

OHA Pandemic Toolkit

For Small, Rural, and Northern Hospitals

November 2007



Compliments of ...

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Foreword

Ontario's hospitals have always been committed to incorporating lessons learned into everyday practice. For example, hospitals have worked hard to use what they learned during the *Severe Acute Respiratory Syndrome (SARS)* outbreak for the development and implementation of their emergency preparedness and management plans. The threat of an influenza pandemic is of a much larger magnitude than SARS, and has caused worldwide concern, resulting in considerable preparedness efforts at national, provincial and local levels. Ontario's hospitals have shown great leadership and commitment in taking steps to develop pandemic influenza plans to better meet patient care, staff safety, and business continuity needs.

In response to the unique issues and challenges faced by small, rural, and northern hospitals in developing emergency response plans specific to an influenza pandemic, the OHA has developed the "*Pandemic Planning Toolkit for Small, Rural, and Northern Hospitals*". The toolkit aims to provide practical tools, templates and strategies to assist these hospitals with the development and implementation of pandemic influenza plans.

As a practical guide, this toolkit should be used to supplement the information presented in the "*Ontario Health Pandemic Influenza Plan (OHPIP)*," which was published by the Ministry of Health and Long-Term Care in 2007. While this toolkit provides a framework to assist hospitals in planning, it was developed under the assumption that as the OHPIP is updated, hospitals will update their respective pandemic plans.

Patient and staff safety continues to be a priority for the OHA. The publication of this toolkit is one example of the OHA's commitment to providing its Members with resources to support them in advancing the culture of safety and preparedness in their organizations and community. We hope that you find this toolkit useful as your hospital builds on its pandemic plans.



Tom Closson
President and Chief Executive Officer
Ontario Hospital Association

Disclaimer

This Toolkit has been prepared by the OHA, as a general guide to assist small, rural, and northern hospitals in their Pandemic Planning efforts. The Toolkit is based primarily on the 2007 Ontario Health Pandemic Influenza Plan (OHPIP), and information may change as the version of the OHPIP changes.

The materials in this Toolkit are for general information purposes only and should be adapted to the circumstances of each hospital that uses it. The Toolkit reflects the interpretations and recommendations regarded as valid when it was published based upon available information at that time. Hospitals will be responsible for ensuring the information is current with the most recent version of the OHPIP.

This Toolkit is not intended as professional advice or opinion and users are encouraged to seek their own professional advice and opinion in the development of their institution's plans. The Toolkit is not intended to be the hospital's pandemic influenza plan, but can serve as a planning guide to assist the hospital in developing and updating such a plan. The OHA will not be held responsible or liable for any harm, damage or other losses resulting from reliance of the use or the misuse of the general information contained in this Toolkit.

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Ordering Information

Copies of the *OHA Pandemic Planning Toolkit for Small, Rural, and Northern Hospitals* are available for purchase by contacting the OHA by email (publications@oha.com), telephone (416-205-1300), or by using the OHA's online ordering system at www.oha.com under Communications and Publications, No. 319 (ISBN 978-0-88621-320-6).

OHA Members can access additional copies of the Toolkit via the Internet at www.oha.com by using their Member login and password information, or by contacting 416-205-1300.

Preface

The *OHA Pandemic Planning Toolkit for Small, Rural, and Northern (SRN) Hospitals* was developed in response to a need expressed by SRN hospitals for strategies, tools, and “how to” material to assist with developing pandemic plans that addressed the unique challenges and characteristics they faced.

The Toolkit aligns with the *Ontario Health Pandemic Influenza Plan (OHPIP)* released by the MOHLTC in 2007, which outlines Pandemic Planning at both the provincial and local levels by instructing how Ontario’s health care system will respond to an influenza pandemic.¹ Contained in the Toolkit are summaries of the pertinent information from the OHPIP and other published sources on pandemic influenza planning and comprehensive lists of what a hospital needs to do to develop its Pandemic Plan, with tools and resources to supplement planning efforts.

How the Toolkit was Developed

A. Ontario Hospital Association

The development of the Toolkit was approved and has been fully supported by the OHA’s Health Emergency Management Committee (HEMC)² and the SRN Provincial Leadership Council³, where membership includes CEOs, hospital senior management, and Board members. The OHA also worked with Members involved in Pandemic Planning at acute teaching hospitals who provided extensive input and shared their lessons learned. The OHA is grateful to its Members for sharing tools and templates, all of which reflect the great planning efforts underway in Ontario’s hospitals.

B. Working Group Support

The OHA convened a working group with 14 members from SRN hospitals to help identify issues related to Pandemic Planning in SRN hospitals, develop focused objectives for the Toolkit chapters, and ensure that the content reflected the needs of its audience.

C. Resources Used

The Toolkit incorporates selected emergency preparedness and response recommendations. The following resources were used:

- The *Ontario Health Pandemic Influenza Plan (OHPIP)*, 2007.
- The *Canadian Pandemic Influenza Plan (CPIP)* for the health sector, 2006.
- The final report of the Independent SARS Commission, *Spring of Fear* (2006), and the two interim reports, *SARS and Public Health in Ontario* (2004) and *SARS and Public Health Legislation* (2005).
- The Naylor Report, *Learning from SARS: Renewal of Public Health in Canada* (2004).
- The Walker Report, *For the Public’s Health: A Plan of Action* (2004).
- The OHA submission to the SARS Commission (September 2006).
- The *Toronto Academic Health Sciences Network Pandemic Planning Guidelines* (May 2006) is also quoted extensively to benefit from expertise and experience that extends beyond the acute teaching realm and can apply to small hospitals as well.

1 The Ontario Health Pandemic Influenza Plan (OHPIP) can be downloaded in its entirety or section by section at:
http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html.

2 The terms of reference and mandate of the Health Emergency Management Committee can be viewed on the OHA website under the Emergency Preparedness Page at
<http://www.oha.com>.

3 The terms of reference and mandate of the SRN Provincial Leadership Council please visit the OHA website at
<http://www.srn Hospitals.com/>

Who is the Target Audience?

The OHA recognizes that the small, rural, and northern (SRN) audience is broad and diverse. For some hospitals, all three adjectives (i.e., small, rural, and northern) apply and for others, only one is an apt descriptor.

Common characteristics of small hospitals:

- Geographic remoteness and isolation
- Low-density populations
- Demographics such as aging and special needs populations
- Difficulty in recruiting and retaining staff, especially physicians and specialists
- Limited or no alternatives to essential services
- Lack of bed surge capacity
- Fewer available community supports
- Staff wear multiple hats

Core Services Role of Small Hospitals

In developing the Toolkit, the OHA set out to design something that was written with the characteristics of the SRN hospital in mind and that would address the unique needs and characteristics faced by this type of hospital in developing emergency response plans.⁴

Specifically, the Toolkit is designed to assist hospital planners across SRN hospitals in the coordination of developing the hospital plan where specific functional expertise may be sought to develop specific plans.

⁴ The SRN hospital is considered to be one that serves as the “focal point” for the coordination and delivery of a broad range of primary care and selected secondary care services to small, rural and remote communities.



There are 93 hospitals in Ontario defined as small. Shown above are Lake of the Woods District Hospital, Lady Dunn Health Centre, and Nipigon District Memorial Hospital.

How to Read the Toolkit

This Toolkit has been organized so that each chapter builds on the concepts and resources provided in the chapters that precede it, and each chapter can stand on its own to assist with developing specific plan aspects. The Toolkit encompasses 16 chapters organized into four sections:

SECTION 1: CONTEXT OF PANDEMIC PLANNING

This section outlines the framework for Pandemic Planning and response, describes roles and responsibilities, and considers how the Hospital Pandemic Plan fits into the Community Pandemic Plan. It also proposes a strategy for getting started.

SECTION 2: ACUTE CARE PANDEMIC PLANNING

This section outlines specific elements of a Hospital Pandemic Plan. Each chapter addresses the pertinent information on what the hospital needs to know about the topic, what the hospital needs to do, what tools and resources can help support implementation, and ends with a checklist to support planning. The material is grouped under the headings: planning, response, and recovery stages.

SECTION 3: EVALUATING THE PLAN AND OTHER CONSIDERATIONS

This section outlines strategies for testing, evaluating and updating pandemic plans at the hospital and community level.

SECTION 4: GLOSSARY, REFERENCE LIST, AND KEY RESOURCES

This section contains a series of appendices to summarize acronyms, resources used for the development of the Toolkit and provides tools and templates that can assist hospitals in developing their Pandemic Plan.

Themes considered in the Toolkit

The material in the Toolkit is designed to address four key themes, which are themselves aligned directly with the issues faced specifically by SRN hospitals.

1. Optimizing the supply and utilization of resources.
2. Ensuring the safety and protection of staff, patients and visitors.
3. Collaborating to integrate plans with the health system response and the local community.
4. Implementing the Incident Management System (IMS).

Icon Legend



This icon identifies the purpose of the chapter.



This icon identifies the elements of a Hospital Pandemic Plan.



This icon identifies how to integrate IMS within the Hospital Pandemic Plan.

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SECTION 1:

The Context of Pandemic Planning

Chapter 1: Setting the Framework for Planning



Chapter 1: Setting the Framework for Planning

The threat of an influenza pandemic has caused world-wide concern and resulted in considerable preparedness efforts at national, provincial, and local levels.



The purpose of this chapter is to provide a framework for small, rural, and northern (SRN) hospitals to develop or enhance Pandemic Plans. Upon completion of this chapter you should understand:

- The conditions for pandemic influenza and urgency for planning.
- How to align an ethical framework with the hospital.
- Types of legislation in place and how it impacts the hospital.
- Roles and Responsibilities for Pandemic Planning.
- The Incident Management System (IMS) framework.

A. Background on Pandemic Influenza

Influenza, more commonly referred to as the flu, is an infectious respiratory disease caused by a virus. An influenza pandemic starts when a new strain of flu virus emerges, and, because people have no immunity to the new virus, it spreads quickly through many countries becoming a *pandemic*. Pandemic influenza strains can develop when the following conditions are present:

1. A new influenza virus subtype emerges.
2. It infects humans, causing serious illness and death.
3. It spreads easily and is sustainable from human to human.

The OHPIP provides additional information on influenza and when it becomes the pandemic strain. The OHA has also developed a Pandemic Influenza Fact Sheet.¹ Refer to this chapter's Resources section for links.

What You Need to Know

The following section details five key components that set the framework of the Hospital Pandemic Plan, as identified in the Ontario Health Pandemic Influenza Plan (OHPPI), and context is provided as to why it is important to the SRN hospital.

Key Assumptions for a Pandemic Influenza from the OHPIP:²

Planning to date has considered implications of a moderate pandemic (refer to Table 1.1)³. The projections for a severe pandemic would be 9-10 times worse for hospitalizations and deaths, being similar to the 1918 influenza pandemic.

Table 1.1: Key assumptions guiding Pandemic Planning efforts in Ontario.

Key Assumption	Explanation
Strain to develop outside of Ontario	New subtype of influenza A that will develop outside Ontario but arrive with little lead time after declaration by the WHO
More than one wave	Spread in two or more waves, each lasting about 6-8 weeks
Virus is community spread	Transmission of the virus likely to occur in all settings
35% attack rate	Over the course of the pandemic, 35 % of population fall ill
20-25% absenteeism rate	At the peak of the first wave, about 20-25% of workforce will be absent
Percentage seeking hospital care is unknown	Ensuring appropriate management of people requiring outpatient care to reduce demand for hospital care
Those who recover will be immune	Those individuals who recover from illness with the pandemic strain will develop immunity to infection from that strain

¹ Planning for a Pandemic: Pandemic Influenza Fact Sheet (May 2006) is available at <http://www.oha.com>

² Planning Assumptions. OHPIP Chapter 3, page 2

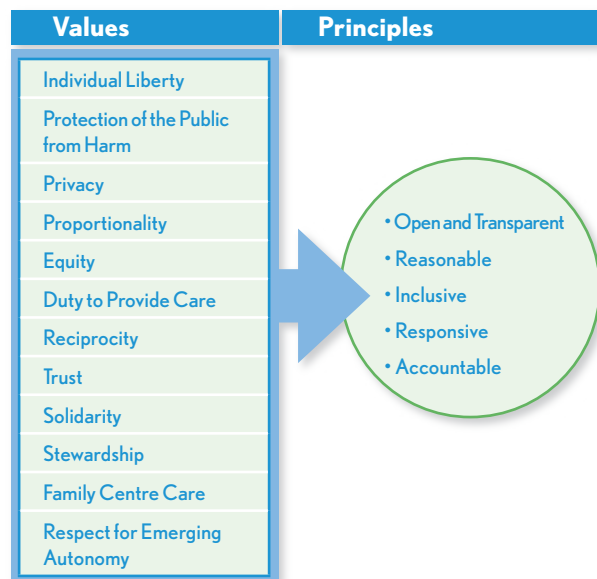
³ Refer to the Toolkit Appendix 3 for the Assumptions Library Template.

B. Ethical Framework for Decision-Making⁴

To optimize the supply and utilization of scarce resources that may be in high demand during a pandemic influenza, governments, public health authorities, and hospitals will have to make difficult decisions. The OHPIP reinforces the importance of a shared ethical language and decision-making process, and has outlined 12 core ethical values that Ontario's response will be based on (refer to Figure 1.1).

While more than one value may be relevant in any given situation, some values will be in tension with others, giving cause to the ethical dilemmas that may emerge during a pandemic.

Figure 1.1: Twelve core ethical values that Ontario's response to an influenza pandemic will be based on.



What does this mean for the SRN hospital?

SRN hospitals will also need to make difficult decisions (e.g., prioritization to receive care, access to ventilators). Adopting the ethical framework for decision-making that has been outlined in the OHPIP is important to ensure consistency; however, hospitals should also consider how decisions will be made (i.e., use of an ethics committee). Refer to the Toolkit Appendix 3 Tools and Templates section and review the table for decision-making.

By utilizing case studies, experiential exercises, or scenarios, the hospital can identify ethical issues, and help remove ambiguity from the decision-making process by initiating dialogue around ethical topics and issues. Through this dialogue the hospital can:⁵

- Challenge individual and collective beliefs, values and attitudes on ethical issues in a respectful, non-judgmental manner.
- Understand the impact and consequences of certain decisions.
- Determine the best course of action in a given situation.

⁴ Ethical framework for decision making. OHPIP Chapter 2, page 8. Adapted from Stand on Guard for Thee: Ethical considerations in preparedness planning for pandemic influenza. University of Toronto Joint Centre for Bioethics Pandemic Influenza Working Group, November 2006.

⁵ Ventrella, S. The Platinum Standard: An Individual Framework for Making Ethical Decisions

C. Provincial Legislation During an Influenza Pandemic

During a pandemic, individuals and institutions responsible for managing the response will require legal authority to implement pandemic plans.⁶ Much of the pertinent legislation is already in place and is outlined in the OHPIP.⁷ For example:

- *Public Hospitals Act*
- *Health Protection and Promotion Act*
- *Emergency Management and Civil Protection Act*
- *Occupational Health and Safety Act*
- *Workplace Safety and Insurance Act*
- *Regulated Health Professions Act*
- *Employment Standards Act*
- *Coroners Act*

What does this mean for the SRN hospital?

During the pandemic response stage, different legislation may impact the hospital in different ways. For instance, the *Emergency Management and Civil Protection Act* addresses declared emergencies and who may declare one. Consider the scenario where an emergency is declared in advance of the pandemic strain being observed in the local community. To ensure optimal use of resources, the hospital must determine what the triggers will be for implementing different components of its Pandemic Plan (like the scaling back of services, for example). Refer to the Toolkit Appendix 3 Tools and Templates section for the Impact of Legislation on the Hospital Table.

How is a Pandemic Plan activated?

The *Emergency Management and Civil Protection Act* (EMCPA), addresses declared emergencies in Ontario. Under the EMCPA,

- The Lieutenant Governor in Council or the Premier, if in the Premier's opinion the urgency of the situation requires that an order be made immediately, may declare that an emergency exists throughout Ontario or in any part thereof.⁸
- A head of municipal council may declare that an emergency exists in the municipality or part of the municipality, and may take action and make orders to implement the emergency plan of the municipality, and to protect property and the health, safety and welfare of the inhabitants of the emergency area.⁹

Vertical Lines of Communication to Activate the Pandemic Plan:



6 Relevant Provincial Legislation. OHPIP Chapter 2, page 11

7 Relevant Provincial Legislation. OHPIP Chapter 2, page 11

8 Emergency Management and Civil Protection Act, 5.7.0.2

9 Emergency Management and Civil Protection Act, 5.4

D. Roles and Responsibilities for Pandemic Planning and Response

The OHPIP describes the roles and responsibilities for the different “vertical” levels (i.e., national, provincial, and local) of government in planning for and responding to a pandemic influenza (refer to Figure 1.2).¹⁰

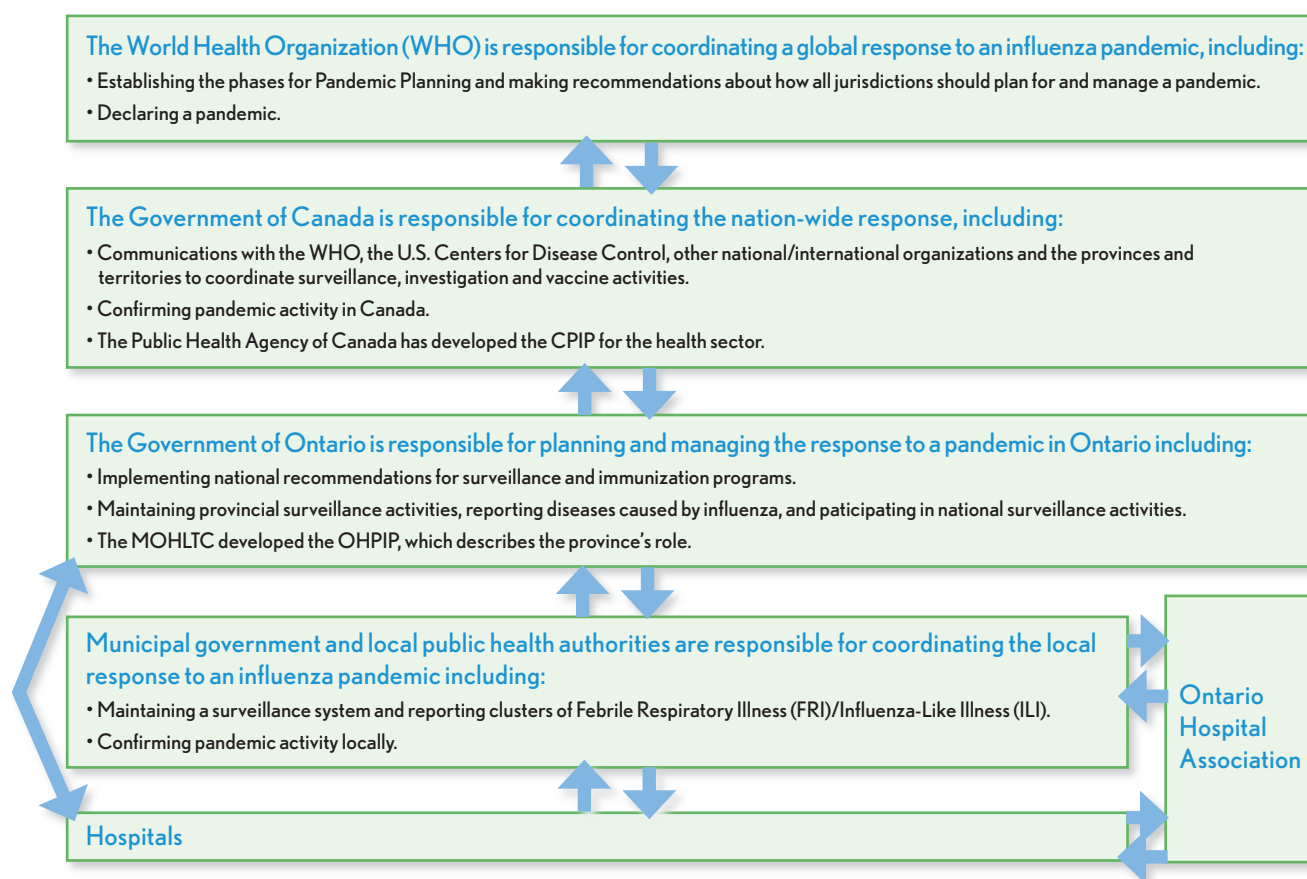
What does this mean to the SRN hospital?

According to the OHPIP each local health unit in the province is required to lead the development of local coordinating pandemic influenza plans that will set out the steps that the local health care organizations/services

should take to prepare for and respond to a pandemic. The local PHU will serve as a source of advice and support to the hospital in the development of the hospital plan.

The hospital receives direction from and will communicate with provincial and local institutions, in addition to the OHA. Refer to the MOHLTC fact sheet “Who is in charge during an influenza pandemic?” for further information.¹¹

Figure 1.2: Roles and Responsibilities for different levels of government for Pandemic Planning and response.



10 Roles and Responsibilities in Collaborative Interjurisdictional Pandemic Planning. OHPIP Chapter 2, page 3

11 Who is in charge during an influenza Pandemic? Fact Sheet
http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_pro_fs.html

E. The Incident Management System for Emergency Management

The activation of the Pandemic Plan is supported by a series of cascading events, which include the implementation of the Incident Management System (IMS) and respective information cycles to support communications.

What is the Incident Management System?

The IMS is a hierarchical model that provides a means to coordinate parts of one agency or many agencies in order to respond to an incident and protect life, property, and the environment.

What does this mean for the SRN hospital?

To coordinate the health response to an influenza pandemic, the province will utilize the IMS. While many hospitals have adopted IMS, integration into hospital-specific emergency plans has not been an easy task. Refer to the Toolkit Appendix 3 for sample job action sheets for key functional roles.

The Key Components of IMS:

- **Common Terminology:** Allows multiple organizations to work together.
- **Modular Organization:** Four functional areas.
- **Unity of Command:** A clear chain of command where each individual reports only to one designated person.
- **Unified Command Structure:** Each incident must be coordinated by a sole incident commander regardless of the number of agencies involved.
- **Consolidated Incident Action Plans (IAPs):** Brief written plans that define response goals, objectives, and activities for a specified time period of 8-24 hours.
- **Manageable span of control:** Typically 3-7 people are managed by one person.
- **Comprehensive resource management:** Ensure the optimal use of resources.
- **Action Sheets:** Brief job descriptions created in advance for common roles.

*Christian, M, Kollek, D, Schwartz, B (2005)
Emergency Preparedness: What Every Health Care
Worker Needs to Know. Can J Emerg Med; 7(5):330-7*

Resources

Background; Roles, Responsibilities,
and Framework for Decision-Making;
Ontario Health Pandemic Influenza Plan
*[http://www.health.gov.on.ca/english/providers/program/
emu/pan_flu/pan_flu_plan.html](http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html)*

Complete Guide to Ethics Management:
An Ethics Toolkit for Managers
<http://www.managementhelp.org/ethics/ethxgde.htm>

Legislative Issues & Analysis – Backgrounders,
Analysis and Submissions
<http://www.oha.com>

Service Ontario, e-laws (Collection of free
legislation and regulations)
<http://www.e-laws.gov.on.ca>

Stand on Guard for Thee – Ethical Considerations in
preparedness planning for pandemic influenza
<http://www.utoronto.ca/jcb/home/documents/pandemic.pdf>

The Great Influenza by John Barry

The Last Days of Okak
<http://www.nfb.ca/collection/films/fiche/?id=16164>

The Platinum Standard: An Individual Framework for
Making Ethical Decisions; Ventrella, S. (2003)
*[http://www.linkageinc.com/company/news_events/
link_learn_enewsletter/archive/2003/04_03_ventrella_
ethical_decisions.aspx](http://www.linkageinc.com/company/news_events/
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ethical_decisions.aspx)*

The Practice of Psychology in Rural Communities:
Potential Ethical Dilemmas Ethics and Behaviour.
Vol. 13, No. 4, Pages 367-384
*[http://www.leaonline.com/doi/abs/10.1207/
S15327019EB1304_5](http://www.leaonline.com/doi/abs/10.1207/
S15327019EB1304_5)*

Framework Checklist for SRN Hospitals

Background on Pandemic Influenza

Faced with so many unknowns (e.g., severity of virus, demand for hospital services, staff absenteeism rate), hospitals must:

- ☐ Be familiar with the assumptions outlined in the OHPIP.
- ☐ Develop an Assumptions Library. Refer to Toolkit Appendix 3 Tools and Templates.

Ethical Framework for Decision-Making

- ☐ Adopt the ethical framework for decision-making outlined in the OHPIP, and develop a process to test how it will be used at the hospital.
- ☐ Discuss ethical issues that the hospital may face and test the process the hospital will take to make the decision. Refer to Toolkit Appendix 3 Tools and Templates.

Provincial Legislation

- ☐ Understand the legal and regulatory framework that the hospital will operate in during a pandemic influenza.
- ☐ Consider the impact legislation will have on the Hospital Pandemic Plan and response. Refer to the Toolkit Appendix 3 Tools and Templates.

Roles and Responsibilities

- ☐ Understand the responsibilities for planning and response to a pandemic influenza, and where the hospital fits in.
- ☐ Consider the roles and responsibilities of the hospital to plan for and respond to a pandemic influenza.

Incident Management System

- ☐ Ensure familiarity with IMS and how it will be utilized to coordinate provincial and local responses.
- ☐ Adopt the incident management framework at the hospital. Develop an IMS and job action sheets to integrate into the Pandemic Plan. Test how IMS will be used.
- ☐ Identify who has the authority to declare an emergency and activate the Pandemic Plan.

Chapter 2: Community Pandemic Planning and Response



Chapter 2: Community Pandemic Planning and Response

Every community is unique, with different structures, resources, networks, and capabilities, so Pandemic Planning at the community level is not a one-size-fits-all solution.

The purpose of this chapter is to provide context of the community pandemic planning and response structure. Upon completion of this chapter you should understand:

- The importance of a coordinated and systematic local community pandemic plan and response structure.



What You Need to Know

What does Pandemic Planning look like at the community level?

In the local community, the Pandemic Planning unit will, for the most part, consider the local public health unit (PHU) or the municipality boundaries, rather than the Local Health Integrated Network (LHIN) boundary. Hospitals may face some difficulty in that they may provide care for patients in more than one public health unit or municipality.

It is important to understand the driving factors that are pulling the local PHU and municipality to work together, and why the hospital should be involved (refer to Table 2.1).

Table 2.1 Roles and Responsibilities for Local Government for Pandemic Planning as outlined in OHPIP.

Local Government Pandemic Planning		
Planning	Health Planning	Critical Infrastructure Planning
Who	Local Public Health Units	Municipalities ¹
Legislation	The <i>Health Protection and Promotion Act</i> outlines the responsibilities of the PHU, which include protecting public health and preventing, managing, and controlling the spread of communicable diseases. ²	The <i>Emergency Management and Civil Protection Act</i> states that every municipality shall develop and implement an emergency management program. ³ This must consist of: <ul style="list-style-type: none"> • An emergency plan • Training programs and exercises • Public education • Any other element required by regulation
Responsibilities	The OHPIP states that each local health unit in the province will have a pandemic influenza coordinating plan that will set out the steps that local health care organizations/services should take to prepare for and respond to a pandemic. ⁴	The Provincial Coordination Plan for Influenza Pandemic (PCPIP), published by Emergency Management Ontario (EMO) states that municipalities and communities have to develop emergency response plans and recommends that an influenza pandemic be identified as a risk. ⁵

1 Influenza Pandemic Guidelines for Municipal Emergency Management Programs. <http://www.health.gov.on.ca>

2 *Health Protection and Promotion Act*.

3 *Emergency Management and Civil Protection Act*, s. 3

4 Roles and Responsibilities in Collaborative Interjurisdictional Pandemic Planning. OHPIP Chapter 2, page 3

5 Provincial Coordination Plan for an Influenza Pandemic (2006). http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_docs/pcpip.pdf

Why is it important to be involved in your community's Pandemic Planning?

Taking a community-based approach to developing a Community Pandemic Planning Committee can ensure that local plans are integrated both vertically (e.g., national and provincial) and horizontally (e.g., health and critical infrastructure).

What is more, there are many issues that are critical to effective implementation of the Hospital Pandemic Plan (e.g., ensuring critical infrastructure, access to the Ministry of Health and Long-Term Care (MOHLTC) equipment and supplies stockpile). Participating on the Community Pandemic Planning Committee can ensure that these issues are addressed in a collaborative manner to support coordination and efficiency during the pandemic.

Elements of a Community-Based Approach to Planning

1. A multidisciplinary team.
2. Clear delineation of roles and responsibilities;
3. Flexibility in application of the model (e.g., project, stakeholder or area of responsibility approach).
4. Community leadership and wide participation.
5. Community commitment and cooperation.
7. Identification of problems in the local system.
8. Education and experiential learning opportunities.

Implementing a Community-based approach to strengthening rural health services.

Representation on the Community Pandemic Planning Committee may include:

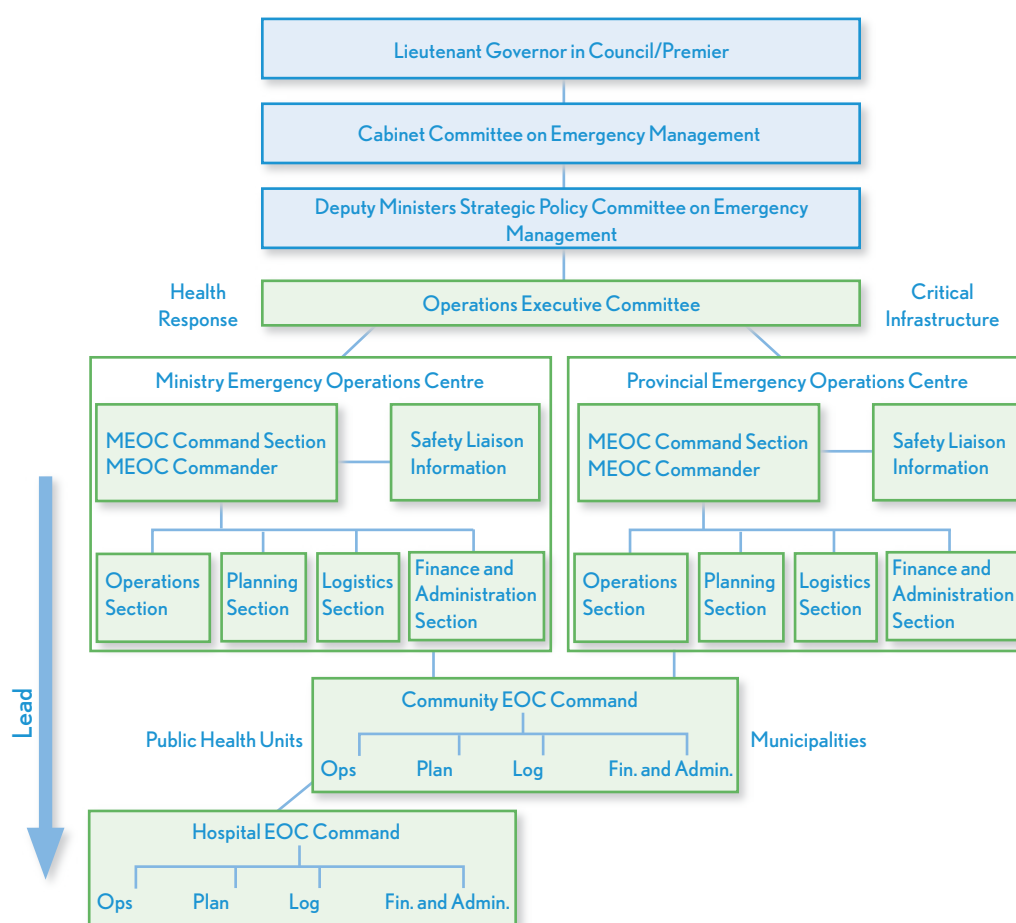


How does the community response connect to the provincial emergency structure?

The MOHLTC will be the lead agency coordinating the response to a pandemic influenza. It will utilize the Incident Management System (IMS) structure and

activate the Ministry Emergency Operations Centre (MEOC). PHU will communicate with the MEOC and municipalities will communicate with the Provincial Emergency Operations Centre (PEOC), which will be activated to support the health response and maintain critical infrastructure (refer to Figure 2.1).

Figure 2.1: Provincial, Local, and Hospital Emergency Response Structure as outlined in the Provincial Coordination Plan for an Influenza Pandemic (PCPIP).



NOTE: The **Incident Manager** is responsible for coordinating the response and is in charge of seven key functional areas:

1. **Information Officer:** provides advice on internal and external communications.
2. **Safety Officer:** ensures the health and safety of all those involved in the response.
3. **Liaison Officer:** maintains the link with external stakeholders.
4. **Operations Chief:** is responsible for core business functions.
5. **Planning Chief:** gathers all relevant information to guide short-term and long-term planning and decisions.
6. **Logistics Chief:** locates and manages necessary resources, and delivery to where needed.
7. **Finance/Administration Chief:** is responsible for tracking and costing expenditures.

Who is the Incident Manager?

In many larger communities where the local Medical Officer of Health (MOH) covers one municipality, he/she participates at the Emergency Operations Centre and is looked upon as the leader in responding to health issues. During a pandemic influenza, the local MOH may assume the role of the Incident Manager and coordinate the response locally based upon directives from the Chief MOH.

In many of the smaller communities however, the local MOH may cover more than one municipality. While there is no specific direction on who should be the Incident Manager, it is important that communities determine how the health response will be coordinated in such situations.

Small, rural, and northern (SRN) hospitals should consider:

- Whether their municipality or community has adopted IMS and whether it will activate an Emergency Operations Centre (EOC), during a pandemic.⁶
- Who is the Incident Manager (and back-up) for the community during a pandemic influenza?
- How will the hospital EOC or Command Centre connect with the community EOC?
- What specific information can be expected from the community EOC?

⁶ The Emergency Operations Centre is a central command and control area where those responsible for leading the response to an emergency are located.

How to start Pandemic Planning?

The OHA acknowledges that hospitals have taken a very proactive role in Pandemic Planning and that the process is ongoing. For hospitals in the early stages of planning, considering commonly asked questions can help get the hospital and community pandemic planning discussions started:

1. If 15 to 35% of the population fell ill, what would be the impact on your community?

The OHPIP estimates that a moderate influenza pandemic could result in between 15-35% of Ontario's population falling ill. The implications for Ontario and in particular, for the health system, are daunting for a moderate pandemic, as outlined in the table below. Of those who become ill, it is assumed that about 45% will not require medical care, about 53% will require outpatient or primary care, and approximately 1.5-2.0% will require hospitalization. These assumptions do not consider the role of antiviral therapies or vaccines.⁷ The MOHLTC website also outlines the assumptions by PHU.⁸

	Estimates for Ontario
Population	12,686,952
Infected	4,440,433
Managed by Self-Care	2,009,252
Outpatient Care	2,365,265
Hospitalization	53,613
Deaths	12,303

Hospitals need to also consider whether their community has a high transient population (e.g., cottagers, students) who may not be accounted for in the population estimates.

