatic external defibrillation, oxygen administration and health care techniques.

St. John Ambulance also has a number of Auxiliary Members who do not have first aid training, but would be available during a disaster to respond to the need for additional help in maintaining essential social services.

In times of a disaster or major emergency, St. John Ambulance will provide primary patient care to disaster victims at reception centres and to volunteer personnel who are involved in the clean-up, repair and rebuilding operations.

Upon being notified by the Co-ordinator of the Social & Community Services Support Group or alternate, the St. John Ambulance can be responsible for:

- a) Providing first aid care in each of the evacuation centre(s) and other secondary sites as required upon being notified of the location of the centre
- b) Taking direction from the Halton Region Health Department staff in the provision of first aid in the centres on a co-operative basis.
- c) Liaising with the Ambulance Service(s) for the transportation of any persons requiring hospitalization
- d) Helping in the maintenance of auxiliary hospitals sites through both first aid and home care skills
- e) Assisting at vaccination clinics with the administration of vaccinations, and the organization of people. (*Note: National St. John Ambulance will not release the Brigade Training System for Vaccinations, until the event of a Pandemic, at which point training will begin.*)
- f) Helping to maintain other essential services where the current level of training of the member meets the needs of the position.

The Salvation Army:

To fulfil its Mission Statement – to supply basic human needs, provide personal counselling..." The Salvation Army will provide personal services during a disaster recovery phase, utilizing its officers, employees, volunteers and emergency vehicle as follows:

- a) Providing a mobile kitchen to serve meals to victims and/or responders
- b) Providing clothing and furniture to victims of a disaster
- c) Listening, counseling and visiting individuals and families who need help
- d) Providing emotional and spiritual support for individuals and families
- e) Being available to help as needed
- f) The local Salvation Army Corps in each municipality may be able to assist in accepting and distributing donated goods.

Victorian Order of Nursing:

The Victorian Order of Nursing (VON) will fulfil its mission of developing and delivering high quality community health and support services in the Region of Halton in collaboration with consumers, planners, funders and other service providers by:

a) Delivering high priority services such as Visiting Nursing in the home and clinic setting, Home/Personal Support Services in the home

- b) Deploying care providers (trained staff and volunteers) to provide services to clients with critical needs as resources permit. For example, VON's specially trained hospice volunteers could be deployed to support increased numbers of bereaved and frightened family members. VON's volunteers trained to work with clients with dementia could be deployed to provide support/respite to families in their homes. Friendly Visiting volunteers could be deployed to monitor the well being of frail, at risk adults living alone in their homes.
- c) Activating the priority ranking system that identifies clients with the greatest needs
- d) Monitoring closely the health and attendance of employees to ensure protection from undue exposure while delivering required services
- e) Activating the VON Halton Emergency Preparedness Plan as needed. Plans to maintain key business processes would be implemented (client intake, scheduling, client services, supervision, discharge, health and safety, billing, and internal/external communication)
- f) Working with other health and related agencies in Halton Region to deliver health and support services as needed in a variety of alternate settings
- g) Providing information and support to homebound clients that would assist in ensuring that basic needs for nutrition, contact, etc., would be met
- h) Communicating with family members of homebound clients and advocate on their behalf in relation to basic needs
- i) Maintaining strong liaison with the Community Care Access Centre (CCAC) and other agencies to ensure that care is delivered to clients with the greatest needs and that scarce resources are utilized efficiently and effectively

Volunteer Radio Services Communication Groups:

Amateur radio operators are affiliated with each local Red Cross group, and if required will be notified by the Red Cross Director of Operations.

If additional communications are required, amateur radio personnel will provide a backup radio communication system using two-way radio at and between key locations. These locations may include evacuation centre(s), the local Canadian Red Cross Society Branch Headquarters, the Social & Community Services Support Group, and any other required locations.

School Boards (The Halton District School Board and the Halton Catholic District School Board):

- a) Providing any school (as appropriate and available) for use as an alternate health care site, vaccination centre and/or reception centre
- b) Adopting "Standard Precautions" for infection control to prevent the spread of the outbreak
- c) Developing a contingency plan to maintain essential services to deal with situations of significant incidents of staff absenteeism due to pandemic influenza.

Mortuary Services:

- a) Burying the dead in accordance with the requirements of the Coroner, Halton Regional Police and the Public Health Inspector
- b) Liaising with other mortuaries and cemeteries to ensure prompt burial services.
- c) Assisting to establish temporary morgues.

14.7 Appendix 7: Communication Plan

Key Messages For The Communication Plan

The communication plan of the Pandemic Influenza Response Plan will address unique and common questions. The following examples focus on two of the phases, i.e. Preparedness and Response, in order to provide a sense of themes which may emerge. The examples are structured as follows:

- Possible questions
- Focus of key messages
- Examples of key messages

While key messages will be required at all states, message development will be heightened at the Response Phase.

Preparedness Phase:

(a) Possible Questions

- What is pandemic flu?
- When will it occur?
- How will it affect me?
- What can I do to prepare?
- Who do I contact for more information?
- (b) Key Messages Focus On:
 - General information re pandemic flu
 - Infection control practices
 - Preparation by all stakeholders
- (c) Key Messages
- Pandemic Flu is a world-wide outbreak of flu. Pandemic is different from regular flu because it is a new virus that has not yet been identified. Regular flu strains are generally identified before the flu season arrives.
- It happened three times this century and scientists are predicting it will happen again.
- It could occur at anytime.

- Pandemics occur in waves. The virus might be active for a few months, disappear for a few months and then return for a few months.
- It is estimated that up to 262,000 people in Halton could be affected by a pandemic flu.
- Our Health Care system, local businesses and families will be affected as we respond to the demands that result from the number of people in Halton who will become sick.
- If available and effective, anti-viral medication could prevent/treat pandemic flu.
- If and when available, flu vaccinations will be used to prevent pandemic flu.
- The Halton Region Health Department, local municipalities, local hospitals, first response agencies (Police, Fire, Ambulance) and local businesses are working together to prepare for a pandemic flu. These partners have been working together since June 2001 to develop the contingency plan that will be used to respond to pandemic flu in Halton.
- If you are at risk for pneumonia get your pneumonia shot. The most common complication of flu is bacterial pneumonia.
- There are other things you can do to reduce your risk of becoming sick from flu.
 - You can prepare by getting your flu shot annually.
 - Practice good hygiene (cover your mouth and nose when sneezing or coughing).
 - Wash you hands frequently.
 - Eat healthy foods (keep your immune system as healthy as possible).
 - If you are sick, stay at home.

