RENFREW COUNTY & DISTRICT PANDEMIC INFLUENZA PLAN

A Planning Guide for Upper and Lower Tier Municipalities

October, 2006

"The only thing harder than planning for an emergency is explaining why you didn't."

Adapted with permission from Toronto Public Health –Toronto Pandemic Influenza Plan June 20, 2006

Renfrew County & District Health Unit would like to extend the following Acknowledgements

ACKNOWLEDGEMENTS

Toronto Public Health would like to express appreciation to the following individuals for their support in the development or review of the Toronto Pandemic Influenza Planning Guide for City Divisions, Agencies,
Boards, and Commissions.
Dr. Irene Armstrong, Associate Medical Officer of Health, Toronto Public Health
Warren Leonard, Manager, Office of Emergency Management, City of Toronto
Chris Ruhig, Emergency Planning Coordinator, Office of Emergency Management, City of Toronto
Jennifer Smysnuik, Emergency Planning Coordinator, Office of Emergency Management, City of Toronto
Dr. Barbara Yaffe, Director, Communicable Disease Control & Associate Medical Officer
of Health, Toronto Public Health
Marco Vittiglio, Manager, Emergency Planning and Preparedness Unit, Toronto Public Health

A Planning Guide for Upper and Lower Tier Municipalities

Table Of Contents

Disclaimer: This Planning Guide is only a tool to support divisions, agencies, boards and commissions. Renfrew County & District Health Unit is not responsible for any errors, omissions, misinterpretation or misuse of this guide.

1.0 INTRODUCTION

1.1 Purpose of this guide

This general planning guide has two purposes. First, it identifies issues that Upper and lower tier municipalities, agencies, boards, and commissions should consider in preparing for an influenza pandemic. Second, it suggests how client services may be affected and emphasizes the need to develop alternative ways to provide those services during a pandemic. This guide will help planners develop more detailed continuity of operations plans for their service area. Although Renfrew County & District Health Unit (RCDHU) will identify broad public health issues, each service area must plan for the specific disruptions it will face during a pandemic. The overall goal of pandemic influenza planning is to reduce illness (morbidity), death (mortality), and
social disruption resulting from an influenza pandemic in our jurisdiction. Although this guide identifies specific issues associated with pandemic influenza, much of the information applies to other emergencies as well.

For additional information, read Renfrew County & District Pandemic Influenza Plan (www.rcdhu.com) or visit the websites listed in Section 9 of this guide.

1.2 What to expect

- Pandemic influenza will be caused by a new sub-type of influenza A virus (see Sections 2.1 and 2.2).
- Since pandemic influenza will simultaneously affect Renfrew County & District, the Province of Ontario, and other jurisdictions, for planning purposes, we are assuming that aid from other sources will not be available.
- When the World Health Organization (WHO) declares “Pandemic Phase 6” (which means increased and sustained transmission in the general population – see Section 2.7), the pandemic influenza strain will probably appear in Renfrew County only a short time afterwards.
- There will be two to three waves of influenza pandemic activity over a period of several months or years.
- During an influenza pandemic it is estimated that 15 to 35% of Renfrew County & District residents will become ill enough that they will be unable to continue their usual activities.
- The severity of illness and the death rate will likely be worse than that from the usual seasonal influenza and the illness will affect all population groups. However, specifics such as who is most affected and how they are affected will not be known until the pandemic virus actually emerges.
- Children and otherwise healthy adults may be at more risk of becoming ill than elderly adults. Elderly people may have some residual immunity if the pandemic is caused by a virus related to one that has previously caused widespread influenza, and if they were infected by that virus earlier in their lives.
- Physical illness is not the only effect of a pandemic. The psychological impact on the public will likely be significant.
- Important community services may need to be curtailed, consolidated, or suspended because of widespread absenteeism in the workplace.
- Community activities may need to be curtailed or cancelled to prevent the spread of infection.
- Supply chains of resources from every sector will likely be disrupted.
- RCDHU will implement the Incident Management System (see Section 3.8) in Pandemic Alert Phase 5.
- Renfrew County & Districts’ Pandemic Influenza Plan will continue to be updated as local, provincial, and federal planning proceeds.

2.0 Pandemic Influenza Information

2.1 What is influenza?

Influenza, commonly known as "the flu," is a highly contagious and common respiratory illness caused by a virus. There are three known types of influenza virus – A, B, and C. Types A and B cause seasonal influenza. Only type A is associated with pandemics.

Influenza is usually transmitted from person to person by droplet spread or direct contact.

- Droplet spread refers to spray with relatively large, short range droplets produced by sneezing, coughing, talking or singing. These droplets may spray up to one meter (about three feet) and can land directly in the eye or be breathed in through the nose or mouth.
- Direct contact occurs when there is immediate transfer of the virus though skin to skin contact or kissing. For example, an infected person may cough into his or her hands and then shake hands with another person who may then touch his or her eyes, nose or mouth.

See the Renfrew County & District Pandemic Influenza Plan for more information on how influenza is transmitted. The incubation period (the time between being exposed to the virus and the point at which one starts to experience symptoms) is 1 to 3 days. Most people recover in 7 to 10 days. Most adults are infectious to others between 24 hours before and up to 5 days after they develop symptoms. Children and some adults may be infectious for 7 or more days after they develop symptoms. Humans are usually infected by other humans. However, in some rare cases, humans may be infected by close contact with infected birds or mammals such as pigs. About 30% to 50% of those who are infected by the influenza virus experience no symptoms at all. The remainder will experience symptoms ranging from mild to severe.

- The first symptoms are usually fever, headache, chills, muscle aches, physical exhaustion, and a dry cough.
- Later, the infected person may have a sore throat, a stuffy or runny nose, and a worsening cough.
- Children may feel sick to their stomach, and may vomit or have diarrhea.
- Elderly people and those whose immune system is weak may not develop a fever.

These symptoms may be caused by other viruses or bacteria, not just the influenza virus. Diagnosing influenza depends on laboratory testing and epidemiological characteristics.

