The Ontario Health Plan for an Influenza Pandemic in Brief

July 2009
Introduction

An influenza pandemic is a global outbreak caused by a new influenza virus that spreads easily from person to person, and causes serious illness because people have little immunity to the new virus.

During the 20th century, the world experienced three influenza pandemics. The most deadly, the "Spanish Flu" of 1918-19, killed 40 to 50 million people worldwide. Public health officials have warned that a global influenza pandemic is overdue.

Effective planning can reduce illness and deaths as well as the social disruption caused by an influenza pandemic. The Ministry of Health and Long-Term Care (MOHLTC) has developed a comprehensive, detailed Ontario Health Plan for an Influenza Pandemic (OHPIP) to provide guidance on how Ontario’s health care system will respond to an influenza pandemic (available at www.health.gov.on.ca/pandemic). This document is a summary of that plan. It provides emergency planners, health care workers, government workers, and others with an overview of the OHPIP, and is designed to better inform local preparedness and response planning.

The OHPIP in Brief is not intended to substitute for or replace the full version of the plan. It complements the full document by highlighting key components of the provincial strategy.

Individuals responsible for preparedness planning in their part of the health care system (e.g., long-term care, primary care, hospital, public health, paediatric services, laboratory services) should read the sections of the OHPIP relevant to their sector for more detailed guidance and instructions. See Appendix I to view the table of contents for the full version of the OHPIP.
Goals, Assumptions, and Roles

OHPIP Goals

1. To minimize serious illness and overall deaths through appropriate management of Ontario’s health care system, and;

2. To minimize societal disruption in Ontario as a result of an influenza pandemic.

Pandemic Phases

To guide planning, the World Health Organization (WHO) has identified the four periods and six phases of an influenza pandemic (Table 1). The OHPIP aligns with the WHO periods and phases to guide Ontario’s response.

<table>
<thead>
<tr>
<th>Period</th>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpandemic Period*</td>
<td>Phase 1</td>
<td>No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk* of human infection is considered to be low.</td>
</tr>
<tr>
<td></td>
<td>Phase 2</td>
<td>No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.</td>
</tr>
<tr>
<td>Pandemic Alert Period**</td>
<td>Phase 3</td>
<td>Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.</td>
</tr>
<tr>
<td></td>
<td>Phase 4</td>
<td>Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.</td>
</tr>
<tr>
<td></td>
<td>Phase 5</td>
<td>Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).</td>
</tr>
<tr>
<td>Pandemic Period</td>
<td>Phase 6</td>
<td>Increased and sustained transmission in general population.</td>
</tr>
<tr>
<td>Postpandemic Period</td>
<td></td>
<td>Return to interpandemic period</td>
</tr>
</tbody>
</table>


* The distinction between phase 1 and phase 2 is based on the risk of human infection or disease from circulating strains in animals.

** The distinction between phase 3, phase 4 and phase 5 is based on the risk of a pandemic.

Assumptions

The OHPIP is based on the following planning assumptions:

**Timing: the course of an influenza pandemic**

- Ontario will have **little lead time** between when a pandemic is first declared somewhere in the world and when it spreads to the province.

- An influenza pandemic usually spreads in **two or more waves** -- each lasting about eight weeks -- either in the same year or in successive years.
Impact on the population: extent and severity of illness

- The pandemic strain will be **primarily community spread**: that is, transmitted from person to person in the community rather than in health care settings.

- Because the population will have had limited prior exposure to the virus, **most people will be susceptible**.

- Regardless of the severity of the pandemic, there will be an illness **attack rate of 35%**, which means that over the entire course of a pandemic about 35% of the population will be sick enough with influenza to take at least a half day off work.

- During the period of peak activity in a pandemic wave during a moderately severe pandemic, about 20 to 25% of the workforce will be **absent from work** for at least a half-day.

See Appendix II for the estimated impact of a moderately severe influenza pandemic on deaths, hospitalizations and out-patient visits at different attack rates in Ontario.

Treatment: access to antivirals/vaccine

- The only specific treatment option for influenza during a pandemic will be **antiviral drugs**.

- The federal and provincial governments are **stockpiling** antivirals.

- Antivirals are most effective for **treatment** when started within 12 to 24 hours of onset of symptoms, and they must be started within 48 hours for community cases. (Note: For hospital settings where more seriously ill persons are seen, there may be value in starting treatment beyond 48 hours for certain patients).

- Antivirals can also be used for **prophylaxis** (i.e., preventing influenza). Currently there is no evidence that putting large groups of otherwise healthy Canadians on antiviral drugs in order to prevent influenza will slow or stop the spread of a pandemic. Ontario is developing a provincial policy on the use of antivirals for prophylaxis.

- A **vaccine** will not be available for at least four to six months after the seed strain is identified, which means it will not be available in time for the first wave of illness.

- With a well-matched vaccine, the effectiveness of an influenza vaccine in preventing illness is approximately 70 to 90% in healthy adults (based on experience with annual influenza immunization programs).

Impact on the health care system

- During a pandemic, the **public health and health care workforce could be reduced** by up to 25% due to illness, concern about disease transmission in the workplace, and family caregiving responsibilities. A shortage of health care providers may result in a decrease in some services.
• Health services -- such as intensive care unit beds, ventilators, and other forms of care -- may be quickly overwhelmed during a pandemic.

• Some health services may be reduced or discontinued during an influenza pandemic.

Managing a pandemic

• A provincial emergency will likely be declared during a pandemic.

• The province’s Scientific Response Team, which includes representatives from the Ministry of Labour, will provide ongoing health and safety, clinical, infection control and epidemiological advice to the MOHLTC.

• Ontario will consider (consistent with legislation) the precautionary principle. In the early stages of a pandemic, there will be limited scientific evidence on the characteristics and epidemiology of the novel virus, so Ontario will take all reasonable steps to reduce risk to the public and to health care workers.

Communications

• The Public Health Agency of Canada and the federal government will coordinate inter-provincial communications. Provincial health communications strategies must be aligned with the federal communications plan.

As noted by Justice Campbell in the final report of the SARS Commission (Spring of Fear, December 2006) we cannot always wait for scientific certainty before we take reasonable steps to reduce risk.
Roles, Responsibilities and Decision-Making during a Pandemic

Viruses do not respect borders, so pandemic planning must be collaborative and occur internationally, nationally, provincially and locally.

Each level of government has a different role depending on its jurisdictional authority, but their plans and activities must be coordinated (see Figure 1).

**Figure 1: Roles and Responsibilities in Collaborative Interjurisdictional Pandemic Planning**

- **The World Health Organization (WHO)** is responsible for monitoring the spread of influenza worldwide, declaring a pandemic and coordinating the global response.

- **The Government of Canada** is responsible for monitoring the spread of influenza in Canada, obtaining antiviral drugs and vaccine, and coordinating the Canadian response.

- **The Government of Ontario** is responsible for monitoring the spread of influenza in the province, stockpiling antivirals, vaccine, equipment, providing guidelines and directions to the health care system, educating the public and coordinating Ontario’s response.

- **Municipal governments and local public health authorities** are responsible for monitoring the spread of influenza in their communities, distributing vaccine, working with local health care providers to manage and maintain services, and coordinating the local response.

Other stakeholders, including health care providers and their regulatory colleges and associations, and the public also play a role in pandemic planning. Each part of the health system must plan to meet the needs of people with influenza while still maintaining other critical health services during a pandemic (e.g., maternity care, trauma services, treatment of life-threatening illnesses, chronic care, and palliative care).