Response Phase

(a) Possible Questions

- Who is at risk?
- What can I do to reduce my risk?
- Who should I go to for help?
- Who is eligible for anti viral/vaccine?
- Will I have to pay? Will my insurance cover the cost?
- Who determines eligibility?
- Where do I go for more information?
- (b) Key Messages Focus On:
 - Prevention/infection control practices
 - Anti viral/vaccine eligibility, status, access

- Essential services impact of outbreak
- (c) Key Messages:
 - Anyone can get sick from pandemic flu. This is a new virus, to which no one is immune.
 - You can reduce your risk by:
 - Practising food hygiene.
 - Cover your mouth and nose when you sneeze or cough.
 - Throw your tissues in the garbage.
 - Wash you hands frequently.
 - Eat healthy foods. Keep your immune system fit.
 - Do not shake hands.
 - Avoid crowds if you can.
 - If you are sick, stay at home.
 - The Federal and Provincial Governments have identified who is eligible to receive anti-viral medication and the pandemic flu vaccine.
 - If you are (identify eligibility) you can receive anti-viral medication to prevent or treat pandemic flu.
 - Essential workers in healthcare, police and ambulance services will receive the vaccine as soon as it is available. By vaccinating essential service workers, we can ensure that essential services will continue to be provided to the community during Pandemic flu. We need to protect them so they can help you.
 - The vaccine will take 6 9 months to produce. Once it is ready, the Health Department will operate clinics to give the vaccine to those who are eligible to receive it.
 - There will be a limited supply of anti-viral medication and vaccine to respond to pandemic flu. Pandemic flu is world-wide and companies that can produce the vaccine in Canada can only produce what their capacity allows.
 - Viral infections are not treatable with antibiotics flu is a viral infection. Do not ask your doctor for antibiotics to treat pandemic flu.
 - Please do not use antibiotics as a means of dealing with pandemic flu. Antibiotics cannot prevent or treat viral infections and may cause harm.
 - If you are at high risk of developing pneumonia please get your pneumonia shot. Pneumonia is a serious complication of flu.

Priority Groups	Projection Numbers for Halton
Treatment of persons hospitalized for influenza	To Be Determined*
Treatment of ill healthcare workers	To Be Determined*
Treatment of emergency service workers and key health decision-makers	To Be Determined*
Prophylaxis of front line health care workers	To Be Determined*
Treatment of ill high risk persons in the community	To Be Determined*
Prophylaxis of remaining healthcare workers	To Be Determined*
Manage outbreaks in high risk residents of institutions	To Be Determined*
Prophylaxis of workers providing necessary community services	To Be Determined*
Prophylaxis of high risk persons hospitalized for illnesses other than influenza	To Be Determined*
Prophylaxis of high risk persons in the community	To Be Determined*

14.8 Appendix 8: Antiviral Priority Groups Projections

* As of August 2004, the calculations for the projected numbers of individuals in each priority group was still to be determined.

Priority	Draiaatad	Rationale	Subgroups
•	Projected	Kationale	Subgroups
Group	Numbers		
#1. Healthcare	TBD*	The healthcare and public health sectors are the first	Healthcare workers in:
workers,		line of defence in a	Acute care hospitals
emergency		pandemic. An effective	Long-term care facilities/nursing
medical services,		response depends on	homes
public health		maintaining these services.	Private physicians' offices
workers		maintaining these services.	• Home care and other community
workers			care facilities
			Public health offices
			• Ambulance and paramedic services
			Pharmacies
			Laboratories
#2	TBD*	An effective response	• police
Emergency		depends on maintaining	• fire-fighters
service providers		necessary community services	emergency response decision
		sei vices	makers
			• utility workers
			• funeral service/mortuary personnel
			• people who work with
			institutionalized populations (e.g.
			corrections)
			• people employed in public
			transportation and transportation of
			essential goods (e.g. food)
#3	TBD*	Individuals most likely to	• Persons in nursing homes, long-
Persons at high		experience sever outcomes	term care facilities, homes for the
risk of severe or		from influenza should be	elderly or other similar settings
fatal outcomes		vaccinated. These are based	• Persons with high risk medical
following influenza		on the high risk groups identified by NACI.	conditions living independently
infection		Identified by NACI.	• Persons 65 and older living
Infection			independently
			• Children 6 to 23 months of age
			Pregnant women
#4	TBD*	Although health adults are at	
Healthy adults		lower risk of developing	
		severe outcomes from	
		influenza, they make up the	
		majority of the work force.	
		Their absence in large numbers could have a	
		significant economic impact	
		and cause societal	
		disruptions.	
#5	TBD*	Although children (over age	
Children 24		2) and youth are the least	
months to 18		likely to experience severe	
years of age		outcomes from influenza,	
,		they play a major role in the	
		spread of the disease.	
		spread of the disease.	

14.9 Appendix 9: Vaccine Priority Groups Projections

14.10 Appendix 10: Tables of Federal, Provincial and Local Responsibilities during Preparedness, Response and Recovery to a Pandemic Influenza