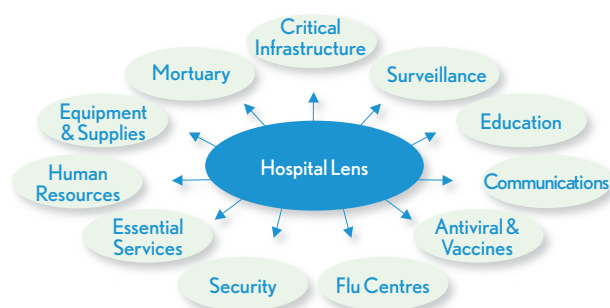
⁷ Planning Assumptions. OHPIP Chapter 3, page 2.

⁸ Based upon 2006 Census data and the Meltzer model, which was developed at the Centre for Disease Control, in the United States. OHPIP 2007 Impact on Ontario Public Health Units. http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_impact.html

2. What is your community planning to do to reduce illness and death, and minimize disruption?

A community-based approach to Pandemic Planning ensures coordination and cooperation in the development of plans that span sectors, but it requires input because the decisions of one sector could impact another. Hospitals must not plan in isolation; rather, they must be engaged with the community, in particular with their local PHU (refer to Figure 2.2).

Figure 2.2: Eleven key issues that should be addressed through collaboration at the Community Pandemic Planning Committee.



3. What is the demand for services that you can expect?

4. How will you cope with increased demand if over the course of the pandemic, 15-35% of your workforce is absent?

5. How will you adapt to disruptions in the supply chain for equipment and supplies necessary to support your services?

To answer questions 3, 4 and 5, consult FluSurge, a spreadsheet-based model developed by the Centre for Disease Control (CDC) that provides hospital administrators and public health officials with estimates of the surge in demand for hospital-based services during a pandemic influenza. It provides the projected number of hospitalizations, estimates for admissions requiring intensive-care and ventilator support as well as the number of deaths.⁹

⁹ FluSurge software and descriptions can be downloaded from <http://www.cdc.gov/flu/tools/flusurge/>

FluSurge does not take into consideration the illness or absenteeism rate of staff, which during the pandemic can result in a balancing dynamic of optimizing the supply of resources with the demand for services. The CDC's FluWorkLoss can assist hospitals in estimating the potential number of days lost from work due to an influenza pandemic.

In considering a model to project the potential impact of an influenza pandemic, it is important to consider both the potential impact and the availability of health care workers.

Resources

FluSurge Centre for Disease Control and Prevention
<http://www.cdc.gov/flu/tools/flusurge/>

FluWorkLoss Centre for Disease Control and Prevention
<http://www.cdc.gov/>

Implementing a Community-based approach to strengthening rural health services: the community health services model
<http://www.unmc.edu/Community/ruralmeded/jedstloc/implemen.htm>

List of Municipalities
<http://www.amo.on.ca>

Ontario Health Pandemic Influenza Plan
http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

Provincial Coordination Plan for an Influenza Pandemic (2006).
http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_docs/pcpip.pdf

Standing Together: An Emergency preparedness Planning Guide for America's Communities; Joint Commission on Accreditation of Health Care Organizations (2005)

Community Pandemic Planning Checklist for SRN Hospitals

Pandemic Planning at the Local Community Level

- ☐ Participate on the local Community Pandemic Planning Committee. Call the local Public Health unit if they have not involved you.
For a list of phone numbers visit:
http://www.alphaweb.org/ont_health_units.asp.
- ☐ Ensure key issues from the hospital perspective are addressed at the community level.

How the Community Pandemic Committee Connects to the Province

- ☐ Ensure familiarity with IMS and how it will be utilized to coordinate provincial and local responses.

SECTION 2:

Acute Care Pandemic Planning

Chapter 3: Hospital Pandemic Plan and Response



Chapter 3: Hospital Pandemic Plan and Response

The process of developing an emergency plan at the small, rural, and northern (SRN) hospital level can be overwhelming. The expectations that have been outlined at national and provincial levels must be understood and incorporated into local plans.

The purpose of this chapter is to address committees and structures that need to be in place for SRN hospitals to develop or enhance pandemic plans. Upon completion of this chapter you should understand:

- The elements of the emergency management process.
- How to develop a Hospital Pandemic Plan.
- How to integrate the Incident Management System into your plan.



What You Need to Know

What is the Emergency Management Process?

Emergency management is the process of dealing with and avoiding risks by identifying and managing hazards. Actions taken depend on the perceived risk of the hazard. It involves five phases: prevention, mitigation, planning, response and recovery (refer to Figure 3.1).¹

Effective emergency management relies on the integration of emergency plans at all levels, both vertically (e.g., provincially, locally) and horizontally (e.g., in the community).

Figure 3.1: Emergency Management Process



Prevention: to avoid/eliminate disaster, as a pandemic cannot be prevented.

Mitigation: actions taken to reduce impact of disasters or lessen impact if they do occur.

Planning: process of developing plans of action to deal with the disaster when it occurs. Activities include identifying resources and building capacity.

Response: mobilization of resources to respond to the disaster.

Recovery: processes to restore the affected area back to “normal”.

¹ Emergency Management in Ontario. OHPIP Chapter 2, page 5.

Why is it important to start Pandemic Planning now?

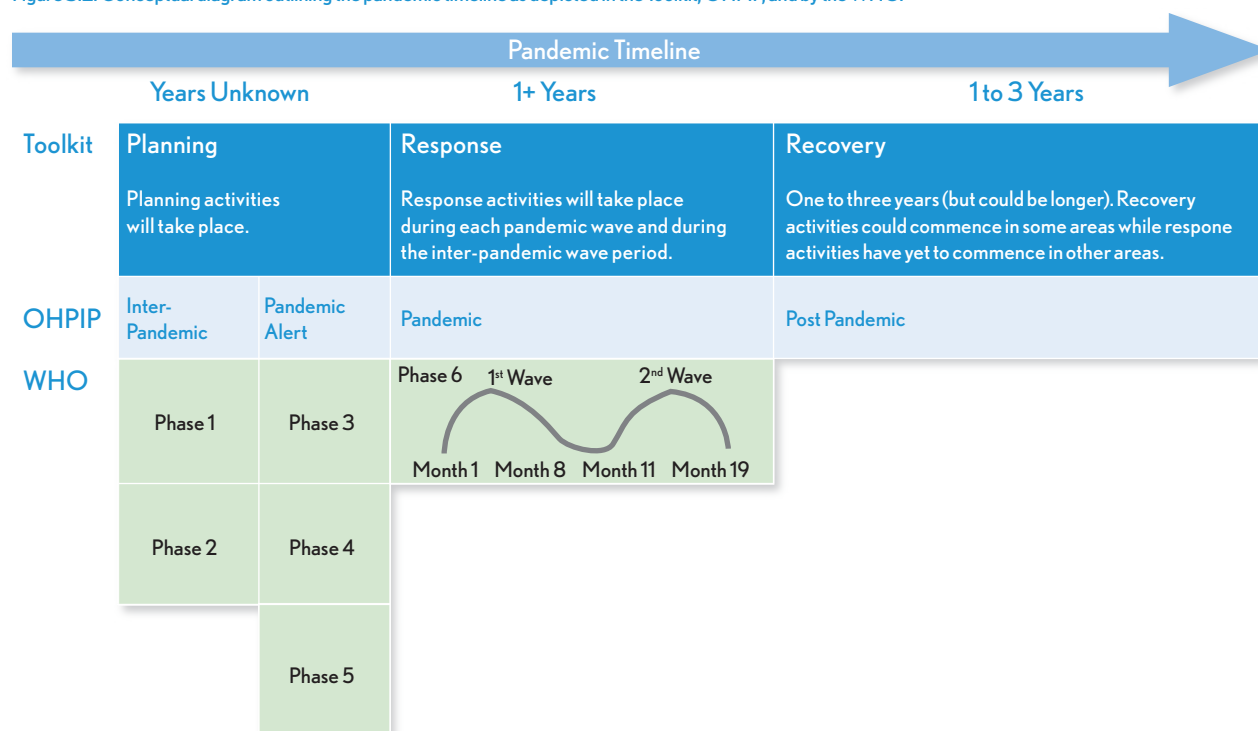
According to the World Health Organization (WHO), the world is currently in a sustained state of pandemic alert and organizations should be in the planning phases.

The OHPIP considers periods and phases that are based upon the six Pandemic Planning phases developed by WHO. Each phase coincides with a series of recommended activities to be undertaken by the WHO, the international community, governments and the health care sector.

The world is presently in WHO Phase 3, a new influenza virus subtype that is causing disease in humans, but is not yet spreading efficiently and is sustainable among humans.²

The Acute Care Pandemic Planning section of the Toolkit considers three phases: Planning, Response and Recovery and corresponds to the OHPIP and WHO phases as the conceptual diagram outlined below illustrates. Hospitals should use the phases as a guide for developing their Pandemic Plan.

Figure 3.2: Conceptual diagram outlining the pandemic timeline as depicted in the Toolkit, OHPIP, and by the WHO.



² Roles, Responsibilities, and Framework for Decision-Making, OHPIP, Chapter 2

What You Need to Do

The Seven Steps to developing a Hospital Pandemic Plan

Pandemic planning is an ongoing iterative process that involves the following steps:

1. Confirm who within hospital senior management has the accountability and ownership of Pandemic Planning

This step is a key success factor in championing the project and in the long-term sustainability of the Pandemic Plan. Senior management can also assist with access to resources and establishing policies and procedures to support the Hospital Pandemic Plan.

2. Designate a lead person to coordinate the Hospital Pandemic Plan

This is a success factor in ensuring that the project is on track, objectives are being met, relevant experts are being sought, and the Hospital Pandemic Planning Committee is supported. The lead person may consider completing a needs analysis of the level of urgency, expectations of the hospital, and resources needed to develop the plan.

3. Develop a Hospital Pandemic Planning Committee

The Committee can provide both the expertise required to develop specific plans (e.g., materials management can develop the equipment and supplies plan) and the buy-in to approve what the hospital will do to respond to a pandemic. Members of the committee may be internal and external. Refer to the Toolkit Appendix 3 Tools and Templates section for further details on participants.

4. Identify the issues, prioritize them, and assign roles and responsibilities to develop plans

The *Ontario Health Pandemic Influenza Plan* (OHPIP) has prioritized many issues and provided guidance to the health system on developing plans. In addition to these plans, hospitals will need to consider issues specific to their community and hospital.

5. Develop plans

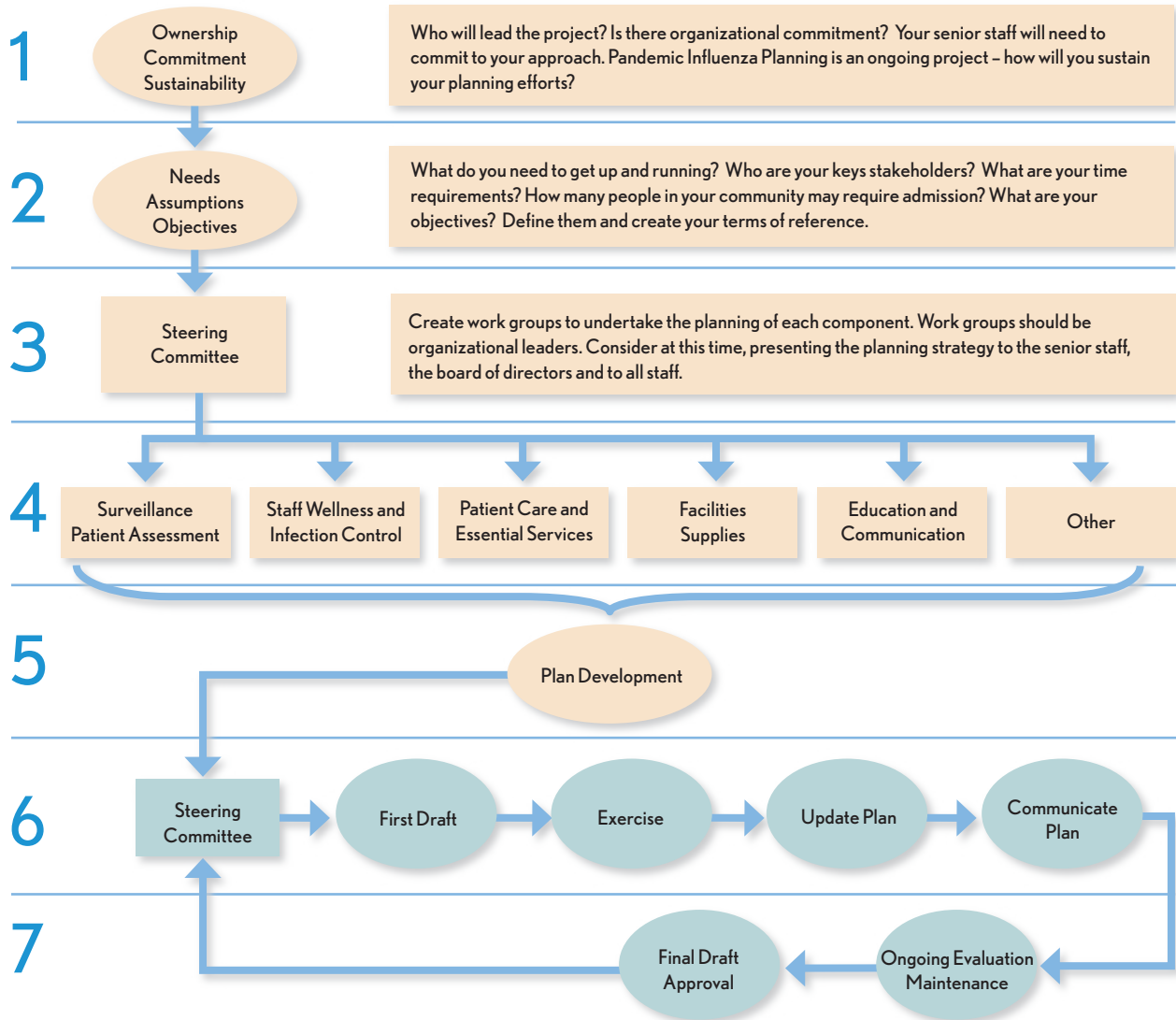
In the process of developing plans, input may be sought from the Hospital Pandemic Planning Committee or senior management, along with the local public health unit and other health sector organizations in the community.

6. Approval, dissemination, and evaluation

Obtain buy-in from the Pandemic Committee, sharing the plan or components with internal and external stakeholders to build awareness, and test the plan.

7. Update and maintenance of the Pandemic Plan

The Pandemic Plan should be regularly reviewed to ensure it is consistent with the OHPIP, MOHLTC guidelines, the Community Pandemic Plan, and the realities of the hospital.

Figure 3.3: The hospital pandemic planning process³

³ Obtained and used with permission of Kingston General Hospital.

How to integrate the Incident Management System into the plan

The Hospital Pandemic Plan should integrate the IMS structure to build familiarity of the language and protocols for emergency management, and ensure that tools are developed and in place to support the response.



To integrate IMS, start by asking the following questions:

- Who is in charge of activating this plan?
- Who is in charge of implementing this plan and who do they report to?
- What information will the command staff need to know to make decisions?
- Will implementation of the plan require coordination or communication with internal or external stakeholders? If so, how will this occur?
- If the role needs to be filled by a designate, what tools would assist the person fulfilling the role?
- What are the resources required to fulfill the response requirements?

How to activate the plan and connect it to IMS

When? The trigger for activation of the plan may be when the MOHLTC issues an alert notifying the health system of heightened pandemic influenza activity and the activation of the health response.

Who? To activate the Pandemic Plan, it generally requires the authority and approval of the CEO or designate member of the senior management team. In the early stage of the pandemic, perhaps only particular parts of the plan will be activated (e.g., the hospital Emergency Operations Centre or the surveillance plan).

What will happen? The Incident Manager will fill section roles and assemble the Incident Management team to consider the immediate responses required of them. Refer to the Toolkit Appendix 3 Tools and Templates section for sample Job Action sheets.

Resources

Roles, Responsibilities, and Framework for Decision-Making Ontario Health Pandemic Influenza Plan, 2007
http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

What Hospitals should do to prepare for an Influenza Pandemic; Toner, E. Waldhorn, R. (2006); Biosecurity & Bioterrorism: biodefense strategy, practice, and science; Vol. 4, No 4

Chapter 4: Surveillance



Chapter 4: Surveillance

Surveillance is the continuous and systematic process of collecting, analyzing, interpreting, and disseminating data to monitor public health and ensure timely interventions to reduce morbidity and mortality.¹ Ontario has developed a surveillance plan to detect, track, monitor, and share information about new influenza virus activity to guide decisions made locally and provincially during a pandemic influenza.

The purpose of this chapter is to outline the elements of a surveillance plan and the role the hospital plays in detecting and tracking influenza activity. After reading this chapter you will understand:

- How the surveillance data collected will guide local and provincial decisions.
- How to develop a hospital surveillance plan.

Guiding Principles:

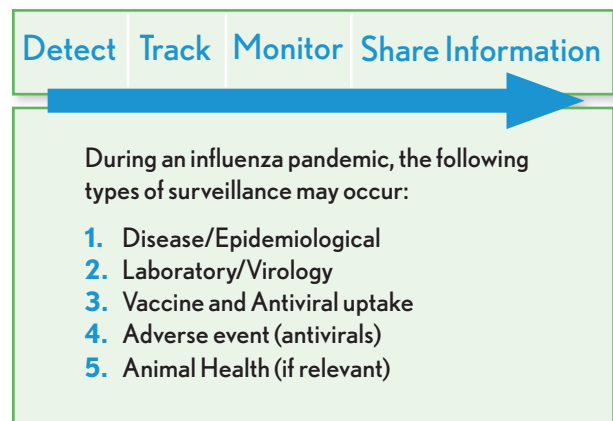
- Through surveillance, the epidemiology and case definition of the pandemic strain will be confirmed.
- Ontario will use every opportunity to target the public health response to slow the spread of pandemic influenza.
- Local public health units (PHU) will monitor surveillance data collected in their area and utilize public health measures as required.
- Hospital surveillance data will feed into the assessment of local and provincial activity.

What You Need to Know

What is the MOHLTC's surveillance plan?

The public health system is responsible for protecting public health and preventing, managing, and controlling the spread of communicable diseases.² To do this, the public health system must be able to detect new virus activity and track the spread and impact locally, provincially and nationally. The Ministry of Health and Long-Term Care (MOHLTC) *Ontario Health Pandemic Influenza Plan* (OHPIP) outlines the elements of Ontario's surveillance plan (refer to Figure 4.1).³

Figure 4.1 Objectives of the MOHLTC's Surveillance Plan.



1 Surveillance: Detecting and Monitoring Influenza. OHPIP Chapter 5, page 1

2 Surveillance: Detecting and Monitoring Influenza. OHPIP, Chapter 5, page 1

3 Surveillance: Detecting and Monitoring Influenza. OHPIP, Chapter 5

DURING THE PLANNING STAGE, the MOHLTC's activities include:

- Clarifying the data needs and developing data elements to be reported and information required for enhanced surveillance.
- Exploring the use and development of a web-based portal to allow institutions (e.g., hospitals) to submit data.

DURING THE RESPONSE STAGE of the pandemic, MOHLTC's activities will include:

- Utilizing the integrated Public Health Information System (iPHIS) and other sources to aggregate data sources from PHU to track the occurrence, severity, and progression of the pandemic.
- Adopting case definitions and disseminating epidemiological summaries.
- Monitoring influenza-like illness (ILI) activity in order to:
 - Detect unusual events (new strains).
 - Compare new strains with seasonal vaccine composition and make recommendations.
 - Estimate the impact of ILI in terms of attack rate, outpatient visits, hospitalizations, and case fatality.
- Monitoring antiviral uptake, adverse reactions to antivirals and vaccines, and coverage (once pandemic vaccine is available).
- Reporting data to the Public Health Agency of Canada (PHAC) and back to the health system to help identify disease; guide prevention, control, and research; and evaluate treatment and public health measures.

DURING THE RECOVERY STAGE of the pandemic, MOHLTC's activities will include:

- Working with local planning groups to determine the burden of the disease in the province.

What is the local public health unit surveillance plan?

Local PHU report to the Public Health Division at the MOHLTC, and will support provincial surveillance activities by monitoring and reporting data on ILI activity to the MOHLTC and to local health care providers.⁴

DURING THE PLANNING STAGE, local PHU activities may include:

- Liaising with local institutions to maintain vigilance in febrile respiratory illness (FRI) screening and ensuring data is collected locally.
- Confirming surveillance tools, forms, and protocols are up-to-date.

DURING THE RESPONSE STAGE of the pandemic, local PHU activities may include:

- Utilizing active surveillance protocols to detect entry of cases locally.
- Disseminating pandemic alerts.
- Monitoring surveillance activities.
- Participating in special studies as required.
- Implementing public health measures as required.

DURING THE RECOVERY STAGE of the pandemic, local PHU activities may include:

- Collecting information required to evaluate surveillance activities.
- Obtaining feedback from local institutions on the surveillance process.

⁴ Local Level Surveillance Activities by level by pandemic period and phase. OHPIP Chapter 5, Appendix, pg 5

What You Need to Do

DURING THE PLANNING STAGE, develop a hospital surveillance plan.

Elements of a Surveillance Plan include:

1. Rationale: Why is it necessary?
2. Goals and Objectives: What is the desired outcome?
3. Approach: How will it be executed?
4. Evaluation and Feedback: Have the objectives been met?

1. Rationale: Why is it necessary?

To meet the data reporting requirements that will guide local and provincial decisions, the hospital surveillance plan will detail how the hospital will screen and monitor for FRI/ILI and report clusters to the PHU.

A cluster is defined as a grouping of cases of a disease within a specific time frame and geographic location suggesting a possible association between the cases with respect to transmission.

PIDAC Preventing Respiratory Illnesses, August 2006

Institutions, including hospitals, are required, by law, to report respiratory infection outbreaks to their local PHU.⁵ Developing a surveillance plan, in collaboration with the local PHU, can ensure that the hospital is aligned with legal requirements and that the PHU is aware of hospital resources to perform surveillance.⁶

⁵ Surveillance Activities during the interpandemic and pandemic Alert periods. OHPIP, Chapter 5, page 4

⁶ An amendment to the *Health Protection and Promotion Act* in 2007 increased the powers for local Medical Officers of Health to investigate and respond to outbreaks of communicable disease in hospitals and issue public health orders (January 1, 2008 provisions in force)

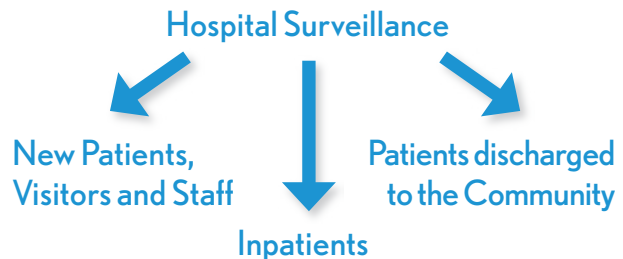
2. Goals and Objectives: What is the desired outcome?

- To minimize the risk of infection and/or spread of infection in the hospital.
- To establish processes to be aware of clusters and detect cases of FRI with travel history.

3. Approach: How will it be executed?

a. Designate a person to work with the PHU to develop the surveillance plan and process by which data will be collected during a pandemic. Establish back-up for data collection during the pandemic.

b. Develop processes for data collection, analysis, and reporting, building on existing surveillance processes and to ensure accuracy of collection.



- Develop a process by which all staff, patients, and visitors will be assessed for FRI/ILI and data will be collected and sent to the PHU. Refer to the chapter on Occupational Health and Safety (page 75) for further details on surveillance of staff. Refer to the chapter on Patient Assessment and Treatment (page 107) for further details on screening of patients.
- Ensure staff members are aware of the reporting requirements and complying with data collection.
- Report surveillance data elements using the MOHLTC web-based portal.
- Establish a process by which surveillance data will be analyzed and reported to guide hospital decisions.
- Work with the local PHU to determine reporting requirements of other communicable diseases (e.g., tuberculosis) during a pandemic influenza.

4. Evaluation and Feedback: Have the objectives been met?

It is important to evaluate and provide feedback within the facility and with the local PHU on the process for collecting and reporting surveillance data.

DURING THE RESPONSE STAGE

During the response stage of the pandemic, hospitals' activities may include:

- Monitoring surveillance activities at the hospital to be aware of clusters, so that proper infection prevention and control procedures can be implemented.
- Ensuring data is collected and submitted daily to assist with interpreting the impact. Indicators may be patients with symptoms of FRI/ILI and clusters, all emergency room visits, and daily morbidity, etc., as per direction from the MOHLTC. Refer to Toolkit Appendix 3 for Draft Surveillance Forms.
- Ongoing communications with local PHU for feedback of surveillance summaries and implications of public health measures on the hospital.

DURING THE RECOVERY STAGE

During the recovery stage, the following activities may take place:

- Continuing to monitor and report outbreaks and symptoms of FRI/ILI and clusters to the local PHU.
- Sharing feedback on surveillance process with local PHU.

Resources

Centre for Disease Control and Prevention

<http://www.cdc.gov>

FluWatch - Public Health Agency of Canada

<http://www.phac-aspc.gc.ca/fluwatch/index.html>

HHS Pandemic Influenza Plan –

Supplement 3 health care planning

United States Health and Human Services

<http://www.hhs.gov/pandemicflu/plan/sup3.html>

Ontario Best Practice Manual: Preventing Febrile Respiratory Illnesses

http://www.health.gov.on.ca/english/providers/program/infectious/diseases/ic_fri.html

Ontario Influenza Bulletin

http://www.health.gov.on.ca/english/providers/program/pubhealth/flu/flu_05/flubul_mn.html

Surveillance: Detecting and Monitoring Influenza

Ontario Health Pandemic Influenza Plan (OHPIP)

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

The Canadian Network for Public Health Intelligence

<https://www.cbphi-rersp.ca/cnphi/index.jsp?src=CPHLN>

Toronto Academic Health Sciences Network: Pandemic Planning Guidelines, May 2006

Surveillance Checklist for SRN Hospitals

Pandemic Planning:

- ☐ Review the OHPIP Surveillance chapter and revise Hospital Surveillance Plan as appropriate to ensure information and tools are up-to-date.
- ☐ Participate on Community Pandemic Planning Surveillance Committee as appropriate, to outline processes and activities and consider scenarios that may impact surveillance.
- ☐ Designate a primary person (and a back-up) to monitor, collect, and report surveillance data to local PHU.
- ☐ Consider the process for how surveillance information will be reported and collected within your facility. Ensure hospital staff assess all patients for symptoms of FRI, vigilantly question the travel history for those presenting with FRI, and consult with local PHU about appropriate laboratory testing.
- ☐ In consultation with the Joint Health and Safety Committee (JHSC), establish a process for how staff will be screened, educate staff on the process, and develop supporting communication tools to implement. Refer to chapter on OHS (page 75) for further details.
- ☐ In consultation with the JHSC, establish signage for respiratory hygiene/cough etiquette in facility. Advise patients to don a surgical mask if they have an influenza-like illness. Refer to chapter on IPAC (page 63) for further details.

Pandemic Response:

- ☐ Communicate reminders to all hospital staff to assess all patients, including those already admitted, for symptoms of FRI/ILI and report cases as per surveillance process. Ensure they also report all Emergency Room visits and daily deaths to the local PHU using the data collection forms or web portal.
- ☐ Maintain ongoing communications with local PHU for feedback on summaries of regional and local influenza activity.
- ☐ Share and utilize surveillance data in hospital Emergency Operations Centre to guide decisions and management efforts in the hospital. Refer to chapter on Patient Assessment and Treatment (page 107) for further details.
- ☐ Follow provincial laboratory protocols for lab testing. Refer to the OHPIP Laboratory Chapter.
- ☐ In consultation with the JHSC, implement screening policies accordingly for employee screening processes and also patients and visitors.

Pandemic Recovery:

- ☐ Continue to monitor and report outbreaks and symptoms of FRI/ILI and clusters to local PHU.
- ☐ Review and revise hospital surveillance program and provide feedback to local PHU on the process of surveillance and investigation.

Chapter 5:

Education of Staff, Patients and Visitors



Chapter 5: Education of Staff, Patients, and Visitors

Education encompasses both the teaching and learning of specific skills as well as something less tangible, the imparting of knowledge, positive judgment and well-developed wisdom. The education plan defines how the organization will build awareness and educate staff and other stakeholders to support implementation of the Pandemic Plan and related activities.

The purpose of this chapter is to outline the elements of an education plan and to determine what role the hospital plays in educating staff, patients, and visitors in the different stages of the pandemic. After reading this chapter you will understand:

- What provincial educational initiatives are underway for acute care hospitals.
- How to develop an education and training plan.

Guiding Principles:

- In the development of education and training plans and materials, the overarching principle must be the application of the precautionary principle.¹
- Standardized educational materials related to pandemic influenza will be developed by the MOHLTC and will be focused, timely, accurate, accessible, and concise.
- Local public health units (PHU) and regional groups may develop additional educational material tailored to the local community.
- The hospital will be responsible for implementing educational material that is developed by the province targeting acute care staff, and tailoring the material to meet their needs.
- There is value in raising awareness and educating staff, patients, and visitors in advance of an influenza pandemic.

¹ Set out by Justice Campbell in the final Report of the SARS Commission (Spring of Fear, December 2006), which stated, “We cannot wait for scientific certainty before we take reasonable steps to reduce risk.”

What You Need to Know

What are the province’s education and awareness initiatives?

For the Ontario Health Pandemic Influenza Plan (OHPIP) to be sustainable, stakeholders must be made aware of the content and expectations outlined to guide organizational Pandemic Planning. The MOHLTC has developed fact sheets targeted to health care workers and the public. Refer to this chapter’s Resources section for further details.

The OHPIP states that to ensure health care workers have the knowledge and skills to reduce influenza transmission, employers must provide appropriate education and training.²

Involve and Engage the Joint Health and Safety Committee

Ongoing education and support is key to workplace health and safety and should be developed in consultation with and reviewed by the Joint Health and Safety Committee (JHSC). They can consider: what are the known hazards? What are the possible hazards? How do you protect employees, patients, and visitors?

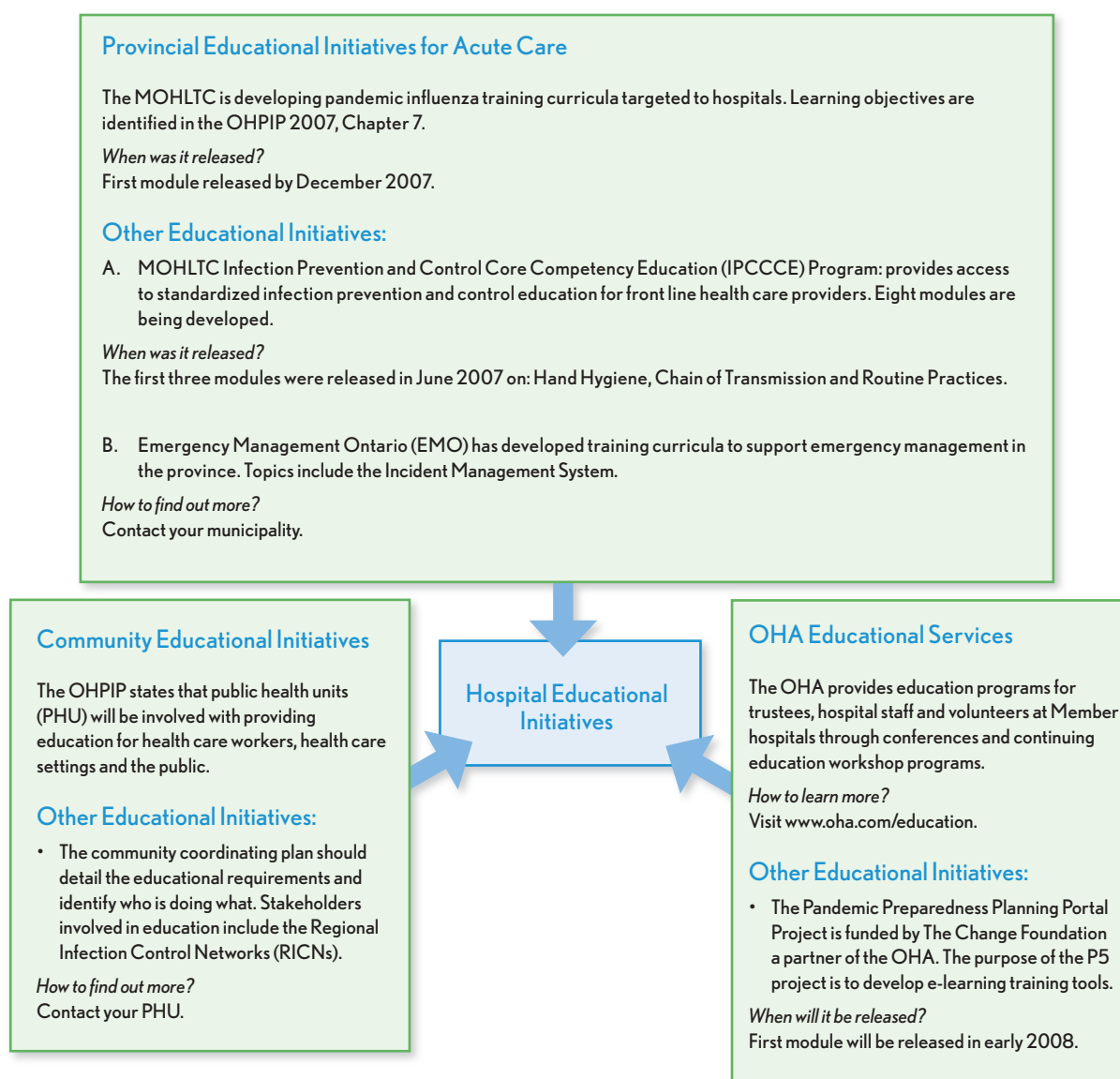
The OHPIP recommends that hospitals should:

- Assess the education and training needs of staff related to infection prevention and control (IPAC), as well as occupational health and safety (OHS).
- Provide initial and ongoing education and training for all staff on:
 - The principles and procedures of IPAC;
 - The hierarchy of controls used to reduce the spread of influenza, and;
 - The correct use of personal protective equipment.

Refer to Figure 5.1 for a list of educational initiatives underway.

² Occupational Health and Safety Measures and Infection Prevention and Control in health care settings. OHPIP, Chapter 7

Figure 5.1: Hospital Educational Initiatives are influenced by and supported by Provincial, Community, and OHA educational initiatives.



What You Need to Do

DURING THE PLANNING STAGE, develop an education and training plan.