During an influenza pandemic, the health system will work to maintain health services while the emergency management system will work to maintain other essential services, and the two systems must work together. (See Appendix III for emergency management roles and relationships).
Ethical Framework for Decision Making

During an influenza pandemic, governments and public health authorities will have to make difficult decisions about access to vaccines and health services as well as how people and resources are used. Ontarians are more likely to accept the difficult decisions if the decision-making processes are:

- Open and transparent – The process by which decisions are made is open to scrutiny and the basis for decisions is explained.
- Reasonable – Decisions are based on reasons (i.e., evidence, principles, and values) and made by people who are credible and accountable.
- Inclusive – Decisions are made explicitly with stakeholder views in mind and stakeholders have opportunities to be engaged in the decision-making process.
- Responsive – Decisions are revisited and revised as new information emerges, and stakeholders have opportunities to voice any concerns about decisions (i.e., formal mechanisms to bring forward new information, to appeal or raise concerns about particular allocation decisions, and to resolve disputes).
- Accountable – There are mechanisms to ensure that ethical decision-making is sustained throughout the response.

During pandemic planning and during a pandemic, Ontario will work within the existing legal framework that attempts to balance the rights of individuals (e.g., privacy, liberty, equity) with the responsibility to protect the public from harm and the rights of workers to work in safety.

Ontario’s response to an influenza pandemic will be based on the following core ethical values:

**Individual Liberty.** Individual liberty (i.e., respect for autonomy) is a value enshrined in our laws and in health care practice.

**Protection of the Public from Harm.** Public health authorities have an obligation to protect the public from serious harm.

**Proportionality.** Restrictions on individual liberty and measures to protect the public from harm should not exceed the minimum required to address the actual level of risk or need in the community.

**Privacy.** Individuals have a right to privacy, including the privacy of their health information.

**Equity.** All patients have an equal claim to receive the health care they need, and health care institutions are obligated to ensure sufficient supply of health services and materials, and to establish fair decision-making processes and criteria.

**Duty to Provide Care.** Health care workers have an ethical duty to provide care and respond to suffering.

**Reciprocity.** Society has an ethical responsibility to support those who face a disproportionate burden in protecting the public good.

**Trust.** Trust is an essential part of the relationship between government and citizens, between health care workers and patients, between organizations and their staff, between the public and health care workers, and among organizations within a health system.

**Solidarity.** Stemming an influenza pandemic will require solidarity among community, health care institutions, public health units, and government.

**Stewardship.** Those entrusted with governance should be guided by the notion of stewardship, which includes protecting and developing one’s resources, and being accountable for public well-being.

**Family-centred Care.** The health system will respect a family’s right to make decisions on behalf of a child, consistent with the capacity of the child. Health care providers will respect families’ unique beliefs and values, and acknowledge that their choices will be informed by their beliefs and values.

**Respect for Emerging Autonomy.** When providing care to young people, the health system will respect their emerging autonomy, and disclose age appropriate information.

*Note: The Occupational Health and Safety Act cannot be overridden by any emergency order made under either the Emergency Management and Civil Protection Act or directives made by the Chief Medical Officer of Health under the Health Protection and Promotion Act.*
Components of Planning for an Influenza Pandemic

For the health care system, pandemic planning consists of the following activities:

1. Surveillance to detect and monitor the spread of the pandemic strain

2. Occupational health and safety measures and infection prevention and control to reduce the spread of influenza in the workplace and protect health care workers and patients

3. Public health measures to slow or reduce the spread of influenza in the community

4. Plans to acquire and distribute antivirals and vaccine

5. Plans to ensure adequate equipment and supplies during a pandemic

6. Plans to ensure all Ontarians have access to influenza assessment, treatment and referral services

7. Health workforce planning to make the best use of limited resources (i.e., at the peak of the wave, 20 to 25% of health care workers could be off sick or caring for sick relatives)

8. Communications plans

9. Setting-specific plans. Each part of the health care system must plan to maintain and deliver its services during a pandemic
1. Surveillance: Detecting and Monitoring Influenza

Ontario and Canada are continually monitoring influenza cases in order to identify any new influenza strains.

During phases 4 and 5, public health laboratories will increase surveillance activities to detect the entry of the pandemic strain into Ontario and monitor its severity and spread.

During the pandemic period -- when there is widespread transmission of pandemic influenza in the province -- Ontario will reduce or curtail some surveillance activities and devote more resources to understanding the nature of the virus and its spread, and the impact of antivirals and vaccine (see Figure 2).

Figure 2: Surveillance Activities during the Pandemic Period
Surveillance Communications

To ensure effective communication of surveillance information within the health care system during a pandemic, the ministry is developing a web-based surveillance system that health care organizations, such as hospitals and long-term care homes, will use to submit reports electronically. It has also developed the following process for sharing information about the pandemic (Figure 3):

- Hospitals, long-term care homes, and influenza assessment, treatment, and referral centres (when activated) will submit daily data on influenza visits/cases and deaths (as of 24:00 each day) by 10:00 the following day.

- MOHLTC will then provide daily information about the severity and distribution of the pandemic based on this and other surveillance information (e.g., lab, Telehealth Ontario, Flu Watch sentinel physician reports).

- This information will be discussed at the public health teleconference at 13:00 each day, and used to inform the public and to develop Important Health Notices.

Figure 3: Pandemic Surveillance Reporting Clock

What Does This Mean for Your Organization?

Health care providers and settings should know:

- how the surveillance system will work in their region during an influenza pandemic

- how to access information and updates on influenza activity from local public health units and the MOHLTC

- any changes in reporting requirements during a pandemic. For example, in Phases 4 and 5, sites will continue to report individual cases; in Phase 6, they will report aggregate cases.
2. Occupational Health and Safety Measures and Infection Prevention and Control

Guidelines for occupational health and safety measures were developed in collaboration with the Ministry of Labour. Recommendations reflect the precautionary principle set out by Justice Campbell in the final report of the SARS Commission (Spring of Fear, December 2006) that stated: “We cannot wait for scientific certainty before we take reasonable steps to reduce risk.”

Occupational health and safety measures and infection prevention and control can help protect health workers and patients from exposure to the influenza virus in health settings.

General Ongoing Responsibilities

Health care facilities are required to comply with applicable provisions of the Occupational Health and Safety Act (OHSA) and its Regulations, the Workplace Safety and Insurance Act, and the Health Protection and Promotion Act. Employers, supervisors, and workers have rights, duties, and obligations under the OHSA (available at www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90o01_e.htm). In addition, the OHSA requires an employer to take every precaution reasonable in the circumstances for the protection of a worker. Specific requirements for certain health care and residential facilities may be found in the Regulation for Health Care and Residential Facilities at www.e-laws.gov.on.ca/html/regs/english/elaws_regs_930067_e.htm.

There is a general duty for an employer to establish written measures and procedures for the health and safety of workers, in consultation with the Joint Health and Safety Committee or health and safety representative, if any. Such measures and procedures may include, but are not limited to, the following:

- Safe work practices.
- Safe working conditions.
- Proper hygiene practices and the use of hygiene facilities.
- The control of infections.

At least once a year the measures and procedures for the health and safety of workers shall be reviewed and revised in the light of current knowledge and practice. The employer, in consultation with the Joint Health and Safety Committee or health and safety representative, if any, shall develop, establish and provide training and educational programs in health and safety measures and procedures for workers that are relevant to the workers’ work.