The influenza season is usually October to April. For most people, this type of seasonal flu is not life threatening. The most seriously affected are the elderly, people with chronic medical conditions, and children less than 2 years old. For these people, the flu may lead to complications such as pneumonia, which can be fatal.

2.2 What is an influenza pandemic?

An influenza pandemic occurs when there is an abrupt and major change in the structure of the influenza A virus (known as an "antigenic shift"). This change may occur in two ways:

1. When two different influenza viruses infect the same cell, their genetic material may mix (re-assortment), resulting in a completely new strain of virus. For example, this may occur when a bird virus and a human virus both infect a pig. Such mixing most often occurs where pigs, birds, and humans live in close proximity to one another.
2. A virus may undergo random mutation. This second type of change may occur during the sequential infection of humans and other mammals and lead to a virus more efficiently transmitted amongst humans.

Since people have little or no immunity to a completely new strain, the virus can spread very quickly. When outbreaks occur in one or more countries or worldwide, the event is called a pandemic. The exact nature of the pandemic virus (such as how severely it affects people, how long the incubation period is, and how easily the virus is transmitted from one person to another) cannot be known until the new strain emerges.

2.3 How often do influenza pandemics occur?

From historical records, we know that a pandemic strain of influenza tends to emerge 3 or 4 times each century. In the last century, influenza pandemics occurred in 1918 (Spanish flu), 1957 (Asian flu) and 1968 (Hong Kong flu). The pandemic of 1918-1919 caused between 20 and 40 million deaths worldwide, while the pandemics of 1957 and 1968 caused much less mortality and morbidity. It is generally believed that another influenza pandemic will occur but there is no way of predicting when that might be, nor the level of illness that might result.

2.4 What is the difference between seasonal influenza and an influenza pandemic?

The following chart summarizes the main differences between seasonal influenza and an influenza pandemic.

Seasonal influenza	Pandemic Influenza
Occurs every year (October to April).	Occurred 3 times in the 20th century.
Occurs during the winter.	Occurs at any time of the year.
For most people, it is an unpleasant but not life-threatening infection.	It is typically a more serious infection for everyone.
Most people recover within one or two weeks without requiring medical treatment.	Some people will not recover, even with medical treatment. Because the illness is more severe, there is greater risk that an infected person may die.
The very young, the very old and people with chronic illness are most at risk of serious illness.	People of every age may be at risk of serious illness.
Vaccine is available in advance.	Vaccines will not be available in advance.
Annual vaccination is recommended, especially for those at risk of serious illness.	The whole population will be vaccinated when the specific vaccine required becomes available.
Antiviral drugs are available to treat those at special risk.	Antiviral drugs are likely to be in limited supply and will be used according to how the disease develops

Adapted from:
Department of Health (England) "Pandemic Flu: Frequently Asked Questions" October 19 2005 http://www.dh.gov.uk,
and Ontario Ministry of Health and Long-term Care "Differences between seasonal or "annual" influenza and the influenza pandemic" Fact Sheet

2.5 Annual influenza immunization

The best way to protect yourself from seasonal influenza is to get vaccinated every fall. The influenza vaccine (or "flu shot") is made from particles of influenza viruses that have been killed and contains three different strains of influenza viruses (two strains of influenza A and one strain of influenza B). Every year, doctors and scientists around the world identify the strains of influenza virus that are circulating, and the vaccine is prepared to protect against the types that are most likely to occur that year. The body needs about two weeks after being vaccinated to build up protection against the virus, and this protection lasts about four to six months. The influenza virus changes each year, so a different vaccine has to be created and used each year.

All county/municipal employees should be vaccinated every year. Although the pandemic strain will be a new strain of influenza, vaccination protects individuals against the seasonal strains. Seasonal immunization may also reduce the chances of a new influenza virus emerging through genetic mixing.

The influenza vaccine is offered free of charge to everyone who lives, works, or attends school in Ontario, through family physicians, workplaces, and public health clinics.

2.6 What is avian influenza?

Avian influenza or "bird flu" is a contagious disease that affects animals, caused by viruses that normally infect only birds and sometimes pigs. Avian influenza viruses have on rare occasions mutated in a way that makes it possible for them to infect humans.

Infection with avian influenza viruses cause two main forms of disease in domestic poultry. One is a mild form that causes hens to have ruffled feathers and produce fewer eggs, and the other is very severe, spreading rapidly and killing most infected poultry.

The H5N1 sub-type that is currently circulating in Asia and parts of Europe is the severe form. The subtype has infected humans who have been in close contact with infected birds and over half of the humans who have been infected have died. There is a possibility that the virus may change to a highly infectious form that spreads very easily from person to person. Such a change could mark the start of a pandemic.

However, current strains of avian influenza will not necessarily become a pandemic strain. The next pandemic could arise from a different influenza virus altogether.

For information on human cases of avian influenza, check the World Health Organization website: http://www.who.int/csr/disease/avian_influenza/en/index.html. For more information on avian influenza, see the Public Health Agency of Canada website: http://www.influenza.gc.ca/ai-ga_e.html.

2.7 World Health Organization Pandemic phases

Pandemic planning begins with the World Health Organization (WHO) classification system, developed in 1999 and revised in April 2005. The WHO phases are intended to guide planning in individual countries and regions and are incorporated into the Canadian, Ontario, and Renfrew County & District plans. The WHO will identify which phase is occurring internationally and will declare when a pandemic has begun. The Public Health Agency of Canada (PHAC) and the Ministry of Health and Long-Term Care (MOHLTC) will declare when a pandemic period has begun in Canada and Ontario, respectively.

The following table outlines the WHO Pandemic Phase Model:

World Health Organization Pandemic Phases

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

*The distinction between phase 1 and phase 2 is based on the risk of infection or disease from circulating strains in animals.
** The distinction between phase 3, phase 4 and phase 5 is based on the risk of a pandemic

As of early February 2006, the world is in Pandemic Alert Phase 3. We have been in this phase since December 2003.

2.8 Potential health impact of pandemic influenza on Renfrew County & District

Unlike Severe Acute Respiratory Syndrome (SARS), which spread primarily among people within a hospital or within a household, an influenza pandemic will likely spread quickly throughout the general community.