Elements of an Education Plan:

1. **Rationale:** Why is it necessary?
2. **Goals and Objectives:** What is the desired outcome?
3. **Approach:** How will the educational activities occur and what are the needs?
4. **Roles and Responsibilities:** Who will develop, deliver, and support the plan?
5. **Key Messages:** What does the audience need to know?
6. **Evaluation and Feedback:** How effective was the learning program?



1. Rationale: Why is it necessary?

Education is also a means of raising staff awareness about the Hospital Pandemic Plan and equipping them with the skills required to respond to a pandemic influenza.

2. Goals and Objectives: What is the desired outcome?

The hospital education plan should aim to:

- Ensure staff members are equipped and willing to perform their designated roles and responsibilities.
- Develop a comprehensive plan detailing the educational expectations of the hospital to disseminate provincial and community curricula.

- Raise awareness of internal and external stakeholders on expectations of them as outlined in the Hospital Pandemic Plan.
- Develop and implement education and training specific to the hospital response.

When developing an education plan, remember the characteristics of adult learners:

- Adults learn throughout their lives.
- Adults exhibit a variety of learning styles and there is no one right way of learning. They learn in different ways at different times and for varying reasons.
- Adult learners' stages of development, whether personal (cognitive, moral, ego, conceptual), chronological (early adulthood, mid-life, etc.) or professional, profoundly affect their learning.
- New learning is followed by a period of reflection to facilitate the integration and application of new knowledge and skills.
- Specific factors that impact motivation include:
 - **Attitude:** combination of concepts, information and emotions about the learning
 - **Need:** the current condition of the learner
 - **Stimulation:** any change in perception or experience that prompts action
 - **Affect:** the learner's emotional experience (feelings, concerns, passions)
 - **Competence:** the learner's sense of effectively interacting with the environment
 - **Reinforcement:** the learning event maintains or increases the probability that the learner will achieve the appropriate response

Butler, J. (1992): Staff Development. School Improvement Research Series

3. Approach: How will the educational activities occur and what are the needs?

a. Designate a person to coordinate the education plan.

Designating all of the educational objectives to one person could likely be overwhelming, since learning objectives are multi-leveled and may require content expertise to support dissemination. However, someone could coordinate and consolidate learning objectives, assist with obtaining curricula, prioritize educational needs, and develop a schedule to disseminate.

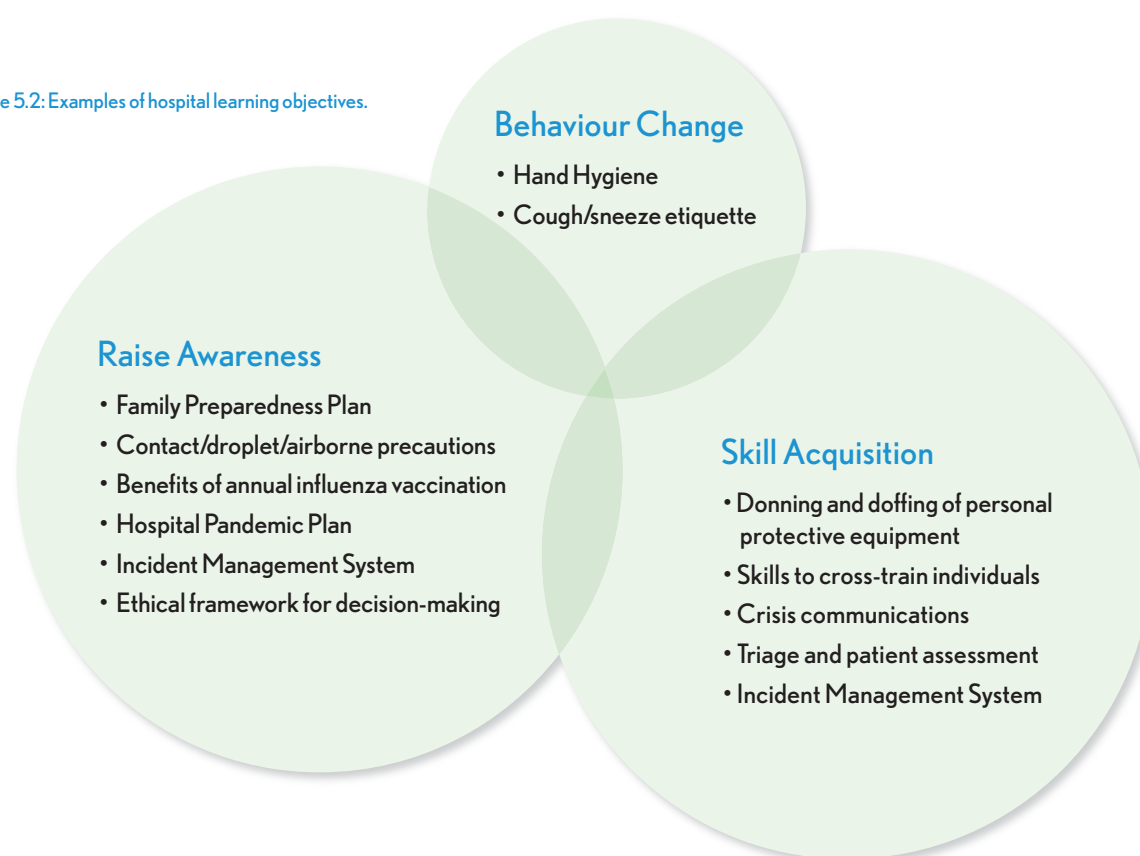
b. Work with senior management to support the education effort.

Working with senior management is important to facilitate buy-in of different stakeholders to attend educational sessions and understand the importance of material that is presented.

c. Identify and prioritize the learning objectives.

All aspects of the Hospital Pandemic Plan will have an educational learning objective or awareness requirement that needs to be met. Developing a list of all of them and setting criteria for how they should be prioritized based on the target audience (e.g., staff, patients, visitors) and importance/need (e.g., high, medium, low), and time (e.g., now, when pandemic hits). The JHSC should be included in setting these priorities, (refer to Figure 5.2 for examples).

Figure 5.2: Examples of hospital learning objectives.



d. Determine the target audience.

The target audience may be both internal (e.g., staff, management, volunteers) and external audiences (e.g., patients, visitors, suppliers).

e. Obtain educational resources.

After the learning objectives have been outlined and the target audiences identified, the next step is to obtain educational material. The resources may be obtained from many different sources (e.g., MOHLTC, local PHU, Regional Infection Control Networks (RICNs), other hospitals). It is important to ensure that the material is consistent with the OHPIP. Refer to this chapter's Resources section for some sources.

f. Consider activities and methods to support dissemination.

Consider both individual and team training needs, where staff can be clinical, support, administration, senior management, and the team can be a “department” or group that will come together to respond (i.e., command staff).

g. Develop supportive infrastructure and schedule for implementation.

This encompasses items required to support implementation (e.g., signage, computers, additional hand hygiene stations).

4. Roles and Responsibilities: Who will develop, deliver, and support the plan?

In assigning roles and responsibilities to implement educational material, it is important to think outside of hospital-specific staff (e.g., IPAC, OHS) and consider community expertise (e.g., local PHU, RICNs, municipal emergency planner) that may be available to the hospital.

5. Key Messages: What does the audience need to know?

Consider the key messages that could serve to raise awareness, remind, or change behaviour during the pandemic response stage. The key messages may be disseminated by the hospital spokesperson or through other formats (e.g., newsletter, signage). Refer to the chapter on Communications (page 51) for further details.

6. Evaluation and Feedback: How effective was the learning program?

Building formal and informal evaluation and feedback into the education programs allows staff, patients, and visitors to provide timely and relevant information. The hospital may wish to track quantitative data such as the number of participants as well.

Toronto Academic Health Sciences Network Recommendations for Educating Staff:

- Ensure target groups have up-to-date knowledge of plans, risks, and responsibilities related to the prevention of spread and protection from infection.
- Assess learning/training needs related to changes in situational requirements or target group needs/expectations on an ongoing basis.
- Create a training team of those who are skilled in training/education to augment those who are in a formal education role.
- Educate target groups in protective practices that may occur as new evidence becomes available (i.e., social distancing, personal protective equipment, etc.)
- Provide regular training and/or up-to-date reference materials covering information related to the pandemic.

TAHSN Pandemic Influenza Planning Guidelines 2006

DURING THE RESPONSE STAGE

Hospital education activities during the response stage will include

- Working with the communications lead to ensure that key messages are linked to the learning objectives outlined during the planning stage and reinforcing knowledge.
- Assessing just-in-time educational needs and supporting dissemination (e.g., epidemiology of virus, review of infection control strategies, policies for restricting visitors, surveillance reporting requirements).

Toronto Academic Health Sciences Network Recommendations for Educating Staff:

Include:

- Ensure target groups have up-to-date knowledge of plans, risks, and responsibilities specific to provincial plans, etiology of the virus, assessment protocols for ILI symptoms, IPAC measures, OHS measures, etc.
- Provide training as required and/or up-to-date reference materials covering information related to the pandemic, and reinforce practices and behaviours.
- Ensure staff and volunteers are aware of the importance of antiviral prophylaxis and immunization, including side effects and benefits.
- Cross-train staff who may be redeployed (e.g., administrative or service staff, volunteers).
- Collaborate with Public Affairs to provide staff/volunteers with up-to-date knowledge and disseminate via technical means (e.g., emails, telephone, etc.) to maximize access and minimize need for personal contact.

TAHSN Pandemic Influenza Planning Guidelines 2006

DURING THE RECOVERY STAGE

Hospital education activities after a pandemic will include:

- Evaluating the effectiveness of the education strategy in meeting staff, patients, and visitor needs.
- Providing feedback to the MOHLTC on the effectiveness of standardized educational material.

Resources

Developing Personal Plans and Emergency Kits

http://www.health.gov.on.ca/english/public/program/emu/pub/prep/broc_plan_010606.pdf

http://www.health.gov.on.ca/english/public/program/emu/pub/prep/broc_clist_010606.pdf

Fact Sheets for Health Care Providers

Ministry of Health and Long-Term Care
Pandemic Influenza Fact Sheets

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_pro_fs.html

Hand Washing and Cough Etiquette

http://www.health.gov.on.ca/english/providers/program/emu/emerg_kit/pdf/kit_handwash.pdf

http://www.cdc.gov/flu/protect/pdf/covercough_hcp11x17.pdf

HHS Pandemic Influenza Plan –

Supplement 3 health care planning
United States Health and Human Services
<http://www.hhs.gov/pandemicflu/plan/sup3.html>

Incident Management System;

Christian, M., Kollek, D, Schwartz, B (2005):
Emergency preparedness: what every health care worker needs to know. *Can J Emerg Med* 2005;7(5):330-7

MOHLTC Pandemic Planner

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/planner.html

**Occupational Health and Safety Measures
and Infection Prevention and Control in
Health Care Settings;
Ontario Health Pandemic Influenza Plan**

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

**Ontario Hospital Association Pandemic Influenza
Fact Sheets**

http://www.oha.com/client/oha/oha_lp4w_lnd_webstation.nsf/page/Pandemic+Influenza

**Toronto Academic Health Sciences Network
Pandemic Planning Guidelines – 2006**

<http://portal.sze.ca/tahsn/default.aspx>

Other Resources

http://www.health.gov.on.ca/english/public/program/emu/links_mn.html#pan_local

Education Checklist for SRN Hospitals

Pandemic Planning:

- ☐ Review the OHPIP and the MOHLTC website, and revise the hospital education plan as appropriate to ensure information and tools are up-to-date.
- ☐ Participate on Community Pandemic Planning Committees as appropriate to outline roles/responsibilities, processes and activities, and confirm topics.
- ☐ Designate a primary person (and back-up) to coordinate the education program for the hospital, which includes identifying learning objectives at provincial, community and hospital levels (e.g., IPAC, OHS), assisting with consolidating resources, and developing a plan for dissemination to staff.
- ☐ Confirm a list of potential topics for which the hospital is responsible for teaching staff, patients and visitors, and prioritize them in consultation with the JHSC.

- ☐ Develop the education plan by determining target audiences, obtaining educational resources, considering activities/methods, roles and responsibilities, supportive infrastructure, and schedule. Ensure materials are language and reading level appropriate.
- ☐ Follow up with local and provincial levels to ensure stakeholders are meeting education roles and responsibilities, working with the JHSC.
- ☐ Track staff members that have completed education and training.

Pandemic Response:

- ☐ Assess just-in-time educational topics and requirements, and develop communications to support learning for hospital staff, patients, and visitors.
- ☐ Support dissemination of educational resources from national, provincial, and local levels targeted to hospitals and health care workers.

Pandemic Recovery:

- ☐ Review and revise hospital education program.

Chapter 6: Communications



Chapter 6: Communications

During the response stage of a pandemic, groups at national, provincial, local and organizational levels will all be attempting to share information with their respective stakeholders. Accurate, timely, and consistent internal and external communications will enable a coordinated response, and minimize duplication and confusion.

The purpose of this chapter is to outline the elements of a communications plan in a small, rural, and northern (SRN) hospital. After reading this chapter you will understand:

- What the various levels of government are doing and planning to do during a pandemic to meet information needs.
- How to develop a structured and systematic hospital communications plan that addresses each phase of the pandemic.

Guiding Principles:

- Dissemination and sharing of timely and accurate information will be important for a coordinated response at provincial, local, and hospital levels.
- The MOHLTC will activate and maintain their information cycle in an emergency and maintain current information on its website.
- The OHA will be a conduit of information to Members and activate the OHA information cycle in an emergency.
- Hospitals will participate on the Community Pandemic Planning Committee, where the local coordination of communications will be planned and local communication cycles developed.

What You Need to Know

What are the lines of communication?

The lines of communication are complex, involving both vertical (e.g., international, national, provincial, local) and horizontal (e.g., public health unit, municipalities, hospitals) levels. To facilitate consistent and coordinated communications among single and multiple agencies, the Incident Management System (IMS) will be utilized. The IMS structure includes a functional role dedicated to Communications, called the Communications Officer. Refer to the Toolkit Appendix 3 for an example job action sheet.

What communication activities occur at different levels during a pandemic influenza?

Refer to Figure 6.1 on the following page for the roles and responsibilities for communication at different levels. For a complete list of what activities will occur at the federal, provincial, and local levels, refer to the Ontario Health Pandemic Influenza Plan (OHPPI) Communications appendix.¹

Government of Canada activities may include:²

- Ongoing communication with key international organizations (e.g., World Health Organization (WHO), Pan American Health Organization (PAHO) with regard to influenza activity inside and outside Canada.

Ontario's Crisis Communications Plan will be activated. The province's activities may include:

- Daily teleconferences/videoconferences using the Information Cycle in an emergency with Health Care Stakeholder Council.³

1 Communication Roles/Activities by Pandemic Period and Phase, OHPPI Chapter 12A, 19

2 Communications Annex - Canadian Pandemic Influenza Plan for the health sector. <http://www.phac-aspc.gc.ca/cpip-pclepi/>

3 http://www.health.gov.on.ca/english/providers/program/emu/emerg_prep/emerg_comm.html

Figure 6.1: Roles and Responsibilities for Communications during an influenza pandemic.

	Government of Canada	Government of Ontario	Local Community	Other
Who are the key groups?	Public Health Agency of Canada (PHAC)	Emergency Management Unit (EMU), secondly Emergency Management Ontario (EMO)	Local Public Health Authorities, Municipality	OHA will serve as a liaison and act as conduit for information
Who is the spokesperson?	Minister of Health, Prime Minister	Ontario's Chief Medical Officer of Health, also Premier of Ontario, Minister of Health and Long-Term Care, Commissioner of Emergency Management	Medical Officer of Health, mayor, municipal council head	President and CEO, Vice President, Policy and Public Affairs
Who are the target audiences?	Provinces and Territories, Ministries of Health and CMOH's	Health Care stakeholders (i.e. hospitals, associations), health care workers, the public, internal government	Health Care stakeholders and workers, public and private sector	Hospitals and affiliate members
How will the information be communicated?	Operate a 24-hour public information line and provide updates to the provinces/territories	Use a 24-hour Information Cycle in Emergency, webpage, Important Health Notices (IHN), Directives, Fact sheets	May use a 24-hour information cycle in an emergency	Use the 24-hour OHA Information cycle in an Emergency, bulletins, webpage and key messages to synthesize information
What is the trigger for activating plans?	WHO will issue alert	PHAC will issue alert	MOHLTC will issue alert to health system, EMO will issue alert to Municipalities	MOHLTC will issue alert
What will happen?	Activate Government Emergency Operations Centre to coordinate response with provinces/territories	Activate Ministry Emergency Operations Centre (MEOC), and potentially, Provincial EOC (PEOC) for coordinating critical infrastructure response	Activate Municipal Emergency Operations Centre, and other EOC (e.g., hospital)	Activate OHA Emergency Operations Centre

- Work with PHAC to hold media and stakeholder briefings with local MOHs, provincial officials.
- Activating, reviewing and revising Telehealth Ontario hotline, Infoline messages and the MOHLTC website, and issuing additional communications (e.g., Important Health Notices (IHNs), directives).

OHA activities may include:

- Activating the OHA Information Cycle and hosting teleconferences/videoconferences with Members.⁴
- Participating on the MOHLTC Health Care Stakeholder Council meeting held daily at 8:30 AM by teleconference/videoconference.

Local Government and Public Health Authorities activities may include:

- Activating the municipal Emergency Operations Centre (EOC) and communicating with stakeholders and the community through the designated spokesperson(s). Can also assist the hospital in communicating messages to the public.
- Connecting with the MOHLTC and EMO to remain current with information/updates and ensuring consistent communications to the community.

⁴ <http://www.oha.com/InformationCycle>

What You Need to Do

DURING THE PLANNING STAGE, develop a hospital communications plan.

Elements of a Communications Plan

1. **Rationale:** Why is it necessary?
2. **Goals and Objectives:** What are the desired outcomes?
3. **Approach:** How will the plan be executed?
4. **Develop Materials:** What is needed to support meeting the plan objectives?
5. **Evaluation and Feedback:** How will the success of meeting objectives be measured?



Things to keep in mind when developing the communications plan:

- Endorsement from leadership
- Procedures to secure needed resources
- Coordinate with external stakeholders and agencies
- Identified communication channels (and back-up systems)
- Designated spokesperson
- Carefully thought out messages for targeted audiences

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1. Rationale: Why is it necessary?

To ensure the timely and efficient flow of accurate information to guide response activities, a communications plan is required. The plan can also be used to support education and awareness needs of the hospital's target audience about the Pandemic Plan. The OHPIP has a Crisis Communications Toolkit to assist the health care sector in developing a plan.⁵

2. Goals and Objectives: What are the desired outcomes?

The goals and objectives of the communications plan include:

- To ensure that the hospital is up to date on all relevant information.
- To identify audiences and determine their information needs.
- To establish processes to keep lines of communications open.
- To develop materials to support the communications role of the hospital.

3. Approach: How will the plan be executed?

a. Designate a person (and back-ups) to be the communications lead and work as part of the Hospital Pandemic Planning Committee to identify and plan for the communication needs of the hospital. This person may also participate on local Community Pandemic Planning Committees to address information flows in the community to the hospital.

b. Designate a spokesperson(s) (and back-ups) for the hospital to communicate with internal and external audiences. It is important to engage the spokesperson(s) during the planning process to familiarize them with materials and processes that will be in place to respond to communication needs, and raise awareness with target audiences on his/her role during an emergency.

c. Identify stakeholders, for input of information to and output from the hospital. Stakeholders include internal (e.g., staff and volunteers), external (e.g., MOHLTC, OHA, PHU) and the public (e.g., patients, visitors). Refer to the Toolkit Appendix 3 Tools and Templates section for tools to assist with identification of stakeholders, their needs, and information needs.

⁵ Health Sector Crisis Communications Toolkit. OHPIP, Chapter 12, Appendix

Responsibilities of a Spokesperson in a Crisis:

- Ensure quality of communication itself does not become the issue.
- Drive the communication process proactively rather than reactively.
- Maintain tight control over who speaks on behalf of the organization.
- Utilize the public role of the CEO to the maximum.
- Stay on message. Brief key officials rigorously prior to any announcement.
- Demonstrate caring about people. Recognize public anxiety, don't dismiss it.

McLaughlin MultiMedia Publishing Ltd. From the Kingston Hospitals Plan

Table 6.1: Key organizations that will be providing direction or communications to the hospital during a pandemic influenza response stage.

#	Organization	Website
1	Ministry of Health and Long-Term Care	www.health.gov.on.ca/pandemic
2	Ontario Hospital Association	www.oha.com
3	Local Public Health Unit	www.health.gov.on.ca/english/public/contact/phu/phuloc_mn.html
4	Municipality	www.amo.on.ca

- Understanding how communication will occur locally (e.g., local PHU, the MEOC).
- Joining relevant email distribution lists.

e. Develop processes to communicate during emergencies with each of the key hospital stakeholders. Refer to Figure 6.2 for further details. Steps include:

- Take an inventory of all internal and external communication tools.
- Learn how communications between the hospital and the OHA or other regional facilities will occur.

d. Identify sources of information. Refer to Table 6.1 for further details. Steps include:

- Creating a map that shows how and to whom information flows within and out of the hospital.
- Becoming familiar with the MOHLTC's and the OHA's information cycles during an emergency.

Figure 6.2: Examples of key communication needs for hospital stakeholder groups.

Staff	Community and Other Stakeholders	Government
<ul style="list-style-type: none"> • Issuing a daily staff bulletin to communicate operational decisions, new directives and clinical protocols/updates from the government. • Conveying instructions (i.e., use of personal protective equipment (PPE). • Integrating the Joint Health and Safety Committee into decision-making and communication. 	<ul style="list-style-type: none"> • Communicate changes to hospital services and alternatives to seek care. • Increasing awareness of 24-hour Telehealth and Infoline, website, fact sheets. • Coordinate through the community response structure meeting the hospital public communication needs. 	<ul style="list-style-type: none"> • Operational matters should be communicated with the MOHLTC directly via the MEOC or through the OHA.

- Learn the methods/frequency/scope of communications to the hospital EOC.
- Identify key topics for ongoing communications with different stakeholders (e.g., staff needs, bed capacity, durable and consumable equipment and supplies, antivirals, vaccines).
- Develop processes and methods for communicating with different stakeholders. Refer to the Toolkit Appendix 3 Tools and Templates section for further details.
- Integrate IMS into planning, and the role of Communications Officer.



*To integrate IMS, start by asking the following questions:*⁶

- Who is in charge of implementing this plan and who do they report to?
- What information will the Command staff need to know to make decisions?
- Will the implementation of the plan require coordination or communication with internal or external stakeholders? If so, how will this occur?
- If the role needs to be filled by a back-up, what tools would assist the person in fulfilling the role?
- What are the resources required to fulfill the response requirements?
- What are the immediate actions? Short-term actions? Longer-term actions?

⁶ Refer to the Toolkit Appendix 3 for example job action sheets.

Toronto Academic Health Sciences Network Recommendations for communicating with stakeholders:

Hospitals have and maintain a disaster telephone fan-out list for use in a pandemic. Key points include:

- Typically begins with the CEO (or most senior administrator available) calling senior management and medical staff and continues to additional staff through the reporting structure of the hospital.

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4. Develop Materials: What is needed to support the meeting of the plan objectives?

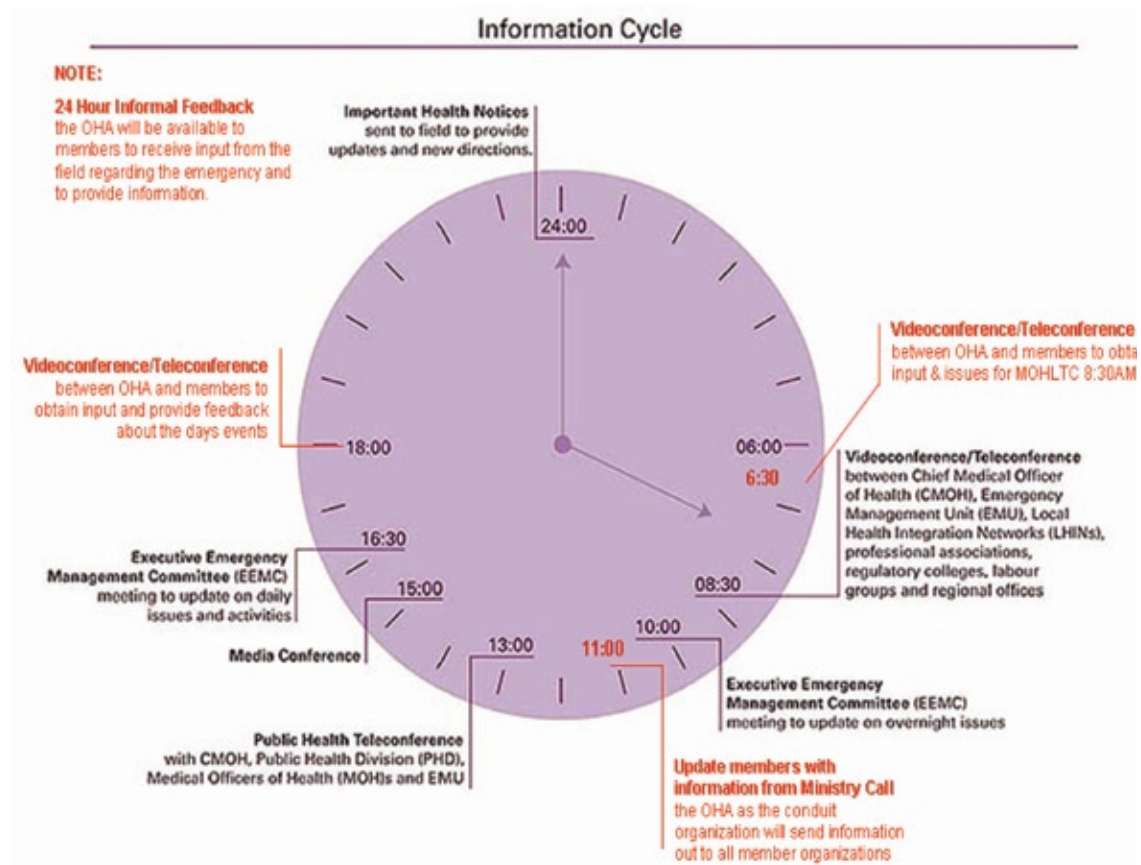
Develop materials that will support the response stage and assist with disseminating information during an emergency in consultation with the Joint Health and Safety Committee (JHSC). Strategies that work for one hospital may not meet the needs of another, due to differing communications infrastructures, equipment, channels of communication.⁷ SRN hospitals do not have to start from the beginning to develop materials to meet objectives and can instead adapt tools that are already in place (e.g., provincially, other hospitals) and update materials to meet local needs and plans. Refer to the Toolkit Appendix 3 Tools and Templates section for further details.

- Develop a Hospital Information Cycle during an emergency to show how the hospital will stay connected and provide updates to key stakeholders.
- Obtain copies of the MOHLTC information brochure: *What you should know about a flu pandemic*.
- Utilize the MOHLTC fact sheets to raise awareness.

⁷ Standing Together: An Emergency Planning Guide for America's Communities

How to Develop a Hospital Information Cycle in an Emergency

The OHA has developed an Information Cycle to serve as a conduit of information from the MOHLTC to hospitals during an emergency, such as a pandemic influenza. As noted in the Information Cycle, key communications will occur daily at 6:30AM, 11AM, and 6PM, as noted in the diagram below. Refer to the OHA website www.oha.com for further details.



Hospitals should develop an Information Cycle to manage communications with their key stakeholders: the OHA, local PHU/Municipalities, and staff. Steps to take:

1. Determine the times for inputs of information (e.g., OHA, local PHU, municipalities) by considering respective Information Cycles.
2. Determine the time for internal communications and decision processes that need to occur prior to providing input and after information is received.

- a. When will you communicate with internal staff (e.g., before 7AM shift change, at 12PM, and before 7PM shift change)
- b. When will you communicate with external stakeholders?
3. Develop a hospital Information Cycle and communicate to internal and external stakeholders. Publish on the Hospital website.

Toronto Academic Health Sciences Network Recommendations for Communicating with Stakeholders:

- Creating a staged communications approach: alert, pandemic, inter-pandemic.
- Profiling leadership.
- Creating synergies with neighbouring hospitals, local stakeholders, etc.
- Developing a communications inventory: tools to reach specific audiences.
- Communicating the plan, investigating the plan's impact on staff, patients, and the public.

TAHSN Pandemic Influenza Planning Guidelines 2006

5. Evaluation and Feedback: How well does the plan meet needs?

To learn how well the plan meets the hospital's needs:

- Build and test the plan both internally and with external stakeholders.
- Ensure that there are back-up communication methods in place.

Why it is important to test the plan:

No matter how comprehensive the plan, if it is not reviewed and accepted by leadership (and understood by those who have to use it) it won't be helpful during an outbreak.

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DURING THE RESPONSE STAGE

Enacting the communications plan during a pandemic

During the response stage of the pandemic, there will be considerable uncertainty, a rapid rate of change, and intense media interest. Activities will include:

- Activating the hospital EOC to coordinate response and all communications.
- Ensuring that the spokesperson communicates internally first to provide information/updates to staff and then externally to the public (e.g., level of services) and community stakeholders.
- Keeping a summary of actions to take, current status of action items, and sources of information.
- Ensuring all communication activity needs and messages are covered in the response (e.g., OHS, IPAC, education and training, HR).

Key messages should express:

- Reassurance that there is a plan
- Confirmation of known facts
- Description of what is known and not known
- Steps taken by the hospital to address unknowns and the impact on services
- Statement of commitment
- Where to go for further information

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DURING THE RECOVERY STAGE

Communications plan considerations after a pandemic

During the recovery stage, hospital activities may include:

- Focusing on staff needs and reinforcing behaviours and what to expect at the hospital during this phase.

Resources

Communications Chapter & Appendices

Ontario Health Pandemic Influenza Plan

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

Crisis Emergency Risk Communications:

by leaders for leaders

U.S. Department of Health and Human Services/
Centre for Disease Control and Prevention

HHS Pandemic Influenza Plan

– Supplement 3 health care planning

United States Health and Human Services

<http://www.hhs.gov/pandemicflu/plan/sup3.html>

Toronto Academic Health Sciences Network: Pandemic Planning Guidelines, May 2006

<http://portal.sw.ca/tahsn/default.aspx>

Communication Checklist for SRN Hospitals

Pandemic Planning:

- ☐ Review the OHPIP Communications chapter and MOHLTC websites and revise Hospital Communications Plan as appropriate to ensure information and tools are up-to-date.
- ☐ Designate a primary person (and a back-up) to support development of the Communications Plan, engage senior leadership and key hospital spokesperson(s). Participate on the Hospital Pandemic Planning Committee to coordinate communication needs and ensure integration with internal and external groups.
- ☐ Identify internal and external stakeholders, determine their information needs, and establish how information will be delivered. Work with other health care facilities in the region.
- ☐ Confirm roles and responsibilities of the hospital for communications with the Community Pandemic Planning Committee and JHSC, and establish how the flow of information will occur.
- ☐ Consolidate the communication needs identified in the Hospital Pandemic Plan (e.g., IPAC, OHS, Education, the Hospital Pandemic Plan) and work with respective leads to develop materials (can adapt resources already developed by others).
- ☐ Develop a checklist, by phase, of all communication activities that should occur may be helpful.
- ☐ Develop processes for information release and approval.
- ☐ Ensure communication channels are in place, test them (e.g., fan-out processes), and develop redundancy of systems by working with materials management to order additional equipment.
- ☐ Develop key messages for target audiences and work with the dedicated spokesperson(s) to test them.

Pandemic Response:

- ☐ Activate the Communications Plan and Hospital Information Cycle in an Emergency, and establish the Communications officer.
- ☐ Confirm the dedicated spokesperson for the hospital (and back-up).
- ☐ Participate on the OHA daily teleconference/ videoconference calls with Members (the OHA Information Cycle in an emergency will be activated); and PHU/municipality information updates.
- ☐ Obtain information from pre-determined sources on the situation.
- ☐ Ensure timely dissemination of directives and other material from the MOHLTC, local PHU, employing predetermined communication channels and vehicles.
- ☐ Create dedicated media line (or line to communicate with municipal EOC and Public Health).
- ☐ Keep a summary of actions to take, current status of action items, and sources of information.
- ☐ Implement communication needs for the pandemic response phase (e.g., IPAC, OHS, education, the Hospital Pandemic Plan).

Pandemic Recovery:

- ☐ Review and revise hospital Communication Plan in consultation with the JHSC, and update.
- ☐ Obtain and provide feedback to stakeholders on the flow of information and update.
- ☐ Implement communication needs for the recovery phase (e.g., IPAC, OHS, education, the Hospital Pandemic Plan) and assist in obtaining materials.

Chapter 7: Infection Prevention and Control



Chapter 7: Infection Prevention and Control

During a pandemic influenza, health care workers can be exposed to persons with influenza both in the health care setting and outside of work. Limiting transmission of pandemic influenza in health care settings requires the application of infection prevention and control principles.

The purpose of this chapter is to outline the elements of an infection prevention and control (IPAC) plan and strategies to embed IPAC principles into the various hospital plans. After reading this chapter you will understand:

- Why the transmission of influenza is consequential and what is the provincial policy.
- How to access IPAC expertise in the province.
- How to develop an IPAC plan for the hospital.

Guiding Principles:

- All means of transmission of the pandemic influenza virus are consequential.¹
- Hospital pandemic planning is grounded in IPAC guidelines and occupational hygiene principles.
- Hospitals will maintain adequate and accessible hand hygiene stations.
- Health Care workers are aware of IPAC precautions and occupational health and safety (OHS) practices, and have easy access to personal protective equipment (PPE).

What You Need to Know

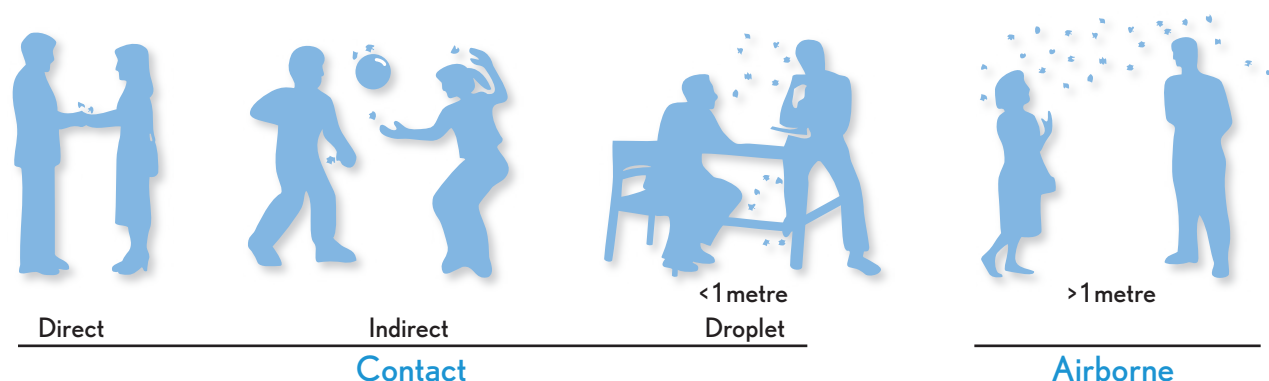
How does influenza spread in a pandemic?²

The OHPIP states that “Health care workers providing care and/or services to individuals with influenza will be at risk of exposure to the virus. Influenza is primarily **droplet spread**: it can be directly transmitted from person-to-person when people infected with influenza cough or sneeze, and droplets of their respiratory secretions come into contact with the mucous membranes of the mouth, nose and possibly eyes of another person. Scientists are not certain how far droplets from a coughing or sneezing person can travel. [The OHPIP] recommends keeping about 1 metre distance from a coughing or sneezing person; however, this distance is currently under review.