	pearance of a New Influenza Strain in		1
Response Component	Federal Level	Provincial Level	Local Level
Surveillance	Alert those currently involved in influenza surveillance (e.g., PIC, CCMOH, CPHLN, FluWatch, Local HUs)	Alert those currently involved in influenza surveillance (e.g. HUs, laboratories, emergency physicians)	Confirm that all inter-pandemic surveillance activities (via FluWatch) are operating optimally
	Confirm that all inter-pandemic surveillance activities (via FluWatch) are operating optimally	Disseminate Health Canada information, adding provincial information	
	Share surveillance information	Ensure routine provincial surveillance activities are operating efficiently	
		 Confirm that: all inter-pandemic surveillance activities (via FluWatch) are operating optimally public health laboratories have the capability to isolate and subtype influenza virus 	
Vaccines	Confirm that plans to acquire, store and distribute vaccine are in place/up-to-date	 Confirm that: high-risk groups have received annual influenza vaccination plans to acquire, store and distribute vaccine are in place/up-to-date Promote pneumococcal vaccination of NACI "high-risk" groups (to reduce the back of the ba	 Confirm that: high-risk groups have received annual influenza vaccination plans to store and distribute vaccine are in place/up-to-date Promote pneumococcal vaccination of NACI "high-risk" groups (to reduce the incidence and
Health Services		incidence/severity of secondary bacterial pneumonia).	severity of secondary bacterial pneumonia) Confirm:
ficatul Selvices		 estimates of health care personnel capacity are current (i.e., estimated number of HCW by type and by work setting rosters of available workers/volunteers by skill/competencies are in place/up-to-date information about appropriate infection control precautions is in place 	 estimates of health care personnel capacity are current (i.e., estimated number of HCW by type and by work setting rosters of available workers/volunteers by skill/competencies are in place/up-to-date health care workers are aware of appropriate infection control precautions Provide roll-up numbers to the EMU

Phase 0, Level 1: A	Phase 0, Level 1: Appearance of a New Influenza Strain in a Human Case			
Response Component	Federal Level	Provincial Level	Local Level	
Emergency Response		Notify emergency service managers of virus report and current monitoring activities.		
		Ensure emergency health service providers are aware of infection control precautions		
Public Health Measures		Confirm that criteria for implementing public health measures are in place	Confirm that criteria for impending public health measures are in place	
Communications	Work wit partners to improve the local, provincial/territorial and federal informatics infrastructure to support the potential information campaign (hardware and software) Respond to media and public enquiries about international situation.	 Ensure all educational material on influenza for the public and health care workers is up to date Continue: frequent communication with Health Canada's Health Emergency Communication Network to coordinate messaging to use existing communications channels to update the field on the international situation (e.g., provider section of MOHLTC website, teleconferences, mailer system) Work with partners to improve the local, provincial/territorial and federal informatics infrastructure to support the potential information campaign (hardware and software) Refer media and public enquiries about international situation to Health Canada 	Work with partners to improve the local, provincial/territorial and federal informatics infrastructure to support the potential information campaign (hardware and software)	

Phase 0, Level 2: H	Phase 0, Level 2: Human Infection Confirmed (in 2 or More Cases)				
Response Component	Federal Level	Provincial Level	Local Level		
Surveillance	Monitor of evolving situation Develop common F/P strategy for the	Develop common F/P strategy for the communication of epidemiological data			
	communication of epidemiological data	Disseminate epidemiological data			
	Disseminate epidemiological data	Acquire (when available) and disseminate any laboratory testing materials (i.e., reagents)			
	Acquire (when available) and disseminate any laboratory testing materials (i.e., reagents)				
Vaccines	Assess current inventory	Confirm nodal distribution points and vaccination locations in each area	Confirm nodal distribution points and vaccination locations in each area		
	Confirm nodal distribution points and vaccination locations in each area	Review mass vaccination program	Ensure list of currently qualified vaccinators and potential vaccinators is up to date		
	Review/update (if necessary) educational materials on administering vaccines	Address any issues that may impede rollout of a mass immunization program	Review mass vaccination program		
		Review/update (if necessary) educational materials on administering vaccines	Address any issues that may impede rollout of a mass immunization program		
			Review/update (if necessary) educational materials on administering vaccines		
Antivirals	Assess current supply (drugs, formulations, and expiry dates)	Assess current supply (drugs, formulations, and expiry dates)	Assess current supply (drugs, formulations, and expiry dates)		
	Confirm plans for appropriate use of existing supplies	Confirm plans for appropriate use of existing supplies	Confirm plans for appropriate use of existing supplies		

Response component	Federal Level	Provincial Level	Local Level
Health Services	Review/revise guidelines	 Confirm: legal/insurance issues that may impede recruitment and use of active and retired HCWs and volunteers have been addressed with licensing bodies agreements with licensing bodies for expedited licensing and indemnification of non-traditional, retired or other non-licensed health care workers are in place Prepare/update communications defining: the extent of care that health care workers/volunteers can perform, licensure protocol, and indemnification 	
Emergency Response	Confirm plans are in place	Review results of any previously conducted simulation exercises and consider what (if any) significant changes have occurred since the exercise was conducted and confirm that corrective actions resulting from exercises have been taken Update all staff about pandemic influenza	Review results of any previously conducted simulation exercises and consider what (if any) significant changes have occurred since the exercise was conducted and confirm that corrective actions resulting from exercises have been taken
Public Health Measures	Assess resources	Review staffing requirements to implement a pandemic response including mass immunization clinics, public health measures, and public education Consider delaying or contracting out introduction of public health programs that may not be adequately resources if situation evolves into a pandemic	Update all staff about pandemic influenza Review staffing requirements to implement a pandemic response including mass immunization clinics, public health measures, and public education Consider delaying or contracting out introduction of public health programs that may not be adequately resources if situation evolves into a pandemic

Phase 0, Level 2: H	Phase 0, Level 2: Human Infection Confirmed (in 2 or More Cases)			
Response Component	Federal Level	Provincial Level	Local Level	
Communications	Maintain ongoing communications with partners and stakeholders	 Refine/modify F/P communication plans and the MOHLTC Crisis and Risk Communications Response Plan as needed and ensure consistency with the emergency preparedness and response framework. Keep Crisis Communication Team on standby for public education and information, media relations, stakeholder and health care provider communications, web communications, internal communications, and communications with health partners. Stage background technical briefings for government, media, external experts and other stakeholders. Ensure Telehealth and EMU call center staff have up to date information rapid 24 hour translation capacity is in place and that all responders know how to access this resource 	Establish when, who and what to communicate to the public and other audiences, with emphasis on existing influenza prevention messages and WHO/Health Canada updates on international situation	