A worker who is required by his or her employer or by the Regulation for Health Care and Residential Facilities to wear or use any protective clothing, equipment or device shall be instructed and trained in its care, use and limitations before wearing or using it for the first time and at regular intervals thereafter and the worker shall participate in such instruction and training. The employer is reminded of the need to be able to demonstrate training, and is therefore encouraged to document the workers trained, the dates training was conducted, and materials covered during training. Under the OHSA, a worker must work in compliance with the Act and its regulations, and use or wear any equipment, protective devices or clothing required by the employer.

Health care associated infections in health care workers, acquired as a result of workplace exposures, are occupational illnesses that must be reported to the Ministry of Labour, to the workplace Joint Health and Safety Committee or health and safety representative, and to the trade union, if any, in accordance with OHSA and its Regulations.
Risk of Exposure to Influenza in the Workplace

Health workers providing care and/or services to individuals with influenza will be at risk of exposure to the virus in both the health care setting and in the community. The risk to health workers in the workplace may be higher when staff are performing aerosol-generating procedures on patients with influenza-like illness or performing lab procedures that generate aerosols because droplets containing influenza virus may become aerosolized and can be spread through the air. The issue of whether influenza can also be spread by airborne transmission in other situations (i.e., other than during procedures that generate aerosols) is controversial. Current scientific literature and experience with other influenza viruses does not conclusively confirm or rule out airborne transmission. In Ontario, employers should take all reasonable steps to protect health workers from exposure to the pandemic strain of influenza in their workplace.

Risk Assessment

Employers should assess the risk of exposure for all employees and use the results to make informed decisions about appropriate infection control measures and procedures, personal protective equipment, education and training. The risk assessment should:

- be conducted by people who have training/responsibility for infection control (e.g., person responsible for infection control in an institution, Ontario’s Regional Infection Control Network, infection control practitioners, pulmonary disease specialists, occupational health and safety professionals, environmental services).
- be conducted in consultation with the Joint Health and Safety Committee/Health and Safety Representative.
- take into account the precautionary principle set out by Justice Campbell in the final report of the SARS Commission.

See chapter 7 in the OHPIP for a sample risk assessment checklist.

The Hierarchy of Controls

The most effective way to protect workers from infectious diseases is by using the hierarchy of controls (Figure 4), which includes:

- **engineering controls** that make the work environment or setting safer, such as physical barriers, easy-to-clean surfaces, and ventilation systems
- **administrative and work practices** that reduce the risk of infection, such as managing patient flow and screening people entering the workplace for influenza symptoms
- **environmental cleaning procedures/processes** for handling and cleaning equipment and clothing that reduce possible exposure
- **personal protective equipment** used by health workers (see Table 2)
- **other infection prevention and control measures** that protect patients and visitors as well as health workers.

For more information, please contact your local Ministry of Labour office. A list of local Ministry of Labour offices may be found at [www.labour.gov.on.ca](http://www.labour.gov.on.ca).
**Figure 4: Hierarchy of Controls by Pandemic Period**

<table>
<thead>
<tr>
<th>Interpandemic Period</th>
<th>Pandemic Alert Period</th>
<th>Pandemic Period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Engineering Controls</strong>&lt;br&gt;Amass building; identify and make modifications to reduce or eliminate exposure to influenza (e.g., physical barriers, spacing, traffic patterns, sinks, ventilation systems)</td>
<td><strong>Implement designated areas</strong>&lt;br&gt;Monitor engineering controls and traffic patterns&lt;br&gt;Identify other changes that could reduce risk</td>
<td><strong>Implement policies and procedures</strong>&lt;br&gt;Provide information to staff, patients and visitors&lt;br&gt;Monitor for effectiveness, adjust as required</td>
</tr>
<tr>
<td><strong>2. Administrative and Work Practices</strong>&lt;br&gt;Develop immunization policies&lt;br&gt;Develop sanitation policies and procedures&lt;br&gt;Develop policies for voluntering patients and staff&lt;br&gt;Develop staffing plans&lt;br&gt;Develop plans to support staff</td>
<td></td>
<td><strong>Distribute equipment as required</strong>&lt;br&gt;Monitor use&lt;br&gt;Reinforce importance of using PPE properly&lt;br&gt;Access emergency stockpile as necessary&lt;br&gt;Implement priority/coningency plans if there is shortage of PPE</td>
</tr>
<tr>
<td><strong>3. Personal Protective Equipment</strong>&lt;br&gt;Identify equipment needs for staff and patients&lt;br&gt;Stockpile four-week supply&lt;br&gt;Fit test employees for 1953 respirator&lt;br&gt;Conduct risk assessment and involve Joint Health and Safety Committee, and set priorities for use of personal protective equipment in case of a shortage</td>
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</tbody>
</table>

**Table 2: Personal Protective Equipment Suggested for Patient Care**

NOTE: PPE is only one component of the hierarchy of infection prevention and control measures required to protect health workers. Gloves, gowns and/or masks (during seasonal influenza) should be used where indicated by routine practices and additional transmission-based precautions based on a workplace specific risk assessment conducted in consultation with the Joint Health and Safety Committee.

<table>
<thead>
<tr>
<th>Seasonal Influenza (including ILI²)</th>
<th>Pandemic Influenza (including ILI²)</th>
<th>Aerosol Generating Procedures on Patients with Pandemic Influenza* (including ILI²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient accommodation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single patient room</td>
<td>Single patient room or cohort</td>
<td>In AIIR² if available</td>
</tr>
<tr>
<td>AIIR² not required</td>
<td>AIIR² not required</td>
<td></td>
</tr>
<tr>
<td>Precautions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine/Droplet/Contact</td>
<td>Routine/Droplet/Contact</td>
<td>Routine/Droplet/ Contact/ Airborne²</td>
</tr>
<tr>
<td>Hand hygiene</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gloves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If indicated by Routine Practices³</td>
<td>If indicated by Routine Practices³</td>
<td>If indicated by Routine Practices³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If indicated by Routine Practices³</td>
<td>If indicated by Routine Practices³</td>
<td>If indicated by Routine Practices³</td>
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<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Surgical mask for HCW</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N95 respirator for HCW</td>
<td>Not routinely</td>
<td>Yes⁴</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye Protection</td>
<td>If indicated by Routine Practices³</td>
<td>Yes</td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical Mask on Patient</td>
<td>At triage and if outside of room</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Note: The hierarchy of controls used in any setting should be based on a risk assessment conducted in consultation with the Joint Health and Safety Committee, infection prevention and control and occupational health services.
ILI: Influenza-like illness
AIR: Airborne infection isolation room
3 See Provincial Infectious Diseases Advisory Committee resources on routine practices.
4 The use of N95 respirators are being recommended to protect health workers from the possibility of short-distance fine droplet aerosol transmission. See Council of Canadian Academies Report on Influenza Transmission and the Role of Personal Protective Respiratory Equipment – December 2007 at www.scienceadvice.ca.

Infection Prevention and Control Measures

Employers should implement and maintain appropriate infection prevention and control measures. These measures are designed to protect workers, patients and visitors from exposure to all types of influenza, including the pandemic strain of the virus. They include:

- access to infection prevention and control expertise
- rigorous and frequent use of hand hygiene measures
- ongoing programs to screen patients, staff and visitors for signs of influenza-like illnesses (may include active and/or passive screening programs)
- immunization policies that encourage staff providing care and/or services to patients/residents/clients to be immunized against seasonal influenza
- consistent use of routine practices and droplet, contact, and airborne precautions as appropriate.