Because the virus in droplets can survive for 24 to 48 hours on hard non-porous surfaces, for 8 to 12 hours on cloth, paper and tissue, and for 5 minutes on hands, the virus can also be **contact spread**: people can acquire influenza indirectly by touching contaminated hands, surfaces and objects, and then touching their mouth, nose or eyes. The risk to health care workers in the workplace may be higher when staff are performing procedures that generate aerosols on patients with pandemic influenza 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.” Refer to Figure 7.1 and 7.2 for further details.

¹ Set out by Justice Campbell in the final Report of the SARS Commission (Spring of Fear, December 2006), which stated, “We cannot wait for scientific certainty before we take reasonable steps to reduce risk.”

² Occupational Health and Safety Measures. OHPIP, Chapter 7, page 4

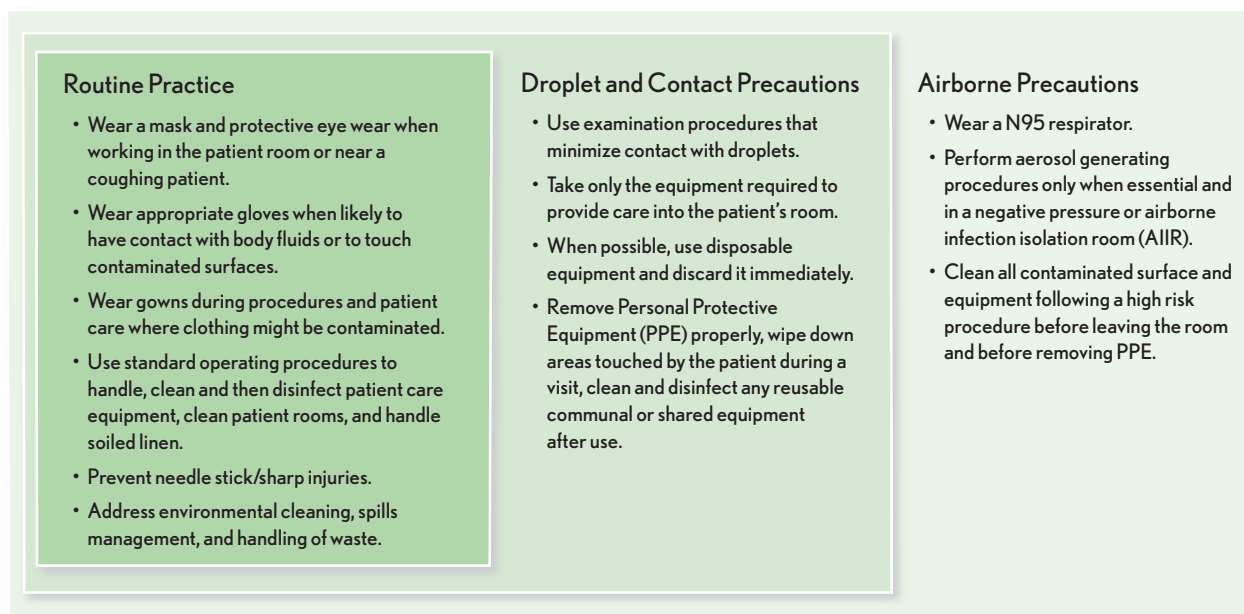
Figure 7.1: Diagram illustrating transmission of influenza.³

Basic Principles for Preventing the Spread of Pandemic Influenza

Hand Hygiene	The single most important practice to reduce the transmission of infectious agents is proper hand hygiene, where the preferred method is use of alcohol-based hand sanitizer and when required, hand washing with soap and water and thorough drying.
Cough and Sneeze Etiquette	Covering nose and mouth with a disposable single-use tissue when sneezing, coughing, wiping/blowing nose, disposing of the tissue, and washing hands.
Social Distance	The OHPIP recommends maintaining a distance of one metre from someone who is coughing or sneezing (however, scientists are not certain how far droplets from a coughing or sneezing person travel, thus the distance is under review).
Adequate Ventilation	Refers to the air handling systems and the circulation of air.

What are some precautionary measures?⁴

Figure 7.2: Diagram illustrating how routine practices, droplet and contact precautions, and airborne precautions are linked.



³ Principles and components of Routine Practices; Can Commun Dis Rep. 1999; 25 Suppl 4: 1-149

⁴ IPAC Occupational Health and Safety Measures. OHPIP, Chapter 7

Provincial Direction on Personal Protective Equipment for Patient Care:⁵

Figure 7.3: Personal Protective Equipment (PPE) for Patient Care during an influenza pandemic, as outlined in the OHPIP.

	Seasonal Influenza (including ILI ¹) no risk factors for airborne diseases	Pandemic Influenza (including ILI ¹)	Aerosol Generating Procedures on Patients with Pandemic Influenza (including ILI ¹)
Patient accommodation	Single patient room AIIR ² not required	Single patient room or cohort AIIR ² not required	In AIIR ² if available
Precautions	Routine/Droplet/Contact	Routine/Droplet/Contact	Routine/Droplet/Contact/ Airborne
Hand hygiene	Yes	Yes	Yes
Gloves	If indicated by Routine Practices ³	If indicated by Routine Practices ³	If indicated by Routine Practices ³
Gown	If indicated by Routine Practices ³	If indicated by Routine Practices ³	If indicated by Routine Practices ³
Surgical mask for HCW	Yes	—	—
N95 respirator for HCW	Not routinely	Yes	Yes
Eye Protection	If indicated by Routine Practices ³	If indicated by Routine Practices ³	Yes
Surgical Mask on Patient	At triage and if outside of room	At triage and if outside of room	If outside of AIIR and if outside of room

Notes:

PPE is only one component of the hierarchy of infection prevention and control measures required to protect health care workers.

¹ILI: Influenza-like illness

²AIIR: Airborne infection isolation room

³See PIDAC fact sheet on routine practices: Figure 7.3

5 Occupational Health and Safety Measures and Infection Prevention and Control in Health Care Settings. OHPIP, Chapter 7. PPE is only one component of the hierarchy of infection prevention and control measures required to protect health care workers. AIIR: airborne infection isolation room. Refer to the OHPIP chapter for further details.

What are the Provincial and Local Infection Prevention and Control activities?

Ministry of Health and Long-Term Care

The OHPIP states that employers must implement appropriate IPAC measures designed to protect workers, patients, and visitors from exposure to the pandemic strain of the virus (refer to Figure 7.3).⁶

DURING THE PLANNING STAGE, the MOHLTC is developing and plans to publish standardized educational material for IPAC through the OHPIP training working group and has also published modules through its Infection Prevention and Control Core Competency Education (IPCCCE) program.⁷ Refer to the chapter on Education of Staff, Patients and Visitors (page 39) for further details.

DURING THE RESPONSE STAGE, the MOHLTC's activities will include:

- Working closely with Provincial Infectious Disease Advisory Committee (PIDAC) to interpret surveillance data, laboratory data, etc., and adopting case definitions and updating management strategies to advise the health care system (and public) on actions to take.
- Distributing infection control supplies and PPE to the health care system for weeks 5-8 of the pandemic, monitoring usage, and continuing to procure supplies.

Provincial Infectious Disease Advisory Committee (PIDAC)⁸

PIDAC advises the Chief Medical Officer of Health (CMOH) on prevention, surveillance and control measures necessary to protect Ontarians from infectious diseases.

DURING THE PLANNING STAGE, PIDAC has developed many best practices documents to guide health care facilities.

DURING THE RESPONSE STAGE, PIDAC will provide scientific advice to the CMOH on the interpretation of data regarding the pandemic strain as well as on issues such as standards and guidelines for infection control and emergency preparedness/management for an infectious disease outbreak.

Regional Infection Control Network (RICN)⁹

RICNs are designed to coordinate IPAC activities and promote standardization in health care facilities across Ontario. RICNs are not designed to replace local IPAC capacity.

DURING THE PLANNING STAGE, activities include:

- Collaborating to support public health initiatives and work with PIDAC to disseminate and interpret IPAC best practice guidelines.
- Provide training and mentoring to build local IPAC expertise through education sessions, focus groups, and fact sheets.

DURING THE RESPONSE STAGE of the pandemic, activities will include:

- Supporting linkages to provincial and federal agencies and providing feedback on unique regional issues, challenges, and priorities.
- Assisting with access to regional expertise in IPAC and infectious diseases.

Local Public Health Units (PHU)

Play a role in supporting provincial public education programs on pandemic influenza. The *Health Protection and Promotion Act* provides the local Medical Officer

6 Occupational Health and Safety measures and Infection Prevention and Control in Health Care Settings. OHPIP Chapter 7, 12-14

7 http://www.health.gov.on.ca/english/providers/program/infectious/infect_prevent/ipccce_ref.html

8 http://www.health.gov.on.ca/english/providers/program/infectious/pidac/pidac_mn.html

9 http://www.health.gov.on.ca/english/providers/project/ohp/ricn_mn.html

of Health with powers to investigate and respond to outbreaks of communicable disease in hospitals and issue public health orders.¹⁰

DURING THE RESPONSE STAGE of the pandemic, local PHU will operationalize directives from the CMOH in the local PHU and potentially use public health measures to minimize illness/death and societal disruption.

What You Need to Do

DURING THE PLANNING STAGE, develop an Infection Prevention and Control (IPAC) plan.

Elements of an IPAC Plan include:

1. **Rationale:** Why is it necessary?
2. **Goals and Objectives:** What are the desired outcomes?
3. **Approach:** How will recommendations be incorporated?
4. **Surveillance and Management of Patients:** What will be done?
5. **Education and Communication:** What are the needs?
6. **Evaluation and Feedback:** How well does the plan meet needs?

1. Rationale: Why is it necessary?

To outline strategies for how the hospital will incorporate IPAC guidelines and recommendations during the pandemic to limit transmission of the influenza virus.

2. Goals and Objectives: What are the desired outcomes?

The goals and objectives of the hospital IPAC plan may include:

- To provide expertise and ensure that the Hospital Pandemic Plan is grounded in IPAC best practices.
- To develop a comprehensive plan detailing processes from surveillance to management of patients.
- To develop and implement education specific to staff needs to ensure correct and consistent implementation of IPAC precautions.

Toronto Academic Health Sciences Network Recommendations for IPAC:

- All health care workers should be fully knowledgeable with respect to Health Canada's "Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care" (1999).
- Routine practices are to be followed at all times.
- Equipment and surfaces contaminated with secretions from patients suspected or confirmed to have influenza should be cleaned before use with another patient.
- Patients should be separated from those infected with or suspected to be infected with influenza whenever possible.
- A formal education/communications plan on influenza pandemic management should be provided and in place according to a pre-established schedule.

TAHSN Pandemic Influenza Planning Guidelines 2006

¹⁰ *Health Protection and Promotion Act*, s.29.2. Section will be in force on January 1, 2008.

3. Approach: How will recommendations be incorporated?

a. Designate a person who is appointed to develop the plan. Working with senior management can increase the plan's profile and address resource requirements. Other considerations include:

- Ensuring access to infection control expertise (e.g., infectious disease physician, RICN, regional academic hospital).
- Working with other subcommittees and departments to develop plans and ensure that IPAC principles are embedded.

b. Policies and procedures should be updated after reviewing best practice documents to ensure that they are current. To help raise awareness of recommendations, IPAC may wish to consider listing the critical processes that need to be embedded in the Hospital Pandemic Plan and then list the specific plans (e.g., housekeeping, linen, cleaning and sterilization of patient care equipment, disposal of clinical and non-clinical waste). Policies that may need to be updated include visitor access, PPE usage for patients and people entering the hospital.

c. Equipment and supplies for infection control will be in high demand during the pandemic. The OHPIP expects hospitals to have four weeks of infection control supplies and PPE stockpiled. IPAC should work with the materials management lead to ensure that assumptions and formulas align with IPAC guidance and consider needs for infection control supplies, PPE, housekeeping and linen.

Patient Management Techniques:

Patients who have influenza symptoms (e.g., fever, cough) should be asked to practice hand hygiene, wear a surgical or procedure mask, and either wait in a separate area or maintain a one-metre distance from other staff and patients.

Patients who have symptoms of ILI with travel history to an area with a health alert should be moved immediately out of the waiting room and put in a separate room.

Patients admitted to the hospital with ILI symptoms should be accommodated in a single room if available or cohorted with other patients in designated multi-bed rooms or wards; have their own hand washing sink, toilet, and bath facilities; have limited movements and contact; and wear a surgical mask when outside the room.

OHPIP 2007, Chapter 7

4. Surveillance and Management of Patients: What will be done?

The hospital surveillance plan is outlined in detail in Chapter 4 (page 31). Other considerations include:

- Surveillance for other communicable diseases and outbreaks: Determine requirements of the PHU and prioritize whether testing will occur on patients hospitalized and then work with laboratory services.
- Segregation and cohorting of patients with Febrile Respiratory Illness (FRI)/Influenza Like Illness (ILI): identify processes and areas that would allow for this and whether it is possible to treat and care for patients with pandemic influenza in a self-contained area with a separate entrance, reception, screening area, etc.
- Management of patients: using multiple-bed rooms to cohort patients with pandemic influenza and consider strategies to optimize capacity.

5. Education and Communication: What are the needs?

Hospitals should assess the education needs of staff and provide initial and ongoing training. Refer to the chapter on Education of Staff, Patients, and Visitors (page 39).

- Targeted training may be developed to meet individual or team needs (e.g., security, emergency department, management) in collaboration with the Occupational Health and Safety (OHS) lead. Refer to the OHS chapter (page 75) for further details.
- Specific communiqués and signage may be developed to highlight key messages and serve as reminders for staff, patients, and visitors on expected behaviours. Refer to the chapter on communications (page 51) for further details.



*To integrate IMS, start by asking the following questions:*¹¹

- Who is in charge of implementing this plan and who do they report to?
- What information will the command staff need to know to make decisions?
- If the role needs to be filled by a back-up, what tools would assist the person with fulfilling the role?
- What are the resources needed to fulfill the response requirements?
- What are the immediate actions? Short-term actions? Longer-term actions?

6. Evaluation and Feedback: How well does the plan meet needs?

Work with provincial and local stakeholders (e.g., local PHU, other hospitals) to obtain feedback on the IPAC plan.

DURING THE RESPONSE STAGE

During the response stage of the pandemic, hospitals' activities may include:

- Assessing and reporting all patients with symptoms of FRI/ILI and clusters, emergency room visits, and daily deaths.
- Completion of reporting forms (and other surveillance data as required) and submit to the local PHU.
- Ongoing communications with local PHU.
- Maintaining signage, availability of hand hygiene stations, and supply of PPE.
- Ensuring compliance and proper usage of PPE, as per precautions.
- Working with materials management to manage levels of infection control supplies and PPE (anticipate delivery of the MOHLTC stockpile for weeks 5-8).
- Monitor implementation of plans for housekeeping, linen, cleaning and sterilization of equipment, and provide IPAC expertise.

DURING THE RECOVERY STAGE

During the recovery stage, activities may include:

- Continuing to monitor and report outbreaks and clusters to the local PHU.
- Sharing feedback on surveillance and management of outbreak with local PHU.
- Evaluating hospital IPAC plan for pandemic influenza and updating.

¹¹ Refer to the Toolkit Appendix 3 for example job action sheets.

Resources

Cleaning, Disinfecting, and Sterilization -

http://www.health.gov.on.ca/english/providers/program/infectious/diseases/ic_cds.html

Community and Hospital Infection Control Association Canada

<http://www.chica.org/>

Fact Sheets:

http://www.health.gov.on.ca/english/providers/program/infectious/pidac/pidac_fs.html

HHS Pandemic Influenza Plan

– Supplement 3 health care planning
United States Health and Human Services
<http://www.hhs.gov/pandemicflu/plan/sup3.html>

Occupational Health Measures and Infection Prevention and Control in the Health Care Setting Ontario Health Pandemic Influenza Plan

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

Preventing Febrile Respiratory Illness:

Protecting Patients and Staff
http://www.health.gov.on.ca/english/providers/program/infectious/diseases/best_prac/bp_fri_080406.pdf

Principles and Components of Routine Practices

(Health Canada. Infection Control Guidelines: Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care.

Can Commun Dis Rep. 1999; 25 Suppl 4: 1-149.)

<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/99vol25/25s4/index.html>

Provincial Infectious Disease Advisory Committee (PIDAC)

http://www.health.gov.on.ca/english/providers/program/infectious/pidac/pidac_mn.html

Regional Infectious Control Network (RICN)

<http://www.ricn.on.ca>

Toronto Academic Health Sciences Network: Pandemic Planning Guidelines, May 2006

<http://portal.sre.ca/tahsn/default.aspx>

IPAC Checklist for SRN Hospitals

Pandemic Planning:

- ☐ Review the OHPIP IPAC chapter and the MOHLTC websites, and revise hospital infection prevention and control plan as appropriate to ensure information and tools are up-to-date.
- ☐ Designate a primary person (and a back-up) to support development of an IPAC Plan, engage senior leadership, and participate on the Hospital Pandemic Planning Committee to ensure integration of IPAC guidelines into the Pandemic Plan and the surveillance plan.
- ☐ Review hospital policies, procedures, and plans to ensure consistency with best practices documents. Consult with the Joint Health and Safety Committee (JHSC).
- ☐ IPAC should work with the materials management lead to ensure that assumptions and formulas align with IPAC guidance and consider needs for infection control supplies, PPE, housekeeping and linen.
- ☐ Assess the education needs of staff and work with the lead coordinating the education plan to develop targeted training for individuals and teams on IPAC topics. Consult with the JHSC.
- ☐ Work with regional and local networks to share resources and obtain assistance in education and training.

Pandemic Response:

- ☐ Ensure surveillance requirements are being met and work with communications to send reminders.
- ☐ Ensure IPAC policies and procedures are being followed (e.g., cohorting, segregation).
- ☐ Maintain signage, availability of hand hygiene stations, and access/supply of PPE; work with materials management to ensure stock levels are managed.
- ☐ Assessing just-in-time educational topics and work with the hospital Emergency Operations Centre and communications lead to support learning or reminders to all hospital staff.
- ☐ Ensure compliance and proper usage of PPE, as per contact, droplet, airborne precautions.
- ☐ Monitor implementation of plans for housekeeping, linen, cleaning and sterilization of equipment.

Pandemic Recovery:

- ☐ Review and revise hospital IPAC plan and update.

Chapter 8: Occupational Health and Safety



Chapter 8: Occupational Health and Safety

The Occupational Health and Safety (OHS) program is a plan of action designed to prevent accidents and occupational diseases in order to ensure the safety and protection of staff.¹ OHS measures, in conjunction with proper infection prevention and control (IPAC) procedures, can help protect health care workers and patients from exposure to the influenza virus in health care settings.²

The purpose of this chapter is to outline the elements of an OHS plan and strategies to embed health and safety principles into the various hospital plans. After reading this chapter you will understand:

- Why the transmission of influenza is consequential and how the provincial policy on personal protective equipment responds.
- How to develop an OHS plan for the hospital.

Guiding Principles:

- All means of transmission of the pandemic influenza virus are consequential, and decisions consider the precautionary principle.³
- Staff will have easy access to personal protective equipment (PPE) and comply with usage. Refer to the chapter on Infection Prevention and Control, (page 67, Figure 7.3) for the provincial policy on PPE for patient care during an influenza pandemic.
- All pandemic influenza planning is made in consultation with the Joint Health and Safety Committee (JHSC) or safety representative.

What You Need to Know

Provincial Legislation for Occupational Health and Safety

The *Occupational Health and Safety Act* (OHSA) is intended to protect workers against health and safety hazards on the job.⁴ Under the OHSA, workers and employers participate in an internal responsibility for occupational health and safety where together they identify hazards and develop solutions (refer to Figure 8.1). Provisions to foster this include, but are *not* limited to:

- Under the OHSA, workplaces are required to have a JHSC, or in smaller workplaces (defined as less than 20 workers) a health and safety representative. Their task is to monitor the internal responsibility system and discuss concerns, review progress, and make recommendations.⁵
- The OHSA sets out reporting requirements to Workplace Safety and Insurance Board, a Director at the Ministry of Labour, the JHSC, and the union.

*Emergency Management and Civil Protection Act*⁶

- Provides special powers to the Lieutenant Governor in Council and the Premier to deal with declared emergencies. The OHSA cannot be overruled in any emergency.

1 Canadian Centre for Occupational Health and Safety. <http://www.ccohs.ca>

2 Occupational Health and Safety and Infection Prevention and Control Measures. OHPIP, Chapter 7

3 Set out by Justice Campbell in the final Report of the SARS Commission (Spring of Fear, December 2006), which stated, "We cannot wait for scientific certainty before we take reasonable steps to reduce risk."

4 Occupational Health and Safety Act, R.S.O. 1990, c.O.1

5 Ministry of Labour. <http://www.labour.gov.on.ca>

6 Emergency Management and Civil Protection Act, s. 7.2 (8)

Table 8.1 Duties and Rights as Outlined in the *Occupational Health and Safety Act*

Employer Duties	Supervisor Duties	Worker Duties	Rights
Provide information, instruction, and supervision to a worker to protect the health or safety of the worker.	Works in the manner and with the protective devices, measures, and procedures required by the OHSA and the regulations.	Work in compliance with the provisions of this Act and the regulations.	The right to participate in identifying and resolving workplace health and safety concerns.
When appointing a supervisor, appoint a competent person.	Uses or wears the equipment, protective devices or clothing that the worker's employer requires to be used or worn.	Use or wear the equipment, protective devices or clothing that the worker's employer requires to be used or worn.	The right to refuse work they believe is likely to endanger their own or another worker's health and safety.
Take every precaution reasonable in the circumstances for the protection of workers.	Advise a worker of the existence of any potential or actual danger to the health or safety of the workers of which the supervisor is aware.	Report to his or her employer or supervisor the absence of or defect in any equipment or protective device of which the worker is aware and which may endanger himself/herself or another worker.	The right to know about hazard in the workplace.
Prepare and review at least annually a written OHS policy and develop and maintain a program to implement that policy.	Where so prescribed, provide a worker with written instructions as to the measures and procedures to be taken for the protection of the worker.	Report to his or her employer any contravention of the OHSA or the regulations or the existence of any hazard of which he or she knows.	
The equipment, materials, and protective devices provided by the employer are maintained in good condition.	Take every precaution reasonable in the circumstances for the protection of workers.		

What recommendations does the province make on health and safety for pandemic influenza?⁷

- Have a four-week supply of appropriate PPE required for routine practices, droplet precautions, contact precautions, and airborne precautions. Refer to the Equipment and Supplies chapter (page 143) for further details.
- Maintain a written respiratory protection program and providing fit-testing and training for staff using N95 respirators.
- Ensure all education programs are developed in consultation with and reviewed by the JHSC/health and safety representative.

⁷ Occupational Health and Safety Measures and Infection Prevention and Control in Health Care Settings. OHPIP, Chapter 7, page 4

The MOHLTC has developed a procurement strategy and is managing a stockpile of infection control supplies (e.g., hand hygiene, disinfectants) and PPE (e.g., masks, N95 respirators, gloves) to provide health care settings with product for weeks 5-8 of a pandemic influenza.⁸ Refer to the Equipment and Supplies Chapter (page 143) for details.

The MOHLTC is developing standardized pandemic influenza education material and has released learning modules through the Infection Prevention and Control Core Competency Education (IPCCCE) program to all acute care settings. Refer to the Education of Staff, Patients, and Visitors chapter (page 39) for details.

⁸ Supply and Equipment Template: Care at Hospital' (Chapter 10A-2). OHPIP

How is the Ontario Hospital Association supporting hospitals?

During the Pandemic Planning and response stage, the OHA's Organizational Health Management Services (OHMS) department aims to assist hospitals by providing expertise in the areas related to OHS.

What You Need to Do

DURING THE PLANNING STAGE, develop an OHS plan that responds to a pandemic influenza.

Elements of an OHS Plan include:

1. **Rationale:** Why is it necessary?
2. **Goals and Objectives:** What are the desired outcomes?
3. **Approach:** How will recommendations be incorporated?
4. **Evaluation and Feedback:** How well does the plan meet needs?



1. Rationale: Why is it necessary?

Ensure the hospital is complying with the OHSA and that it is taking every reasonable precaution under the circumstances for the protection of a worker.⁹

2. Goals and Objectives: What are the desired outcomes?

Goals and objectives include:

- To provide expertise and ensure that the hospital Pandemic Plan is grounded in the principles of health and safety.

- To develop a comprehensive plan detailing processes to support and maintain the health and protection of staff.
- To develop and implement education specific to staff needs to ensure the correct and consistent implementation of OHS.

3. Approach: How will recommendations be incorporated?

a. Designate a person to develop the plan and consider the needs of the hospital. Working with senior management can help to embed key messages of the plan and address resource requirements. Other considerations include:

- Ensuring access to OHS experts who have trained in applied bio-safety.
- Role of the Joint Health and Safety Committee (JHSC) to support OHS.
- Working with other subcommittees and departments to develop plans to ensure that OHS principles are embedded.

b. Maintain the role of the Joint Health and Safety Committee (JHSC)

This is an advisory group of worker and management representatives that monitors the internal responsibility system/workplace partnership. The JHSC should meet at least once every three months, or more frequently if required, to discuss health and safety concerns, review progress, and make recommendations to improve workplace health and safety.¹⁰

c. Complete a Hazard Identification and Risk Assessment (HIRA)¹¹

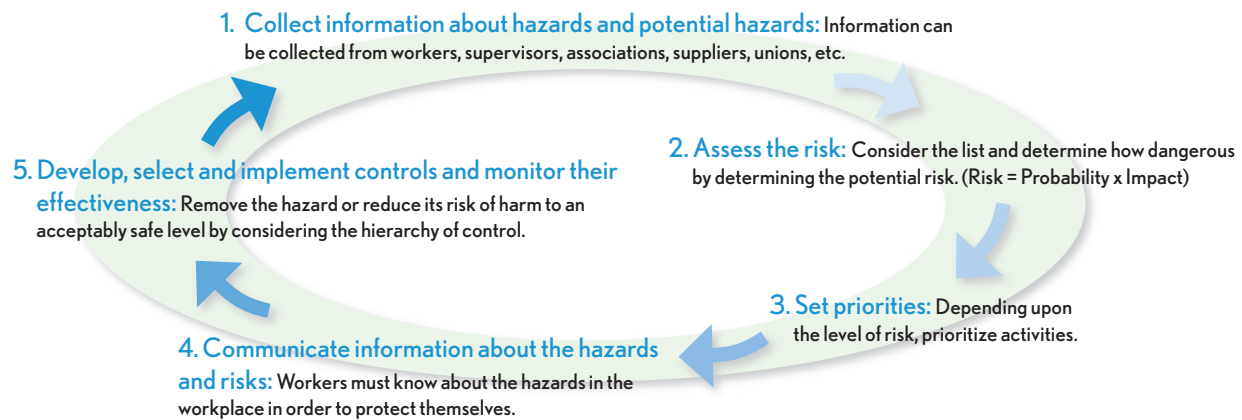
A HIRA is a systematic process to identify hazards and assess risks to eliminate or reduce the threat to workers, organizations, or systems. There are the five steps involved (refer to Figure 8.1).

⁹ **Ministry of Labour** is responsible for enforcing the *Occupational Health and Safety Act 1990 (OHSA)*. Ministry inspectors have broad powers to inspect any workplace, investigate any potentially hazardous situation, complaint and/or work refusal, and order compliance with the Act.

¹⁰ Occupational Health and Safety Measures and Infection Prevention and Control in Health Care Settings. OHPIP, Chapter 7, page 2

¹¹ Workplace Safety and Insurance Board. <http://www.wsib.on.ca>

Figure 8.1: Five step process to complete a Hazard Identification and Risk Assessment



Refer to the Toolkit Appendix 3 Tools and Templates for a sample Worker Risk Assessment tool, as outlined in the OHPIP. Risks may include analysis of regulatory and legal risks, biological, chemical, ergonomic, physical, safety, and psychological. The hospital JHSC can assist in the development and analysis of the HIRA.

d. Use controls to mitigate health and safety hazards. These include opportunities for reducing the risk of influenza transmission by considering solutions to eliminate hazards and risks using the hierarchy of controls and recommendations outlined in OHPIP (refer to Table 8.2). Elimination, substitution and isolation controls would not be feasible during a pandemic (i.e., hospitals would not close their doors to patients with influenza pandemic).

It is essential to ensure that the respiratory fit-testing program and policies supporting this program are up to date. Refer to the Toolkit Appendix 3 Tools and Templates section for further details.

NOTE: Staff required to wear N95 respirators must be fit-tested and trained in use of the respirator. Hospitals must fit-test staff with the eye protection that they will be wearing as specifications could change. A good fit can only be achieved if the area where the respirator seals against the skin is clean-shaven (beards, moustaches and stubble may cause leaks).

e. Education and Training through assessing staff needs and considering training needs related to the plan. Refer to the chapter on Education of Staff, Patients, and Visitors (page 39).

- Targeted training on hierarchy of controls and proper use of PPE may be developed to meet individual or team needs (e.g., security, emergency department) in collaboration with the IPAC team.

Table 8.2: Health and safety hazards can be controlled at the source, along the path or at the level of the worker. Once controls are in place, they must be checked periodically to make sure they are still working properly.¹²

Controls	Explanation
Engineering Controls	Most effective because they involve permanent changes in the workplace to reduce exposure and eliminate risk of "human-error" or non-compliance with recommended practices. They include physical barriers and hand sanitizer stations.
Administrative and Work Practices	Ways of organizing and providing care and services to reduce exposure. Consult with workers who have direct experience with tasks. They include: managing patient flows and access/egress, human resource policies, cohorting plans, cleaning precautions.
Personal Protective Equipment	Reduce employee exposure to hazards when engineering controls and administrative practices are not feasible or effective in reducing the exposure.

- Specific communiqués and signage may be developed to highlight key messages and serve as reminders for staff on expected behaviours.

5. Evaluation and Feedback

Work with provincial and local stakeholders (e.g., local PHU, other hospitals) to obtain feedback on the OHS plan.



*To integrate IMS, start by asking the following questions:*¹³

- Who is in charge of implementing this plan and who do they report to?
- What information will the Command staff need to know to make decisions?
- Will implementation of the plan require coordination or communication with internal or external stakeholders? If so, how will this occur?
- If the role needs to be filled by a back-up, what tools would assist the person with fulfilling the role?
- What are the resources required to fulfill the response requirements?
- What are the immediate actions? Short-term actions? Longer-term actions?

DURING THE RESPONSE STAGE

How to execute an OHS plan during a pandemic influenza

During the pandemic response stage, health and safety measures will be important while there are only a small number of reported cases in order to possibly contain the virus and slow the spread into the community (refer to Figure 8.3).¹⁴

- Coordinate activities and responses through the safety officer.
- Implement a surveillance process to track staff illness and absenteeism.

Toronto Academic Health Sciences Network Recommendations for OHS include:

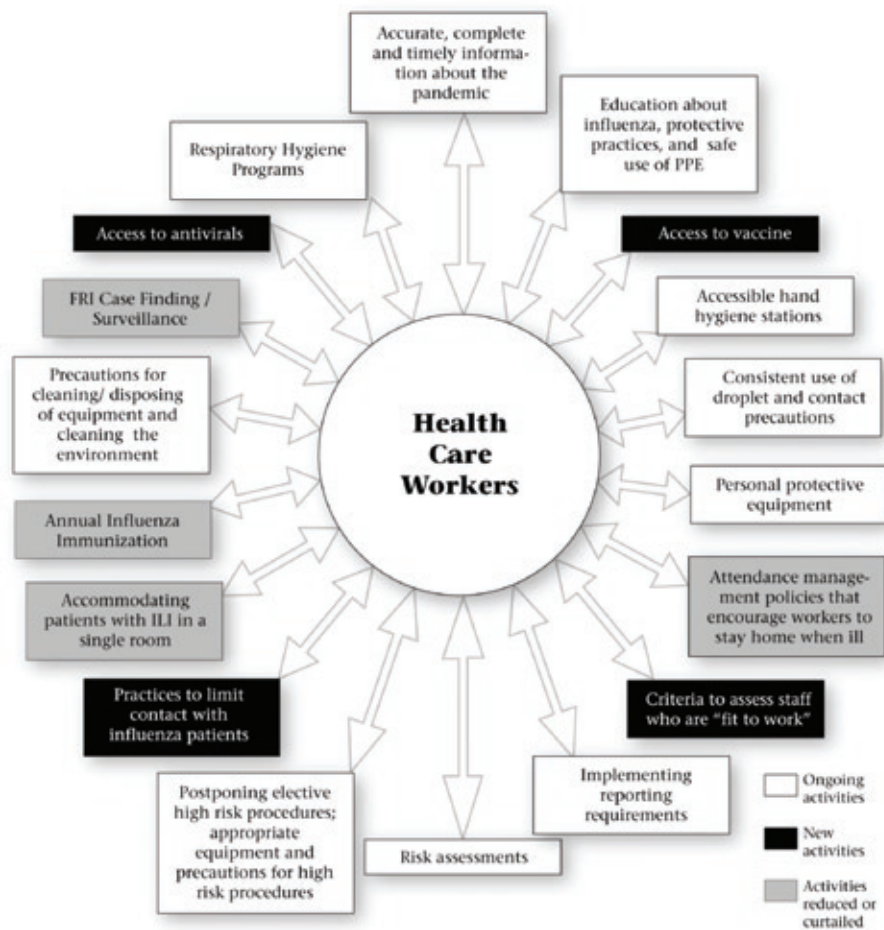
- OHS will continue to track Health Care Workers (HCW) who report symptoms of respiratory tract infection and follow up with reports of clusters of illness
- Active symptoms and illness tracking including return to work information and vaccine and prophylaxis tracking

TAHSN Pandemic Influenza Planning Guidelines 2006

¹² Occupational Health and Safety Measures and Infection Prevention and Control in Health Care Settings. OHPIP, Chapter 7

¹³ Refer to the Toolkit Appendix 3 for example job action sheets.