	uman Transmission Confirmed		
Response Component	Federal Level	Provincial Level	Local Level
Surveillance	Heighten enhanced surveillance systems	Increase current surveillance activities	Increase current surveillance activities
	Develop any new/updated case definitions Implement border-based surveillance (depending on origin of cases), including notifications to ill and well travellers Confirm the information to be collected on cases and screening measures and how this will be done (e.g., data collection forms, database issues, data flow)	 Implement: any new/updated case definitions border-based surveillance (depending on origin of cases), including notifications to ill and well travellers emergency room surveillance (especially in areas known to receive a lot of travelers from affected areas) Ensure surveillance data is being collected and forwarded to appropriate authorities Maintain heightened vigilance in screening for appropriate authorities 	Implement and test emergency room surveillance (especially in areas known to receive a lot of travellers from affected areas) Ensure surveillance data is being collected and forwarded to appropriate authorities Maintain heightened vigilance in screening for SRI/FRI
Vaccines	Review and modify, if necessary, contingency plans for storage, distribution, and administration of influenza vaccine Confirm and communicate priority groups for immunization Reinforce promotion of current (non-novel virus) influenza vaccination (to decrease the likelihood of re-assortment between the currently circulating strains and the novel strain	SRI/FRIReview and modify, if necessary, contingency plans for storage, distribution, and administration of influenza vaccineEnsure staff are trained and infrastructure is in place to record immunizations, including requirements for a two-dose immunization program (i.e. re-call and record-keeping procedures)Review estimates of the number of people in each of the priority groups for vaccination (i.e., high risk groups, health care workers, emergency service workers, specific age groups) and access strategiesReinforce promotion of current (non-novel virus) influenza vaccination (to decrease the likelihood of re- assortment between the currently circulating strains and the novel strain	Review and modify, if necessary, contingency plans for storage, distribution, and administration of influenza vaccine Ensure staff are trained and infrastructure is in place to record immunizations, including requirements for a two-dose immunization program (i.e. re-call and record-keeping procedures) Review estimates of the number of people in each of the priority groups for vaccination (i.e., high risk groups, health care workers, emergency service workers, specific age groups) and access strategies Reinforce promotion of current (non-novel virus) influenza vaccination (to decrease the likelihood of re-assortment between the currently circulating strains and the novel strain

Response Component	Federal Level	Provincial Level	Local Level
Antivirals	Inventory available supplies	Inventory available supplies	Inventory available supplies
	Review and modify, if necessary, contingency plans for storage, distribution and administration of antiviral drugs through public health and other providers to nationally defined high-priority target groups Review/revise recommended priority groups and plans for antiviral use based on available epidemiological data	Review and modify, if necessary, contingency plans for storage, distribution and administration of antiviral drugs through public health and other providers to nationally defined high-priority target groups Review estimates of the number of people within the province who fall within each of the priority groups for receipt of antiviral drugs (i.e., high risk groups, health care workers, emergency service workers, specific age groups) and access strategies. Ensure staff are trained and infrastructure is in place to track who receives antiviral for the purpose of treatment and prophylaxis	Review and modify, if necessary, contingency plans for storage, distribution and administration of antiviral drugs through public health and other providers to nationally defined high-priority target groups Review estimates of the number of people within the province who fall within each of the priority groups for receipt of antiviral drugs (i.e., high risk groups, health care workers, emergency service workers, specific age groups) and access strategies. Ensure staff are trained and infrastructure is in place to track who receives antiviral for the purpose of treatment and prophylaxis
Health Services	 Review and modify as required: screening tool national recommendations for clinical management of cases Implement real-time mortality surveillance 	 Review and modify as required: screening tool national recommendations for clinical management of cases guidelines for prioritizing health care needs and service delivery, accessing resources and implementing infection control measures during a pandemic. Confirm readiness, including: plans to mobilize human and financial resources up to date roster information/efforts to promote rosters health emergency data sets and communications mechanisms medications, supplies, equipment one-month stockpile of personal protective equipment the number & type of health care facilities, and capacity: hospital beds, ICU beds, swing beds, 	 Update as required: screening tool and procedures clinical management of cases guidelines for prioritizing health care needs and service delivery, accessing resources and implementing infection control measures during a pandemic Confirm readiness: plans to mobilize human and financial resources up to date roster information/efforts to promote rosters health emergency data sets and communications mechanisms medications, supplies, equipment one-month stockpile of personal protective equipment the number & type of health care facilities, and capacity: hospital beds, ICU beds,

Response Component	Federal Level	Provincial Level	Local Level
		 LTC beds with enhanced level of care, emergency department, ventilatory capacity, oxygen supply, antibiotic supply contingency plan 	 swing beds, LTC beds with enhanced level of care, emergency department, ventilatory capacity oxygen supply, antibiotic supply contingency plan
		Alert voluntary organizations which would assist during a pandemic	Alert voluntary organizations which would assist during a pandemic
		 Ensure: infection control and surveillance standards are uniformly applied appropriate occupational health and safety measures are in place and communicated. 	 Ensure: infection control and surveillance standards are uniformly applied appropriate occupational health and safety measures are in place and communicated.
		Review health emergency data information to assess provincial and local demand on services Review and modify PTAC logarithms to reflect current information	Distribute detailed local and facility-level plans for providing health services during a pandemic, includin the type of care to be delivered at different health cars settings and the triage across sites; human resource, material and financial resource needs, and directions
		Establish Health Care Stakeholder Council of key provincial health stakeholder organizations to provide advice and assistance in disseminating information during a pandemic.	regarding prioritizing patient care. Review health emergency data information to assess provincial and local demand on services
		 Disseminate: strategy for tracking of recovered, presumably immune, cases 	Review and modify PTAC logarithms to reflect curre information
		 strategy for collecting/monitoring data on health care service use/demands information on medical supply stockpiles and potential need and sources of additional supplies 	 Disseminate: strategy for tracking of recovered, presumably immune, cases strategy for collecting/monitoring data on health
		Implement real-time mortality surveillance	 care service use/demands information on medical supply stockpiles and potential need and sources of additional supplies
			Implement real-time mortality