4 Moments for Hand Hygiene

- Before contact with a patient, resident or client
- Before an aseptic procedure
- After risk of exposure to body fluid
- After contact with a patient, resident or client

Education and Training

To ensure that health workers have the knowledge and skills to reduce influenza transmission, employers must provide appropriate education and training. Employers should assess staff training needs, and provide initial and ongoing education in:

- the principles and procedures of infection prevention and control
- the hierarchy of controls used to reduce the spread of influenza
- the correct use, removal, and disposal of personal protective equipment.

All education programs must be developed in consultation with and reviewed by the Joint Health and Safety Committee/health and safety representative.

Managing Workers with Influenza-like Illness

Ideally, staff with influenza-like illness should be considered “unfit for work” and asked to stay home; however, during a pandemic, health care settings may be understaffed and staff with mild influenza-like illness or who are recovering from influenza may be considered fit to work with restrictions, such as only working with patients who have influenza-like illness. They should NOT be deployed to intensive care areas, nurseries or units with severely immunocompromised patients (i.e., transplant recipients, hematology/oncology patient, patients with chronic heart or lung disease, or patients with HIV/AIDS and dialysis patients).
What Does This Mean for Your Organization?

Health care organizations and health care workers should:

- be aware of their obligations under the OHSA and its Regulations and integrate them into pandemic planning and response
- know the steps to take to prevent the spread of influenza and to protect workers and patients
- ensure that everyone in the workplace understands his or her roles and responsibilities in implementing infection prevention and control and occupational health and safety measures during an influenza pandemic
- use the hierarchy of controls to reduce risk, including conducting risk assessments, providing education and training, modifying the physical environment, changing administrative and work practices, and making appropriate use of personal protective equipment and other infection prevention and control measures.
3. Public Health Measures

Public health measures are non-medical interventions -- such as public education, travel restrictions and social distancing measures like restricting public gatherings or closing schools -- used to reduce the spread of disease during a pandemic.

Under the *Health Protection and Promotion Act*, the local medical officer of health has the authority to implement public health measures within his or her health unit area. In the event of an influenza pandemic, the threat will not be limited to a single health unit so the decision to use particular public health measures will be made by the Chief Medical Officer of Health in consultation with local medical officers of health and others. Close collaboration among health units on the type, timing and duration of public health measures will help ensure a consistent approach across the province and enhance both public confidence and the public’s adherence to public health measures.

Effectiveness of Public Health Measures

The US Centers for Disease Control in its 2007 report, *Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States – Early, Targeted, Layered Use of Nonpharmaceutical Interventions*, analyzed the effectiveness of different public health measures. The most effective measures are:

- hand hygiene
- social distancing strategies in daycare
- school closures – particularly when combined with other measures that disrupt young people’s other social networks, such as meeting at the mall
- low cost, sustainable social distancing strategies that disrupt adult networks and suppress the spread of the virus
- travel restrictions that close large hub airports (as opposed to smaller airports).

The success of any single public health measure depends on the epidemiology of the strain, the timing of the measure, public compliance, and the cost/benefit analysis of implementing the action (e.g., the implications of having parents stay home from work to look after school-aged children in the event that school closures are implemented).

A Severity-based Approach to Public Health Measures

During an influenza pandemic, Ontario may use six different public health measures to slow the spread of pandemic influenza (see Figure 5). Ontario will use the least restrictive means necessary to achieve public health goals. Coercive measures will be used only when less restrictive measures fail to protect public health. The types and extent of public health measures used during an influenza pandemic will depend on the severity of the pandemic, based on death rates. For example, only in a **severe pandemic** would public health recommend restricting public gatherings and closing schools and daycares for four or more weeks.
<table>
<thead>
<tr>
<th>Public Health Measure</th>
<th>Timing</th>
<th>Severity of the Pandemic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Education</strong></td>
<td>Early in the pandemic (i.e., pandemic alert period) and maintain throughout.</td>
<td><strong>Mild</strong> ($\leq 0.1%$ case fatality rate)</td>
</tr>
<tr>
<td>Provide clear, consistent, accurate information to the public to help them be prepared for a pandemic and reduce their risk.</td>
<td><strong>Moderate</strong> from 0.1% to &lt;1.0% case fatality rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Severe</strong> $\geq 1.0%$ or higher case fatality rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reinforce general infection prevention and control practices. Provide information on where to access self-care resources.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide messages re: social distancing.</td>
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<tr>
<td></td>
<td>Provide messages re: masks for people who do not have the flu - not recommended, but if individuals choose to use them, they should use surgical masks.</td>
<td></td>
</tr>
<tr>
<td><strong>Travel Restrictions</strong></td>
<td>Depending on the severity of the pandemic strain, early in the pandemic (e.g., pandemic alert period) in an effort to keep the pandemic strain out of Canada.</td>
<td><strong>Mild</strong> ($\leq 0.1%$ case fatality rate)</td>
</tr>
<tr>
<td>Restrict travel between countries in order to slow the spread of influenza.</td>
<td><strong>Moderate</strong> from 0.1% to &lt;1.0% case fatality rate</td>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong> Travel restrictions are the responsibility of the Public Health Agency of Canada (PHAC): Ontario will comply with federal directions.</td>
<td><strong>Severe</strong> $\geq 1.0%$ or higher case fatality rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refer travelers to the PHAC website for Travel Health Notices and International Reports.</td>
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</tr>
<tr>
<td></td>
<td>Advise travelers to consider deferring unnecessary travel. Consider measures to reduce the number of people on transit vehicles at any one time in the affected area.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recommend travelers defer unnecessary travel. Recommend measures to reduce the number of people on transit vehicles at any one time in the affected area.</td>
<td></td>
</tr>
<tr>
<td><strong>Case Management</strong></td>
<td>Early in the pandemic (i.e., pandemic alert period), when there are a relatively small number of cases and there is an opportunity to contain the virus. After that time, use a group/public education approach.</td>
<td><strong>Mild</strong> ($\leq 0.1%$ case fatality rate)</td>
</tr>
<tr>
<td>Follow up with individuals who have influenza (i.e., cases) to provide information and strategies to reduce transmission to other people.</td>
<td><strong>Moderate</strong> from 0.1% to &lt;1.0% case fatality rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ask ill individuals to avoid contact with others. Provide ill individuals and their families with information on how to care for someone with influenza at home. Ensure that ill individuals receive antivirals, know how to take them, and adhere to treatment.</td>
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</tr>
</tbody>
</table>


### Figure 5: Public Health Measures by Pandemic Severity (continued)

<table>
<thead>
<tr>
<th>Public Health Measure</th>
<th>Timing</th>
<th>Severe 1.0% or higher case fatality rate</th>
<th>Moderate 0.1% to &lt;1.0% case fatality rate</th>
<th>Mild &lt; 0.1% case fatality rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contact Management</strong></td>
<td>Early in the pandemic</td>
<td>Consider voluntary or modified quarantine.</td>
<td>Reinforce public education messages about symptoms and provide information on what to do to get care.</td>
<td>Early in the pandemic (i.e., pandemic alert period), when there is an opportunity to contain the virus. After that time, use a group/public education approach.</td>
</tr>
<tr>
<td><strong>School and Day Care Measures</strong></td>
<td>Early in the pandemic (i.e., pandemic alert period)</td>
<td>Consider social distancing (e.g., limit sizes of groups and activities). Consider closing day cares, elementary schools, and secondary schools for &lt; 12 weeks. +</td>
<td>Reinforce infection prevention and control measures.</td>
<td>Early in the pandemic (i.e., pandemic alert period) and maintain throughout.</td>
</tr>
<tr>
<td><strong>Social Distancing in the Community</strong></td>
<td>Early in the pandemic (i.e., pandemic alert period)</td>
<td>Consider implementing social distancing measures in post-secondary institutions, workplaces, and the community. Recommend that individuals avoid indoor gatherings.</td>
<td>Reinforce public education/infection prevention and control measures.</td>
<td>Early in the pandemic (i.e., pandemic alert period) and maintain throughout.</td>
</tr>
</tbody>
</table>

* Droplets from a coughing or sneezing person can be expelled a distance of about two metres and may be inhaled by someone within that two metre distance.