¹⁴ Occupational Health and Safety Measures and Infection Prevention and Control in Health Care Settings. OHPIP, Chapter 7, page 4

Figure 8.3: OHS activities during the response stage of an influenza pandemic.¹⁵

- Continue to monitor hazards/risks, reprioritize and take action.
- Implement policies and procedures and communicate changes to staff, patients, and visitors working through the Communications Officer.
- Distribute antiviral medications (and vaccine if available) as per hospital strategy and monitor staff for adverse effects and usage.
- Evaluate and manage symptomatic health care personnel.
- Monitor use of PPE and reinforce proper usage.
- Implement time-off policies and support needs for rest and recuperation (consider those workers who live a fair distance from the hospital).

DURING THE RECOVERY STAGE

What OHS activities to consider following a pandemic influenza

During the recovery stage, hospitals' activities may include:

- Responding to the psychosocial needs of staff and providing assistance. Refer to the chapter on Human Resources (page 131).
- Evaluating OHS plan and assess effectiveness of strategies and policies to reduce risk of exposure to pandemic influenza.
- Assess effectiveness and antiviral distribution to employees (if done).

¹⁵ Occupational Health and Safety Measures and Infection Prevention and Control in Health Care Settings, OHPIP, Chapter 7

To manage workers with Influenza-Like Illness (ILI), the OHPIP provides the following guidance:

1. Fit for Work - Fit to work with no restrictions. Ideally, health care workers are fit to work when one of the following conditions applies:

- They have recovered from ILI
- They have been immunized against the pandemic strain of influenza
- They are on appropriate antivirals

2. Unfit for Work – Defined as a medically determinable illness that prevents an employee from performing the regular or modified duties of their occupation.

Ideally, staff with ILI should be considered “unfit for work” and should not work, however, due to shortages, they may be asked to work if they are well enough to do so.

3. Fit for work with restrictions – Allows for the re-assignment of duties or reintegration into the workplace in a manner that will not pose an infection risk to the health care worker or to other individuals in the workplace.

Ideally, symptomatic staff who are considered “fit to work with restrictions” should only work with patients with ILI. Workers who must work with non-exposed patients (non-influenza areas) should be required to wear a mask if they are coughing and must pay meticulous attention to hand hygiene. Symptomatic health care workers who are well enough to work should not be redeployed to intensive care areas, nurseries or units with severely immuno-compromised patients.

OHPIP 2007

Resources

3M Canada – Respiratory Safety Information

http://www.3m.com/intl/CA/english/market/traffic/ohes/?WT.mc_id=www.3m.com/ca/occsafety

Acklands-Grainger

Respirators – Fit Testing Supplies

<http://www.acklandsgrainger.com/AGIPortalWeb/WebSource/index.jsp>

AOSafety (Aearo Company)

Respiratory Safety Information

<http://www.aosafety.com/industrial/default2.cfm>

Canadian Centre for Occupational Health and Safety

<http://www.ccohs.ca/pandemic/>

Interim Domestic Guidance on the Use of Respirators to Prevent Transmission of SARS

Centre for Disease Control and Prevention

<http://www.cdc.gov/ncidod/sars/ic.htm>

Levitt Safety

Respirators – Qualitative Fit Testing

<http://www.levitt-safety.com/>

Ministry of Labour

<http://www.labour.gov.on.ca/>

Occupational Health and Safety Measures and Infection Prevention and Control in Health Care Settings

Ontario Health Pandemic Influenza Plan

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

Ontario Safety Association for Community and Health Care

<http://www.osach.ca/index.shtml>

Toronto Academic Health Sciences Network
Pandemic Planning Guidelines – 2006

<http://portal.swh.ca/tahsn/default.aspx>

Workplace Safety and Insurance Board

Resource Information and Pandemic Checklist

Occupational Health and Safety Checklist for SRN Hospital

Pandemic Planning:

- ☐ Review the OHPIP OHS chapter and the MOHLTC websites, and revise hospital OHS plan as appropriate to ensure information and tools are up to date.
- ☐ Designate a primary person (and a back-up) to support development of an OHS plan, engage senior leadership and the JHSC, and participate on the Hospital Pandemic Planning Committee to ensure integration of OHS practices and guidelines.
- ☐ Review regulatory framework and legislated requirements for employers/hospital.
- ☐ Conduct a respiratory disease hazard risk assessment to identify workers who will be involved in high risk activities as well as patients who pose a risk. Work with JHSC.
- ☐ Identify opportunities for reducing the risk of influenza transmission by considering solutions to eliminate hazards and risks using the hierarchy of controls and work through the Hospital Pandemic Planning Committee and JHSC to prioritize and implement these.
- ☐ Review hospital policies, procedures, and plans to ensure consistency with best practices documents.
- ☐ Develop a plan to respond to respiratory fit-testing requirements and work with the Hospital Pandemic Planning Committee and materials management lead to ensure PPE requirements are aligned.
- ☐ Assess the education needs of staff and work with the lead coordinating the education plan to develop targeted training for individuals and teams on OHS topics.
- ☐ Promote annual influenza vaccination and other provincial and local level guidance.

- ☐ Work with Human Resources lead to develop policies and procedures (e.g., sick time policy, assistance programs).
- ☐ Develop or update system to monitor illness of employees and track absenteeism of staff during pandemic influenza to provide information to the EOC and redeployment centre.
- ☐ Review process to report OHS illnesses.
- ☐ Work with human resource lead to develop plan for OHS department services during a pandemic influenza.

Pandemic Response:

- ☐ Through the health and safety officer, continue to monitor hazards and risks, reprioritize and take action.
- ☐ Implement policies and procedures and communicate changes to staff, patients, and visitors through the Communications Officer.
- ☐ Distribute antiviral medications (and vaccine if available) as per hospital strategy and monitor staff for adverse effects and usage.
- ☐ Evaluate and manage symptomatic health care personnel.
- ☐ Monitor use of PPE and reinforce proper usage (e.g., just-in-time education, communications reminders).
- ☐ Monitor and utilize reporting system for tracking absenteeism and employees who report illness while at work.

Pandemic Recovery:

- ☐ Confirm list of all staff who have been vaccinated with pandemic influenza vaccine.
- ☐ Review and revise hospital OHS plan and update.
- ☐ Evaluate effectiveness of antiviral and vaccine distribution (as per hospital strategy).

Chapter 9: Antiviral Drugs and Vaccines



Chapter 9: Antiviral Drugs and Vaccines

Both antiviral drugs and vaccine therapies are part of Ontario's comprehensive strategy to minimize illness and death. While vaccines are the most effective means to prevent disease and death, it will take four to five months after the pandemic strain is identified to develop a vaccine.¹ Antiviral 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 a vaccine is not available.²

- An effective system to distribute and administer antivirals and vaccines is being developed between national, provincial, and local stakeholders, since distribution of antivirals for effectiveness is time-dependent (must occur within 48 hours of onset, preferably within 12-24 hours).

What You Need to Know

What is the difference between antivirals drugs and vaccines?

Antiviral drugs are a class of medication used specifically for treating viral infections. Refer to the Ontario Health Pandemic Influenza Plan (OHPIP) for a list of antiviral drugs that are currently approved in Canada.³

A vaccine is a preparation that contains antigens consisting of whole viral organisms (killed or weakened) or parts of such organisms, and is used to confer immunity against the disease that the organism causes.⁴ The influenza vaccine is made from killed, chemically disrupted (split) virus.

The purpose of this chapter is to outline elements of a hospital antiviral drug and vaccine plan and how it links to the provincial strategy on the management of pandemic patients. After reading this chapter you will understand:

- The roles and responsibilities of national, provincial, and local Public Health Units (PHU), and hospitals in antiviral drug and vaccine procurement, storage, distribution, and administration.
- How to develop an antivirals and vaccines hospital plan that is coordinated with the local community.

Guiding Principles:

- The Ministry of Health and Long-Term Care (MOHLTC) antiviral stockpile will be current (i.e., medications will not be beyond their expiry date) and meet the demands for treatment in Ontario.
- Consistent, ethical, and evidence-based decision-making process will be utilized by the MOHLTC for determining priority access to antivirals and vaccines when supplies are limited.

What antiviral and vaccine plans are being considered?

A comprehensive antiviral drug and vaccine plan is being developed at national, provincial, and local levels to respond to a pandemic influenza and minimize illness and death.⁵ Activities included are outlined on the following page (refer to Figure 9.1).

1 Accessing Antiviral Drugs and Vaccines. OHPIP Chapter 9

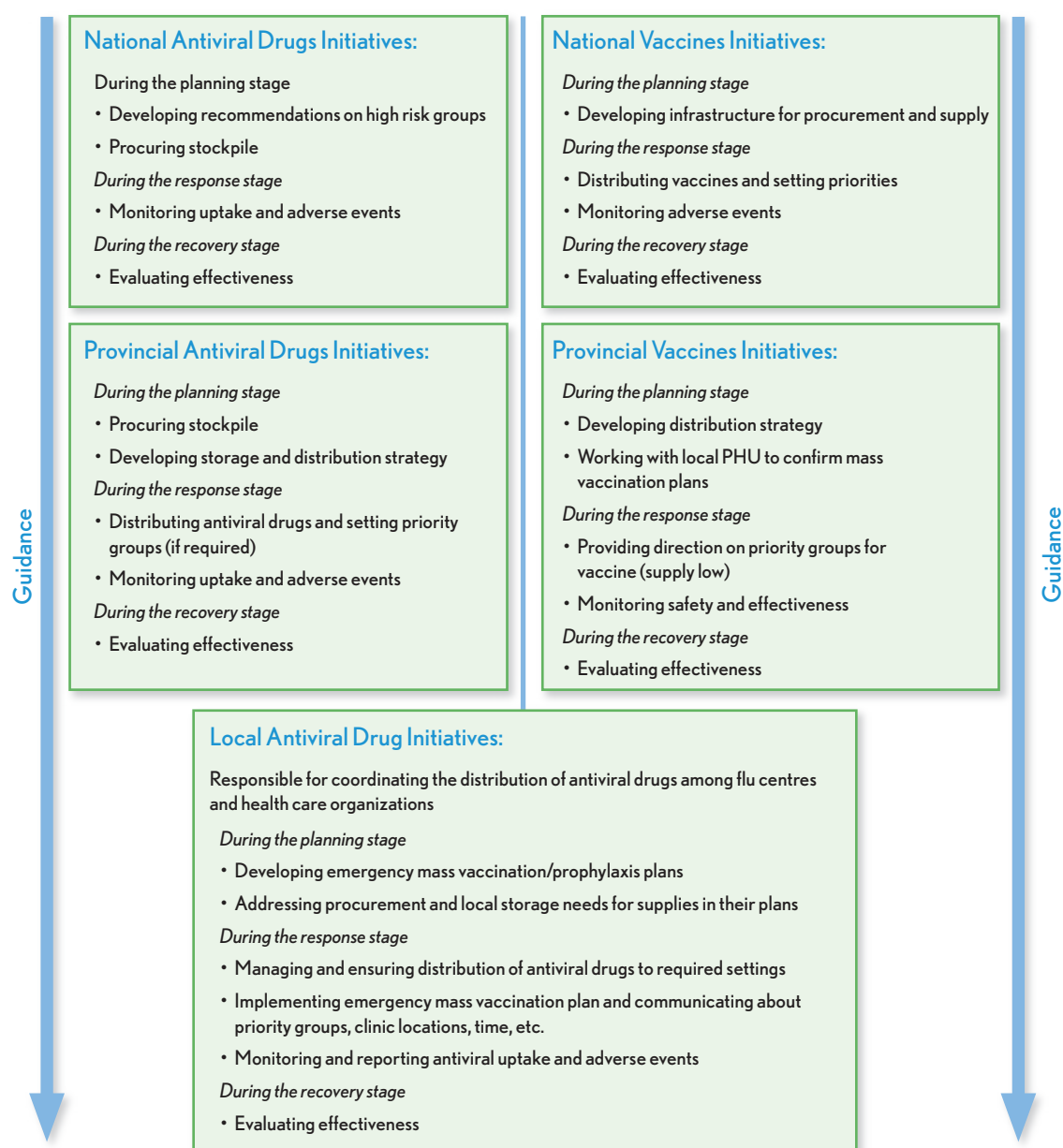
2 Accessing Antiviral Drugs and Vaccines. OHPIP Chapter 9

3 Accessing Antiviral Drugs and Vaccines. OHPIP Chapter 9

4 Accessing Antiviral Drugs and Vaccines. OHPIP Chapter 9

5 Accessing Antiviral Drugs and Vaccines. OHPIP Chapter 9

Figure 9.1: Guidance flows vertically, but the ability of the federal level to procure and access vaccines impacts both the antiviral and vaccine response abilities provincially and locally, creating dependencies.



Guidance on the use of antivirals for prophylaxis:

Canadian Government Guidance

There currently is no national policy on the use of antivirals for prophylaxis, however one is being developed to help ensure a consistent approach across all provinces and territories.

Provincial Government Guidance

There currently is no provincial policy on the use of antivirals for prophylaxis, but one will be developed after the national policy is published, in accordance with the ethical framework. The OHPIP states, “currently there is no evidence that putting large groups of otherwise healthy people on antiviral drugs to prevent influenza will slow or stop the spread of a pandemic. However, there is recognition that prophylaxis may play a critical role in maintaining critical services until a vaccine is available.”

What does this mean for the SRN hospital?

Many hospitals have chosen to develop a policy on prophylaxis in the absence of national and provincial direction, resulting with some of these hospitals procuring and maintaining stockpiles of antiviral drugs.

NOTE: The *Health Protection and Promotion Act* (s. 77.5) authorizes the Minister of Health and Long-Term Care to procure, acquire or seize medications and supplies (subject to reasonable compensation) when regular supply and procurement processes are insufficient to address the needs of Ontarians.⁶

⁶ Service Ontario, e-laws (Collection of free legislation and regulations)
<http://www.e-laws.gov.on.ca>

What You Need to Do

DURING THE PLANNING STAGE, develop a hospital antiviral drugs and vaccines plan.



Elements of an Antiviral Drugs and Vaccines Plan include:

1. Rationale: Why is this necessary?
2. Goals and Objectives: What is the desired outcome?
3. Approach: What is the strategy that will be taken?
4. Education and Communications: How to build awareness
5. Evaluation and Feedback: Monitor uptake and adverse reactions

1. Rationale: Why is this necessary?

The plan helps to outline the role the hospital will play in administering antiviral drugs and vaccines, and developing specific policies to support implementation. The plan will also outline the hospital position on antivirals for prophylaxis.

2. Goals and Objectives: What is the desired outcome?

The goals and objectives of the plan include:

- To develop a comprehensive plan detailing processes to support the hospital role in administration of antiviral drugs and vaccines.
- To design and implement education specific to staff needs to build awareness and ensure consistency.
- To develop plans to support the hospital antivirals for prophylaxis policy (e.g., acquisition, storage, security, distribution, surveillance).

3. Approach: What is the strategy that will be taken?

a. Designate a person to develop the plan and supporting policies/procedures in collaboration with the Hospital Pandemic Planning Committee. The committee will have representation from senior management, who can help obtain support in obtaining approval for the hospital policy and resource needs (if required).

b. Work with the local PHU to determine who is responsible for receiving and managing the MOHLTC antiviral drugs stockpile for the community. Confirm how the hospital will access these medications, and in what quantities, for treatment of patients at the hospital. The primary administration point for antivirals is through the flu centres. Refer to the chapter on Accessing Care and flu centres (page 97) for community patients. Additionally, work with the local PHU to confirm the role of the hospital to administer vaccines (once it is available) to staff and inpatients.

c. Develop policies and processes for how the hospitals will provide antivirals for treatment and distribute vaccines to staff and admitted patients, and whether the hospital will provide antivirals for prophylaxis.

Antivirals for Treatment

- Develop processes to acquire, store, and manage part of the MOHLTC stockpile of antiviral drugs that will be used by the hospital for treatment. Work with the local Public Health Unit (PHU).
- Determine how security requirements will be met.
- Develop plans to administer antivirals for treatment, detect and manage rapid consumption, and replenish the supply in a timely manner. Antivirals for treatment will need to be available for staff, volunteers, and inpatients that fall ill, and by the emergency department for patients seeking acute care who have pandemic influenza.
- Consider how the hospital will collect/report on surveillance requirements (i.e., adverse events) related to antivirals for treatment.

Distribution of Vaccines

- Clarify with the local PHU what the hospital role will be to provide vaccines to staff, volunteers, and patients, when the vaccine is available.
- Develop plans to support what the hospital role will be in the administration of vaccines to staff, volunteers, and inpatients (e.g., education and training, equipment and supplies, communications).

Toronto Academic Health Sciences Network Recommendations for Distribution of Vaccines:

- Each institution should develop a contingency plan for administration of vaccines which takes into account space, staffing, and other resource requirements.
- Existing information management software should be used in hospital occupational health areas to track vaccination status of workers, medical contraindications, and adverse events.

TAHSN Pandemic Influenza Planning Guidelines 2006

Antivirals for Prophylaxis

Currently national and provincial recommendations on the use of antivirals for prophylaxis are pending. Recognizing that many hospitals may have purchased or are considering purchasing antivirals for prophylaxis, these hospitals may wish to consider the following:

- Develop a hospital policy, in consultation with senior management, staff, and infectious disease experts, for use of antivirals for prophylaxis. In response to a request for information on antivirals for prophylaxis, the OHA developed a fact sheet to assist hospitals in the planning process.⁷
- Consider what the trigger for administration will be and how it will be administered/distributed to staff.

⁷ Planning for a Pandemic – Tamiflu Fact Sheet (<http://www.oha.com>)

Toronto Academic Health Sciences Network Recommendations on Antivirals for Prophylaxis:

The TAHSN hospitals believe that the use of antiviral prophylaxis for the protection of health care workers is an important strategy to keep hospital services functioning during a pandemic. Recommendations include:

- Stockpiling of Tamiflu® as an antiviral agent of choice for chemoprophylaxis of predetermined recipients in the event of a pandemic is endorsed for eight weeks. Purchase of Zanamivir (Relenza™) for use in persons who are unable to use/tolerate Tamiflu®
- Staff of TAHSN facilities involved in the provision of direct patient care during pandemic should ideally be on chemoprophylaxis as long as hospitals continue to experience influx of influenza patients. May not be possible if first wave prolonged
- Informed consent be obtained from all staff members or patients (or substitute decision-maker) prior to initiation of chemoprophylaxis
- TAHSN hospitals may want to consider including institutionalized populations into the groups of predetermined recipients and placing them on chemoprophylaxis

TAHSN recommends that the message about high risk of infection with pandemic influenza in pregnancy is clearly communicated to staff.

A medical directive endorsed by occupational Health physician (or substitute) can be used to prescribe antiviral and initiate mass prophylaxis. There are three ways of administering mass chemoprophylaxis:

1. Directly Observed Therapy (DOT): highest level of control over uptake, which translates to higher compliance. Most logistically challenging method and requires careful planning and considerations for administration after work, on days off, and weekends. Facilities choosing DOT should consider combining with staff screening at the entrance to the facility.
2. Distribution of weekly/monthly supplies: Allows more flexibility but provides minimal or no control over antiviral uptake, potential for lower compliance.
3. Combination of 1 and 2: Allows for a balance between control over antiviral uptake and logistical flexibility of administration.

TAHSN recommends that staff should not be provided with quantities of antivirals greater than two tablets to be taken on their days off.

TAHSN Pandemic Influenza Planning Guidelines 2006

4. Education and Communications: How to build awareness

Using education and communications tools and techniques ensure that key learning objectives are:

- Promoting annual vaccination (e.g., limit spread of seasonal influenza, increase acceptance/compliance during pandemic influenza).
- Providing background information on antiviral drugs and vaccines and answer staff questions/concerns on how they will be used during a pandemic.

5. Evaluation and Feedback: Monitor uptake and adverse reactions

This evaluation and feedback stage includes developing a process for surveillance data reporting (e.g., adverse events, resistance to antivirals), and for measuring how effectively the hospital is able to operationalize the antivirals and vaccines plan.

DURING THE RESPONSE STAGE

Enacting the antiviral drugs and vaccines plan during a pandemic

During the response stage of the pandemic, hospital activities will include:

- Communicating with staff regarding local strategies (e.g., the disease, priority groups, process for vaccination).
- Ensuring access and ongoing replenishment of antiviral drugs obtained from the MOHLTC stockpile for patient treatment at the hospital.
- Managing stockpiles (e.g., distributed from MOHLTC stockpile, hospital stockpile if providing antivirals for prophylaxis).
- Completing data collection forms as per surveillance requirements.

DURING THE RECOVERY STAGE

Antiviral drugs and vaccines plan considerations after a pandemic

During the recovery stage, hospital activities will include:

- Providing feedback to local PHU on the distribution and administration of antivirals and vaccines and reflecting on the hospital role to facilitate/support the plan.
- Assessing the hospital antiviral drugs and vaccines plan and obtaining feedback.

Resources

Antivirals and Vaccine

Ontario Health Pandemic Influenza Plan

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

Planning for a Pandemic – Tamiflu Fact Sheet

Ontario Hospital Association

<http://www.oha.com>

Toronto Academic Health Sciences Network

Pandemic Planning Guidelines – 2006

<http://portal.srw.ca/tahsn/default.aspx>

Antivirals and Vaccines Checklist for SRN Hospitals

Pandemic Planning:

- ☐ Review the OHPIP Antivirals and Vaccines chapter and revise Hospital Antiviral Drugs and Vaccines Plan as appropriate to ensure information and tools are up-to-date.
- ☐ Review at the Community Pandemic Planning Committee plans for the distribution of antivirals through flu centres, emergency mass vaccination, and communications related to antivirals and vaccines at the local level, as well as determine the role of the hospital.
- ☐ The MOHLTC stockpile of antivirals may be delivered and managed by the local PHU. If so, hospitals should work with the local PHU to acquire and store a quantity of the antivirals for treatment of staff and patients admitted to the hospital with pandemic influenza, and develop plans for the distribution of the antivirals during a pandemic.
- ☐ Prepare a vaccination plan for health care workers and inpatients, in conjunction with the local PHU.
- ☐ If a hospital has stockpiled antivirals for prophylaxis of staff (and patients), develop plans for management, storage, security, and distribution, and what the trigger will be to commence distribution.
- ☐ Continue to promote annual influenza immunization and work with the communications lead, OHS lead, and education lead to consider key messages and education needs.

Pandemic Response:

- ☐ Monitor updated information and recommendations posted on the MOHLTC website.
- ☐ Ensure education and communication with staff regarding local strategies (e.g., the disease, priority groups, antivirals, process for vaccination) as per hospital responsibility.
- ☐ Continue to manage and maintain stockpiles (e.g., from local PHU if lead for distributing antivirals from MOHLTC stockpile, hospital stockpile if providing antivirals for prophylaxis).
- ☐ Ensure hospital is tracking and reporting adverse events as per surveillance plan.
- ☐ If the hospital has indicated that they will be responsible for distributing the pandemic influenza vaccine to staff, then implement the plan.

Pandemic Recovery:

- ☐ Review and revise hospital antiviral drugs and vaccines Plan and update.
- ☐ Share feedback to assist in evaluation of the distribution and administration of the vaccine, the tracking of doses, adverse events, and evaluate the process with the PHU.
- ☐ Assess the vaccine distribution, storage, and administration process.

Chapter 10: Access to Care and Flu Centres



Chapter 10: Access to Care and Flu Centres

An effective planning and management strategy for the delivery of outpatient care is critical to properly manage people with influenza during a pandemic. The provincial strategy for management of outpatient visits consists of self-care fact sheets, telephone hotlines to address self-care needs/questions, and Community Assessment, Treatment and Referral Centres (flu centres).

The purpose of this chapter is to outline the provincial strategy for meeting the care needs of Ontarians during a pandemic influenza. After reading this chapter you will understand:

- What the assumptions are for the potential demands for outpatient care in your community.
- How the local community plan for management of outpatient visits can impact the Hospital Pandemic Plan.

Guiding Principles:

- The public will need support and information to understand how to access the health care system.
- No single group or organization will be able to absorb the projected number of people who will develop signs or symptoms of Influenza-like Illness (ILI).
- Health Care workers will need to focus on those aspects of assessment and treatment of ill individuals who require their expertise. Volunteers will play an important role.
- Flu centres must be linked to other parts of the health care system to ensure continuity of care and to contribute to surveillance programs that will inform management strategies.
- Appropriate management of outpatient pandemic influenza cases can reduce the progression to severe disease and reduce the demand for inpatient care.
- Effective management of outpatient care in communities will require that public health departments, health care providers/organizations, and communities plan together to address the issues.

What You Need to Know

What is the potential impact of a pandemic influenza on the community?

Ontario Health Pandemic Influenza Plan (OHPIP) estimates that a moderate influenza pandemic could result in between 15-35% of Ontario's population falling ill. The implications for Ontario and in particular for the health system, are daunting. It is assumed that approximately 45% of the people who become ill will not require medical care, 53% of the ill will require outpatient/primary care and approximately 1.5-2% will require hospitalization. These assumptions do not consider the role of antiviral therapies or vaccines.¹

The OHPIP also outlines the assumptions by the Public Health Unit (PHU).² Estimates for three health units, for example, are outlined in figure 10.1 to show how differently sized PHU may be impacted for a moderate scenario. Refer to the reference for the link to view the estimates for all other local PHU.

Figure 10.1: Provincial Strategy for Access to Care during an Influenza Pandemic.

Estimates (Health Unit)	Timiskaming	Huron County	Grey Bruce
Population	34,920	61,446	161,328
Infected	12,222	21,506	56,465
Managed by self-care	5,530	9,686	25,526
Outpatient Care	6,495	11,467	30,013
Hospitalization	185	324	871
Deaths	39	68	184

¹ Planning Assumptions. OHPIP Chapter 3, page 2.

² Based upon 2006 Census data and the Meltzer model, which was developed at the Centre for Disease Control, in the United States. OHPIP 2007 Impact on Ontario Public Health Units.
http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_impact.html

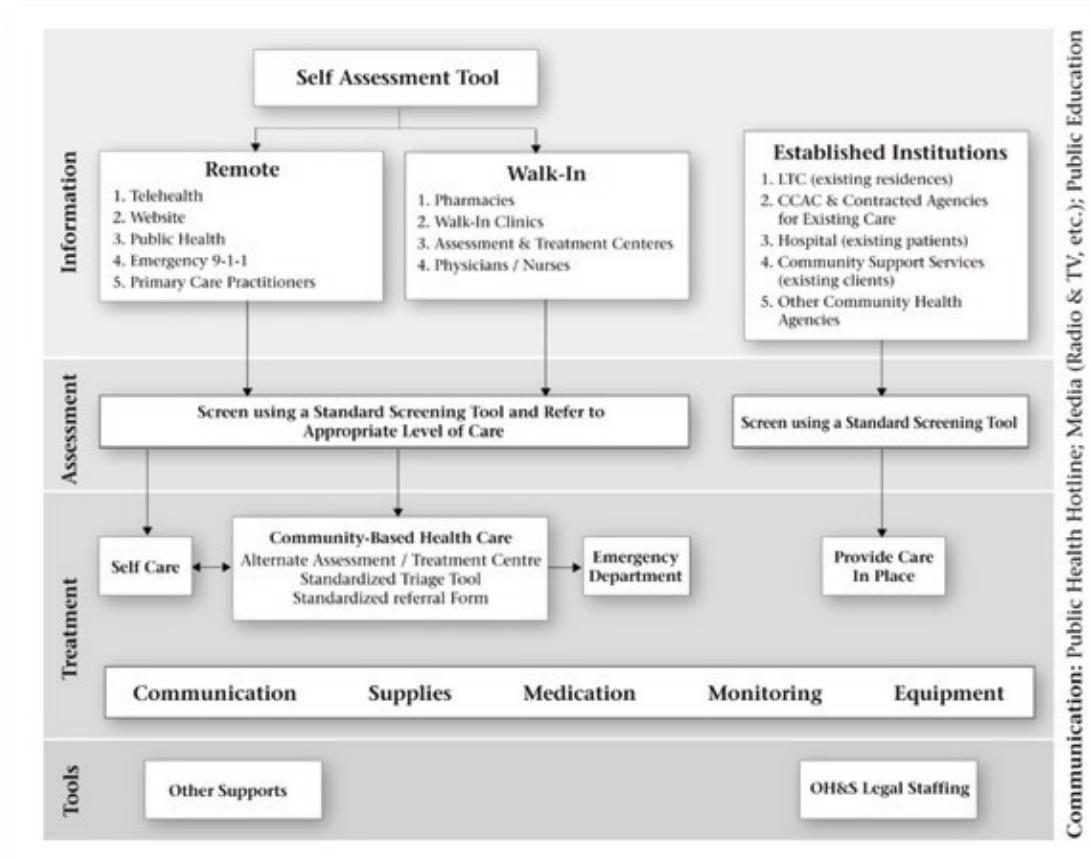
What is the provincial strategy on Access to Care and Flu Centres?

The OHPIP outlines the provincial strategy to meet the population's assessment, treatment, and referral needs during a pandemic influenza. The strategy considers a three-stage process: (1) self-assessment, (2) remote screening by Telehealth and internet services, and (3) face-to-face assessment at the flu centre (or hospital if symptoms are severe).³ Refer to Figure 10.2 for details.

Why has the province developed this strategy?

To allow the health care system to use resources effectively and provide a timely way for people with symptoms of ILI to receive assessment and care. This enables hospitals to focus on treating people who are critically ill with influenza or have other life-threatening illnesses/injuries.

Figure 10.2: Common Approach to Influenza Screening and Referral as outlined in the OHPIP.



3 Influenza Assessment, Treatment, and Referral Centres. OHPIP Chapter 11

How will it be planned for and implemented?

Flu centres will be temporary additions to the health care delivery system, and will be planned and managed locally. The OHPIP advises that every community establish an advisory committee to oversee development of their centre(s) with broader stakeholder involvement, determine the lead agency for planning, and identify which group/organization in the community is best positioned to manage the flu centre(s) once these are opened.

What are the lead agencies for planning and implementation?

The OHPIP states that the lead agency designated to oversee planning of the flu centre(s) shall be identified locally. For those communities that are unable to identify a lead agency to coordinate planning, the MOHLTC will designate one. For more information call 1-866-212-2272

NOTE: The lead agency for planning may not be the lead agency for implementation.

The OHPIP recommends that staffing challenges be considered through the advisory committee, and suggests curtailing some services to free up staff, investigating the willingness of staff in community organizations to work in the flu centres, and making use of volunteers.

What will the flu centres do?

The OHPIP provides guidelines for developing influenza assessment, treatment, and referral centres. Expectations include:

- Screening all patients and submitting surveillance data through the web portal (refer to Figure 10.3).

- Completing the Primary Assessment Record form for all patients (the patient will hold onto this). Refer to the Toolkit Appendix 3 Tools and Templates section for further details.
- Providing supportive care strategies to ease symptoms, access to antiviral drugs and associated therapeutics in accordance with clinical guidelines (will be provided), and education about possible complications.
- Developing transfer protocols for those patients requiring care at a hospital.

DURING THE PLANNING STAGE, to support planning MOHLTC is developing:

- A self-assessment screening tool to support individuals in how best to manage their symptoms (e.g., self care, flu centre, hospital).
- A standard screening tool to be used by Telehealth providers, primary care/walk-in clinics, and all other care settings to ensure a consistent approach.
- Education modules on pandemic influenza to support a consistent approach to assessment, treatment, and referral.
- A stockpile of equipment and supplies as outlined in the *Guidelines for developing influenza assessment, treatment, and referral centres* under the provincial procurement and stockpiling responsibilities (refer to the OHPIP chapter Appendix on influenza assessment, treatment, and referral).
- Details on the legal and financial issues for implementation of flu centres (e.g., malpractice and personal liability insurance, licensing and scope of practice, use of medical directives and temporary licenses, and compensation for people working in the flu centres).

DURING THE RESPONSE STAGE, the MOHLTC's activities may include:

- Posting the self-assessment screening tool on the website and activating the Telehealth hotlines, internet services, and flu centres.

Figure 10.3: Influenza Assessment Categories outlined in the OHPIP.

Assessment Category	Referral
1. No influenza-like illness identified	<ul style="list-style-type: none"> No treatment required. Offer educational material on influenza.
2. Further assessment required to make a diagnosis	<ul style="list-style-type: none"> Refer for diagnostic work-up including radiological examinations and/or laboratory testing (see OHPIP Chapter 14 for laboratory tests available by phase, recommended tests, obtaining proper specimens) Provide at the Flu Centre or transfer patient to another site (depending on the Advisory Committee's assessment of the most effective use of scarce resources in these circumstances).
3. Influenza-like illness identified	<ul style="list-style-type: none"> Initiate treatment at the Flu Centre 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.
4. Influenza-like illness identified, condition deteriorating	<ul style="list-style-type: none"> Transfer to hospital.

- Distribution of equipment and supplies to the flu centre and procure additional equipment and supplies.
- Activation of the MOHLTC Information Cycle in an Emergency and issuance of different communiqués to support management of pandemic influenza.
- Monitoring of surveillance data collected and report back to local PHU and public.

DURING THE RECOVERY STAGE, MOHLTC activities may include:

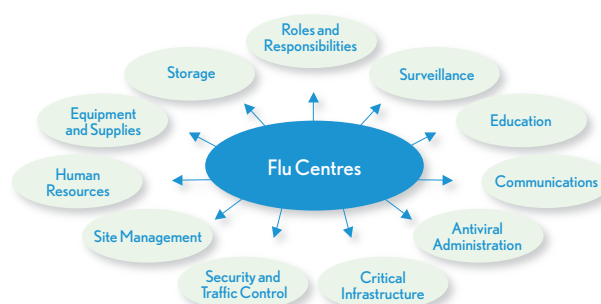
- Evaluating the strategy for assessment, treatment, and referral.
- Evaluating the acquisition, distribution and management strategy with local PHU.
- Determining the financial burden.

What could the local community do?

The OHPIP states that each local health unit in the province will have a pandemic influenza coordination plan that will set out the steps that local health care organizations/services should take to prepare for and

respond to a pandemic.⁴ The OHPIP also recommends that local communities develop an advisory committee to oversee the development of their flu centre(s) with broad stakeholder involvement. Refer to the chapter on Community Pandemic Planning and Response (page 11) for further details.

Figure 10.4: Eleven key issues that should be addressed through collaboration at the Community Pandemic Planning Committee.



⁴ Roles, Responsibilities, and Framework for Decision Making, OHPIP Chapter 2, Figure 2.1; to view a copy of local planning efforts visit http://www.health.gov.on.ca/english/public/program/emu/links_mm.html#pan_local

DURING THE PLANNING STAGE, activities should include developing plans about specific areas (refer to Figure 10.4).

DURING THE RESPONSE STAGE, local communities will manage their flu centre(s) through the lead agency for implementation. Activities may include:

- Promoting the self-assessment tool to the community, and providing information about accessing Telehealth hotlines, internet services, and flu centre(s).

Status of Community Planning: In May 2007, the MOHLTC surveyed all PHU. The survey showed that:

- All 36 public health units are well underway in developing internal pandemic response plans for their health unit.
- Of the 36 PHU, 63% of communities have completed local interagency pandemic plans that address roles and responsibilities, surveillance, communications, mass vaccination and flu centres.