Response Component	<i>uman Transmission Confirmed</i> Federal Level	Provincial Level	Local Level
Emergency Response		Confirm/update estimates of numbers of emergency services workers including health care workers, funeral services, and leaders (political leaders, managers of response teams) essential to pandemic response are current and prepare lists for dissemination	Ensure list of necessary community services (and corresponding personnel) whose absence would pose a serious threat to public safety or would significantly interfere with the ongoing response to the pandemic, is up to date and available for distribution Confirm/update estimates of numbers of emergency services workers including health care workers, funeral services, and leaders (political leaders, managers of response teams) essential to pandemic response are current and prepare lists for dissemination
Public Health Measures	Review/modify national recommendations for public health management of cases and other measures	Review/update provincial recommendations for public health management based on national recommendations Ensure adequate resources are available to implement recommended public health measures including isolation of cases	Review/update provincial recommendations for public health management based on national recommendations Ensure adequate resources are available to implement recommended public health measures including isolation of cases

Response Component	man Transmission Confirmed Federal Level	Provincial Level	Local Level
Communications	Work with provinces to develop	Work with Health Canada to establish messages for the	Work with MOHLTC on specific public
	messages for the five key audiences	five key audiences	education messaging
	Review/revise educational	Review/revise public health educational materials	Participate in Crisis Communication health
	and guidance materials for	emphasizing infection control in homes, schools, places of work	partner network
	public health partners		Implement plans/mechanisms for ongoing
	(specifically	Activate Crisis Communications health partner network	communications with all relevant audiences,
	provincial/territorial and	(i.e., MOHLTC, Health Canada, public health units, health associations)	including media, key opinion leaders, stakeholders, employees.
	local health departments who		
	will be on the front lines with	Work with Public Health on specific provincial public	
	respect to prevention and	educational messaging	
	public health measures), the	Provide regular Important Health Notices and website	
	general public; some	postings of status updates,	
	documents for the public	including new/updated case definitions and clinical guidelines	
	should emphasize infection		
	control in homes, schools,	Implement plans/mechanisms for ongoing	
	places of work	communications with all relevant audiences, including media, key opinion leaders, stakeholders, employees	
	Activate Crisis Communications network		

Response Component	Federal Level	breaks in at least one country and spread to Provincial Level	Local Level
Surveillance	Define clinical spectrum of disease (based on feedback from local level experts), and revise	Revise case definitions as necessary	Revise case definitions as necessary
	case definitions if necessary	Monitor surveillance activities and compile and report outcomes	Provide timely data
	Monitor surveillance activities; compile and report outcomes	Distribute data collection forms and database transmission instructions/protocols	Review protocols for special studies and establish dedicated teams to activate the studies in collaboration with PPPHB
	Distribute data collection forms and database		
	transmission instructions	Implement protocols/guidelines for prioritization of laboratory services during times of high service	
	Review protocols for special studies and establish dedicated teams to activate the studies	demand and staff and supply shortages	
	in collaboration with PPHB	Review protocols for special studies and establish dedicated teams to activate the studies in collaboration with PPHB	
Vaccines	Review recommended priority groups for immunization based on available epidemiological data and revise if necessary	Modify/refine nationally defined priority target groups depending on provincial circumstances	Apply national target groups and guidelines as directed by the province
	Review and modify if necessary, plans for vaccine security (i.e., during, transport, storage and clinic administration)	Modify/refine other aspect of the federal guidelines, as necessary for provincial/local application	Review and modify if necessary, plans for vaccine security (i.e., during, transport, storage and clinic administration)
	When vaccine is availablepurchase suppliesimplement distribution and security plans	Review and modify if necessary, plans for vaccine security (i.e., during, transport, storage and clinic administration)	 When vaccine is available activate immunization clinic capability implement distribution and security plans
	• implement streamlined VAAE surveillance	 When vaccine is available activate immunization clinic capability implement distribution and security plans 	 implement streamline VAAE surveillance, in collaboration with PPHB
	Communicate with bordering jurisdictions to facilitate awareness of the vaccine distribution plan and coordination of efforts as much as	 implement distribution and security plans implement streamline VAAE surveillance, in collaboration with PPHB 	Communicate with bordering jurisdictions to
	possible	Communicate with boarding jurisdictions to facilitate awareness of the vaccine distribution plan and coordination of efforts as much as possible	facilitate awareness of the vaccine distribution plan and coordination of

Phase 1: Confirmat	ion of onset of pandemic (i.e., sever	al outbreaks in at least one country and spread to	other countries)
Response Component	Federal Level	Provincial Level	Local Level
Antivirals	Review and revise recommendations on antiviral use based on available epidemiological data Communicate with bordering jurisdictions to facilitate awareness of any antiviral distribution plans If antivirals are being used, implement adverse drug reaction reporting system	Update priority groups for antiviral based on federal advice Based on local epidemiology and available supplies, consider administering antiviral prophylaxis and treatment to priority groups If antivirals are being used, implement adverse drug reaction reporting system	Update priority groups for antiviral based on federal advice Based on local epidemiology and available supplies, consider administering antiviral prophylaxis and treatment to priority groups If antivirals are being used, implement adverse drug reaction reporting system
Health Services		 Evaluate/revise infection control recommendations and screening tools Implement mechanisms for coordinating patient transport and tracking/managing beds Confirm existing PTAC algorithms Activate plans/systems to: decrease non-essential services and redeploy staff establish alternative care sites ensure facilities are providing information that can be used to track and manage beds access sources of additional HCWs and volunteers through HHR rosters initiate orientation and training acquire extra supplies needed to provide care in alternative care sites Co-ordinate clinical care and health services activities with bordering jurisdictions to avoid migration to centers of perceived enhanced services Confirm Mass Facilities Plan Issue directives for treating the un-insured 	Revise infection control practices and screening tools based on provincial recommendations Implement mechanisms for coordinating patient transport and tracking/managing beds (e.g., central bed registries, call center and centralized ambulance dispatch) Ensure facilities are providing information that can be used to track and manage beds Implement protocols/guidelines to decrease non-essential health services and redeploy staff Confirm alternative care sites, and acquire supplies for those sites Access sources of additional HCWs and volunteers through HHR rosters, as required, and initiate orientation and training.