+ Reassess length of time that schools should remain closed based on the epidemiology of the virus.
What Does this Mean for Your Organization?

Organizations should:

- understand and reinforce the range of public health measures Ontario may use during an influenza pandemic, including the factors that will determine the type and duration of each intervention

- understand the impact that public health measures may have on their health care setting or organization.
4. Antivirals and Vaccine

Antiviral Treatment

Antiviral drugs (i.e., anti-influenza drugs) can be used to treat influenza and will be an important disease management strategy during an influenza pandemic – particularly during the early wave(s) when vaccine is not available.

- In community settings, antiviral treatment must be started within 48 hours of the onset of symptoms, and within 12 to 24 hours to be most effective.
- In hospital settings, there may be value in starting treatment beyond 48 hours for certain patients.
- The decision to prescribe antivirals will be based mainly on clinical judgment as it may not be possible to get diagnostic test results within 12 to 48 hours of onset of symptoms.
- Antiviral treatment will likely be limited to those ill enough to require it (i.e., not everyone presenting with influenza-like illness will qualify for treatment).
- During a pandemic, treatment regimens may have to be altered (e.g., higher doses, longer treatment courses).
- The timing to start treatment may also change, depending on the epidemiology of the pandemic strain.

Antiviral Supply and Distribution

Ontario currently has an antiviral stockpile large enough to treat 25% of the population, which is the proportion of the population likely to become sick enough during a pandemic to need antiviral treatment. Ontario’s stockpile is diversified to include a mixture of two types of antivirals: oseltamivir (Tamiflu®) and zanamivir (Relenza®).

During a pandemic:

- The decision to release antivirals from the provincial stockpile will be made by the Ministry Emergency Operations Centre (MEOC) based on information about the severity of the pandemic strain and any antiviral resistance.
- The MEOC will coordinate the distribution of antivirals to hospitals, long-term care homes, pharmacies, and Flu Centres as well as to special populations, including those under federal jurisdiction (e.g., armed forces, First Nations communities, RCMP).
- Should a pandemic be severe enough that more than 25% of the population requires treatment, antiviral drugs will be distributed based on the available scientific evidence (e.g., priority will be given to those likely to develop complications from influenza) and in accordance with the ethical framework for decision-making (see page 5 or chapter 2 of the OHPIP).

Objectives

To maintain a secure supply of antiviral drugs large enough to treat 25% of Ontario’s population.

To provide a secure supply of safe, effective vaccine for all Ontarians as quickly as possible.

To store, distribute, allocate and administer antiviral drugs and vaccine efficiently and appropriately.

To monitor the safety and effectiveness of antiviral drugs and vaccine as well as any development of resistance to antivirals.
Antivirals for Prophylaxis/Prevention

Ontario does not currently have a provincial policy on the use of antivirals for the prevention (i.e., prophylaxis) of influenza. Currently there is no evidence that putting large groups of otherwise healthy Canadians on antiviral drugs to prevent influenza will slow or stop the spread of a pandemic; however, prophylaxis with antiviral drugs may be used during a pandemic to maintain critical services (i.e., ensure the people come to work) and in closed environments with vulnerable populations (e.g., long-term care homes) until a vaccine becomes available.

The Public Health Agency of Canada has developed national recommendations on the use of antivirals for prophylaxis. Ontario is now reviewing those recommendations and consulting with stakeholders to develop a provincial policy. More information on the national recommendations can be found at www.health.gov.on.ca/pandemic.

Vaccine

Vaccine is the most effective means to prevent disease and death from influenza; however, it will take time after the pandemic strain is identified to develop a vaccine.

The federal government is responsible for procuring pandemic influenza vaccine. In case of a pandemic, a domestic supplier guarantees to manufacture at least 8 million doses of monovalent vaccine per month and to provide enough vaccine for all Canadians to receive one dose within four months.

Ontario’s goal is to obtain enough vaccine for the entire population but, during the early stages of a pandemic, vaccine will be in short supply. In this situation, the province will follow the national recommendations for priority groups for influenza immunization, adapting them to meet provincial needs.

Vaccine Distribution

During a pandemic, Ontario will use primarily a “pull” strategy to distribute vaccine: influenza vaccine will be sent only to public health units, which will organize mass immunization clinics in various locations in their communities. Other vaccines (e.g., essential immunizations) will continue to be administered through current channels.

The province has developed an Emergency Mass Immunization/Prophylaxis Plan that will address any issues or gaps in vaccine and antiviral distribution, such as security issues and timely distribution to remote communities (see chapter 9 in the OHPIP).

Provincial and local vaccine distribution plans include steps to reach special populations, such as those that fall under federal jurisdiction (e.g., armed forces, First Nations, RCMP) and people who are homeless.

Monitoring Adverse Events

Physicians, pharmacists and consumers will be able to report severe and unusual adverse events from antivirals to Health Canada through MedEffects (visit www.hc-sc.gc.ca/dhp-mps/medeff/index-eng.php for more information).

The MOHLTC collects information on Adverse Events Following Immunization (AEFI) through the integrated Public Health Information System (iPHIS). Physicians, pharmacists and consumers report any adverse events related to vaccines.

Children’s hospitals in Ontario participate in the Immunization Monitoring Program – Active (IMPACT) that tracks AEFIs, vaccine failures, and selected infectious diseases in children.
What Does This Mean for Your Organization?

Health care practitioners and organizations should:

- understand the policies for antiviral and vaccine supply, distribution, and use
- be aware of the steps Ontario has taken to maintain an antiviral stockpile and acquire vaccine at the time of a pandemic
- know when and how to prescribe antivirals for treatment
- follow instructions from public health to access influenza pandemic vaccine when it becomes available.
5. Equipment and Supplies

During an influenza pandemic, health care settings will need large quantities of equipment and supplies to provide care and to protect health care workers. Demand will be high worldwide, and traditional supply chains may break down. The health system must have an adequate stock of equipment and supplies to meet increased patient care needs and to protect health care workers, access to back up supplies, and an efficient system for purchasing, storing and distributing those supplies.

At the Provincial Level

The MOHLTC has developed a comprehensive pandemic procurement strategy to purchase and warehouse critical health care supplies. The province will develop and maintain:

- a **four-week stockpile** of personal protective equipment for the entire health system
- a system for purchasing, storing and distributing supplies
- a process to manage perishable supplies.

At the Local Level

In addition to the four-week provincial stockpile, all health care settings and providers have been asked to maintain a **four-week stockpile** of personal protective equipment and other critical supplies. This will ensure business continuity for the first wave of the pandemic (estimated to be approximately 8 weeks).

During a pandemic, organizations will be able to access the provincial stockpile of personal protective equipment when/if their individual/local stockpiles are exhausted. The provincial stockpile can be used until regular supply chains can be re-established. To access the ministry stockpile during a pandemic, health care provider organizations should contact the MEOC at 1-866-212-2272.

To help smaller clinical settings/practitioners who may not have the resources to develop adequate stockpiles, the ministry has provided over 15,000 **Emergency Infection Control Kits** to community health centres, Aboriginal health centres, community physician offices, primary care nurse practitioners, and midwives to provide extra emergency response capacity in smaller clinical settings.