View interagency plans at www.health.gov.on.ca/pandemic under “Local Planning”.

- Ensuring that the flu centre(s) have access to equipment and supplies (i.e., those received from the MOHLTC stockpile and those procured and stockpiled locally).

What You Need to Do

DURING THE PLANNING STAGE, hospital activities will include:

a. Participate on the Community Pandemic Planning Committee

In doing so, ensure that access to care and flu centres are being planned for. While only approximately 1.5-2% of the population will require hospitalization, ensuring effective management of outpatient care in communities (i.e., flu centres) can reduce the progression to severe disease and reduce the demand for inpatient care. If you currently do not participate on a Community Pandemic Planning Committee, then call your local PHU.

b. Develop a plan

The plan should be consistent with the roles and responsibilities identified for the hospital in supporting the local strategy for accessing care and flu centres (this may include developing transfer protocols to the hospital, flu centre site selection, and assisting with procurement of equipment and supplies). Refer to the chapter in OHPIP on Influenza Assessment, Treatment, and Referral Centres for further details.⁵

DURING THE RESPONSE STAGE

During the response stage, hospital activities will depend upon the role that they are playing and responsibilities.

DURING THE RECOVERY STAGE

During the recovery stage, depending upon the role that the hospital plays in the management of the flu centres (e.g., site location, and staff), the recovery stage may include financial compensation (for equipment and supplies, staffing) insurance considerations, and reconfiguring space for hospital use.

⁵ Influenza Assessment, Treatment, and Referral Centres, OHPIP, Chapter 11.

Resources

HHS Pandemic Influenza Plan

– Supplement 3 health care planning

United States Health and Human Services

<http://www.hhs.gov/pandemicflu/plan/sup3.html>

Influenza Assessment, Treatment, and Referral Centres

Ontario Health Pandemic Influenza Plan, 2007-10-04

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

Flu Centres Checklist for SRN Hospitals

Pandemic Planning:

- ☐ Review the OHPIP and understand the provincial strategy for access to care and implementation of flu centres in responding to influenza patients as appropriate to ensure information and tools are up-to-date.
- ☐ Participate on the Community Pandemic Planning Committee (and subcommittees as required for the flu centres). Confirm roles and responsibilities of hospital in management, administration, operations, and logistics of the flu centre (e.g., registration, procurement and management of equipment and supplies).
- ☐ Ensure hospital involvement in developing transfer protocols from the flu centre to an acute care facility, roles and responsibilities, data forms, and communications.
- ☐ Consider site selection. Flu centres may be located at a separate location from the hospital, as separate parts of the hospital or within the hospital.

Pandemic Response:

- ☐ Monitor updated information and recommendations on the MOHLTC website.

Depending upon the role that the hospital plays in the management of the flu centres (e.g., site location, staff, etc.) the response stage could be more extensive.

Pandemic Recovery:

- ☐ Provide feedback on the strategy for assessment, treatment, and referral, and on the role flu centres played in meeting outpatient services for patients with pandemic influenza.
- ☐ Evaluation of local protocols for transferring patients to acute care settings.

Other considerations: Depending upon the role that the hospital plays in the management of the flu centres (e.g., site location, staff, etc.) the recovery stage may include financial compensation from the MOHLTC and others (for equipment and supplies, staffing), insurance considerations, reconfiguring space for hospital use, etc.

Chapter 11: Patient Assessment and Treatment



Chapter 11: Patient Assessment and Treatment

The previous chapter outlined the provincial strategy for access to care, which includes self-assessment, Telehealth and flu centres. If implemented appropriately in each community, this strategy will help to reduce some of the demand on acute care hospitals. The Ontario Health Pandemic Influenza Plan (OHPIP) estimates that a pandemic influenza could result in 15-35% of the population falling ill, of which 53% of the ill will require outpatient/primary care and 1.5-2% hospitalization.¹ Hospitals must be prepared to assess and manage patients seeking hospital care, along with those that fall ill with influenza while at the hospital, or those that are being transferred out to the community.

The purpose of this chapter is to outline the elements of a Patient Assessment and Treatment plan and strategies to build surge capacity and respond to the demand for services. After reading this chapter you will understand:

- The importance of systematically mapping out a plan to show how patients will be screened, triaged, assessed, discharged or admitted to the hospital.
- How to take stock of hospital resources and capacity.

Guiding Principles:

- Appropriate management of outpatient pandemic influenza cases can limit the progression to severe disease and reduce the demand for inpatient care.
- A minimum of 50% of the hospital's capacity will be required for pandemic influenza patients, with increased demand for Intensive Care Unit (ICU) beds.
- Clinical criteria use for decision-making around the allocation of resources will be based upon access and interpretation of real-time data and the application of an ethical framework for decision-making.

¹ Refer to the Toolkit Chapter on Access to Care and Flu Centres (page 97) for further information.

What You Need to Know

Optimizing Hospital Capacity

The OHPIP outlines different approaches to optimizing hospital capacity, which includes physical capacity, hospital staffing, and clinical practices.² This chapter discusses strategies to optimize capacity by implementing physical capacity and clinical practices. The next two chapters consider physical capacity (Essential Services, page 131) and hospital staffing strategies (Human Resources, page 119).

What are some strategies to developing Surge Capacity?³

In the early stages, strategies to develop surge capacity include code orange and the scaling back of services. As the demand for care increases, then ensuring that resources are used optimally and that patients requiring more urgent care receive it first underlies the importance of accurate triage. Refer to Toolkit Appendix 3 Tools and Templates for further detail. The next level is to focus on key critical care interventions, such as mass critical care, and if required, 'true' Triage, which targets resources including supplies and people to optimize effectiveness and efficiency. The OHPIP outlines draft guidelines for critical care triage, as summarized on the following page.⁴

² Acute Care Services, OHPIP Chapter 17

³ Acute Care Services, OHPIP Chapter 17

⁴ Christian, M., et al. *Development of a triage protocol for critical care during an influenza pandemic* CMAJ 2006; 175: 1377-1381

Principles of Critical Care Triage:

1. A triage protocol for critical care is not aimed at deciding who will or will not receive care. *All patients will be cared for*, however this does not mean that all patients *will* or should receive critical care; but they will continue to receive alternative levels of care.
2. Triage does not challenge or contravene ethical doctrine.
3. This protocol is *NOT* a first step to resources rationing under ordinary circumstances and is only to be used in extraordinary situations.

Triage Overview: Use of methods during disasters (e.g., a pandemic) to allocate resources in an equitable manner to the maximum benefit of the population at large, based upon established medical criteria, human rights, laws, and ethical practices. Accurate triage is critical to maximize survival and prevent “over-triage”. The Sequential Organ Failure Assessment (SOFA) system has been validated on a variety of critically ill patients and was effective.

Draft Triage Protocol and Rationale: Triage is a dynamic process that depends on both the demands and availability of resources to share the pool of critical care resources and will evolve over time. The three components are:

A. Inclusion/Exclusion Criteria: Inclusion identifies those who will benefit from admission to critical care (e.g., respiratory failure). Exclusion criteria are people who: (1) currently have a very poor prognosis/chance of survival; (2) need a level of resource that simply cannot be met; and (3) have underlying significant/advanced medical illnesses whose underlying illness has a poor prognosis with high short-term mortality.

B. Minimum Qualifications for Survival:

This is the ceiling on the amount of resources that can be expended on any one individual and requires that patients be reassessed at 48 hours and 120 hours, as well as a ceiling if a patient develops a SOFA of ≥ 11 or other exclusion criteria.

C. Prioritization of Patients: For admission into the ICU and ventilation by Blue (expectant category and should not receive critical care), Red (highest priority for ICU and a ventilator), Yellow (very sick and may/may not benefit), and Green (transfer out of ICU). Refer to the following diagram.

Triage code	Criteria	Action or priority
Blue	Exclusion criteria met or SOFA score $> 11^*$	<ul style="list-style-type: none"> • Manage medically • Provide palliative care as needed • Discharge from critical care
Red	SOFA score ≤ 7 or single-organ failure	Highest priority
Yellow	SOFA score 8–11	Intermediate priority
Green	No significant organ failure	<ul style="list-style-type: none"> • Defer or discharge • Reassess as needed

NOTE: SOFA = Sequential Organ-Failure Assessment

*If an exclusion criterion is met or the SOFA score is > 11 anytime from initial assessment to 48 hours afterward, change the triage code to Blue and proceed as indicated

OHPiP, Acute Care Services Chapter

Definitions of Assessment and Management Processes

Screening: The process of rapidly identifying individuals with criteria related to an illness with the purpose of separating patients into groups for those with symptoms and without.

Triage: The process of classifying patients according to the severity of their illness in order to determine the prioritization for assessment or care based on the demand and resources available.

Assessment: The primary assessment is the process of reviewing the symptoms and vital signs. The secondary assessment (if required) follows a primary assessment and involves a thorough history and physical exam. It may also include diagnostic testing.

Discharge/Disposition: Physician assigns patient a diagnosis and disposition.

Management: Provide clinical management (e.g., antiviral therapy, supportive care, treatment of secondary complications).

What is the MOHLTC Guidance on Patient Assessment and Treatment?⁵

During the planning stage, the MOHLTC outlines several recommendations in the OHPIP for hospitals, which include:

- Ensure those responsible for assessing patients and making triage decisions have proper training before, and support during the pandemic. Effective triage depends upon an established, skilled and practiced infrastructure.

- Develop a central triage committee familiar with the triage protocol to oversee triage during the pandemic and have command and control over the critical care resources in the field.
- Ensure the committee has access to real-time system and epidemiological data.
- Identify protocols to know when to implement surge capacity strategies and how to implement them. One approach is to implement gradually by expanding the breadth of the exclusion criteria in a graded manner and/or applying the protocol to new patients being considered for admission.

DURING THE RESPONSE STAGE of the pandemic, the MOHLTC will utilize surveillance techniques to confirm the clinical case definition of the pandemic influenza virus and provide specific clinical practice guidance through Important Health Notices (IHNs), the 8:30 AM teleconference/videoconference with health care stakeholders, and directives (if required).

What should the local community be doing?

DURING THE PLANNING STAGE, through the local coordinating plan, consider how the provincial strategy for access to care through self-assessment, Telehealth, and flu centres will be implemented to ensure that people will go to the right place to receive care.

DURING THE RESPONSE STAGE of the pandemic, local efforts include supporting communications to the local health system on the clinical case definition and processes to implement guidance from the province locally.

5 Acute Care Services, OHPIP Chapter 17

What You Need to Do

DURING THE PLANNING STAGE, develop a Patient Assessment and Treatment Plan.

Elements of a Patient Assessment and Treatment Plan

1. Rationale: Why is it necessary?
2. Goals and Objectives: What are the desired outcomes?
3. Approach: How will it be achieved?
4. Policies and Procedures: to support its implementation of the plan.
5. Evaluation and Feedback: How well does it meet objectives?

1. Rationale: Why is it necessary?

To ensure that the management and allocation of acute care hospital services during a pandemic influenza meet the needs of influenza and non-influenza patients, while ensuring the safety and protection of staff is not compromised.

2. Goals and Objectives: What are the desired outcomes?

Goals and objectives include:

- To effectively screen and triage patients to support efficient flow and minimize transmission of the influenza virus.
- To identify patients requiring secondary assessment or admission, and apply the appropriate management protocols or clinical pathways.
- To effectively build hospital surge capacity to accommodate both influenza and non-influenza patients requiring acute care services.

3. Approach: How will it be achieved?

a. Designate a person to lead the development of the Patient Assessment and Treatment plan in collaboration with the Hospital Pandemic Planning Committee.

b. Conduct an assessment of capacity, both current and planned for beds and types of beds, and ventilators. Refer to the Toolkit Appendix 3 Tools and Templates section for further details.

Toronto Academic Health Sciences Network Recommendations:

- Determine the location for distinct triage and patient assessment areas in order to separate influenza from non-influenza patients.
- Conduct an inventory of hospital beds including: total number current and maximum, as well as the number of ventilated and monitored beds.
- Assess the total number of ventilators in use and the total available (and location).
- Determine which inpatient areas will be dedicated to influenza vs. non-influenza.
- Identify any non-clinical areas of the facility that can be converted to increase patient capacity.
- Assess the total number of staff (physicians, nurses, etc.), full and part-time.
- Determine the number of staff and supplies needed for each level of patient assessment.
- Assess information technology support and software.

TAHSN Pandemic Influenza Planning Guidelines 2006

c. Understand the projected impact on the community and potential demand for care. Refer to the OHPIP assumptions by PHU.⁶

d. Develop protocols for how patients will be screened, triaged, assessed, discharged/diagnosed, and managed. Planning considerations include:

- Who to screen (e.g., all persons entering the hospital including staff, patients and visitors), where to set up screening (e.g., main entrance for patients, other

entrance for staff), necessary signage, personnel (e.g., screeners, security), equipment and supplies (e.g., Personal Protective Equipment (PPE), hand hygiene, masks), facility design (e.g., partitions, dividers), determining space for waiting areas.

- Establish waiting areas that consider the following cohorting based upon: Influenza-Like Illness (ILI), Non-ILI, ILI Suspect/Exposed, ILI Confirmed, Not Exposed/Immune, Not Exposed but High Risk of Complications Assessment waiting areas.

Toronto Academic Health Sciences Network Recommendations

Screening

- Consider closing emergency departments to walk-in visits but keep open to those patients brought in by Emergency Medical Services, and communicate via media.
- Determine where screening will take place (e.g., main entrance).
- Display international signage directing patients to influenza and non-influenza lines.
- Implement IPAC protocols (e.g., PPE for staff, masks and one-metre distance for patients).
- Security personnel considerations.

Triage

- Triage both influenza and non-influenza patients following screening (separate areas).
- Consider adopting the Canadian Triage Acuity Scale (CTAS) to prioritize patients.
- Continue IPAC screening currently employed at the health care institution.

Primary Assessment

- Primary assessment may have occurred outside of the hospital setting.
- Will be performed by an individual with clinical experience.
- Staff need: primary assessment nurses, physicians, data entry staff, security.
- Provide patients who are sent home with information package: influenza facts, self-care, and what to do if symptoms worsen.

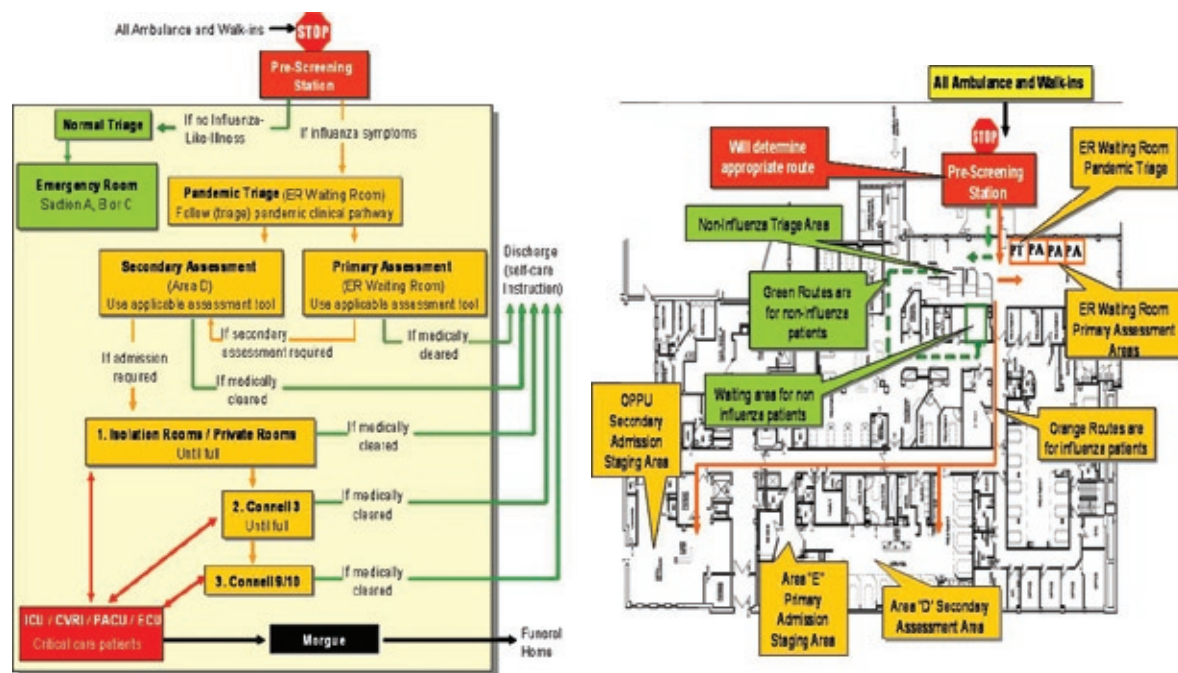
TAHSN Pandemic Influenza Planning Guidelines 2006

⁶ Based upon 2006 Census data and the Meltzer model, which was developed at the Centre for Disease Control, in the United States. OHPIP 2007 Impact on Ontario Public Health Units. http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_impact.html

- Following the screening process, patients are classified and either sent for a primary assessment or, if they already have been assessed by Telehealth or a flu centre, sent for a secondary assessment. Establish protocols for triage.
- To identify those patients who can be discharged or require a secondary assessment. Pre-print the forms for easy accessibility.
- Applicable to both influenza and non-influenza patients and currently is performed by physicians. Pre-print the forms for easy accessibility.
- Discharge/disposition.
- For those requiring admission, what are the staffing needs, how will segregation/cohorting patients with pandemic influenza who require admission occur, access to equipment (e.g., ventilator), how to build surge capacity, who will administer treatment to patients with pandemic influenza, and what are the visitor policies.
- Consider palliative needs and ethical dilemmas that may result for patients seeking acute care where resources may not be available (i.e., ventilators).

e. Map the Process. Refer to Figure 11.1 for further details.

Figure 11.1: Example algorithm and hospital map for screening, triage, assessment, and management of patients presenting to the hospital with pandemic influenza.⁷



⁷ Diagram has been obtained and used with permission of Kingston General Hospitals.

4. Policies and Procedures to support its implementation.

Integrate the plans for other areas of the hospital that play a role in supporting of the plan such as:

- Incident Management System (e.g., communication between the field and EOC, activation of the plan and protocols for implementing surge capacity strategies).
- Surveillance (e.g., reporting on Febrile Respiratory Illness/Influenza-Like Illness to the Public Health Unit).
- Infection prevention and control (IPAC) (e.g., use of segregating/cohorting of patients, contact/droplet/airborne precautions).
- Occupational health and safety (e.g., use of PPE).
- Education (e.g., cross-training requirements, donning and doffing of PPE).
- Communications (e.g., signage on access to hospital services, informing public on services available, coordinating with other hospitals for services and space).
- Human resources (e.g., ensuring business continuity for essential services and those involved with the pandemic response).
- Equipment and supplies (e.g., maintaining access to PPE, supplies to treat patients with pandemic influenza, antibiotics, essential services).
- Security (e.g., manage access/egress, access to care) by working with the local community and local law enforcement personnel.
- IT needs (e.g., collection of data on ED visits, admission rates, staffing, bed usage and type of beds). Quality of the decision will depend upon availability of accurate data.

5. Evaluation and Feedback: how well does it meet objectives?

Ensure that operationalization of other plans will meet the needs of the Patient Assessment and Treatment plan (e.g., communications, IPAC, equipment and supplies). Testing of the use of the IMS through a table-top exercise can assist with updating the plan. Refer to the Chapter on Evaluating the Plan (page 165) for further details.



To integrate IMS, start by asking the following questions:

- Who is in charge of implementing this plan and who do they report to?
- What information will the command staff need to know to make decisions?
- If the role needs to be filled by a back-up, what tools would assist the person in fulfilling the role?
- What are the resources required to fulfill the response requirements?
- What are the immediate actions? Short-term actions? Longer-term actions?

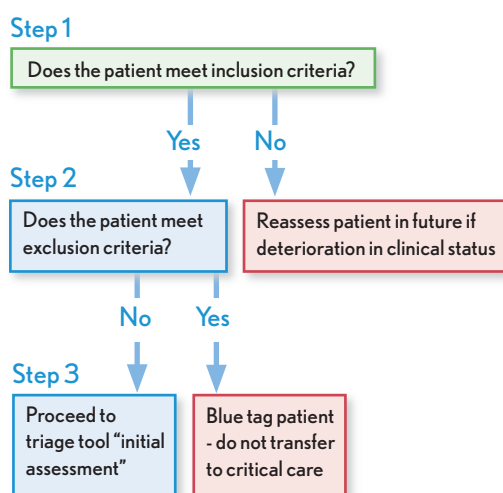
DURING THE RESPONSE STAGE

During the response stage of the pandemic, hospital activities may include:

- Updating clinical practices to coincide with guidance from the MOHLTC on the case definition and characteristics of the pandemic influenza virus strain.
- Ensuring hospital surveillance reporting (e.g., ILI/FRI) to the public health unit.
- Communicating reminders on infection prevention and control practices (e.g., segregating/cohorting of patients, hand hygiene, contact/droplet/airborne precautions).
- Providing just-in-time education (e.g., background on pandemic influenza, triage, donning and doffing of PPE).
- Implementing communications (e.g., signage, updating health care workers).
- Ensuring access to and monitoring levels of equipment and supplies (e.g., maintaining access to PPE, supplies to treat patients with pandemic influenza, antibiotics).

- Assessing and confirming security needs (e.g., manage access and egress).
- Re-evaluating patients according to the SOFA scale. Consider how the ethical framework for decision-making links to the triage decisions, and potential dilemmas that may result (refer to Figure 11.2).

Figure 11.2: Three step process to re-evaluate patients by the SOFA scale.⁸



DURING THE RECOVERY STAGE

During the recovery stage, hospital activities will include:

- Providing feedback on the strategy for assessment, treatment, referral and role flu centres played in meeting outpatient services for patients with pandemic influenza and reducing demand on acute care.
- Determining the burden of pandemic influenza and demand for hospital services.

Resources

Acute Care Services

Ontario Health Pandemic Influenza Plan

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

Christian, M., et al. Development of a triage protocol for critical care during an influenza pandemic; CMAJ 2006; 175: 1377-1381

Toronto Academic Health Sciences Network Pandemic Planning Guidelines – 2006

<http://portal.srw.ca/tahsn/default.aspx>

⁸ Diagram has been obtained and used with permission of Kingston General Hospitals.

Patient Assessment Checklist for SRN Hospitals

Pandemic Planning:

- ☐ Review the OHPIP update on the hospital Patient Assessment and Treatment plan as appropriate to ensure information and tools are up-to-date.
- ☐ Participate on the Community Pandemic Planning Committee to ensure that planning for the continuum of care and flu centres is prioritized and underway, as outlined in the OHPIP.
- ☐ Establish subcommittee or lead to coordinate development of Patient Assessment and Treatment Plan, working with senior management and confirm ethical framework for decision-making.
- ☐ Calculate the projected impact from pandemic influenza on the community and demand for hospitalization services using FluSurge.
- ☐ Assess current (and planned) capacity of the hospital (e.g., rooms, beds, ventilators), compare to projected demand for acute care services and consider surge capacity strategies.
- ☐ Develop plan for screening, triage, assessment, and management of patients coming to the hospital to access acute care services.
- ☐ Incorporate other considerations into planning:
 - ☐ IMS (e.g., communication between the field and EOC, activation of the plan and protocols for implementing surge capacity strategies).
 - ☐ Surveillance (e.g., reporting on ILI/FRI to PHU).
 - ☐ Infection prevention and control (e.g., segregating/cohorting, hand hygiene stations, routine precautions, contact/droplet/airborne precautions).
 - ☐ Occupational health and safety (e.g., Plexiglass dividers, visitor policies, PPE).
 - ☐ Education (e.g., background on pandemic influenza, triage, donning and doffing of PPE).

- ☐ Communications (e.g., signage, information on where to go if you think you have the flu, access to hospital services).
- ☐ Human resources (e.g., people with triaging skills – nurses, physicians).
- ☐ Equipment and supplies (e.g., maintaining access to PPE, supplies to treat patients with pandemic influenza, antibiotics, additional ventilators – regular ventilators, portable, anaesthesia machines, bag-valve mask devices).
- ☐ IT needs (e.g., collection of data on ED visits, admission rates, staffing, bed usage and type of beds). Quality of the decision will depend upon availability of accurate data.
- ☐ Security (e.g., manage access/egress, access to care).
- ☐ Policies (e.g., visitation policies).
- ☐ Develop criteria for patient discharge and transfer to another organization/site. Work with community and health sector stakeholders to develop protocols to support transfers.

Pandemic Response:

- ☐ Monitor updated information and recommendations on the MOHLTC website regarding case definition, assessment and management guidelines and protocols.
- ☐ Activate screening, triage, assessment, and management plan and utilize IMS roles.
- ☐ Evaluate potential room availability throughout the facility and community using CritiCall. Begin implementation of hospital surge capacity tactics taking into consideration staff resources, isolation capacity.
- ☐ Ensure surveillance reporting (e.g., ILI/FRI to PHU).

- ☐ Reminders on infection prevention and control practices (e.g., segregating/cohorting of patients, ensuring refills of hand hygiene stations, and that patients are using routine precautions, contact/droplet/airborne precautions).
- ☐ Involvement of the JHSC and confirming implementation of OHS measures (e.g., Plexiglass dividers, visitor policies, PPE).
- ☐ Just-in-time education (e.g., background on pandemic influenza, triage, donning and doffing of PPE).
- ☐ Develop and manage communications as per the activities outlined in the phases of the communications plan (e.g., signage, updating health care workers, updating public on access to hospital services).
- ☐ Activate the redeployment centre and working with Human Resources (e.g., people with triaging skills – nurses, physicians) and determine role for volunteers.
- ☐ Ensure access and monitoring levels of equipment and supplies (e.g., maintaining access to PPE, supplies to treat patients with pandemic influenza, antibiotics, additional ventilators – regular ventilators, portable, anaesthesia machines, bag-valve mask devices).
- ☐ Assess information technology needs and update accordingly to support decisions regarding triage, discharge (e.g., collection of data on ED visits, admission rates, staffing, bed usage and type of beds). Quality of the decision will depend upon availability of accurate data.
- ☐ Assess and confirm security needs (e.g., manage access/egress, access to care) by working with community to access law enforcement if required.
- ☐ Provide feedback (e.g., local PHU, municipal EOC, OHA) on the strategy for assessment, treatment and referral and the role flu centres played in meeting outpatient services for patients with pandemic influenza.

- ☐ Ensure patients who are referred to the flu centre or are discharged, have self-care and care-at-home guidelines.

Depending upon the role that the hospital plays in the management of the flu centres (e.g., site location, staff, etc.) the response stage could be more extensive and complex.

Pandemic Recovery:

- ☐ Close separate screening and triage area in hospital and advise Emergency Department and other departments and clinics accepting patients to continue to screen patients.
- ☐ Provide feedback on the strategy for assessment, treatment, and referral and the role flu centres played in meeting outpatient services for patients with pandemic influenza and reducing demand on acute care.
- ☐ Evaluate strategies for building hospital surge capacity.
- ☐ Assess the community's health needs/demands and needs of staff to determine strategy for recovery and restoration of services.
- ☐ Determine the burden of pandemic influenza and demand for hospital services.

Other considerations: Depending upon the role that the hospital plays in the management of the flu centres (e.g., site location, staff) the recovery stage may include financial compensation from the MOHLTC and others (e.g., equipment and supplies, staffing), insurance considerations, reconfiguring space for hospital use, etc.

Chapter 12: Essential Services



Chapter 12: Essential Services

In the event of a pandemic influenza outbreak, hospitals will need to be responsive to the care needs of both influenza and non-influenza patients requiring acute level care. Projections from the Ontario Health Pandemic Influenza Plan (OHPiP) indicate that a minimum of 50% of the hospital's capacity will be required for such an emergency.¹ To meet this demand, hospitals will have to consider strategies to optimize surge capacity, including the deferral of services to those who may not require immediate care.

- Clinical criteria use for decision-making around the allocation of resources will be dynamic and based on access to real-time data and an ethical-based framework.

What You Need to Know

How is the demand for hospitalization in a pandemic influenza projected?

The OHPiP estimates that a moderate influenza pandemic could result in 15-35% of Ontario's population falling ill, of which it is assumed that approximately 1.5-2% will require hospitalization.²

Know your Population: During the annual influenza season, the people at higher risk for complications from influenza are the most likely to require hospitalization. These include people with: heart and lung conditions, compromised immune systems (e.g., diabetes, cancer, renal disease, HIV). Knowing the demographics and health needs of your community is important to assess the potential demand for services and impact on the hospital from people who could develop complications.³

Understand the Demand: FluSurge is a forecasting tool that assists hospitals in projecting the impact of a pandemic influenza on hospital capacity by considering the number of weekly hospital admissions, intensive care unit patients, ventilator patients, and deaths.⁴ Refer to the chapter on Equipment and Supplies (page 143) for further information.

The purpose of this chapter is to outline the elements of a service reduction plan and examine strategies to build surge capacity and scale back services. After reading this chapter you will understand:

- The importance of working with the Community Pandemic Planning Committee to consider the continuum of health services offered.
- How the provincial strategy for access to care and flu centres can impact the hospital.
- The importance of a systematic and well-thought-out plan, due to linkages with Human Resources and Equipment and Supplies plans.

Guiding Principles:

- The pandemic influenza will cause an overall attack rate of 35% with individual waves lasting 6-8 weeks.
- Appropriate management of outpatient pandemic influenza cases can reduce the progression to severe disease and reduce the demand for inpatient care.
- There will be an increased demand for Intensive Care Unit (ICU) beds for both influenza and non-influenza patients.

1 Acute Care Services, OHPiP Chapter 17

2 Refer to the Chapter on Access to Care and Flu Centres (page 97) for further information.

3 Acute Care Services, OHPiP Chapter 17

4 CDC FluSurge (www.cdc.gov/flu/fluurge.htm)

Table 12.1: Strategies to optimize hospital physical capacity.

Capacity	Activity
Physical Capacity	Defer any services for non life-threatening conditions where no severe adverse health consequences are anticipated from the delay.
	Discharge Alternate Level of Care (ALC) patients to Long-Term Care homes when beds are immediately available.
	Discharge acute inpatients to home care when care can be provided safely in that environment.
	Discharge acute patients to family and self care when care can be provided safely in that environment.
	Create “flex beds” from reserved beds or recently closed beds.
	Use ventilator capacity anywhere in the hospital where sufficient oxygen capacity exists (e.g. ER, post-anesthetic care units), cohort infectious patient and noninfectious patients.
	Deploy freed-up beds for influenza patients.

How to optimize hospital capacity

The OHPIP outlines different approaches to optimizing hospital capacity. This includes physical capacity, hospital staffing, and clinical practices.⁵ In the previous chapter, Patient Assessment and Treatment (page 107) clinical practices were discussed, and in the next chapter (Human Resources, page 131) hospital staffing is discussed. This chapter discusses strategies to optimize physical capacity specific to prioritization and deferral of services (refer to Table 12.1).

What are some strategies for developing a hospital’s physical capacity?⁶

Code Orange: Generally the first response to a demand that exceeds routine critical care capacity is to consider a series of strategies (e.g., activation of Incident Management System (IMS), mutual aid

agreements, call back staff, cancel elective operating room procedures, open alternative care areas) that together help to provide short-term surge capacity. These strategies may be helpful in the short term, however responding to a pandemic, which will last an unknown period of time and impact others in the system long-term, requires sustainable capacity strategies – code orange will not be feasible.

Scaling Back Elective Surgeries: The next consideration is to scale back elective surgeries, which allows hospitals to free up areas (e.g., surgical intensive care units, endoscopic units, step-down units, and post anaesthetic care units [PACU]) that are well equipped to provide critical care space for patients.

Mass Critical Care: The final level of surge capacity is to focus on key critical care interventions (i.e., mass critical care), and if required ‘True’ Triage, which targets resources including supplies and manpower to optimize their effectiveness and efficiency. Refer to Chapter on Patient Assessment and Treatment (page 107) for further details.

⁵ Acute Care Services, OHPIP Chapter 17

⁶ NOTE: The amount of critical care capacity available will depend largely on the availability of ventilators and personnel who are skilled in managing critically ill patients

Elements of Mass Critical Care:

- Basic modes of ventilation
- Hemodynamic support
- Antibiotics
- Disease specific counter-measures
- Prophylaxis
- Modified standard and delivery of care

*OHPIP, 2007***Types of Hospital Services**

Essential Services: These are clinical services for life-threatening conditions or those services that would anticipate severe adverse health consequences from a delay to deliver the service. Such services include inpatient, outpatient, and emergency department care and procedures.

Clinical Services: Services or procedures providing comprehensive therapeutic care to meet a variety of patient care needs. This includes emergency department, ambulatory day clinics, anaesthesiology, dialysis, general surgical care, obstetrics and gynaecology, oncology, and diabetes care.

Clinical Support Services: Services that provide a range of allied health and administration functions both directly to patients and as support to the clinical and administrative services. These include respiratory therapy, speech pathology, rehabilitation, diagnostic imaging, chaplaincy, laboratory, nutrition, occupational therapy, pharmacy, mental health and addictions counselling, physiotherapy, pharmacy, laundry, medical records and clinical library.

Administrative Services: Services that support the decision-making needs and operational needs of the hospital. These include finance and accounting, human resources, materials management, security, facilities management, and information technology.

What guidance does the MOHLTC offer on essential services?

While flu centres may reduce some pressure, the OHPIP acknowledges that acute care settings will likely be overwhelmed with the demand for services. The OHPIP promotes using a phased-approach to allow for flexibility and a timely response to deferring services, and provides some guidance on criteria to ensure that essential services are there for both influenza and non-influenza care. Key recommendations include:

- Apply the ethical framework for decision-making.
- Establish a senior multi-disciplinary team to make the decisions and seek support from ethical and legal experts.
- Use consistent criteria that are flexible enough to allow local responses based on local demands and resources, and ensure their decisions are transparent.

DURING THE PLANNING STAGE, MOHLTC activities include:

- Procurement and management of a four-week stockpile of infection control supplies and personal protective equipment (PPE) for all health care facilities for weeks 5 to 8 of the pandemic.
- Developing criteria and identifier conditions that hospitals will use to identify services that can be deferred, and those that are essential, and must be maintained. Refer to the Toolkit Appendix 3 Tools and Templates section for further detail.

DURING THE RESPONSE STAGE, the MOHLTC activities will include discussions with the Health Care Stakeholder Council at the daily 8:30 AM teleconference/videoconference (i.e., Information Cycle in an Emergency) to better understand the demands on the health system and provide guidance to optimally use resources in responding to care needs. Refer to the chapter on Communications (page 51) for further details.

What could the local community be doing?

Each PHU will have a pandemic influenza coordinating plan that will set out the steps that local health care organizations/services should take to prepare and respond to a pandemic. The OHPIP recommends:

- Ensuring that plans for the scaling back of elective and non-urgent procedures will be coordinated between hospitals and community services so the health system can continue to provide the full spectrum of services and meet the population's urgent needs.