Response Component	Federal Level	Provincial Level	Local Level
Emergency Response		Open emergency operation centers and activate Provincial Operations Center (POC)	Activate local emergency response plan
			Confirm plans to provide food, medical and
		Activate MOHLTC Emergency Response Plan	emergency social services for persons confined to their homes as directed by public
		Confirm plans to provide food, medical and emergency social services for persons confined to their homes by	health
		direction from P/L health officials	Assist with preparation and operation of alternate care sites, and other "over-flow"
		Assist with preparation and operation of alternate care sites, and other "over-flow" facilities	facilities
		Develop provincial response to federal travel advisories (as necessary)	
		Convene Health Care Stakeholder Council	
Public Health Measures	Evaluate public health interventions and revise recommendations as necessary	Evaluate public health interventions and revise recommendations as necessary	Integrate national recommendations for isolation into consistent practice at the local level
		Integrate national recommendations for isolation into	
		consistent provincial recommendations	Ensure policies for the use of mandatory isolation orders are in place
		Ensure policies for the use of mandatory isolation orders if	
		necessary are in place	Review/update/disseminate national
			recommendation regarding containment
		Review/update/disseminate national recommendations regarding containment strategies (i.e., cancellation of public gatherings, school closures)	strategies (i.e., cancellation of public gatherings, school closures)
		public gamerings, school closures)	Monitor/track compliance with containment
		Monitor/track compliance with containment recommendations	recommendations
		Participate in strategy for tracking recovered, presumable immune cases	Participate in strategy for tracking recovered, presumably immune cases.
		Develop/update educational materials for the public and health care providers as the pandemic evolves	

Phase 1: Confirmat	ion of onset of pandemic (i.e., several	outbreaks in at least one country and spread to	other countries)
Response Component	Federal Level	Provincial Level	Local Level
Communications	Continue to provide information updates to the province, and to participate in regular ongoing communication	Institute regular conference calls with Health Care Stakeholder Council	Continue ongoing communication with provincial partners
	With province, stage media and stakeholder briefings with local MOHs, provincial officials, and others officials, CMOH rep, if required	Continue ongoing communication with local communications partners Activate Crisis and Risk Communications Response Plan and Crisis Communication Team	Establish ongoing communications with health care workers, media, partners and public regarding: level or readiness the preparedness of Ontario's health
		 Establish ongoing communications with health care workers, media, partners and public regarding: level of readiness preparedness of Ontario's health system 	 system the potential Decrease in service availability alternative care sites
		the potential Decrease in service availabilityalternative care sites	Continue local influenza immunization campaign targeting specific target groups including the general public, health care
		Refine messaging on Telehealth and InfoLine Update MOHLTC web site to incorporate international influenza situation	workers and local community support networks-incorporating reference to international situation
		Continue multi-media influenza immunization campaign targeting specific target groups including the general public, health care workers and local community support networks-incorporating reference to international situation	
		Ensure that senior management has access to appropriate messaging	
		With Health Canada, stage media and stakeholder briefings with local MOHs provincial officials, and other officials, CMOH rep, if required	
		Update public information	

Phase 2: Regional d	and Multi-regional Epidemics		
Response Component	Federal Level	Provincial Level	Local Level
Surveillance	Revise surveillance case definitions as necessary	Revise surveillance case definitions as necessary Monitor surveillance activities; compile and report	Modify definitions, activities, processes and tools as required based on direction from the province
	Monitor surveillance activities; compile and report outcomes	outcomes Activate plan to limit laboratory services across	Continue to provide timely data and analysis
	Monitor and modify (if necessary) data collection/transmission processes/protocols	province to accommodate high service demands and staff/supply shortages, and inform health providers	Encourage strategic use of laboratory services (i.e., only ordering tests that are essential) to local providers
	Monitor and report on progress of implemented special studies	Monitor and modify (if necessary) data collection/transmission processes/protocols	
		Monitor and report on progress of implemented special studies	
Vaccines	If vaccine is availablesee Phase 1	If vaccine is availablesee Phase 1	If vaccine is availablesee Phase 1
	Continue ongoing VAAE surveillance	Collect and compile reports of total people immunized with one and/or two doses	Collect and compile reports of total people with immunized with one and/or two doses
	Monitor of vaccine supply, demand, distribution and uptake	Monitor of vaccine supply, demand, distribution and uptake	Continue ongoing VAAE surveillance
			Monitor of vaccine supply, demand, distribution and uptake
Antivirals	Continue to promote strategic use of antiviral drugs	Promote strategic use of antivirals based on priority groups, available supplies and local epidemiology	Make strategic use of antivirals based on priority groups, available supplies and local epidemiology
	Monitor antiviral availability, demand, distribution and uptake	Monitor antiviral availability, demand, distribution and uptake	Monitor antiviral availability, demand, distribution and uptake
		Monitor for antiviral resistance and adverse drug reactions	Monitor for antiviral resistance and adverse drug reactions

Response Component	<i>und Multi-regional Epidemics</i> Federal Level	Provincial Level	Local Level
Health Services		 Implement HHR supply follow-up activities, including: monitoring supply of Haws monitoring re-deployment 	Continue to implement and monitor health services plan and redeploy staff/use temporary workers and volunteers as required
		 opening additional alternative sites as required tracking provincial and local stocks of medications as well as necessary medical equipment and supplies, and developing strategies to mitigate 	Report to the province HHR issues as they arise
		shortfalls	Track local stocks of supplies and equipment, and develop strategies to mitigate shortfalls
		Assess and re-allocate health human resource availability and demand	Activate local mass casualty plan
		Activate Mass Casualty Plan	Monitor capacity of mortuary/burial services, as well as needed for social and psychological
		Monitor capacity of mortuary/burial services, as well as needed for social and psychological services for families of victims, and implement/establish alternative	services for families of victims, and implement/establish alternative sites for provision of services as necessary
		sites for provision of services as necessary	
Emergency Services	Evaluate need to request additional security assistance with national stockpile system	Respond to international travel advisories as warranted	Continue to implement local emergency response plan to provide essential services
	and distribute supplies as needed	Determine whether conditions warrant declaring a	
	Promote optimal use of emergency	provincial and/or local state of emergency	Work with the province to determine whether conditions warrant declaring a local state of
	resources	Evaluate need to request additional security assistance with provincial stockpile system and distribute supplies	emergency
		as needed	Evaluate need to request additional security assistance with provincial stockpile system
		Evaluate need to request additional security assistance with preparation and operation of alternative care sites,	and distribute supplies as needed
		and other "over-flow" facilities	Evaluate need to request additional security assistance with preparation and operation of alternative care sites, and other "over-flow" facilities