To **estimate equipment and supply requirements** during a pandemic, see chapter 10 of the OHPIP.

What Does This Mean for Your Organization?

Practices and organizations should:

- know the right equipment and supplies to use during a pandemic
- maintain a four-week stockpile of equipment and supplies (including personal protective equipment)
- know how to access the MOHLC stockpile of equipment and supplies once local resources have been exhausted.
6. Influenza Assessment, Treatment and Referral

During an influenza pandemic, Ontarians who develop influenza symptoms must know where to go for assessment, treatment and, if necessary, referral to another level of care (e.g., hospital, home care).

Using Existing Primary Care Services for Assessment

In Ontario, influenza assessment, treatment and referral services will be provided in the community by:

- primary care practitioners
- temporary Influenza Assessment, Treatment, and Referral Centres (Flu Centres), if required based on the severity of the pandemic.

Hospitals will focus on treating people who are critically ill with influenza or have other urgent or life-threatening illnesses or injuries.

Each community is encouraged to establish a Community Influenza Assessment Committee to plan for influenza assessment and treatment services and oversee the development of Flu Centres, if required.

Assessment Approach

Diagnosing pandemic influenza will be challenging, particularly given that diagnosis will have to be made early in the course of the illness for antivirals to be effective (within 12 to 24 hours). Influenza usually has a sudden severe onset, but not all presentations will be classical and it may be difficult for both the public and primary care providers to differentiate pandemic influenza from other illnesses.

Ontarians will have four possible pathways to access influenza assessment and treatment services (see Figure 6):

- **Internet** – Individuals will be able to access the standard influenza screening tool on the MOHLTC website in order to complete a self-assessment. Individuals will use the tool to assess whether they can manage their symptoms at home (self-care) or if they require further assessment or advice.

- **Telephone** – Individuals will be able to access remote screening for influenza by calling Telehealth, their primary care provider, or any other telephone information line as directed by their municipality. Based on the results of the telephone assessment, individuals will either be instructed to manage their symptoms at home (self-care) or referred to another level of care (walk-in setting for face-to-face assessment by a primary care provider or referral to a hospital for those with high-risk criteria).

Objectives

To provide timely access to influenza assessment, treatment and referral services.
To treat people diagnosed with influenza and prescribe antivirals within recommended time frames.
To identify and refer people who need hospital, home care or other community-based services.
To maintain essential (i.e., non-deferrable) primary care services.
To contribute to the prevention and control of pandemic influenza.
To instill public confidence in the influenza services available to them.

All Ontarians will be assessed using a standard screening tool that has been developed by the MOHLTC (see chapter 11 of the OHPIP). This tool will be updated at the time of a pandemic to reflect the epidemiology of the pandemic strain and distributed to all practitioners and settings.

1 For purposes of OHPIP, primary care practitioners include physicians (including pediatricians who provide primary care), nurse practitioners, nurses and other primary care providers working in family health teams, community health centres, physician practices, nurse practitioner practices, and other primary care agencies.
- **Walk-In** – Individuals may access a face-to-face assessment by seeing their primary care provider or by visiting a Flu Centre (depending on whether they have been established).

- **Established Institution/Home Setting** – Individuals that are located in a health care institution (e.g., hospital, long-term care home) or individuals receiving health care services in their home (e.g., Community Care Access Centre/contracted agency or other community health agency) will be able to access assessment by health care providers in their established institution/home setting.

*Figure 6: Common Approach to Influenza Assessment*

Once assessed, individuals will be assigned to one of four categories (see Table 3) and either treated in place (i.e., by their primary care provider, at a Flu Centre, or in their care setting) or referred to the appropriate place for care.
Table 3: Influenza Assessment Categories

<table>
<thead>
<tr>
<th>Assessment Category</th>
<th>Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No influenza-like illness identified</td>
<td>No treatment required. Offer educational material on influenza.</td>
</tr>
<tr>
<td>2. Further assessment required to make a diagnosis</td>
<td>Consider initiating treatment. Refer for diagnostic work-up including radiological examinations and/or laboratory testing.</td>
</tr>
<tr>
<td>3. Influenza-like illness identified</td>
<td>Initiate treatment. Assess for appropriate discharge/referral (i.e., to self-care at home, to home with community supports). Follow up with vulnerable patients in 24 to 48 hours to assess status.</td>
</tr>
<tr>
<td>4. Influenza-like illness identified, high risk criteria identified</td>
<td>Transfer to hospital for assessment.</td>
</tr>
</tbody>
</table>

Special efforts must be made to reach individuals that may have difficulty accessing influenza assessment services through the existing primary care system, including:

- Ontarians who do not have a regular primary care provider and rely on walk-in clinics or emergency departments for their care.

- Vulnerable Ontarians, such as people who are shut in, living in shelters, on the street or otherwise marginalized.

Criteria for Activating Flu Centres

During a mild to moderate influenza pandemic, existing primary care services should have the capacity to provide influenza assessment, treatment and referral services – and continue to provide the other primary care services that Ontarians will need.

During a moderate to severe pandemic, primary care services may become overwhelmed, and communities may need to establish dedicated Flu Centres or designated primary care services for flu assessments.

The trigger for switching to an alternative approach will be when the existing primary care system is no longer able to ensure that patients will be assessed, diagnosed and treated with antivirals within 12 to 24 hours of developing symptoms.

Planning for Flu Centres

Flu Centres will be temporary additions to the health care delivery system, and will be planned and managed locally. The lead agency designated to oversee planning for influenza assessment services including implementation of Flu Centre/s will be identified locally. The Community Influenza Assessment Committee will support the lead agency in planning to implement each Flu Centre, identifying the groups/organizations in the community best positioned to manage Flu Centres once they are opened.

In the event that communities decide to use alternative approaches to assessment:

- some primary care practitioners may be asked to work at least part-time in other settings, such as Flu Centres, hospitals, long-term care homes and home care.
• because influenza is primarily a community-acquired infection, there will be no restrictions on where health providers can work during a pandemic.

**Treatment at the Flu Centres**

Treatment available at the Flu Centres will include the following:

• supportive care strategies to ease symptoms

• access to antiviral drugs and associated therapeutics in accordance with clinical guidelines as provided at the time of the pandemic

• education about transmission and possible complications.

To encourage use of the Flu Centres, services will be available at no cost, and people will not need an Ontario Health Insurance Plan (OHIP) card for assessment and treatment. The Flu Centres will use unique identifiers to track patients.

**Primary Assessment Record**

All settings will use the Primary Assessment Record for the initial assessment and treatment (see chapter 11 of the OHPIP). The Primary Assessment Record will accompany the patient through the Flu Centre and to other treatment sites if required.

For patients who have to be admitted to hospital, the hospital will use the Primary Assessment Record as well as the Secondary Assessment for Hospital and the Influenza Admission form (see Chapter 17 of the OHPIP).

**What Does This Mean for Your Organization?**

Health care practitioners and organizations should:

• understand how patients with influenza-like illness will be assessed and treated during a pandemic

• be able to direct patients to the right place for care.
7. Health Human Resources Planning

At the peak of a pandemic wave as many as 20 to 25% of health care workers may be absent from work – either because of illness or caregiving responsibilities at home. To make the most effective use of human resources, Ontario will take a competency-based approach.

A Competency-based Approach

In preparation for an influenza pandemic (interpandemic and pandemic alert periods), practices and organizations will identify:

- the competencies (i.e., skills, knowledge, judgment) required to provide care
- the providers available and their competencies -- including non-registered providers (e.g., retirees), part-time workers, and administrators who may be able to assist in providing care.