According to the Canadian Pandemic Influenza Plan, during an influenza pandemic, between 15 to 35% of the population might become ill, compared to an average of 5 to 20% of the public who are affected by “normal” seasonal influenza outbreaks. Previous influenza pandemics have occurred in multiple waves. Each wave is likely to last six to eight weeks.

Planning for a pandemic is based on this estimate of 15 to 35% of the population being affected. However, when an actual pandemic begins, the specific impact on Renfrew County & District may be different from the estimates.

Estimated Direct Health Impact of an Influenza Pandemic on Renfrew County & District

Description	Based on 15% attack rate	Based on 35% attack rate
Clinically ill	**15,000**	**35,000**
Require outpatient care	**6,300**	**26,949**
Require hospitalization	**70**	**558**
Deaths	**28**	**172**

Based on FLUAID 2.0 – A CDC software designed to provide a range of estimates of the impact of pandemic influenza available at http://www.gov/flu/tools/fluaid/ and Renfrew County & District population estimate of 100,545 based on the 2001 Census.

3.0 Who Does What During A Pandemic?

3.1 Municipal governments and local public health authorities

The Ontario Health Pandemic Influenza Plan (September 2006) outlines the following tasks for municipal government and local health authorities for pandemic influenza planning.

Municipal government and local public health authorities are responsible for coordinating the local response to an influenza pandemic, including:

- Maintaining a local surveillance system, reporting clusters of febrile respiratory illness/influenza-like illness (FRI/ILI) and investigating outbreaks
- Developing plans to provide mass immunization and distribute vaccines, antiviral drugs and medical supplies
- Liaising with local partners (e.g. emergency responders, hospitals, community services, mortuary services, schools, workplaces)
- Assessing the capacity of local health services, including health human resources and helping health services identify additional/alternative resources
- Defining clear responsibilities for communication at the local and facility level during a pandemic
- Collaborating with the provincial government to deliver public information/education programs
- Delivering mass vaccination/prophylaxis program

Figure 1 on page 11, shows the relationship of local public health authorities to provincial and federal authorities in planning for and responding to an influenza pandemic.

3.2 Head of Council

The Head of Council of a municipality may declare that an emergency exists in the municipality or in any part thereof and may take such action and make such orders as he considers necessary and are not contrary to law 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 (Section 4(1) of the Emergency Management Act). The Head of Council issues reports to the media regarding developments during an emergency and maintains liaison with provincial and local authorities during an emergency.

3.3 Upper and Lower Tier Municipalities

All upper and lower tier municipalities, agencies, boards, and commissions must develop their own continuity of operations plan for pandemic influenza, and carry out training and exercises to prepare their staff for an emergency. They will be required to use these plans to ensure the continuity of essential services during an emergency. Renfrew County & District Health Unit provides health-related information to support pandemic influenza preparedness.

3.4 Board of Health

The Board of Health is the governing body for RCDHU. It was established under the Health Protection and Promotion Act, and is required by the Act to ensure that specified public health programs and services are provided.

As the governing body for RCDHU, the Board must be kept fully informed in order to play its role during an emergency. RCDHU will therefore provide timely information to the Chair and members of the board during a pandemic influenza emergency.

3.5 Renfrew County & District Health Unit

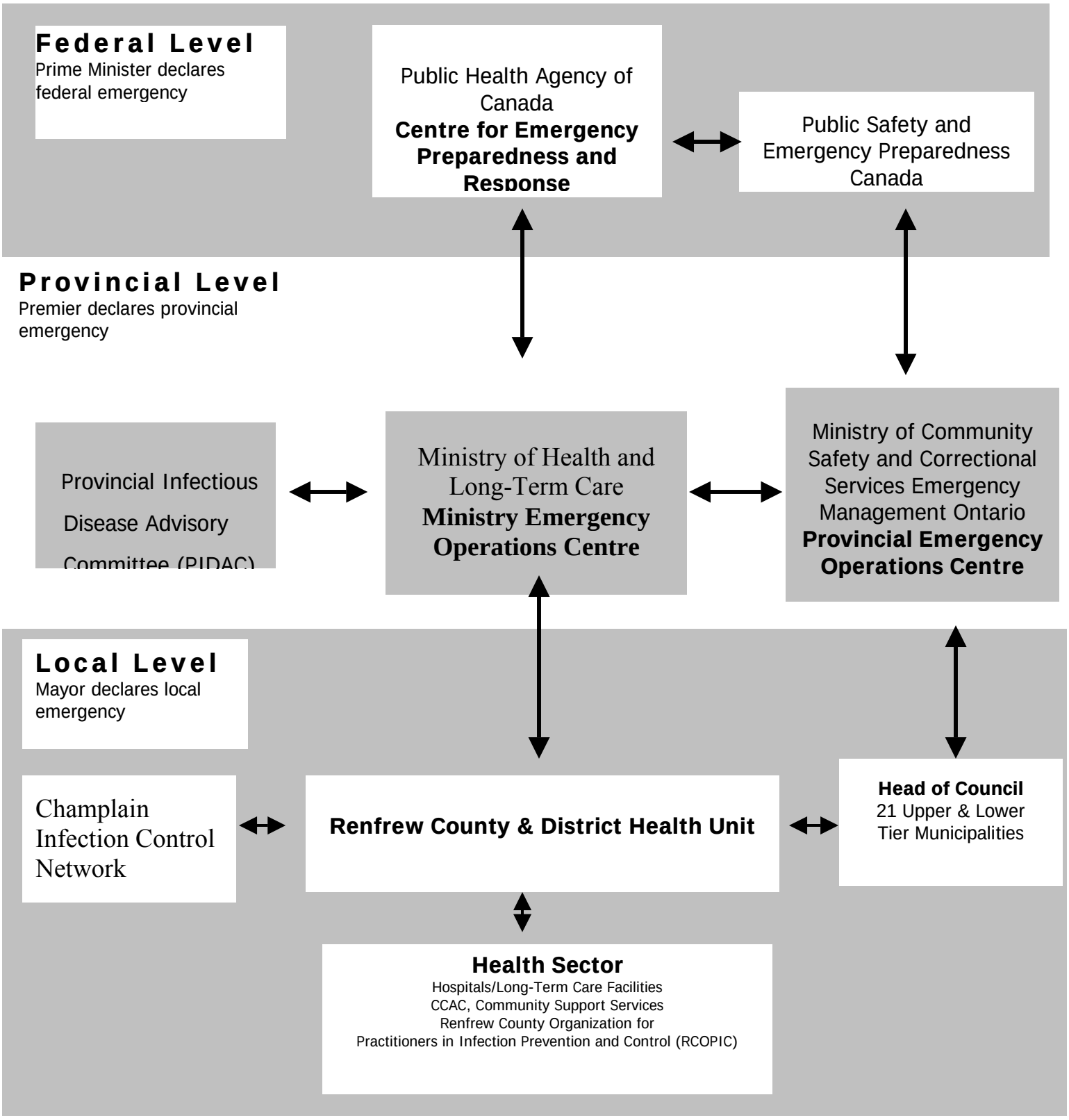
Renfrew County & District Health Unit takes the lead in facilitating pandemic influenza planning throughout our jurisdiction. Although local planning is critical, many decisions made at the federal or provincial level must be followed locally, such as establishing who has priority in receiving vaccination once a pandemic vaccine becomes available.