Phase 2: Regional an	nd Multi-regional Epidemics		
Response Component	Federal Level	Provincial Level	Local Level
Public Health Measures	 Continue to: promote a consistent public health response across the country evaluate/revise interventions/national recommendations as required Disseminate any changes in recommendations (e.g.; cancellation of public gatherings, school closures) to the provinces Share educational and other resources across jurisdictions 	 Monitor: the consistency of public health measures across the province effectiveness of isolation recommendations and other control measures compliance with containment measures Provide feedback on effectiveness of interventions to the federal level Implement any changes in national recommendations forcontainment strategies (i.e., cancellation of public gatherings, school closures) Share educational and other resources Recruit trained immunization staff from unaffected jurisdictions to ease demand in affected areas 	 Monitor: the consistency of public health measures across the province effectiveness of isolation recommendations and other control measures compliance with containment measures Provide feedback on effectiveness of interventions to the provincial level Implement any changes in national/provincial recommendations forcontainment strategies (i.e., cancellation of public gatherings, school closures)
Communications	Continue to work with provinces to ensure consistent communications messages and tactics across the country Evaluate communication strategy and modify as required	Continue to deploy MOHLTC Crisis and Risk Communications Response Plan Continue to work with Health Canada to ensure consistent communications messages and tactics across the country Maintain ongoing communications with: 5 key audiences local levels, other partners Health Care Stakeholder Council Evaluate provincial communication strategy and modify as required	Continue to work with MOHLTC to ensure consistent communications messages and tactics across the province Maintain ongoing communications with: • local partners • MOHLTC • key audiences Evaluate local communication strategy and modify as required.

Phase 3: End of First Pandemic Wave				
Federal Level	Provincial Level	Local Level		
Estimate burden of disease during outbreak period	Work with local planning group to estimate burden of disease in the province during outbreak period	Work with MOHLTC to estimate burden of disease during outbreak period		
Review/modify case definition	Review/modify case definition based on guidance from Health Canada	Evaluate active local surveillance systems		
Determine ongoing surveillance needs for both documentation of end of first wave and detection of any new cases/outbreaks	Determine ongoing surveillance needs for both documentation of end of first wave and detection of any new cases/outbreaks			
Evaluate active surveillance systems	Evaluate active provincial surveillance systems			
	Restock laboratory supplies and resume routine laboratory services			
	Develop projections for future laboratory requirements (i.e., human and physical resources, including test kits etc.)			
If vaccine only becomes available at this stage in the pandemicsee Phase 1 and 2	If vaccine only becomes available at this stage in the pandemicsee Phases 1 and 2	If vaccine only becomes available at this stage in the pandemicsee Phases 1 and 2		
 If vaccine was available and administered in earlier phases summarize and report coverage data (with one and/or two doses) and VAEE data continue ongoing VAAE surveillance Review/revise guidelines for vaccination programs 	 If vaccine was available and administered in earlier phases expand vaccine programs to cover population not yet immunized and actively promote vaccination summarize and report coverage data (with one and/or two doses) and VAAE data continue ongoing VAAE surveillance restock supplies and resume routine programs Review/revise guideline and/or protocols used during the mass vaccination campaigns 	 If vaccine was available and administered in earlier phases expand vaccine programs to cover population not yet immunized and actively promote vaccination summarize and report coverage data (with one and/or two doses) and VAAE data continue ongoing VAAE surveillance restock supplies and resume routine programs Review/revise guidelines and/or protocols used during the mass vaccination campaigns 		
	Federal Level Estimate burden of disease during outbreak period Review/modify case definition Determine ongoing surveillance needs for both documentation of end of first wave and detection of any new cases/outbreaks Evaluate active surveillance systems If vaccine only becomes available at this stage in the pandemicsee Phase 1 and 2 If vaccine was available and administered in earlier phases • summarize and report coverage data (with one and/or two doses) and VAEE data • continue ongoing VAAE surveillance Review/revise guidelines for vaccination	Federal LevelProvincial LevelEstimate burden of disease during outbreak periodWork with local planning group to estimate burden of disease in the province during outbreak periodReview/modify case definition Determine ongoing surveillance needs for both documentation of end of first wave and detection of any new cases/outbreaksReview/modify case definition based on guidance from Health CanadaEvaluate active surveillance systemsDetermine ongoing surveillance needs for both documentation of end of first wave and detection of any new cases/outbreaksDetermine ongoing surveillance needs for both documentation of end of first wave and detection of any new cases/outbreaksEvaluate active surveillance systemsEvaluate active provincial surveillance systemsIf vaccine only becomes available at this stage in the pandemicsee Phase 1 and 2If vaccine only becomes available at this stage in the pandemicsee Phase 1 and 2If vaccine was available and administered in earlier phasesIf vaccine was available and administered in earlier phases• summarize and report coverage data (with one and/or two doses) and VAEE dataIf vaccine was available and administered in earlier phases• continue ongoing VAAE surveillance Review/revise guidelines for vaccination programs• continue ongoing VAAE surveillance • restock supplies and resume routine programs Review/revise guideline and/or protocols used during		