Influenza Care Competencies

The mix and quantity of influenza care competencies an individual health care setting or a geographic area will require during an influenza pandemic will depend on:

- the size and mix of population served in the setting or area (demographics)
- health status, attack rate, mortality, and morbidity (severity of the pandemic)
- the type and level of service provided in the care setting or area.

The key competencies during a pandemic will be the ability to:

- assess patient status
- develop a care plan for the patient
- identify whether additional care is needed
- determine whether the patient can be discharged from the care site.

These key competencies are also the most difficult to assess. Ontario has developed a two-part self-assessment tool to help in health care providers reflect on their own ability to assist during a pandemic (see chapter 8 in the OHPIP).

Restrictions on a Competency-based Approach

In a competency-based approach, health care workers are matched to work that makes effective use of their knowledge and skills. However, there are some limitations:

- The Regulated Health Professions Act specifies a number of controlled acts (or health care procedures) which are authorized ONLY to specific professions.
• Any controlled act may be delegated by someone authorized to perform that act to another regulated health professional or non-regulated person; however, a health care worker who feels he or she cannot perform the act safely can refuse to do so and institutional rules may prohibit delegation.

• Under Regulation 965 of the Public Hospitals Act, only a physician can order tests and treatment for hospital in-patients and outpatients while Registered Nurses in the Extended Class can only order tests and treatment for outpatients of the hospital.

• Some activities can only be performed by a person who holds an appropriate registration/license to do so (e.g., registration with the College of Physicians and Surgeons of Ontario).

For more information on influenza care competencies that are in the public domain as well as those that require more skills or are controlled acts, see chapter 8 of the OHPIP.

**Care Strategies to Maximize the Workforce**

Health care settings can structure care in ways that allow them to make the most effective use of provider skills, such as:

• using detailed care plans and algorithms – which rely more on set patterns of care rather than the judgment of the health care worker

• having experienced staff supervise less experienced staff (i.e., designing care to be delivered in “teams” or “pods”)

• using a “cascade” system for deploying resources – that is, as resources need to be extended, moving staff whose competencies require the least supplementation to take on new/different roles

• differentiating between the competencies required to assess patients and the competence to discharge patients from the particular care site.

**The Role of Volunteers**

Settings may have to look beyond their traditional workforce to volunteers for assistance. Settings that use volunteers should take the following steps:

• Identify roles for volunteers. Which influenza care competencies can be done by volunteers? Are there tasks currently performed by health care staff that could be done by volunteers during a pandemic?

• Develop job descriptions that clearly lay out the volunteers’ roles and responsibilities.

• Recruit and screen volunteers. The local pandemic planning committee may consider establishing a central clearinghouse for volunteers that would help recruit, orient and train volunteers as required for all care settings in the community.

• Orient and train volunteers. Training should include infection control practices and procedures, the duties/tasks of the job, and how to cope with any fear, stress or grief associated with their work.

In the 1918 pandemic, a doctor in Ottawa, Ontario provided a two-day course and trained hundreds of women to help care for people at home.
• Retain volunteers. Because of the likely shortage of workers during a pandemic, it will be crucial for health care setting to retain their volunteers. One of the best ways to keep volunteers is to ensure they are kept informed and supported in their roles. If volunteers feel that they are receiving all necessary information, they are less likely to succumb to fear and more likely to stay involved.

**What Does This Mean for Your Organization?**

Health practitioners and organizations should:

• ensure the continuity of critical services and functions during an influenza pandemic

• use the competency-based approach to health human resources planning: identify critical functions in all departments during a pandemic and the skills and competencies required to perform these functions

• maintain a roster of people who are able to help

• coordinate with other settings to share staff and skills.
8. Communications

In the event of a pandemic, both the Public Health Agency of Canada and MOHLTC will activate their pandemic response plans. MOHLTC will use its Crisis Communications Plan to manage provincial health communications.

Communications will focus on providing up-to-date accurate information about the pandemic to both the public and health care workers/stakeholders, informing them of the steps being taken to respond to the pandemic, and advising them what to do at each phase.

Targeted Communications

Ontario is committed to providing timely, accurate, concise communications to/from/among four key audiences:

- **The public** – through media, press coverage, brochures and fact sheets available in more than 20 languages at [www.health.gov.on.ca/pandemic](http://www.health.gov.on.ca/pandemic); advertising to promote the annual influenza immunization; and a public education campaign to reduce the spread of respiratory illnesses.

- **Health workers** – through a crisis communications plan, provider fact sheets, Important Health Notices and a communications system to share surveillance information.

- **Health stakeholders** (including health care employers, associations, regulatory colleges, joint health and safety committees, and unions).

- **Internal audiences** (i.e., MOHLTC staff, Ontario Public Service).

When there is an increased risk of a pandemic (phases 4 and 5) and during a pandemic (phase 6), frontline staff must receive the information they need to work safely. The MOHTLC will:

- issue Important Health Notices

- activate the Healthcare Stakeholder Teleconference – a group made up of ministry representatives, and representatives from the professional associations, labour unions, regulatory colleges and regional offices – that is responsible for bringing forward issues, providing advice to the government, and ensuring effective communication with their constituencies

- ramp up the MOHLTC Healthcare Provider Hotline (toll-free at 1-866-212-2272)

- use a number of different mechanisms to communicate with health care workers and stakeholders, including telephone, email, fax, website, videoconferencing, public education, advertising, stakeholder communications, and media relations.

---

**Objectives**

To educate Ontarians about the pandemic plan
To provide consistent, coordinated and effective public and provider communications
To ensure health care workers have access to transparent, accessible, accurate, real time information that will help them respond to challenges during each phase of the pandemic
Pandemic Communications Strategy

To educate by:
- Encouraging Ontarians to take the threat of pandemic seriously
- Explaining how to prevent and treat influenza
- Providing information about influenza symptoms
- Describing the measures required to protect those at greater risk
- Conducting regular technical briefings for members of media
- Providing transparent, accessible, useful, accurate, technical, real time information for health care professionals that they can use to protect themselves and the public during each phase of the pandemic

To reassure by:
- Demonstrating that government is prepared and has plans in place before a pandemic occurs
- Demonstrating that government has initiated its emergency response plan when required, is working with all other levels of governments and is taking all necessary steps to address the situation
- Issuing regular timely updates that provide accurate and relevant information
- Being responsive to information from the field/front lines and using that information to shape/adapt communication messages
- Recognizing the hard work and dedication of all health care workers
- Modeling a calm approach designed to reduce fear, avoid panic and encourage vigilance

To be accountable by:
- Providing appropriate timely information
- Reporting regularly on the health care system’s ability to respond to the emergency
**Information Cycle**

When there is an increased risk of a pandemic (phases 4 and 5), the MOHLTC may implement aspects of the public health emergency information cycle (see Figure 7).

During a pandemic (phase 6), the MOHLTC will most likely implement all components of the public health emergency information cycle. Information will be issued and briefings held at the same time each day.

*Figure 7: MOHLTC Information Cycle in a Public Health Emergency*
## Communication Roles and Responsibilities

During a health emergency, everyone has a role to play in communication. Table 4 sets out the roles and responsibilities for the ministry and the health care system.