DURING THE PLANNING STAGE, the Community Pandemic Planning Committee could prioritize and plan for the provision of services in the community across providers.

OHA JPPC Core Services Role of Small Hospitals in Ontario

The Advisory Group has made recommendations on core services for small hospitals based on the following principles:

- Basic core services may be different for different types of communities.
- Should be available to communities of regions – not all individual institutions should be expected to deliver all core services.
- Planning for health services must take into account the diverse health needs and different circumstances of different communities.

Joint Policy and Planning Committee, 2006

DURING THE RESPONSE STAGE, activities could include ensuring effectiveness of the implementation of access to care strategies (e.g., Telehealth, flu centres) at the local community level to meet care needs of people with pandemic influenza.

What You Need to Do

DURING THE PLANNING STAGE, develop a service reduction plan.



Elements of a Service Reduction Plan:

1. Rationale: Why is the plan necessary?
2. Goals and Objectives: What are the desired outcomes?
3. Approach: How will it be developed?
4. Policies and Procedures: What policies and procedures will support its implementation?
5. Evaluation and Feedback: How to ensure the plan is up-to-date.

NOTE: The Services “Ramp-up” plan is equally important, as it considers how services that have been deferred will be reintroduced at the hospital. This is based upon the needs of the community and availability of resources (i.e., staff, space, supplies).

1. Rationale: Why is the plan necessary?

To outline strategies for building surge capacity and utilizing a phased approach to scaling back services to ensure that essential services are available for both influenza and non-influenza patients, and that the safety and protection of staff is not compromised.

2. Goals and Objectives: What are the desired outcomes?

- To ensure that plans will be coordinated and systematic so the hospital can continue to provide essential services.
- To plan for specialized populations (e.g., oncology, dialysis) in conjunction with the larger community or teaching hospitals in the region.

3. Approach: How will it be developed?

a. Designate a person to lead the coordination of the plan, working with the Hospital Pandemic Planning Committee and senior management.

b. Inventory of programs and services that the hospital provides, considering clinical (e.g., emergency care, oncology, dialysis), clinical support (e.g., house-keeping, laundry, linen), administrative (e.g., facilities, financial). This also involves outlining all of the departments, programs and services provided at the hospital. Refer to the toolkit Appendix 3 for Tools and Templates.

c. Prioritization of services. During the regular course of business, each program and service at the hospital is important. However, due to the nature of a pandemic influenza, it is necessary to prioritize the clinical services, clinical support services, and administrative services to manage and allocate resources appropriately. Services are prioritized by assigning priority levels to each, and determining potential responses and trigger points for building surge capacity or scaling back the service.

d. Develop plans for surge physical capacity. Consider strategies to build surge capacity at the level of minor and moderate surges and outline potential triggers (e.g., the number of emergency department visits with symptoms of Febrile Respiratory Illness (FRI)/Influenza-Like Illness (ILI), percentage of staff absent, provincial declaration of the pandemic) for taking action (e.g., cancelling elective surgeries to make beds and staff available). It is important to ensure that planning encompasses guidelines for segregation and cohorting of pandemic influenza patients, ideally in a self-contained area of the hospital. Refer to the chapter on Infection Prevention and Control (page 63) for further details and toolkit Appendix 3 for Tools and Templates.

e. Determine data elements to monitor demand, and confirm the information technology systems to support the collection and reporting (e.g., emergency department visits, admission rates, staffing, bed usage and type of beds). Quality of decisions will depend upon availability of accurate data.

Triggers for Activating Responses

Ongoing assessment of surge capacity requires understanding the demand for and supply of resources. Triggers are predefined criteria utilized to signal the implementation of specific actions of phase levels of a Pandemic Plan such as the reduction of services.

- What are the Key Assumptions?
- What are the Key Response Activities?
- What is the Surge Capacity Result?

NOTE: Key response activities include reduction of specific services, redeployment of services, procuring additional supplies, etc. all with the intention of providing “units of care”.

4. Policies and Procedures: to support its implementation?

Policies and procedures to support implementation and ensure alignment with other plans that have been developed to support the hospital pandemic response. This includes:

- Incident Management System (IMS) (i.e., support communication between the field and hospital Emergency Operations Centre, to activate the plan, outline protocols for implementing surge capacity strategies)

5. Evaluation and Feedback: How to ensure the plan is up-to-date

Decisions for service deferral in one area will impact other areas within the hospital and the community (e.g., cancellation of an ambulatory clinic may result in the deferral of a clinical support service or the patient seeking care at a tertiary care centre). The plan should be structured to allow for updates as additional information is provided so that decisions are not made in isolation.

Prioritization of Services

The prioritization of hospital services considers the following three elements:

1. Level of Urgency

Level 1: Must do, cannot be deferred or delegated. Maintain services for life threatening conditions throughout the influenza pandemic (e.g., urgent/emergent services such as urgent obstetric/gynaecology).

Level 2: Do not defer if possible or bring back as soon as possible. Maintain services for non-life threatening conditions as long as resources are available and if severe adverse health consequences are anticipated from a delay (e.g., colectomy).

Level 3: Can be deferred, medium-low priority. Defer services for non-life threatening conditions immediately if no severe, adverse health consequences are anticipated by the delay (e.g., elective surgeries such as hip/knee replacement).

Hospital Services	Level 1	Level 2	Level 3
Clinical			
Clinical Support			
Administrative			

2. Surge Level Experienced

Minor Surge: Indicates an enhanced surge strategy to respond to a 5-10% increase in demand compared to normal.

Moderate Surge: Indicates an augmented surge strategy to respond to an 11-15% increase in demand compared to normal.

Major Surge: Indicates an optimum surge strategy to respond to a 16-20% increase in demand compared to normal.

Large Scale Emergency or Extreme Surge: Indicates an overcapacity surge strategy to respond to over 20% increase in demand compared to normal.

3. Level of Response

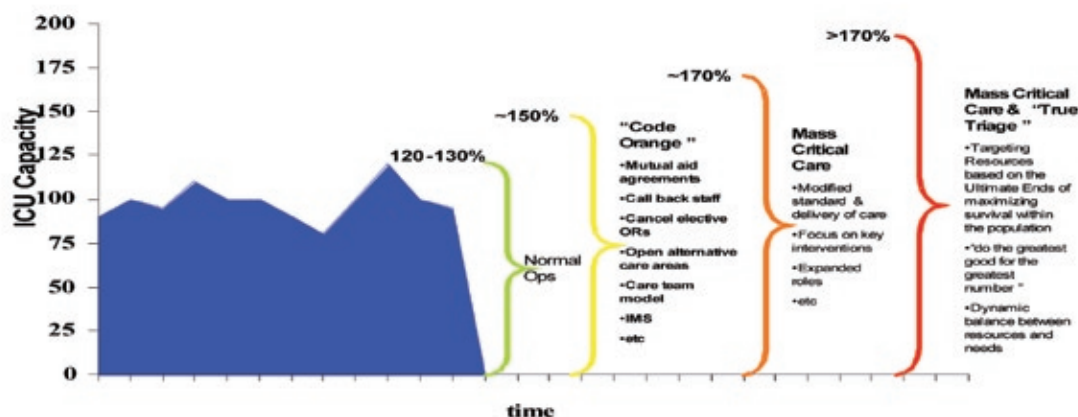
Hospital Response: Considered to be minor and moderate surges requiring coordination and allocation of resources at the hospital level.

Regional Response: Considered to be major surges requiring coordination and allocation of resources at a community/regional level (and sometimes provincial).

Provincial Response: Considered to be a large scale emergency requiring coordination and allocation of resources usually at the provincial level (which is operationalized locally).

From the OHPIP:

Response Thresholds





*To integrate IMS, start by asking the following questions:*⁷

- Who is in charge of implementing this plan and who do they report to?
- What information will the command staff need to know to make decisions?
- If the role needs to be filled by a back-up, what tools would assist the person with fulfilling the role?
- What are the resources required to fulfill the response requirements?
- What are the immediate actions? Short-term actions? Longer-term actions?

DURING THE RESPONSE STAGE

During the response stage of the pandemic, hospital activities may include:

- Analyzing data (e.g., ED visits with ILI, admission rates, staffing, bed usage) to determine hospital capacity and begin implementing surge capacity tactics as required.
- Working with the Municipal Emergency Operations Centre to maintain critical infrastructure needs.
- Scaling back services based upon prioritization matrix, and working with the communications lead to inform internal and external stakeholders of changes.
- Ensuring a coordinated and systematic response that encompasses the response requirements of other plans (e.g., education, infection prevention and control, occupational health and safety, communications).

It is very likely that in addition to responding to a pandemic influenza, other emergencies may be experienced in the community or within the facility. Hospitals must be prepared to consider the implications of hospital emergency code calls and other risks that may require action (e.g., evacuation, lockdown, spills management).

DURING THE RECOVERY STAGE

During the recovery stage, hospital activities may include:

- Evaluating strategies for building hospital surge capacity.
- Assessing the community's health needs/demands and needs of staff to determine strategy for recovery and restoration of services (e.g., ramp-up service plan).
- Determining the burden of pandemic influenza and demand for hospital services.
- Managing financial remuneration and processing of payroll.

Resources

Acute Care Services

Ontario Health Pandemic Influenza Plan

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

Christian, M., et al. Development of a triage protocol for critical care during an influenza pandemic; CMAJ 2006; 175: 1377-1381

FluSurge

Centre for Disease Control and Prevention

<http://www.cdc.gov/flu/fluurge.htm>

Toronto Academic Health Sciences Network Pandemic Planning Guidelines – 2006

<http://portal.sze.ca/tahsn/default.aspx>

⁷ Refer to the Toolkit Appendix 3 for example job action sheets for key

Essential Services Checklist for SRN Hospitals

Pandemic Planning:

- ☐ Review the OHPIP Acute Care Services Chapter and update the Hospital Essential Services Plan as appropriate to ensure information and tools are up-to-date.
- ☐ Participate on the Community Pandemic Planning Committee to ensure that plans for the scaling back of elective and non-urgent procedures will be coordinated between hospitals and community services so the system can continue to provide the full spectrum of services and meet the population's urgent needs.
- ☐ Develop an essential services plan in collaboration with the Hospital Pandemic Planning Committee and senior management.
- ☐ Utilize a phased approach to defer or scale-back services (e.g., elective surgeries) to ensure that essential services are there for both influenza and non-influenza care and to allow flexibility and timely response.
- ☐ Calculate the projected impact from pandemic influenza on the community and demand for hospitalization services using FluSurge.
- ☐ Assess current (and planned) capacity of the hospital (e.g., rooms, beds, ventilators), compared to projected demand for acute care services and consider surge capacity strategies.
- ☐ Take an inventory of the programs and services, assign prioritizations to each, and determine potential responses/trigger points for building surge capacity or scaling back the service.
- ☐ Incorporate other considerations:
 - ☐ IMS (e.g., communication between the field and EOC, activation of the plan and protocols for implementing surge capacity strategies).
 - ☐ Surveillance (e.g., reporting on ILI/FRI to PHU).
 - ☐ Infection prevention and control (e.g., segregating/cohorting, hand hygiene stations, routine precautions, contact/droplet/airborne precautions).
 - ☐ Occupational health and safety (e.g., PPE).
 - ☐ Education (e.g., cross-training requirements, donning and doffing of PPE).
 - ☐ Communications (e.g., signage on access to hospital services, informing public on services available, coordinating with other hospitals for services and space).
 - ☐ Human Resources (e.g., ensuring business continuity for essential services and those involved with the pandemic response).
 - ☐ Equipment and Supplies (e.g., maintaining access to PPE, supplies to treat patients with pandemic influenza, antibiotics, additional ventilators, essential services).
 - ☐ IT needs (e.g., collection of data on ED visits, admission rates, staffing, bed usage and type of beds). Quality decisions will depend upon availability of accurate data.
 - ☐ Security (e.g., manage access/egress, access to care).

Pandemic Response:

- ☐ Monitor updated information and recommendations on the MOHLTC website regarding case definition, assessment and management guidelines and protocols, etc.
- ☐ Implement IMS and consider triggers to utilize all of hospital surge capacity tactics taking into consideration staff resources, isolation capacity, etc.
- ☐ Reminders on infection prevention and control practices (i.e., segregating/cohorting of patients, ensuring refills of hand hygiene stations, and that patients are using routine precautions, contact/droplet/airborne precautions).
- ☐ Involvement of the JHSC and confirming implementation of OHS measures (e.g., Plexiglass dividers, visitor policies, PPE).
- ☐ Just-in-time education (e.g., background on pandemic influenza, triage, donning and doffing of PPE).
- ☐ Develop and manage communications as per the activities per phase outlined in the communications plan (e.g., signage, updating health care workers, updating staff and public on access to hospital services).
- ☐ Activate the redeployment centre and work with human resources (e.g., people with triaging skills – nurses, physicians).
- ☐ Ensure access and monitor levels of equipment and supplies (e.g., maintaining access to PPE, supplies to treat patients with pandemic influenza, antibiotics, additional ventilators – regular ventilators, portable, anaesthesia machines, bag-valve mask devices).
- ☐ Assess information technology needs and update accordingly to support decisions regarding services, discharge (e.g., collection of data on ED visits, admission rates, staffing, bed usage). Quality of the decisions will depend upon availability of accurate data.
- ☐ Assess and confirm security needs (e.g., manage access/egress, access to care) by working with community to access law enforcement if required).

Pandemic Recovery:

- ☐ Provide feedback (e.g., local PHU, municipal EOC, OHA) on the strategy for assessment, treatment, referral and role flu centres played in meeting outpatient services for patients with pandemic influenza and reducing demand on acute care.
- ☐ Evaluate strategies for building hospital surge capacity.
- ☐ Assess the community's health needs/demands and needs of staff to determine strategy for recovery and restoration of services (e.g., ramp-up service plan).
- ☐ Determine the burden of pandemic influenza and demand for hospital services.

Chapter 13: Human Resources



Chapter 13: Human Resources

Currently there is a growing shortage of key health professionals in Ontario. The demand for health care workers with skills to provide patient care and maintain critical services will be particularly high during a pandemic influenza, requiring that hospitals consider strategies to optimize the utilization of staff to respond to care needs.

The purpose of this chapter is to outline the elements of a human resources plan and present strategies to optimize the supply and utilization of staff resources. After reading this chapter you will understand:

- The guidance from the MOHLTC on optimizing human resources.
- The importance of working with the Community Pandemic Planning Committee to consider human resources and volunteer needs.
- How to develop a hospital Human Resources plan.



Guiding Principles:

- Deployment and redeployment of staff will be essential to ensure adequate coverage of hospital services.
- The first wave of the pandemic will last eight weeks and at the peak of it, may result in as many as 20-25% of health care workers being absent from work, either from illness or due to care-giving responsibilities at home.
- The access to and use of volunteers may be considered by the Community Pandemic Planning Committee

What You Need to Know

How to optimize hospital capacity

The Ontario Health Pandemic Influenza Plan (OHPiP) outlines different approaches to optimizing hospital capacity. This includes physical capacity, hospital staffing, and clinical practices.¹ In the previous two chapters, Patient Assessment and Treatment (page 107) and Essential Services (page 119), physical capacity, and clinical practices were discussed. This chapter discusses the supply and utilization of hospital staff. The OHPiP provides some examples of what strategies may be considered (refer to Table 13.1).

Table 13.1: Strategies to optimize hospital staffing capacity.

Capacity	Activity
Hospital Staffing	Re-deploy clinical staff from deferred services.
	Defer staff holidays and leaves of absence until pandemic ends.
	For staff willing to work extra hours, establish 12-hour shifts up to the maximum recommended number of days per staff.
	Train non-clinical staff to provide support services such as meals, personal care, and patient movement for treatment, site cleaning and support for health care workers and their families so the workers can do their job (e.g., child care, pet care).
	Recruit clinical agency staff in coordination with other hospitals in the immediate geographic area.
	Encourage members of the public to take home health care courses before the pandemic so they know how to prevent infection and provide supportive care for family members who are ill; train family members of hospital patients to provide home health care.
	Cross-train clinical staff for influenza care and other essential services during a pandemic and other large-scale emergencies.

¹ Acute Care Services, OHPiP Chapter 17

What is a competency-based approach to human resources planning?²

The OHPIP describes a framework to assist with deploying staff during a pandemic by using both quantitative and qualitative data elements to identify competencies required and available (refer to Figure 13.1). Competencies are defined as the skills, knowledge, and judgment required to deliver a particular health service. This includes:

- Assessing the type and level of service that will be provided.
- Assessing the spectrum of competencies required to meet the needs of patients.
- Assessing the competencies that can be supplied by providers.
- Determining the gap in competencies.
- Developing strategies to build hospital staff capacity in competencies required.

Figure 13.1: Competency-based Health Human resources Planning Framework from OHPIP.



Quantitative Data:

- What is the projected demand for services?
- What is the hospital's ability to meet that capacity (e.g., type and number of staff, hours of work)?

Quantitative Data: Ask:

- How can we get providers who are in administration and research into patient care?
- How do we shift part-time workers to full-time workers?
- Are there non-registered providers (e.g., retirees) who could be registered?
- What are the competencies of these providers? Their level of productivity?

Optimizing Deployment of the Health Workforce, OHPIP 2006.

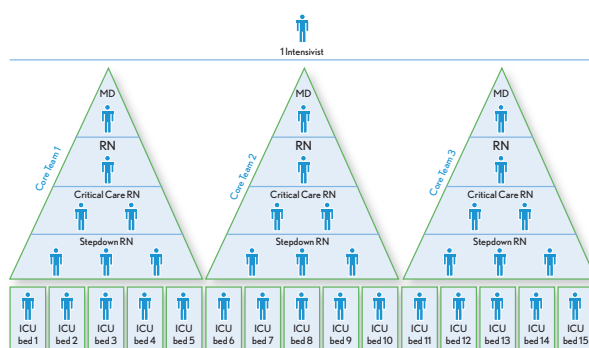
2 Optimizing Deployment of the Health Workforce, OHPIP Chapter 8

What are some strategies to develop hospital staff surge capacity?

The OHPIP outlines several strategies that health care settings can use to structure care in order to make the most effective use of provider skills, which are dependent upon the patient influenza volumes, expectations for continued clinical services (e.g., essential versus deferred services), number of staff who become ill, and the length of the pandemic. These strategies include:³

- Using detailed care plans and algorithms that rely on set patterns of care.
- Using a team care model wherein through supervision, health care providers who lack experience in a specific area can provide it, resulting in the team as a whole having a complete skill set (refer to Figure 13.2).
- Using the “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 or different roles.
- Differentiate between the competencies required to assess patients and the competencies to discharge patients from the particular care site: referring to a “more competent” practitioner provides a safety net.

Figure 13.2: Team care model from OHPIP



What guidance does the MOHLTC offer on human resources issues?

Although, the OHPIP focuses on Health Human Resources (HHR) planning for influenza care, it also recognizes and recommends that health care settings and regions plan for the HHR required to maintain other essential services during the pandemic influenza. It recommends that key stakeholders work together at the local, regional, and provincial levels to ensure that planning occurs across all care settings (e.g., community, primary, acute, long-term).

DURING THE PLANNING STAGE, to facilitate the process, the MOHLTC guidance includes:

- Background on the competency-based approach and the skills/competencies required to provide influenza care.
- A set of key questions to assist planners in developing pandemic HHR plans.
- A self-assessment tool for health care providers to use to assess their skills related to influenza care, and personal/professional circumstances. Refer to the OHPIP Optimizing Deployment of the Health Workforce Appendix.
- A Regulated Health Professionals Act (RHPA), Profession/Influenza Care Competencies Decision Tree that provides an overview of key questions and consequences in assessing abilities to assist in an influenza pandemic. Refer to the OHPIP Optimizing Deployment of the Health Workforce Appendix.

DURING THE RESPONSE STAGE, MOHLTC activities could include:

- Issuing directives to assist with ensuring the appropriate and equitable allocation of scarce resources and maximizing the benefit to the population at large.

3 Optimizing Deployment of the Health Workforce, OHPIP Chapter 8, page 7

NOTE: The *Emergency Management Statute Law Amendment Act, 2006* (formerly Bill 56) amends the *Emergency Management Act* (including a change of title to the *Emergency Management and Civil Protection Act*), the *Employment Standards Act*, and the *Occupational Health and Safety Act*, and gives the Lieutenant Governor in Council the power, through the making of orders, to authorize but not require any person, or class of persons, to render services of a type that that person, or a person of that class, is reasonably qualified to provide.

The *Employment Standards Act* is amended by, among other things, adding a section that provides employees with the right to unpaid leave in certain circumstances arising from declared emergencies. The *Workplace Safety and Insurance Act* is amended to reflect changes made to the *Emergency Management Act* by Bill 56.

What guidance does the OHA offer on human resources issues?

Through the OHA's Strategic Human Resources Management Division, the organization is involved in the development, planning and execution of provincial initiatives and programs related to human resources and employee relations.

DURING THE PLANNING STAGE, the OHA will provide advice and guidance on issues that include labour relations, workers compensation, collective agreements, human resources planning, and benefits.

DURING THE RESPONSE STAGE, the OHA activities will include:

- Supporting Members in issues related to collective agreements, scheduling, bargaining unit work, work refusals, and workers compensation.
- Working in conjunction with other stakeholders in the health care system to support solutions for physician coverage and credentialing.

What can the local community do?

DURING THE PLANNING STAGE, each PHU will develop a pandemic influenza coordinating plan that will set out the steps that local health care organizations/services should take to prepare and respond to a pandemic. The Community Pandemic Planning Committee will support development and identify key issues, which should include local human resources and use of volunteers. Refer to the chapter on Setting the Framework for Planning (page 1) for further details. The OHPIP recommends:

- That planning occur in a bottom-up fashion with local planners estimating the HHR needs in the local planning area.
- All sectors of the health care system must work together to plan a coordinated and comprehensive response to optimizing the deployment of the health workforce during a pandemic.⁴
- Integrating local volunteer organizations early into the planning process by developing effective communication among volunteer groups, governments, local communities, and other stakeholders.⁵

What You Need to Do

DURING THE PLANNING STAGE, develop a human resources plan.

Elements of a Human Resources Plan:

1. **Rationale:** Why is it necessary?
2. **Goals and Objectives:** What are the desired outcomes?
3. **Approach:** How will it be developed?
4. **Policies and Procedures** to support its implementation.
5. **Evaluation and Feedback:** How to ensure plan is up-to-date?

⁴ Optimizing Deployment of the Health Workforce, OHPIP Chapter 8, page 1

⁵ Optimizing Deployment of the Health Workforce, OHPIP Chapter 8, page 8

1. Rationale: Why is it necessary?

To develop strategies to optimize the availability of human resources to meet demands for provision of services and continuity of operations.

2. Goals and Objectives: What are the desired outcomes?

The goals and objectives include:

- To ensure that management is knowledgeable about the *Occupational Health and Safety Act* as well as about the rights of the employer/workers and collective agreements.
- To provide expertise and work with departments to develop business continuity plans for critical services.
- To develop policies and procedures to support implementation of the human resources plan.

HR Considerations for Community Assessment, Treatment, and Referral Centres (flu centres):

Depending upon the role that the hospital will play in its community for the planning and management of flu centres, additional objectives and planning considerations may need to be included.

3. Approach: How will it be developed?

a. Designate a person to lead the development of the HR plan, in collaboration with the Hospital Pandemic Planning Committee and senior management. This person will work in collaboration with the Occupational Health and Safety (OHS) lead around issues related to the *OHS Act*, and also work with union representatives from all union groups, engaging them regularly.

b. Prioritize services and competencies. During the regular course of business, each program and service at the hospital is important. Due to the nature of a pandemic influenza, it is necessary to prioritize the clinical services, clinical support services, and administrative services so as to manage and allocate resources appropriately.

Refer to the Essential Services chapter (page 119) where a plan will be developed to prioritize services. Upon completion of the plan, the table will have services populated under level one, two or three. The human resources staff plan will prioritize business continuity plans to maintain hospital staffing capacity for Level 1 services, and secondarily for Level 2 services. Staff from Level 2 and 3 can be surveyed for their competencies to meet the needs of Level 1 services.

Human Resources	Level 1	Level 2	Level 3
Clinical			
Clinical Support			
Administrative			

Level 1 – must do, cannot be deferred or delegated

Level 2 – do not defer if possible or bring back as soon as possible

Level 3 – can be deferred, medium-low priority

c. List essential competencies and take an inventory of staff skills. The OHPIP reinforces the value of a competency-based rather than credential or profession-based approach. Competencies should be prioritized for services related to influenza care (e.g., care services, administrative support, transportation, education, infection control) and other Level 1 services. Refer to the OHPIP Optimizing Deployment of the Health Workforce Appendix.

d. Gap analysis and strategies to build hospital staffing capacity. Competency needs are compared to supply at the hospital. Where gaps exist, strategies are planned for, such as: recruitment, mobilization, education and training programs. Refer to the chapter on Education of Staff, Patients, and Visitors (page 39) for further details on education and training plans.

e. Develop specific plans, for issues that need to be integrated into the HR plan. Provided collective agreements are followed, the risks of grievances would be minimized. Refer to the chapter on OHS (page 75) for further details on complying with the *OSHA*.

Toronto Academic Health Sciences Network Recommendations for HR include:

Element	Issue	Recommendations
Compensation and Benefits	<ul style="list-style-type: none"> • Compensation of redeployed staff • Use and cost of overtime • Premium pay to recruit/retain staff • Collective agreement issues • Sick pay considerations for staff not covered under sick benefits 	<ul style="list-style-type: none"> • Review new collective agreement for language governing this issue • Provisions in collective agreement for compensation and benefits must be upheld (for both internal and external new hires) • Staff must not be paid additional compensation outside of existing collective agreements for working during the pandemic • Review MOHLTC or OHA guidelines
Labour Relations-Union Expectations	<ul style="list-style-type: none"> • Greater expectation of union to be involved • Potential increase in number of grievances, workload complaints, possible refusal of work, and other safety-related issues 	<ul style="list-style-type: none"> • Hospital preparedness plans must be proactively discuss with unions prior to event • During pandemic, send unions regular verbal and written updates • Seek agreement with your individual unions prior to pandemic on how to effectively deal with grievances filed, and set up mechanism to deal with workload complaints
Recruitment Plan	<ul style="list-style-type: none"> • Recruitment will be competitive and difficult • Potential issues surrounding work demands and increased rates • New staff may require additional orientation and training • Part-time staff may have multiple jobs/expectations 	<ul style="list-style-type: none"> • Discuss with casual and part-time staff the need for commitment to full-time hours • Discuss with recent retirees the possibility of returning to work • Utilize students from all clinical and health care-related programs • Discuss in advance with agencies the ability to hire temporary staff • Discuss with staff the possibility of cancelling vacations, leave of absences, etc.
Redeployment Centre (RC)	<ul style="list-style-type: none"> • Framework for RC is in place • Staff names are submitted • Staff working in the RC understand the competencies needed and available • Process to capture costs • Redeployed staff receive orientation/training • Personal supports are in place 	<ul style="list-style-type: none"> • Human Resources manage the day-to-day operations of the RC • Hospitals develop framework to set up RC within days • Clinical experts assist in the redeployment of other clinical staff, etc. • Capture, monitor, and track redeployment activities and set up additional payroll code for redeployment activities • Redeployment Principles and Operational Guidelines for redeployment have been established
Use of Volunteers	<ul style="list-style-type: none"> • Decide whether volunteers will be used • Type of role or activity they could play • Whether they can reassign the work of unionized employee and if they should be paid 	<ul style="list-style-type: none"> • Determine how to best utilize their volunteers and communicate with them on how they can contribute (or would like to) • Discuss with unions prior to pandemic, if in extreme staff shortages, can volunteers be used in union positions or hired temporarily
Organizational Resiliency	<ul style="list-style-type: none"> • Supports to help cope with multiple waves, staff morale, ill workers, workload changes, staff resignations, and use of employee assistance programs 	<ul style="list-style-type: none"> • Initiate discussions with Employee Assistance Program provider regarding needs during a pandemic and if necessary, negotiate additional coverage • Departments or services not fully engaged in pandemic activities could assist with setting up EAP sessions and other counselling initiatives • Have list of resources available to staff
Childcare/Eldercare	<ul style="list-style-type: none"> • Managing the illness of a child or parent or school closures 	<ul style="list-style-type: none"> • Encourage staff to discuss and plan for a pandemic • Research alternative child care arrangements that do not involve daycares

TAHSN Pandemic Influenza Planning Guidelines 2006

Additional considerations should be given to the use of unregulated workers, antiviral and vaccine compliance, medical staff, involving the Joint Health and Safety Committee-Ministry of Labour, responding to staff medical concerns, screening at the entrances, and staff identification.⁶ Refer to the TAHSN Pandemic Planning Guidelines for further details.

4. Policies and Procedures to support its implementation.

Develop policies and procedures to support the HR plan (e.g., work from home policies, sick time pay, stress leaves, resignation, work refusal) in collaboration with the Hospital Pandemic Planning Committee and senior management. Work with the Communications lead to develop strategies to inform staff and others implicated in the HR plan (e.g., volunteers, unions) on policies and procedures.

5. Evaluation and Feedback: How to ensure plan is up-to-date.

Decisions for service deferral in one area will impact other areas within the hospital and the community (e.g., cancellation of an ambulatory clinic may result with deferring a clinical support service or the patient seeking care at a tertiary care centre). Human resources will also be displaced, thus the plan should be structured to allow for updates as additional information is provided so that decisions are not made in isolation.



*To integrate IMS, start by asking the following questions:*⁷

- Who is in charge of implementing this plan and who do they report to?
- What information will the command staff need to know to make decisions?
- If the role needs to be filled by a back-up, what tools would assist the person with fulfilling the role?
- What are the resources required to fulfill the response requirements?
- What are the immediate actions? Short-term actions? Longer-term actions?

DURING THE RESPONSE STAGE

During the response stage, activities may include:

- Completing a just-in-time skill inventory of staff by surveying them for competencies to provide influenza care and critical services.
- Ensuring contact information of staff and other key stakeholders are up-to-date.
- Working with the communications lead to fan-out information to staff and other stakeholders.
- Activating the hospital Redeployment Centre (RC).
- Monitoring staff levels for different hospital services and supporting the hospital Incident Manager/Emergency Operations Centre in surge capacity tactics.
- Ensuring just-in-time education needs are met for staff (e.g., background on pandemic influenza, triage, donning and doffing of PPE) and orientation/training for those redeployed to new areas.
- Assessing information technology needs and updating accordingly to support decisions regarding services and human resources.
- Maintaining staff support services (e.g., Employee Assistance Plan, staff distress management) and reminding staff of how to access them.
- Responding to human resources issues (e.g., grievances, work refusals).

DURING THE RECOVERY STAGE

During the recovery stage, activities may include:

- Evaluating strategies for building hospital surge capacity.
- Assessing the community's health needs/demands and needs of staff to determine strategy for recovery and restoration of services (e.g., ramp-up service plan).

⁶ Human Resources, Toronto Academic Health Sciences Network Pandemic Influenza Planning Guidelines

⁷ Refer to the Toolkit Appendix 3 for example job action sheets for key

Resources

FluWorkLoss 1.0

Centre for Disease Control and Prevention

<http://www.cdc.gov/flu/tools/fluworkloss/>

HHS Pandemic Influenza Plan

– Supplement 3 health care planning

United States Health and Human Services

<http://www.hhs.gov/pandemicflu/plan/sup3.html>

Optimization Deployment of the Health Workforce

Ontario Health Pandemic Influenza Plan

(OHPIP), 2007

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

Service Ontario, e-laws (Collection of free

legislation and regulations)

<http://www.e-laws.gov.on.ca>

Toronto Academic Health Sciences Network

Pandemic Planning Guidelines – 2006

<http://portal.sw.ca/tahsn/default.aspx>

HR Checklist for SRN Hospitals

Pandemic Planning:

- ☐ Review the OHPIP HR chapter and update the hospital HR plan as appropriate to ensure information and tools are up-to-date.
- ☐ Through the Hospital Pandemic Planning Committee, establish a lead and/or subcommittee with senior management involvement to coordinate development of the HR plan. Utilize the ethical framework for decision-making.
- ☐ Participate on the Community Pandemic Planning Committee to ensure that the local pandemic influenza coordinating plan encompasses human resources considerations and volunteers.
- ☐ Prioritize business continuity plans to maintain hospital staffing capacity for essential services and departments/services supporting pandemic response (e.g., Senior Management and leadership, IPAC, OHS, HR).
- ☐ Prioritize services related to influenza care (e.g., care services, administrative support, transportation, education, infection control) and essential services, including clinical support and administrative services to support the hospital pandemic response and take inventory of staff competencies to assess the feasibility of redeployment or staff modelling strategies.
- ☐ Other considerations including:
 - ☐ Compensation and Benefits
 - ☐ Labour Relations – Union Expectations
 - ☐ Recruitment
 - ☐ Redeployment Centre
 - ☐ Use of Volunteers

- ☐ Review staff support measures such as organizational resiliency and working with staff to develop family emergency plans that deal with child care, elder care, and pet care, etc.
- ☐ Work with communications lead to consider the information needs of different stakeholders related to human resources.
- ☐ Develop a priority list for reassigning and redeploying staff.

Pandemic Response:

- ☐ Monitor updated information and recommendations on the MOHLTC website.
- ☐ Activate EOC and utilize IMS.
- ☐ Begin implementation of hospital surge capacity tactics taking into consideration staff resources and isolation capacity.
- ☐ Activation of the hospital RC.
- ☐ Monitor and implement business continuity plans for essential services and services supporting the pandemic response (e.g., infection prevention and control, OHS, materials management).
- ☐ Ensure just-in-time education (e.g., background on pandemic influenza, triage, donning and doffing of PPE) and orientation/training for those redeployed.
- ☐ Ensure communications are sent to stakeholders regarding HR issues.
- ☐ Assess information technology needs and update accordingly to support decisions regarding services and human resources.
- ☐ Maintain staff support services (e.g., Employee Assistance Plan, critical incident stress management, group/individual counselling).
- ☐ Respond to human resources issues (e.g., grievances, work refusals).

Pandemic Recovery:

- ☐ Evaluate strategies for building hospital surge capacity.
- ☐ Assess the community's health needs/demands and needs of staff to determine strategy for recovery and restoration of services (e.g., ramp-up service plan).
- ☐ Determine the burden of pandemic influenza on the hospital human resources.

Chapter 14: Equipment and Supplies



Chapter 14: Equipment and Supplies

During a pandemic influenza, traditional supply chains may break down and the demand for products may exceed supply, thereby preventing hospitals from accessing essential items in a just-in-time manner to conduct business.

The purpose of this chapter is to outline the elements of an equipment and supplies contingency plan and present strategies to support developing one for the hospital. After reading this chapter you will understand:

- What the MOHLTC is doing to build resiliency in the health care system to respond to a pandemic.
- The importance of having stockpile and contingency equipment as well as a supplies plan to meet hospital demand.