The specific RCDHU roles during a pandemic influenza emergency response will include:

- Disease surveillance and reporting
- Case investigation and management
- Identification and follow-up of close contacts
- Health risk assessment and communications
- Liaison with hospitals and other agencies
- Community-based control strategies
- Vaccine and antiviral medication administration and distribution

The role of RCDHU is described in more detail in the Renfrew County & District Pandemic Influenza Plan.

Figure 1. Emergency Management Structure for the Renfrew County & District Pandemic Influenza Plan



3.6 Incident Management System

The Incident Management System (IMS) is an emergency response model that provides a way of coordinating the efforts of agencies and resources by using a common organizational structure that can expand or contract based on the scope of response. The more complex the situation, the more important it is for every agency involved to coordinate its efforts with those of other responding agencies. IMS design makes that possible, as it uses standard terminology and communication systems, consolidated action plans, pre-designated facilities, and an all-hazards approach appropriate for all types of emergencies.

The IMS structure, which is used by agencies across the county to respond to emergencies, is built around five functions: **Command (Incident Manager, Public Information and Liaison), Operations, Planning, Logistics, and Finance/Administration**. In a small-scale emergency response, one person can and often will perform all functions. In a complex, large-scale emergency response, the system can quickly expand to several hundred people supporting each function.

1. **Command** determines the flow of decision-making and communications. In an influenza pandemic, the **Incident Manager** will lead the command function and the overall response effort. As the emergency expands, the Incident Manager will assign people to fill the positions of Public Information and Liaison. Although these responsibilities are delegated to others, they remain under the authority of the Incident Manager.

   Liaison function co-ordinates with participating agencies and represents the Incident Manager in dealings with other agencies and community groups. This function establishes formal communication with agencies and services involved in pandemic influenza response (such as the Board of Health, Heads of Councils, Corporate Communications, hospitals, long term care facilities and physicians) and with other community groups as needed.

   Public information is responsible for media relations, communications strategy, and releasing information about the pandemic influenza.

2. **Operations** function is responsible for managing the RCDHU response operations, such as information line and case management.

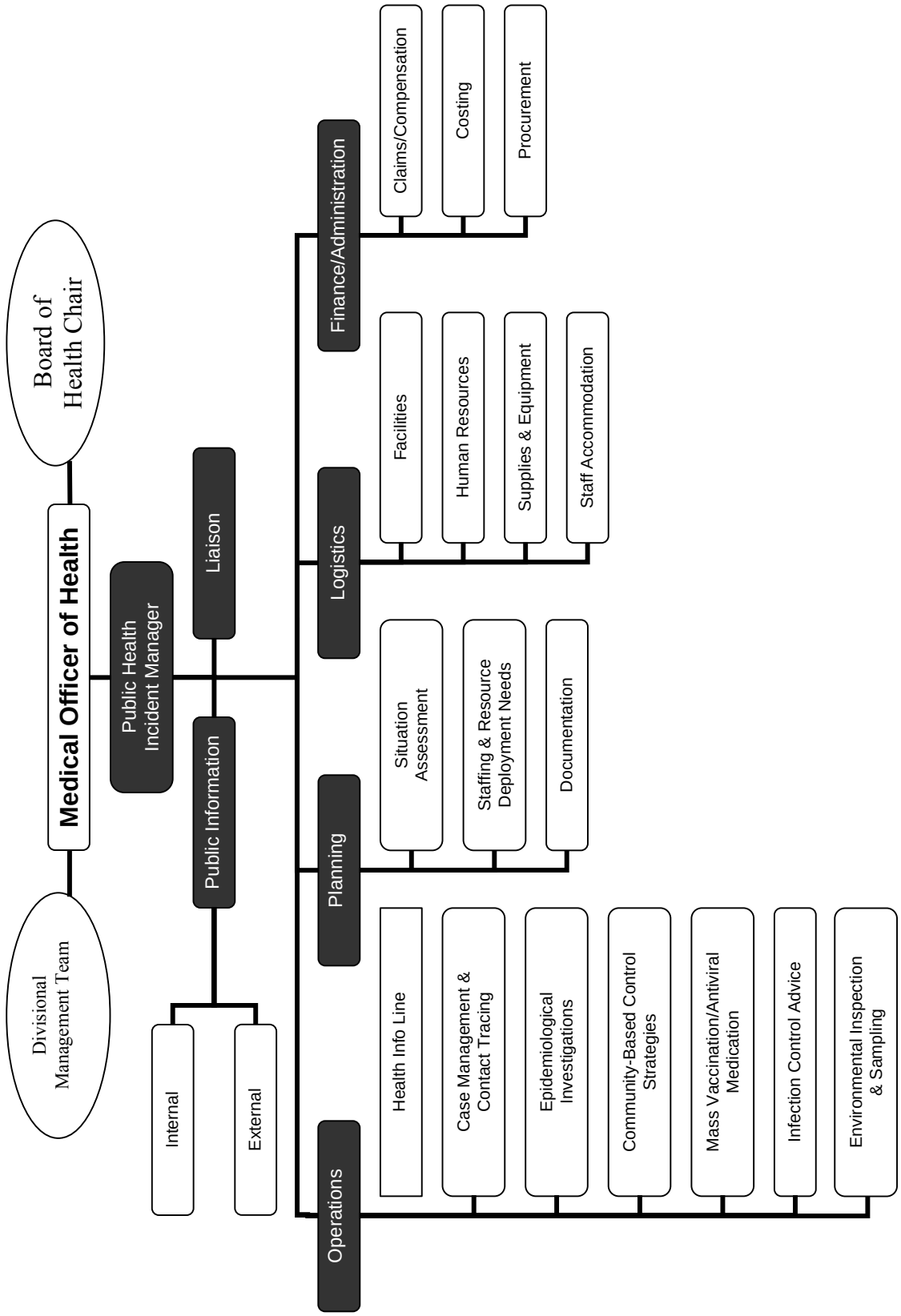
3. **Planning** assesses the situation and creates an Incident Action Plan, which identifies public health objectives for the emergency response and the response activities.