### Table 4: Communication Roles and Responsibilities

<table>
<thead>
<tr>
<th>Organization</th>
<th>Role in Phases 1-3</th>
<th>Role in Phases 4-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Health and Long-Term Care</td>
<td>• Website</td>
<td>• Important Health Notices</td>
</tr>
<tr>
<td></td>
<td>• Publications</td>
<td>• Information Cycle</td>
</tr>
<tr>
<td></td>
<td>• Important Health Notices</td>
<td>• “Directives”</td>
</tr>
<tr>
<td></td>
<td>• Call Centre 24/7</td>
<td>• Website updates</td>
</tr>
<tr>
<td></td>
<td>• Media</td>
<td>• Call centres</td>
</tr>
<tr>
<td></td>
<td>• Advertising</td>
<td>• Teleconferences</td>
</tr>
<tr>
<td></td>
<td>• Information sharing and coordination with federal, provincial and territorial</td>
<td>• Ministry Emergency Operations Centre</td>
</tr>
<tr>
<td></td>
<td>governments</td>
<td>• Media</td>
</tr>
<tr>
<td></td>
<td>• Information sharing and message alignment with local public health units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Coordination of information and fact checks for other OPS ministries’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>communication products</td>
<td></td>
</tr>
<tr>
<td>Municipality/ Local Public Health Unit</td>
<td>• Website</td>
<td>• Website</td>
</tr>
<tr>
<td></td>
<td>• Publications</td>
<td>• Teleconferences</td>
</tr>
<tr>
<td></td>
<td>• Call Centre</td>
<td>• Fan-out emails</td>
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<tr>
<td></td>
<td>• Media</td>
<td>• Media</td>
</tr>
<tr>
<td>Ministry of Labour</td>
<td>• Standards</td>
<td>• Targeted enforcement</td>
</tr>
<tr>
<td></td>
<td>• Inspections and enforcements</td>
<td>• Website and media updates</td>
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<td></td>
<td>• Website notices</td>
<td>• Prevention updates</td>
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<tr>
<td></td>
<td>• Prevention</td>
<td>• Government-wide communications</td>
</tr>
<tr>
<td>Regulatory College</td>
<td>• Website</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Newsletter</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Standards and guidelines</td>
<td></td>
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<td></td>
<td>• Media</td>
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<tr>
<td>Professional Association/ Organized Labour</td>
<td>• Website</td>
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<td></td>
<td>• Newsletter</td>
<td>• Standards and guidelines</td>
</tr>
<tr>
<td></td>
<td>• Advocacy</td>
<td>• Teleconferences</td>
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<td></td>
<td>• Media</td>
<td>• Fan-out emails</td>
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<td>• Advocacy</td>
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<td></td>
<td>• Earned media</td>
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<tr>
<td>Employer</td>
<td>• Policies and procedures</td>
<td>• Modification to policies and procedures</td>
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<tr>
<td></td>
<td>• Training</td>
<td>• Review and revise measures for worker health and safety</td>
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<tr>
<td></td>
<td>• Intranet</td>
<td>• Training on revisions to usual practice</td>
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<td></td>
<td>• Employer 1-800 #</td>
<td>• Joint Health and Safety Committee</td>
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<tr>
<td></td>
<td>• Joint Health and Safety Committee</td>
<td>• Intranet</td>
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<tr>
<td></td>
<td></td>
<td>• Meetings</td>
</tr>
<tr>
<td>Individual</td>
<td>• Awareness</td>
<td>• Awareness</td>
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</tbody>
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**What Does This Mean for Your Organization?**

Health practitioners and organizations should:

- know where to go for information
- develop their own communications strategies
- share and reinforce information provided by the MOHLTC.
9. Site-Specific Plans

OHPIP includes plans for a variety of health care settings, including public health services, laboratory services, emergency medical services, community health services, acute care services, paediatric services, long-term care, and First Nations communities (see Appendix I).

All site-specific plans should:

- set priorities for care, identifying conditions that are critical or life-threatening that must be treated immediately and those for whom services can be deferred for a few weeks or until after the pandemic wave
- identify different ways to organize/deliver services to reduce the spread of influenza and meet needs for influenza care
- develop plans to manage patients with influenza who also have other urgent needs (e.g., cardiac care, kidney disease)
- develop contingency plans to deal with human resource shortages
- institute and maintain best practices in occupational health and safety/ infection prevention and control (note: these should be developed in consultation with the workplace Joint Health and Safety Committee or the health and safety representative)
- develop stockpiles of equipment and supplies and secure supply chains
- develop checklists and tools that can be used during a pandemic.

What Does This Mean for Your Organization?

Health practitioners and organizations should:

- be familiar with the planning guidelines for their sector and for other health care settings that are relevant to their work
- develop pandemic plans.
Appendix I. 2008 OHPIP Table of Contents

Preface

Part I: The Context for Planning for an Influenza Pandemic

   Chapter 1 Background

   Chapter 2 Roles, Responsibilities and Frameworks for Decision-Making

   Chapter 3 Planning Goals, Approach and Assumptions

   Chapter 4 Resources

Part II: System-Wide Issues, Activities and Tools

   Chapter 5 Surveillance -- Detecting and Monitoring the Spread of Influenza

   Chapter 6 Public Health Measures -- Managing the Spread of Influenza

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   Chapter 8 Optimizing Deployment of the Health Workforce

   Chapter 9 Antivirals and Vaccine

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Part III: Setting-Specific Issues, Activities and Tools

   Chapter 13 Public Health Services

   Chapter 14 Laboratory Services

   Chapter 15 Emergency Health Services

   Chapter 16 Community Health Services

   Chapter 17 Acute Care Services

   Chapter 17B Cancer Care Ontario Pandemic Planning Clinical Guideline

   Chapter 17C Clinical Care of Patients with Chronic Kidney Disease/Acute Kidney Injury

   Chapter 17D Ontario Contingency Plan for Management of Blood Shortages
Chapter 18 Paediatric Services

Chapter 19 Long-Term Care

Chapter 20 Guidelines for First Nations Communities

Chapter 21 Psychosocial Support for Health Care Workers and the Public

Chapter 22 Natural Death Surge Planning
Appendix II: Estimated Impact of an Influenza Pandemic by Attack Rate (based on a moderate scenario)

(Note: These estimates were developed based on data from the 1957 pandemic, which is considered to be a pandemic of moderate severity. These estimates do not include the potential impact of health interventions not available during the 20th century pandemics, including certain public health measures such as antivirals and vaccines, and other medical interventions, such as access to antibiotics or intensive care units.)

<table>
<thead>
<tr>
<th>Attack Rate 15 %</th>
<th>Attack Rate 25 %</th>
<th>Attack Rate 35 %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Source</td>
<td>min</td>
</tr>
<tr>
<td>1. Estimated population 2008</td>
<td>2001 Census</td>
<td>12,919,600</td>
</tr>
<tr>
<td>2. No. of people ill enough to remain home</td>
<td>% of total population (1)</td>
<td>1,937,940</td>
</tr>
<tr>
<td>3. No. of people who can be managed through self care</td>
<td>#2 minus 4, 5 and 6</td>
<td>1,121,724</td>
</tr>
<tr>
<td>4. No. of people who will require an outpatient visit</td>
<td>FluAid 2.0</td>
<td>804,484</td>
</tr>
<tr>
<td>5. No. of people hospitalized who will recover</td>
<td>FluAid 2.0</td>
<td>8,595</td>
</tr>
<tr>
<td>6. No. of fatal cases (70% in hospital)</td>
<td>FluAid 2.0</td>
<td>3,137</td>
</tr>
<tr>
<td>7. No. of hospitalizations (recoveries + 70% of fatal cases)</td>
<td>#5 plus 70% of #6</td>
<td>10,791</td>
</tr>
</tbody>
</table>