Phase 3: End of Fir Response Component	Federal Level	Provincial Level	Local Level
Antivirals	Assess national inventory of antivirals and continue to monitor availability	Assess provincial stockpile/inventory of antivirals and continue to monitor availability	Assess local stockpile/inventory of antivirals and continue to monitor availability
	Evaluate effectiveness of strategic antiviral	Summarize and report:	
	use (in Canada and/or based on	antiviral resistance data	
	international reports)	• adverse drug reaction data	
	Summarize and report: • antiviral resistance data		
	 adverse drug reaction data 		
Health Services	Review/revise clinical management standards	Review/revise:	Update, based on federal and provincial standards and guidelines:
	standards	clinical management standards	
		• infection control and surveillance standards and	 clinical management standards infection control and surveillance standards
		guidelines	
		• strategy for management of mass fatalities (if	and guidelines
		applicable)	• strategy for management of mass fatalities (if applicable)
		Close/reduce use of alternative care sites	
			Close/reduce use of alternative care sites
		Coordinate province-wide efforts to assess status of	
		stocks and impact of first wave across all health care services (including mortuary)	Assess status of stocks and impact of first wave across all health care services (including
		Coordinate offerte to toral at also of modiantians of	mortuary)
		Coordinate efforts to track stocks of medications as	Track stocks of medications as well as necessary
		well as necessary medical equipment and supplies, including ventilators and oxygen. Develop strategies	medical equipment and supplies, including
		to mitigate shortfalls in next wave	ventilators and oxygen. Develop strategies to
			mitigate shortfalls in the next wave.
		Reorder provincial supplies, and provide staff leads	
		if possible	Recorder supplies, and provide staff leads if possible
		Maintain a roster of recovered health care workers	
		with virus immunity for re-assignment	Identify recovered health care workers with virus immunity for re-assignment
		Coordinate efforts to evaluate, modify and report on	
		the use of social and psychological services	Provide data on the use of social and psychological services.

Response Component	Federal Level	Provincial Level	Local Level
Emergency Services		Review/revise response to travel advisories	Assess need for ongoing local state of emergency (if applicable) and criteria for
		Assess need for ongoing provincial state of	ending the local emergency
		emergency (if applicable) and criteria for ending the	
		provincial emergency	Evaluate local stockpile system and restock supplies as available
		Evaluate use of provincial stockpile system and	
		restock supplies as available	Evaluate need for ongoing security assistance with operation of alternative care sites
		Evaluate need for ongoing security assistance for	
		alternative care sites	Review/revise local pandemic influenza plan a required
		Review/revise Ontario pandemic influenza plan as required	
Public Health Measures	Evaluate the effectiveness of public health measures, and document lessons learned	Review/revise public health management guidelines	Document and report lessons learned
		Coordinate the documentation and reporting of	Resume routine public health
	Review/revise and disseminate public health management guidelines	lessons learned	activities/programs
	Prepare for the next wave	Update educational materials	Promote immunization for influenza and other secondary infections observed during the first
	Update educational materials	Resume routine public health activities/programs	wave at the local level (if appropriate and applicable)
	1	Promote immunization for influenza and other	
		secondary infections observed during the first wave	Evaluate the effectiveness of public health
		(if appropriate and applicable)	measures (e.g., closing schools or other institutions)
		Evaluate the effectiveness of public health measures (e.g., school closures)	
Communications	Evaluate federal communications strategy	Evaluate provincial communications strategy	Evaluate local communications strategy
		Update public and provider education materials (including scripts for Infoline, Telehealth and public advertising)	
		Develop/circulate messages to 5 audiences about the potential of a second wave	

Phase 4: Second or	Phase 4: Second or Later Waves of the Pandemic			
Response Component	Federal Level	Provincial Level	Local Level	
Surveillance	Maintain ongoing surveillance to detect second or later waves early (See Phase 1 and 2)	Maintain ongoing surveillance to detect second or later waves early (See Phase 1 and 2)	Maintain ongoing surveillance to detect second or later waves early (See Phase 1 and 2)	
Vaccines	Continue to develop/produce vaccine (as applicable) and work to maintain adequate supply Maintain vaccine programs (See Phases 1 and 2)	If vaccine is available continue immunization programs focusing on non- immunized populations (See Phases 1 and 2)	If vaccine is available continue immunization programs focusing on non-immunized populations (See Phases 1 and 2)	
Antivirals	Based on epidemiology and available supplies, and lessons learned from previous wave(s), recommend administering antiviral prophylaxis and treatment to priority groups (See Phases 1 and 2)	Based on provincial epidemiology and available supplies, and lessons learned from previous wave(s), support administering antiviral prophylaxis and treatment to priority groups (See Phases 1 and 2)	Based on local epidemiology and available supplies, and lessons learned from previous wave(s), administer antiviral prophylaxis and treatment to priority groups (See Phases 1 and 2)	
Health Services		Implement updated provincial pandemic plan, gearing up to meet increased demand (See Phases 1 and 2)	Implement updated local pandemic plan, gearing up to meet increased demand (See Phases 1 and 2)	
Emergency Services		Implement emergency response as required (See Phases 1 and 2)	Implement emergency response as required (See Phases 1 and 2)	
Public Health Measures		Implement measures as required (See Phases 1 and 2)	Implement measures as required (See Phases 1 and 2)	
Communications	Continue to develop messages and maintain communications network	Continue ongoing communications with 5 key audiences (See Phases 1 and 2)	Continue ongoing communications with 5 key audiences (See Phases 1 and 2)	

Respond Component	Federal Level	Provincial Level	Local Level
Surveillance	Resume routine ongoing laboratory and disease surveillance Estimate national burden of disease during outbreak periods	Resume routine ongoing laboratory and disease surveillance Estimate provincial burden of disease during outbreak period	Resume routine ongoing laboratory and disease surveillance
Vaccines	Develop recommendations for routine prevention and control including vaccine recommendations	Adapt/implement national recommendations for routine prevention and control including vaccine recommendations for the province	
Antivirals	Develop recommendations for the strategic use of antivirals during a pandemic based on lessons learned within Canada and internationally	Develop provincial policy for antiviral use based on national recommendations	
Health Services		Review/activate provincial aftercare/recovery plans/guidelines/return to routine operations	Review/activate local aftercare/recovery plans/guidelines/return to routine operations
Emergency Services	Review/activate national aftercare/recovery plans/guidelines/return to pre- emergency activity level	Review/activate provincial aftercare/recovery plans/guidelines/return to pre-emergency activity level	Review/activate local aftercare/recovery plans/guidelines/return to pre-emergency activity level
Public Health Measures	Recommended routine prevention and control measures, and develop lessons learned to help prepare for next emerging disease	Adopt recommended routine prevention and control measures, and develop lessons learned to help prepare for next emerging disease	Implement recommended routine
Communications	Review performance measurement criteria and evaluate response	Review performance measurement criteria and evaluate response	Review performance measurement criteria and evaluate response