4. **Logistics** coordinates facilities, services, materials, and personnel for the emergency response. This includes organizing and confirming the availability of staff.

5. **Finance/administration** tracks all expenditures, claims, purchases, and contracts initiated during the emergency. Administration monitors all expenses and identifies RCDHU resources used during the emergency response.

The IMS is used by agencies across the county to respond to emergencies. RCDHU has adopted the IMS and will organize itself accordingly to communicate, cooperate and respond collectively with other county emergency response partners. Figure 2 (on page 14) illustrates RCDHU's IMS organization and functions in a pandemic which allows RCDHU to coordinate its own efforts, integrate our activities with other responding agencies and manage resources during an emergency.

Figure 1: Renfrew County Public Health Pandemic Influenza Incident Management System



4.0 Challenges During A Pandemic

Within Renfrew County & District cities, towns, municipalities and the county of Renfrew will likely face a number of significant challenges as a result of the widespread illness and social disruption that may occur during an influenza pandemic.

4.1 Employee absenteeism

Health Canada estimates that 15 to 35% of the population will become ill during a pandemic and will be unable to work. Many people who are not ill may stay home to care for children, other family members, or friends who are ill. The resulting high rates of employee absenteeism will affect every sector and every part of the county. Strategies to manage staffing shortages include redeploying staff from non-urgent activities or drawing on additional workers, such as recent retirees, students, or volunteers.

4.2 Supply chain disruption

Given widespread social disruption and employee absenteeism, supply chains may be interrupted. The pandemic will affect countries around the world, with some regions hit earlier, longer, and harder than others. If border crossings or transportation systems are disrupted, the delivery of supplies may be delayed.

Organizations should purchase from local suppliers wherever possible, make plans for regular shipments, and stockpile 6 to 8 weeks of critical supplies (those required to maintain service operations). In addition to critical supplies, all essential/emergency services should have an adequate supply of disposable tissues, hand sanitizers, and hand-washing supplies.

4.3 Public health measures

Public health measures will be implemented during an influenza pandemic to reduce the spread of the virus through the community. These measures may include public education, case and contact management and community-based disease control measures. Public health measures may be implemented to cancel public gatherings (such as conferences or other events) or restrict the size of gatherings. Schools and day nurseries may be closed. The federal government may restrict international travel and border crossings. These measures will likely disrupt service in the short term. Head of Council with respect to upper and lower tier municipalities will be
kept informed of all such measures.

4.4 Changes in demand for services

During an influenza pandemic, the people of Renfrew County will need access to information and municipal/county services (such as emergency services, public health services, and clean water) to help reduce the impacts of the pandemic on their health and daily activities. Municipal/County programs may experience an increased or decreased demand during the pandemic, depending on the particular service.

To prepare for an influenza pandemic, upper and lower tier municipalities must develop a service continuity plan that:

- identifies the organization's mandated and critical services;
- ranks the services in order of priority;
- identifies the internal and external effects of disruptions.

5.0 Critical Elements Of Emergency Preparedness

5.1 Communication

Communication will be critical to an effective response to the pandemic. All organizations should have plans in place for communicating with employees during an emergency. Phone trees or e-mail lists ensure rapid and efficient communication with a large number of employees, provided that employee contact information is kept up-to-date. The service may choose to designate one individual in the organization who will be responsible for receiving and communicating information. Strategies should also be developed for communicating with clients and community stakeholders about changes to or disruptions in services.

5.2 Education and training

Education and training sessions should be developed and provided to staff regarding emergency and continuity plans, so they will know their roles and responsibilities. Staff should also be trained in infection control precautions and the proper use of personal protective equipment.

5.3 Skill set inventory

The skills of all employees and those needed to provide the critical services of the organization should be recorded. The skill set inventory provides the planners with the ability to identify transferable skills that would allow an employee to be transferred from one task, job, or workplace to another without the need for extensive training or close supervision.

5.4 Continuity of operations plan

The organization should plan to scale back its activities if staffing levels drop below a minimum level. Determining what are the essential activities or positions ahead of time makes it easier to respond quickly and efficiently to an emergency. This task requires information on the impact of a disruption to service delivery, as well as the loss of revenue, additional expenses, and intangible losses caused by a disruption. It is also important to consider designating alternates for essential positions, planning how to reallocate staff from non-essential activities, and arranging for employees to work from home during an emergency.