Guiding Principles:

- During an outbreak such as pandemic influenza, hospitals will need large quantities of equipment and supplies to provide patient care and protect health care workers.
- Demand for equipment and supplies will be high worldwide and traditional supply chains may break down due to ill staff, slower production lines, and potentially closed borders.
- All health care settings and providers will plan for and maintain a four-week stockpile (**weeks 1-4**) of Infection Control supplies and Personal Protective Equipment (PPE), where health care settings are hospitals, Community Care Access Centres, community support services, Emergency Medical Services, home care providers, long-term care homes, primary care providers and midwives, laboratories, mortuaries, flu centres, and public health.

- The MOHLTC stockpile of infection control supplies and PPE will be provided to all hospitals for **weeks 5-8** of the pandemic.
- Only those supplies listed in the Ontario Health Pandemic Influenza Plan (OHPiP) will be provided to hospitals. If a hospital is stockpiling an item not on the MOHLTC list, then they should consider strategies to sustain the stockpile for eight weeks.
- Hospitals will have priority in the receiving of water, oil, gas, electricity, and telecommunications during a pandemic influenza.

What You Need to Know

What is the MOHLTC doing?¹

DURING THE PLANNING STAGE, the MOHLTC is developing and is implementing, for all health care settings/facilities, a procurement and warehouse strategy to maintain a four-week stockpile of equipment and supplies that will be in short supply in a pandemic. Supplies prioritized for stockpiling are infection control supplies, PPE, and mass vaccination to ensure that the health system has adequate stocks to meet increased patient care needs and protect health care workers.²

Other MOHLTC Stockpiles:

- An antiviral stockpile to treat 25% of the population, which is the proportion expected to become sick enough during a pandemic to require antiviral treatment.
- Provided 15,000 smaller clinical settings/practitioners with Infection Control Kits.

¹ Equipment and Supplies, OHPiP Chapter 10

² OHPiP's 'Supply and Equipment Template: Care at Hospital' (Chapter 10A-2)

DURING THE RESPONSE STAGE, the MOHLTC's activities include:

- Managing and maintaining the provincial equipment and supplies stockpile.
- Distributing the 5 to 8 week stockpile of equipment and supplies to health care facilities.
- Ensuring timely and coordinated delivery of supplies for the flu centres and the antiviral stockpiles to all local communities.
- Ensuring security of the provincial stockpile.

The Health Protection and Promotion Act, authorizes the Minister of Health and Long-Term Care to procure, acquire or seize medications and supplies (subject to reasonable compensation) when regular supply and procurement processes are insufficient to address the needs of Ontarians.

DURING THE RECOVERY STAGE, the following activities may take place:

- The MOHLTC may collect information required to evaluate the procurement, management, and distribution of equipment and supplies.
- Resume procurement and management of supplies (if another wave is expected).
- Work with local planning groups to determine the financial burden of the disease in the province.

What You Need to Do

DURING THE PLANNING STAGE, develop a hospital equipment and supplies contingency plan.



Elements of an Equipment and Supply Plan:

1. **Rationale:** Why is it necessary?
2. **Goals and Objectives:** What are the desired outcomes?
3. **Approach:** How will it be done?
4. **Evaluation and Feedback:** How to monitor and manage the stockpile.

1. Rationale: Why is it necessary?

To allow the facility to optimize hospital surge capacity by ensuring that the necessary equipment and supplies are available to provide patient care as well as for the safety and protection of staff. The “planning solution” is specific to each facility and based on factors such as the services they provide, geography, access, storage, and distribution channels available for equipment and supplies.

2. Goals and Objectives: What are the desired outcomes?

The goals and objectives include:

- To develop and maintain the four-week stockpile of the critical supplies and PPE outlined in the OHPIP for care at hospital.
- To develop a comprehensive plan detailing processes for how the hospital will procure, store, and manage additional equipment and supplies to meet service needs during the pandemic.
- To evaluate the existing system and establish a process to detect rapid consumption of supplies.

3. Approach: How will it be done?

a. Designate a person to develop an equipment and supplies plan working with the Hospital Pandemic Planning Committee to align expectations and priorities of the hospital.

b. Engage senior management early in the planning process, either directly or by working through the Hospital Pandemic Planning Committee. Leadership is required to help prioritize and support the chosen planning strategies with the necessary funding to procure, store, and maintain the stockpile.

c. Categorize equipment and supply needs and establish priorities, to make planning manageable and targeted based upon care and services that will be maintained during the pandemic, and consider prioritizing planning efforts:³

- I. Personal Protective Equipment (PPE) and Infection Control Supplies
- II. Equipment and Supplies to treat patients with influenza
- III. Infusion Therapies
- IV. Respiratory Therapies
- V. Essential Services (Level 1, Level 2, Level 3)⁴
- VI. Other Considerations: for the Hospital, flu centres, other providers

d. Develop strategies. For some products, a stockpile is required (e.g., PPE and infection control supplies), while for others, identifying alternative suppliers and distributors, diversification of suppliers, and mutual aid agreements, may suffice. Going through the list, and the pros and cons of each alternative will be considered based upon the hospital's unique circumstance and needs. For instance, the pros of stockpiling are ensuring timely access to products, and minimizing geographic challenges, whereas the cons are cost, shelf-life, and warehousing and managing the stockpile.

Consider:

- Connecting with suppliers to learn about their pandemic plans and how they will meet demands, including how they will source raw materials. Determine if there will be any prioritization in products manufactured and what they will be.
- Developing a separate budget code for the equipment and supplies procured for the pandemic stockpile, which can assist in evaluating financial implications.

e. Develop the product list, calculate the stockpile and create a purchasing strategy. For each of the priority equipment and supply groups, specific product lists will be developed in collaboration with departments and people in the hospital. To determine the quantities required, assumptions and protocols must be determined for how much stock is required. The FluSurge tool assists with projecting the potential impact and the number of patient encounters that the hospital could expect, which can help with setting assumptions and protocols for determining quantities. Refer to the Toolkit Appendix 3 Tools and Templates section for additional information.

3 Prioritizations are outlined based upon input from a videoconference/teleconference meeting with Members of the Toronto Academic Health Sciences Network and SRN members from Kirkland District Hospital and Pembroke Hospital.

4 In the Essential Services chapter hospital services were categorized into one of three levels. The first level are those that are essential and will continue in a pandemic, level 2 services could be partially scaled back depending upon resources (e.g., staff, supplies, etc.), and level 3 services will be deferred or cancelled.

I. Personal Protective Equipment and Infection Control Supplies

To determine the PPE and infection control needs of the hospital, determine whether calculations will be based upon the number of patient encounters (this number can be obtained from FluSurge) or the potential number of daily usage that could occur. Refer to the Toolkit Appendix 3 Tools and Templates section for the list of equipment and supplies outlined in the OHPIP. Additional considerations include:

- The occupational health and safety (OHS) staff will perform a risk assessment and fit-test staff, which will help determine the make-up of the PPE stockpile.
- The usage of infection control supplies by staff, patients, and visitors will be higher than current consumption, preventing direct extrapolation to consider needs. Infection Prevention and Control (IPAC) staff may be interested in increasing the number of hand hygiene stations during a pandemic influenza.
- These items will be in very high demand during a pandemic and result in supply shortages being experienced early in response stage. The location of the facility may also play a role in the frequency of deliveries.
- Consultation with the Joint Health and Safety Committee (JHSC) can help to determine the volume of PPE.

II. Equipment and Supplies to Treat Patients with Pandemic Influenza

Refer to the Toolkit Appendix 3 Tools and Templates for the list of equipment and supplies as outlined in the OHPIP. Additional considerations include:

- Review the suggested list from the OHPIP and categorize items as reusable or consumable. For those items that are categorized as reusable, plans must be in place to ensure they can be reprocessed during the pandemic.

- Utilize FluSurge to determine potential projections for people requiring hospitalization, and establish protocols to calculate the supply needs (e.g., number of patient encounters, length of stay).
- Consider the antibiotic requirements and work with the pharmacy to develop a plan and stockpile. The list outlined in the OHPIP 2007 is noted below:

Antibiotic	Unit	Route
Amoxicillin/ Clavulanic acid (200)	70ml Bottles	Oral-liquid
Amoxicillin/ Clavulanic acid (125)	875/125 Tablets	Oral
Azithromycin	15ml Bottles	Oral-liquid
Azithromycin	500mg	IV
Azithromycin	250mg	Tablet
Levofloxacin	250mg	Tablet
Levofloxacin	500mg	Tablet
Levofloxacin	250mg/50ml IV bags	IV
Levofloxacin	500mg/100ml IV bags	IV
Vancomycin	1g Vial	IV
Cefuroxime	1.5g Vials	IV
Ceftriaxone	2g Vials	IV
Ceftriaxone	1g Vials	IV

III. Infusion Therapies

- Use the FluSurge projections, consider the number of inpatients, days on intravenous, and changes per day to calculate the quantity of sets and solutions.
- Work with the clinical group to determine the necessary product sets required and confirm with vendors/manufacturers the availability of intravenous solutions during the pandemic to determine stockpile needs.

IV. Respiratory Therapies (RT) including ventilators

- Use the FluSurge projections to consider the number of patients requiring Intensive Care Unit (ICU) and ventilation care, as well as the average number of days.
- Review the availability of ventilators at your facility.
- Work with the RT staff to consider the procedures that will be offered no matter what during a pandemic influenza and determine equipment and supplies needs.

NOTE: In assessing strategies to optimize capacity, hospitals will take inventory of the number and type of beds available, including those with available ventilators. Plans may be considered for how to train staff and access additional ventilators (e.g., on loan from vendors) for the course of the pandemic.

V. Essential Services

Establishing contingency plans for equipment and supplies in this area will require that the hospital identifies the services that will be sustained during a pandemic influenza. Services can include critical services (e.g., prevent life and death) or clinical support services (e.g., laboratory, linen, housekeeping, nutrition) or administrative (e.g., financial, facilities, communications). Optimizing the hospital capacity is dependent on “units of care”, which include the availability of space, staff, and supplies.

- Prioritize essential service stockpile based on the prioritization matrix developed by the hospital (e.g., Level 1 services). Refer to the Essential Services chapter (page 119) for further details.
- Understand current demand/consumption of items and establish protocols for managing stock needs for the duration of the pandemic (e.g., product availability).

- Consider plans for equipment repairs.
- After Level 1 services are considered, establish strategies for Level 2 services where the scale-back of the service is less clear, but equipment and supply needs are still in place.
- Plan for scale-up of services during the recovery stage, and how equipment and supply needs will be met.
- Consultation with the JHSC can help identify the essential services.

NOTE: plans should be developed for all areas for which the hospital materials management is currently procuring and managing equipment and supplies.

VI. Other Equipment and Supply Considerations

Many small, rural, and northern hospitals also stockpile for other facilities in their community (e.g., Community Care Access Centres (CCACs), long-term care homes, nursing homes), and may play a role in assisting with procuring and managing stockpiles that will be required by these facilities during a pandemic. During the planning stage, working with these satellite organizations to determine roles, responsibilities, and expectations can ensure needs are met during the response stage.

Additionally, as part of the Community Pandemic Planning Committee, the hospital may play a role in assisting the community and sharing expertise in this area.

f. Obtain approval and place order. Work through the Hospital Pandemic Planning Committee and senior management to obtain timely approval to financial commitments needed to place purchase order. By prioritizing the equipment and supply needs into categories, this ensures that funding requests are also manageable.

g. Store and maintain the stockpile. Before the stockpile order is placed, consideration must be given to where and how it will be managed after it is received. Given the size of the stockpiles, storing and maintaining stockpiles will prove to be a challenge for most organizations, and an added burden can be those items that are time-sensitive or fall under the workplace hazardous materials information system (WHMIS).⁵ Considerations include:

- Inventory of space available at the hospital.
- Whether the supplier/distributor can store, and rotate items that have been purchased from them. The hospital will need to take into consideration the location of the warehouse and timeliness of delivery, and whether the supplier will prioritize deliveries to the hospital.
- Opportunity to consider storage agreements with other health providers or community stakeholders.
- Developing policies and procedures on access, reporting, and security of the stockpile (e.g., especially if hospitals have stockpiled antivirals for prophylaxis) and to assist with implementation of the plan (e.g., work from home policies for those individuals placing orders).

h. Develop and maintain contact lists of key suppliers, distributors, and couriers used as part of the daily business, but also have alternative ones that may be used during the pandemic. This will be especially useful in the event a back-up person is fulfilling the role of procuring additional supplies, during the pandemic.

4. Evaluation and Feedback: How to monitor and manage the stockpile

While the stockpile will not perfectly match the needs of a hospital during a pandemic, it will provide a good starting point to respond to care needs and ensure protection of staff. By outlining assumptions and protocols for equipment and supply needs, these can be

revisited to ensure that they align with expectations and any new provincial policies or information. The JHSC can be a valuable source of information and feedback about the plan.



To integrate IMS, start by asking the following questions:

- Who is in charge of implementing this plan and who do they report to?⁶
- What information will the Command staff need to know to make decisions?
- Will implementation of the plan require coordination or communication with internal or external stakeholders? If so, how will this occur? And what about?
- If the role needs to be filled by a back-up, what tools would assist the person with fulfilling the role?
- What are the resources required to fulfill the response requirements?
- What are the immediate actions? Short-term actions? Longer-term actions?

DURING THE RESPONSE STAGE

During the response stage of the pandemic the hospital's activities may include:

- Procuring supplies that the facility did not stockpile and maintaining inventory of necessary equipment and supplies (e.g., PPE, infection control supplies, supplies to provide care to influenza patients, essential services).
- Ensuring distribution of equipment and supplies stockpiled for other providers (e.g., nursing homes, meals on wheels).
- Working with suppliers and distributors to ensure timely delivery, and through the hospital Emergency Operations Centre to connect with the municipality and community as required to support access to the hospital.

⁵ Alcohol hand rub stored in quantities greater than 500cc is considered a dangerous good and fire hazard

⁶ Refer to the Toolkit Appendix 3 for example job action sheets for key functional positions.

- Responding to requests from the MOHLTC regarding counts of supplies, and placing requests to access the MOHLTC stockpile for health care facilities.

To access the MOHLTC stockpile of PPE and infection control supplies for weeks 5 to 8 of the pandemic, health care providers should contact the Ministry Emergency Operations Centre (MEOC). Contact information for the MEOC will be provided once the pandemic has been declared through the OHA and also posted on the MOHLTC website at www.health.gov.on.ca/pandemic

DURING THE RECOVERY STAGE

During the recovery stage, the following activities may take place at the hospital level:

- Taking an inventory of hospital equipment, supplies, antibiotics, and determining the financial expenses associated with response.
- Considering the needs for equipment repairs.
- Provide feedback to the MOHLTC on the financial costs from responding to the pandemic.
- Resume procurement and management of supplies (if another wave is expected) or replenish equipment and supplies (especially as services are ramped up).

Resources

Equipment and Supplies

Ontario Health Pandemic Influenza Plan (OHPIP), 2007

http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html

FluSurge

Centre for Disease Control and Prevention

<http://www.cdc.gov/flu/tools/flusurge/>

HHS Pandemic Influenza Plan

– Supplement 3 health care planning

United States Health and Human Services

<http://www.hhs.gov/pandemicflu/plan/sup3.html>

Toronto Academic Health Sciences Network

Pandemic Planning Guidelines – 2006

<http://portal.srw.ca/tahsn/default.aspx>

Equipment and Supplies Checklist for SRN Hospitals

Pandemic Planning:

- ☐ Review the OHPIP Equipment and Supplies chapter and revise the hospital surveillance plan as appropriate to ensure information and tools are up-to-date.
- ☐ Designate a primary person (and a back-up) to lead planning for equipment and supply needs. Ensure a member from senior management is designated and involved.
- ☐ Evaluate the existing system for tracking available medical supplies in the hospital to determine whether it can detect rapid consumption, including items that provide personal protection (e.g., gloves, masks).
- ☐ Categorize and prioritize supplies and determine protocols for calculating product needs (e.g., PPE, equipment and supplies to treat patients with influenza, infusion therapies, respiratory therapies, essential services, laboratories, pharmacy, nutrition, linen, housekeeping, facilities, communications, mortuary, and security).
- ☐ Determine specific product items for each category and establish requirements for stockpile based upon protocols.
- ☐ Identify supply sources and commence discussions on options for storage, warehousing, and management of stockpiles (especially if time-sensitive products are being procured).
- ☐ Establish process for purchase approval, sign-off and placing order (based on priorities). Establish separate budget code for pandemic stockpile.
- ☐ Prepare purchase orders in advance.
- ☐ Manage stockpile and continue to evaluate and update list.
- ☐ Develop contact list of suppliers and couriers.

- ☐ Educate and train staff to build capabilities in material management functions.
- ☐ Create linkages with local and regional stakeholders.
- ☐ Security considerations to ensure safekeeping of stockpile.

Pandemic Response:

- ☐ Procure supplies that the facility was unable to stockpile or top up inventory.
- ☐ Continue to manage the hospital equipment and supplies stockpile.
- ☐ Ensure distribution of equipment and supplies stockpiled for other providers (e.g., nursing homes, meals on wheels).
- ☐ Place orders for additional equipment and supplies and responding to requests from the logistics chief/operations chief.
- ☐ Work with suppliers and distributors to ensure timely delivery.
- ☐ Ensure accessibility and security of supplies being delivered.
- ☐ Respond to requests from the MOHLTC regarding counts of supplies.
- ☐ Place requests with the MOHLTC to access the provincial stockpile.

Pandemic Recovery:

- ☐ Collect the necessary information to evaluate activities related to the procurement, management, and distribution of equipment and supplies.
- ☐ Provide feedback to the MOHLTC on the financial costs from responding to the pandemic.
- ☐ Resume procurement and management of supplies (if another wave is expected) or to replenish equipment and supplies (especially as services are ramped up).

Chapter 15: Mortuary Issues



Chapter 15: Mortuary Issues

The number of deaths resulting from the influenza pandemic could easily overwhelm local morgues and funeral homes.¹ In addition to the pandemic, people will continue to die of natural causes such as cancer, heart disease and from accidents, all of which funeral service providers will need to respond to.² Hospitals must develop plans to manage a potential surge in deaths, where mortuary process may be slower.

The purpose of this chapter is to outline considerations for the hospital mortuary plan. After reading this chapter you will understand:

- The importance of a mortuary plan that is coordinated with the local community to ensure effective management of the deceased.

Guiding Principles:

- It is anticipated that for a moderate influenza pandemic, 0.1% of the population will die from influenza pandemic, or 0.3% of those infected with the virus.³
- Funeral homes and local morgues may not be able to meet demand.

- Northern and isolated communities face particular issues in dealing with large numbers of fatalities making the preparation, storage and burial of a large numbers of corpses very challenging:⁴
 - Lack of funeral service personnel and other resources.
 - Extreme cold weather and heavy snowfalls in winter result in difficulties with burials and in difficulties with the transportation of corpses. In some areas, burials are not done from January-April.
 - In remote areas where families live vast distances apart, corpses may have to be transported a long way, which may be challenging for areas with few plane flights and no road access, or poor road surface conditions.
 - Frozen ground, boggy land and other geographical features also pose a challenge to transportation and burial.

What You Need to Know

What is the difference between multiple fatalities and a natural death surge?

In Ontario, the definitions of Multiple Fatalities and Mass Fatalities and Natural Death Surge are different and have different implications. A pandemic would be defined as a Natural Death Surge event.

Multiple Fatalities: Incident or event (usually a single event) where several persons die and where the number of deaths exceeds the capabilities of the local resources (personnel, equipment, facilities) to respond with appropriate investigation, recovery of remains, examination of bodies, identification of the decedents, reporting of findings, and disposal of the human remains (repatriation, burial, cremation).⁵

¹ http://www.vch.ca/pandemic/docs/ch12_handling_deceased.pdf

² <http://www.funeralboard.com/PublicUploads/2234439103%20Pandemic.pdf>

³ Based upon 2006 Census data and the Meltzer model, which was developed at the Centre for Disease Control, in the United States. OHPIP 2007 Impact on Ontario Public Health Units. http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_impact.html

⁴ http://www.vch.ca/pandemic/docs/ch12_handling_deceased.pdf

⁵ Natural Death Surge Planning. PCPIP (2006). Page 3-4

Natural Death Surge: An increased number of deaths from natural causes that can occur over a period of time (weeks to months) rather than one incident.⁶

The *Coroners Act* provides the legal framework and context in which coroners in the province conduct investigations into deaths. In the early stages of the pandemic, the role of the Office of the Chief Coroner (OCC) may be quite significant. Deaths resulting from a declared pandemic influenza would be regarded as natural but not necessarily sudden *and* unexpected, thus the coroner would not conduct an investigation.⁷

What is the role of the local community?

Municipalities have the responsibility to develop plans for natural death surges, in collaboration with local community stakeholders (i.e., hospitals, funeral homes, cemeteries, crematoria, death registry offices, local public health, the Regional Supervising Coroner).

What You Need to Do

DURING THE PLANNING STAGE

Develop a hospital mortuary plan

An understanding of regular capacity and a projection of need for additional resources to develop space in temporary morgues are key objectives for the hospital Mortuary Plan.⁸ Hospital strategies should be developed to complement the Community Mortuary Plan and include:

- Assessing current capacity for refrigeration of deceased persons and ability to increase shelving to increase capacity.
- Determining the equipment and supply requirements (e.g., body bags) needed to handle the expected number of deceased patients and working with materials management. Refer to the chapter on Equipment and Supplies (page 143) for details.
- Establishing protocols for ministers of religion, family members and visitors.
- Identifying routes in the hospital specific for the transportation of the deceased (refer to Figure 15.1).⁹
- Identifying transportation for bodies to funeral homes or other temporary morgue facilities from private homes or health care.

Other Considerations:

Religion: A number of religious and ethnic groups have specific directives about how bodies are managed after death. First Nations, Inuit, persons of Jewish, Hindu, and Muslim faiths, all have specific directives for the treatment of bodies and for funerals.

Vancouver Coastal Health – Handling and Disposal of the Deceased (Chapter 12)

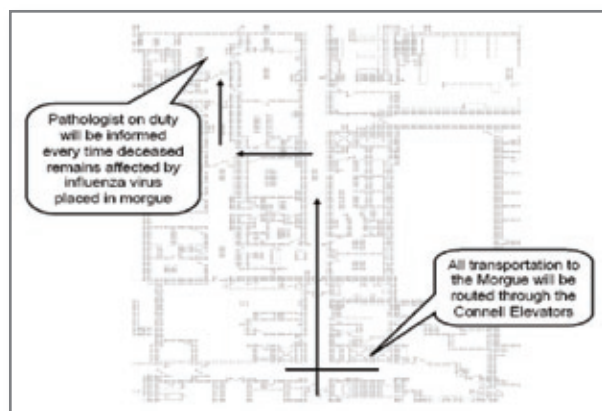
6 Natural Death Surge Planning. PCPIP (2006). Page 3-4. The Ministry of Community Safety and Correctional Services is developing a plan for Natural Death Surge.

7 Coroners Act, R.S.O., 1990, c.37.

8 http://www.vch.ca/pandemic/docs/ch12_handling_deceased.pdf

9 Obtained and used with permission of Kingston General Hospitals.

Figure 15.1: Hospital map depicting route to transport the deceased.



DURING THE RESPONSE STAGE

During the response stage, hospital activities may include:

- Assessing hospital morgue capacity and communicating by the liaison officer to the Municipal EOC to ensure rapid removal and disposition of bodies from the hospital.
- Managing inventory of supplies related to the mortuary plan.
- Ensuring staff involved with the management of the deceased are adhering to infection prevention and control procedures.

DURING THE RECOVERY STAGE

During the recovery stage, hospital activities may include:

- Evaluating handling and disposal of the deceased.
- Estimating costs associated with the handling and disposal of the deceased.

Resources

Board of Funeral Services - Ontario

<http://www.funeralboard.com>

Funeral Service Association of Canada

<http://www.fsac.ca>

Funeral Service Guide to Pandemic Planning

<http://www.funeralboard.com/PublicUploads/2234439103%20Pandemic.pdf>

National Funeral Directors Association

<http://www.nfda.org>

Vancouver Coastal Health

Chapter 12: Handling and Disposal of the Deceased

http://www.vch.ca/pandemic/docs/ch12_handling_deceased.pdf

Mortuary Checklist for SRN Hospitals

Pandemic Planning:

- ☐ Ensure mortuary issues are prioritized at the Hospital and Community Pandemic Planning Committees.
- ☐ Assessing current capacity for refrigeration of deceased persons and the ability to increase shelving to increase capacity in the hospital.
- ☐ Determining the equipment and supply requirements (e.g., body bags) needed to handle the expected number of deceased patients, and working with the lead for the Equipment and Supplies Plan.
- ☐ Examine community morgue capacity to see if it will meet hospital excess demand and determine processes for rapid removal of bodies from hospitals.
- ☐ Establishing protocols for ministers of religion, family members and visitors.
- ☐ Work with the Hospital Pandemic Planning Committee to ensure designated grieving areas.

- ☐ Identifying transportation options for delivering bodies to funeral homes or other temporary morgue facilities from private homes or health care.

Pandemic Response:

- ☐ Monitor hospital morgue capacity.
- ☐ Ensure rapid removal and disposition of bodies from the hospital through communicating with Municipal EOC.
- ☐ Manage inventory of supplies related to the mortuary plan.
- ☐ Ensure staff involved with the management of the deceased are adhering to infection prevention and control procedures.

Pandemic Recovery:

- ☐ Determine the burden of pandemic influenza on hospital human resources.
- ☐ Evaluate handling and disposal of the deceased.
- ☐ Estimate costs associated with the handling and disposal of the deceased.

SECTION 3:

Evaluating the Plan and Other Considerations

Chapter 16:

Testing, Evaluating, and Updating the Pandemic Plan



Chapter 16: Testing, Evaluating, and Updating the Pandemic Plan

The duration and potential magnitude of a pandemic requires that pandemic plans be well thought through. Testing, evaluating, and updating the Pandemic Plan is a systematic way to improve and to keep the document current. The benefits of such a process include helping to identify weaknesses, ensuring that the information in the plan is up-to-date, and improving the knowledge and capabilities of those involved.

The purpose of this chapter is to outline processes to test, evaluate, and update the Hospital Pandemic Plan. After reading this chapter you will understand:

- The importance of reviewing and revising the Hospital Pandemic Plan within the context of the broader community.

Guiding Principles:

- No matter how comprehensive the plan is, if it is not reviewed and accepted by leadership (and understood by those who have to use it) it will not be helpful during an outbreak.¹
- Commitment to a systematic approach to testing will enable the hospital to be better positioned to return to normal business operations.
- Test components align with the Hospital Pandemic Plan.
- System dependencies require that the hospital test the plan within the context of the broader community response plan.
- Consultation with the joint health and safety committee (JHSC) is a key component for a successful Pandemic Plan.

What You Need to Know

Practice drills and exercises help determine how effective the plan is and reveal what changes should be made.

What roles and responsibilities should be tested?

Provincial and Municipal Governments

Under the *Emergency Management and Civil Protection Act*, municipal councils and ministers presiding over a provincial ministry and designated agencies, boards, commissions and branches of government are **required** to develop and implement emergency management programs that must consist of training programs and exercises for municipal and Crown employees, and other persons.²

How is the testing conducted?³

There are many different types of testing techniques available:

Orientation and Education Sessions: regularly scheduled discussion sessions to provide information, answer questions, and identify concerns. Refer to the chapter on Education of Staff, Patients and Visitors (page 39) for further details.

Tabletop Exercises: Bring people together to think through and focus on understanding concepts; identify strengths and shortfalls; and raise awareness of expectations of the response stage. Exercises generally involve senior management and other key personnel who are encouraged to consider a scenario and discuss issues in depth, and develop decisions through a slow-paced problem-solving process.

1 Forging Partnerships to Eliminate Tuberculosis: A Guide and Toolkit

2 Emergency Management and Civil Protection Act, R.S.O. 1990, c. E.9, section 2.1, 5.1.

3 Train, Exercise and Drill Collaboratively. Standing Together: An Emergency Planning guide for America's Communities.

Drills: Coordinated test used to evaluate a specific operation or function in a single department or unit. These can be considered to provide training on new equipment, test new policies or procedures, or to practice skills/capabilities.

Functional Exercises: Test multiple functions, activities, and departments with a focus on exercising the plans, policies, procedures, and staff. These simulate operations by presenting realistic problems that require responses.

Full-Scale Exercises: Simulates reality and involves multiple departments, organizations, regions, and potentially, levels of government. It is also the most costly. The reality of operations is considered through presenting realistic problems and a course of events that require problem solving, critical thinking, and effective responses involving different stakeholders.

OHA Educational Services:

Incident Management System (IMS) for health care facilities targets those involved in the development and operations of emergency management planning and procedures within their organization.

Emergency Exercise Design offers insight into the requirements of conducting emergency exercises in the workplace.

Additionally, the OHA offers conferences and seminars in Emergency Preparedness and Management addressing these topics and incorporating drills/exercises.

What You Need to Do

Develop an Evaluation Plan and Implement it

Small, rural, and northern (SRN) hospitals may find it challenging to implement face-to-face training and exercises with all staff due to the fact that many wear multiple hats. It may be more cost-effective and time-effective to consider joint exercises and drills with neighbouring communities, especially as emergencies cross jurisdictions and emergency response services are likely to overlap in these areas.



Elements of an Evaluation Plan:

1. Rationale: Why is it necessary?
2. Goals and Objectives: What is the desired outcome?
3. Approach: How will it be executed?
4. Evaluation and Feedback: Have the objectives been met?

1. Rationale: Why is it necessary?

No matter how comprehensive the plan, if it is not reviewed and accepted by leadership (and understood by those who have to use it) it will not be helpful during an outbreak.⁴

⁴ Forging Partnerships to Eliminate Tuberculosis: A Guide and Toolkit

2. Goals and Objectives: What is the desired outcome?

The Pandemic Plan considers multiple component plans with specific activities and roles and responsibilities during the response stage. Some include:

- To build awareness with staff and other stakeholders on the roles, responsibilities and elements of the Hospital Pandemic Plan.
- To execute specific plans and procedures under crisis conditions, and identify gaps in the planning and response structure.
- To ensure linkage with community and provincial pandemic response structure.

What Tests Should Be Conducted?

With the Hospital:

The Hospital Pandemic Plan, communication systems, activation of Hospital Emergency Operations Centre and information flow, capabilities of management and back-up personnel.

With the Community:

The Community Pandemic Plan, communication systems, surveillance reporting processes, set up of flu centres, activation of Municipal Emergency Operations Centre and information flow, occurrence of another emergency (based on hazard identification and risk assessment in community – e.g., power failure).

Things to consider:

- How can all levels of management be involved in evaluating and updating the plan?
- Does the plan reflect lessons learned from the drill and actual events?
- Does the plan reflect changes in the physical layout of the facility? Does it reflect any new facility processes that may occur?
- Have community agencies been briefed on the plan? Are they involved in evaluating the plan?

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3. Approach: How will it be executed?

a. Designate a person to develop an evaluation and test plan that will consider scenarios that will allow the hospital to execute specific plans and procedures. This person will work with the Hospital Pandemic Planning Committee to determine broad goals and objectives of the plan, timelines, and resources.

b. Setting goals and objectives for the exercise. Work with the Hospital Pandemic Planning Committee to set the scale, scope, type of exercise, workplan, and resources requirements of the exercise. Identify functional roles to be tested from those participating at staff or departmental levels, imbedding the IMS into planning.

c. Develop the exercise scenario. The stages for development of an exercise scenario are research, drafting and integration, review, talk-through, and finalization. It is important to consider resources that are already in place, including those from the province, local public health or municipalities, and other hospitals that can be used. For instance:

- The Centre for Disease Control and Prevention (CDC) has developed an evaluation model *Framework for Program Evaluation in Public Health* (1999) that can be easily adapted for hospital and Community Pandemic Plans.
 - Consider both formal and informal evaluation components.
 - Ensure that the main issues of each stakeholder group are understood and addressed.
- Table top exercise for pandemic influenza preparedness in Local Public Health Agencies, please refer to the following website:
<http://www.pandemicflu.gov/plan/states/tr319.html>

An exercise scenario may need to be tailored to meet the hospital's unique needs and environment.

In developing a scenario, consider how to address the following:

- Individual roles and responsibilities
- Information about threats, hazards, and protective actions
- Notification, warning, and communication procedures
- Means for locating family members in an emergency
- Emergency response procedures
- Evacuation, shelter, and accountability procedures

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– Implement the Plan*

d. Confirm the people who will be involved. Includes the following:

- **Moderators:** individual(s) to lead and moderate the exercise scenario, walking participants through it and ensuring it remains on track. This person will have detailed knowledge about the Hospital Pandemic Plan, and policies and procedures that have been developed to support the plan.
- **Experts:** Individuals to ensure the unfolding scenario is credible and in line with the broader response. Could include internal and external people (i.e., infectious disease experts, MOHLTC, local public health unit).
- **Participants:** Individuals to respond to information provided and implement the plan.
- **Evaluators:** Individuals to determine the effectiveness of the response effort, based on set evaluation criteria.
- **Observers:** Individuals who are knowledgeable about the Hospital Pandemic Plan can play the role of observer and document gaps, issues and successes throughout the exercise.

e. Set evaluation criteria to outline how the exercise will be evaluated to determine the level of success in meeting objectives.

f. Develop materials and organize logistics for the exercise, including:

- Exercise script and documentation of timed information release.
- Scenario time clock (disaster + minutes/hours).
- Participant job action sheets.
- Evaluator worksheets that allow the documentation of problems encountered and solutions identified.
- Location, supplies, food and water, etc.

g. Conduct the exercise. Develop a checklist to assist with the implementation of the exercise.

4. Evaluation and Feedback: Have the objectives been met?

Ensure that at the end of the exercise, participants have the opportunity to reflect on their experiences with the drill/exercise, the process, and the outcomes. The debrief session should put emphasis on suggestions to improve the Pandemic Plan. Resources should be dedicated to updating the plan.

When to update the Pandemic Plan:

- After each training drill or exercise
- After each emergency
- When personnel or their responsibilities change
- When the layout or design of the facility changes
- When policies or procedures change

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Resources

Centre of Excellence in Emergency Preparedness
http://www.ceep.ca/resources_genplan.htm

Federal Emergency Management Agency
<http://www.fema.gov/>

Forging Partnerships to Eliminate Tuberculosis:
A Guide and Toolkit
<http://www.cdc.gov/tb/pubs/forge/pdfs/toolkit.pdf>

Legislative Issues & Analysis
– Backgrounders, Analysis and Submissions
<http://www.oha.com>

Service Ontario, e-laws
(Collection of free legislation and regulations)
<http://www.e-laws.gov.on.ca>

Standing Together: An Emergency Planning guide
for America's Communities
http://www.jointcommission.org/NR/rdonlyres/FE29E7D3-22AA-4DEB-94B2-5E8D507F92D1/0/planning_guide.pdf