A continuity of operations plan allows County of Renfrew/municipalities to provide critical services with little or no break in service during an emergency. The plan should identify and rank critical services, identify and plan for possible disruption, and allow the organization to continue its most important operations. County of Renfrew/municipalities should review and update their current plans to respond to an influenza pandemic. A continuity of operations plan includes:

1. Establishment of a steering committee or lead individual
2. Service impact analysis
3. Service continuity plan
4. Readiness procedures
5. Quality assurance

1. Establishment of a steering committee or lead individual

The first step in the planning process is to establish a Steering Committee or designate an individual to oversee, support, and direct the development of a continuity of operations plan. This includes:

- providing strategic direction and communicating essential messages;
- approving the results of the service impact analysis;
- reviewing critical services;
- approving continuity plans and arrangements.

2. Service impact analysis

The service impact analysis provides the organization with a list of critical services and identifies how disruptions will affect internal and external stakeholders. The analysis involves the following steps:

- Identify the mandate of the organization and determine which services must continue during an emergency (for example, garbage collection or water purification).
- For each service, identify:
  - ⇒ the impact of a disruption and the length of time the organization or the community could function without the service;
  - ⇒ the amount of revenue lost if the service is not provided;
  - ⇒ additional expenses that arise due to the loss of service;
  - ⇒ intangible expenses such as loss of image or reputation.
- Identify any insurance requirements
- Rank the critical services according to:
  - ⇒ the severity of impact a disruption would cause;
  - ⇒ time required to recover from the disruption;
  - ⇒ revenue loss caused by the disruption.
- Identify internal and external requirements for providing the services:
  - ⇒ internal – employee availability, equipment, facilities, vehicles, etc.;
  - ⇒ external – suppliers, utilities, transportation, federal/provincial governments, etc.

3. Plan for service continuity

A continuity plan should be created for each critical service identified in the service impact analysis. The continuity plan is a detailed list of response and recovery activities and arrangements to ensure that all necessary actions are taken to provide services during an emergency. During an influenza pandemic, all upper and lower tier municipalities should continue to provide critical services to the community.
In planning for service continuity, organizations should:

1. identify risks that might threaten the service and develop methods to eliminate or reduce the risk;
2. analyze current recovery capabilities and review current recovery plans;
3. create continuity plans that can be changed as the severity of the emergency changes; plans should be based on the most realistic and effective option;
4. create an incident management system (see Section 3.8).

4. Readiness procedures

The key to any service continuity plan is to ensure that the staff carrying out the plan have been properly trained and that the plan's readiness has been tested. This means:

- ensuring that all staff are briefed on the contents of the plan and their roles in the event of an emergency;
- ensuring that managers or staff with specific functions outlined in the plan are trained in those functions;
- conducting exercises to ensure a high level of competence and readiness.

5. Quality assurance

The continuity of operations plan should be reviewed regularly to identify opportunities for improvement and to ensure that it meets any new demands of the organization or any newly emerging risks.

For further information on service continuity planning, visit Public Safety and Emergency Preparedness Canada, http://www.psepc-sppcc.gc.ca.

5.5 Changes in staffing and redeployment

High rates of absenteeism may result in changes to staffing, chains of command, hours of work, or employee responsibilities. Organizations should discuss these implications with employees, unions, and human resources staff before an emergency begins.

During an emergency, the organization may delegate new job functions to employees or move employees to other job sites or other divisions where they are most needed.

5.6 Human resources policies

All workplaces should develop alternate human resource policies for a pandemic to address the following issues.

Attendance management

During an influenza pandemic, RCDHU will advise ill people to stay home. However, attendance management policies may create barriers to staff staying home. Physician notes may be required following a certain number of consecutive days of absence due to illness. The health care system may be overwhelmed with people seeking necessary medical attention. Request for physician notes will overload the system unnecessarily. Once a local emergency has been declared for an influenza pandemic, current policies that may pose a barrier to effective disease control and prevention should be suspended or revised as appropriate.

Ill employees at work

During a pandemic, some employees will develop symptoms of influenza while at work. These individuals must immediately leave the workplace and should not return to work until five days after the onset of symptoms, or when they feel well enough to return to their duties, whichever is longer. This procedure will help slow the transmission of the virus in the workplace. Ill employees will be requested by their manager or supervisor to leave work even if they do not have sick day credits. Upper and lower tier municipalities will need to address the issue of compensation for this type of situation.

Emergency scheduling

During a pandemic, work schedules will have to be changed. In planning for these changes, organizations must consider the implications of:

- shift changes;
- changes to hours of work;
- compensation and scheduling of overtime;
- the need to assign the most qualified employees to specific tasks;
- training employees for newly assigned work;
- provision of food to employees
- parking requirements or reimbursement for transportation expenses;
- scheduling of breaks.

The current collective agreement may not adequately address these issues. The organization should negotiate solutions to these issues with each relevant local union body so that emergency response plans can be implemented effectively and efficiently.

5.7 Occupational health and safety

A pandemic will likely cause a high level of fear and anxiety among the general population. Employees will be concerned about their own health and the health of their families. Employees who deal with large numbers of people in the workplace may be concerned about potential exposure to influenza. Some may refuse to work. Employees will have questions and concerns about potential exposure in the workplace and their rights relating to occupational health and safety. Informing employees of their rights, providing training and equipment as appropriate, and communicating openly about emergency planning processes will help to alleviate employees' anxiety.

Psychosocial support

People affected by a disaster, such as a pandemic, must adjust to major changes in their lives. People may be grieving for friends or family members and may have to deal with personal or family crises. Many people will need to talk about their feelings and experiences and learn how to face the challenges of an unknown future. At the same time, trauma-affected individuals, families, communities, and cultures have inherent strengths and resilience to cope with difficult situations.

Organizations should build increased support for staff through their Employee Assistance Programs and other services.

Personal protective equipment (masks, etc.)

Staff may request masks for protection on the job. The use of masks is a difficult and unresolved issue. There is no evidence that the use of masks in public will protect an individual from infection when the influenza virus is circulating widely in the community. However, a person wearing a surgical mask properly at the time of exposure to influenza may benefit from the barrier that a mask provides.

At this time, federal and provincial plans recommend the use of surgical masks and eye protection for health care workers who provide direct care involving face-to-face contact to patients with influenza-like illness. The plans also recommend that people who are ill with influenza-like illness and who must leave their home to receive medical attention should wear a mask. The plans do not recommend the widespread use of masks as a community-based disease control strategy. However, the federal plan states that members of the public may wish to purchase and use masks for individual protection.

The recommendations for health care workers providing direct patient care are clear. The majority of upper and lower tier municipal employees are not health care workers, but many of them do deal with large numbers of people in the workplace. These employees may be concerned about potential exposure and may refuse to work. Upper and lower tier municipalities should consult with the Ministry of Health and Long-Term Care, the Ministry of Labour, labour
unions, and RCDHU, and provide up-to-date information and education to employees and unions on this issue.

Infection control measures

Infection control measures are actions that can help prevent the spread of the influenza virus in the workplace. These measures include:

Stay home if you are ill. Most adults infected with influenza can transmit the virus from 24 hours before and up to 5 days after they begin to experience symptoms. For some adults and for young children, this period may last for 7 or more days. Some experts believe that people are most infectious in the first 3 days that they are infected with influenza. However there are no clear data on how long a person should wait before returning to work or school to minimize the risk of infecting others. The best advice at this time is that adults should not return to their usual activities for at least 5 days after they begin to experience influenza symptoms or when they feel well enough to return to their duties, whichever is longer. It should be made clear that employees must not come into work when they have influenza-like symptoms.

Wash your hands. Hand washing is one of the most important preventive measures during a pandemic. All organizations should promote hand washing and ensure that adequate supplies of hand soap and paper towels are available. Post signs in conspicuous locations (washrooms, staff kitchen, coffee stations, etc.) to remind staff to wash their hands. People must not share towels, eating utensils, or drinks with anyone else.

Use hand sanitizers. Hand sanitizers should be used when hand washing stations are not available. Use an alcohol-based hand sanitizer with 60% to 90% alcohol (isopropanol or ethanol).

Practice respiratory etiquette. Cover your nose and mouth when coughing or sneezing, avoid touching your nose, mouth, and eyes, and dispose of single-use tissues after use. These practices are essential to preventing the spread of influenza.

Vaccine administration and distribution. In the event of an influenza pandemic, it will take approximately four to six months to produce a suitable vaccine. Initially, there will not be enough vaccine for everyone. The federal and provincial governments have identified “priority groups” to receive the vaccine. The groups are:

- health care workers;
- essential service workers;
- persons at high risk of serious illness;
- healthy adults;
- healthy children.

The priority groups may change depending on the nature of the influenza pandemic. RCDHU is working with hospitals and other organizations to ensure that the priority groups 1 to 3 are enumerated for vaccine. When enough vaccine becomes available, RCDHU will organize mass vaccination clinics to vaccinate the general public. RCDHU will make public announcements about the time and location of these clinics. Issues to consider include communicating with employees and ensuring the safe and accurate distribution of vaccines and/or medications.

Antiviral medication administration and distribution. The Province of Ontario has a limited stockpile of Oseltamivir (Tamiflu). Initially antiviral medication such as Tamiflu will most likely be used to treat those with severe influenza illness during a pandemic (i.e., those sick enough to require hospital care). Although, the effectiveness of antiviral medications against a novel pandemic virus is unknown it is likely that they will reduce the severity of influenza illness caused by a pandemic.
If providing antiviral medication to prevent illness in contacts of cases at the early stage of a pandemic fails to prevent the viruses' introduction into Renfrew County & District, as is likely, the MOHLTC priority system for vaccine distribution will be used. This means certain populations will be given antiviral medications to prevent illness during the first pandemic wave before the vaccine is available.

Cleaning workplaces. The influenza virus can live up to two days on hard surfaces. Surfaces such as bathroom counters and objects such as door knobs that have been touched by a person with known or suspected influenza should be cleaned every day with regular household cleansers or by following current infection control protocols for cleaning and disinfecting. Ensure that adequate supplies for hand washing and cleaning are available in the workplace and that waste is disposed of promptly.

Social distancing in the workplace. During an influenza pandemic, strategies that prevent employees being in close proximity to one another may help to decrease transmission in the workplace. These strategies may include:

- working from home or arranging to work flex hours to avoid rush-hour crowding on public transit;
- minimizing contact with others by keeping one's office door closed; using stairs instead of crowded elevators; canceling non-essential face-to-face meetings and using teleconferencing, video conferencing, e-mails, and faxes instead; staying three feet (one meter) away from others when a meeting is necessary;
- avoiding shaking hands, hugging, or kissing people;
- bringing lunch and eating at one's desk or away from others;
- if you feel unwell, stay home, rest, and drink plenty of fluids.

Screen employees for symptoms. Screening employees for symptoms of influenza may be a useful strategy to keep workplaces healthy. RCDHU recommends that individuals with influenza-like symptoms avoid coming to work, school, or public gatherings until they are recovered. Strategies also need to be in place to assess staff fitness to work or return to work.

Note: Priority groups may change, based on the epidemiology of the pandemic influenza virus outbreak.

Adapted from the Ontario Health Pandemic Influenza Plan June 2005 with permission from the Ministry of Health and Long-Term Care

6.0 Planning Checklist

6.1 Planning checklist– short version

Planning Issues	Completed Yes/No	Comments
Does your organization have an emergency plan?		
Have you identified which tasks and positions would be essential during an emergency?		
Have you considered how to keep your organization operational with a large number of staff ill and unable to work?		
Have you considered alternative strategies on how to continue service delivery when normal methods are disrupted?		
Do you have a mechanism to monitor increases in staff absenteeism?		
Have you considered how you would communicate information to your staff and clients in an efficient manner?		
Have you considered how you would provide your staff with support and counseling?		
Have you developed a service continuity plan for your organization for decreasing or altering the services that you offer?		
Do you know how to get up-to-date and accurate information about influenza and the pandemic?		
Have you trained your employees on proper hand washing and respiratory etiquette?		
Is your cleaning staff aware of proper disinfecting techniques during a pandemic?		
Have you considered stockpiling necessary supplies?		
Have you considered how to deal with employees who report to work ill?		
Have you made your employees aware of emergency response plans?		
In case of a death on-site, do you know who to contact? (ambulance, coroner, funeral home)?		

6.2 Planning checklist – long version

Planning Issues	Completed Yes/No/Not Applicable	COMMENTS Document who is responsible for each action and the decision making process
Activation/Termination of Pandemic Flu Response Plan		
Who has responsibility for activating the continuity of operations plan for your organization and who is that person's back-up?		
Has your organization identified a process through which the decision will be made to activate and terminate the Plan?		
Do you have a communication strategy for reaching employees and business partners as a result of having to implement any section of the continuity of operations plan?		
Decision-making and Reporting		
Who will be in charge and make decisions within your organization on services during a pandemic/emergency episode?		
Who is identified as being in charge in the event of a pandemic influenza and are the roles of the various stakeholders clearly defined?		
Who makes what decisions?		
Who needs to approve the Pandemic Response Plan?		
Who will make decisions about reducing levels of service and/or terminating services temporarily?		
Agencies and Stakeholder Communications		
Do you have a relevant list of all agencies and stakeholders?		
Who notifies the various stakeholders?		
Communications with Staff and the general public		
Who will be in charge of communicating to the employees in your organization and who is their back up person(s) to resume this responsibility?		
Have you prepared site-specific notification for office closures and contacts for the public?		

Planning Issues	Completed Yes/No/Not Applicable	COMMENTS Document who is responsible for each action and the decision making process
If mail service is interrupted, is their critical mail delivery which you need to make alternative arrangements for?		
How will reduction/temporary termination of regular services be communicated to local stakeholders and the public?		
Who has authority to issue public service announcements/new releases and who is their alternative?		
How fast can these announcements be produced and approved?		
Do you know where to get up-to-date and accurate information about influenza and the pandemic? • Vaccine and antiviral medications • Infection control • Personal care • Public Health Measures		
Planning		
Who do you need input from both internally and externally to prepare and review a continuity of operations plan for your agency/business? • Elected officials • Legal counsel • Community partners • Labour Unions/bargaining unit Who is in charge in the event of a pandemic episode and are the roles of the various stakeholders clearly defined? Who makes what decisions? Who notifies the stakeholders?		
Is the Pandemic Influenza continuity of operations plan integrated with your emergency preparedness plan(s)?		
Who needs to approve the continuity of operations plan?		
Is your organization's continuity of operations plan integrated with the municipal/county emergency plan and Renfrew County & District Pandemic Influenza Plan?		
What is the staff capacity and are there provisions to bring in additional staff or volunteers?		
Have you identified the key services that must be provided? (Note: take into account minor to major lack of availability of staff due to illness)		

Planning Issues	Completed Yes/No/Not Applicable	COMMENTS Document who is responsible for each action and the decision making process
Has your organization identified possible key functions, staff positions, and supplies for each key service?		
Testing of the Plan		
How will you test and/or evaluate your continuity of operational Plan?		
How will you test your communication systems, e.g. fan-out?		
Training and Orientation		
What are the training needs pertaining to an influenza pandemic and the continuity of operations plan for internal (staff) and external stakeholders? • Infection control measures • Environmental cleaning • Equipment use • Roles and responsibilities		
What additional training will volunteers and reassigned staff require?		
Educational Materials		
Have educational materials been prepared/obtained?		
Have public education efforts been planned?		
Human Resources		
Is there a list of all employees complete with telephone numbers (home and business) and job titles (including those recently retired?		
Does your organization maintain a fan-out list to contact employees?		
Is there a contact list of all senior staff within your agency?		
If transportation becomes a problem, can employees arrange alternate forms of transportation to work, e.g. carpooling?		
Has your organization addressed the issue of staff being unable to report to work due to possible school and daycare closures?		
Do you currently have adequate staffing for regular day-to-day function?		
Do you have a mechanism to monitor increases in staff absenteeism?		

Planning Issues	**Completed Yes/No/Not Applicable**	**COMMENTS Document who is responsible for each action and the decision making process**
Has your organization prepared an inventory of skills and professional competencies in the event that people from your organization are required to perform duties/functions in other divisions/programs to maintain essential services?		
How has your organization planned to maintain the employee payroll?		
Health and Safety		
Is there a copy of the Health and Safety Manual on site in your organization?		
Have insurance and union issues been addressed?		
Has an inventory been prepared for specialized equipment/facilities that may be needed during an influenza pandemic?		
Have liability issues been addressed for volunteers and re-assigned staff?		
Have support care services been planned for employees? • Psychosocial support • Grief Counseling		
Materials and Support		
Who is signing authority for expenditures during an emergency and who is their alternate?		
Are there clearly stated policies and procedures that cover signing authority and acquisitions?		
Is there a mechanism that will ensure that additional equipment (e.g., cell phones, pagers, refrigerators, etc.) can be obtained with minimum delay?		
Who has authority for ordering repair/replacement for equipment and who is their alternate?		
Are you currently stocked with all of the necessary supplies for regular day-to-day function?		
Does your organization have contact lists for all your supplies and alternate suppliers?		
Who authorizes repairs and supply/equipment orders? Are there other employees who can take over this responsibility during an influenza pandemic?		
Who has a recovery phase planned for (e.g., depleted supplies or backlogs)?		

Planning Issues	Completed Yes/No/Not Applicable	COMMENTS Document who is responsible for each action and the decision making process
Documentation and Record Keeping		
Has your organization developed appropriate record keeping procedures for such items as: • Complaints and issues raised. • Significant decisions made. • Regular reporting to provincial/federal governments as required.		
Are there people in your organization who have sole access to incoming information (e.g., reports, complaints, etc.) and who are their alternates?		
Information and Technology		
Does your organization maintain a central inventory of passwords to office equipment and electronic files?		
If your information and technology person is ill, who is their alternate?		
Does your organization have access to inventory (including serial numbers) of all computer equipment, printers, fax machines, photocopiers in case repairs are needed?		
Does your organization have contact lists for all equipment repair persons?		
Will there be a website/telephone call-in line to update staff and public?		
Facilities		
Could any of the organization's services be provided from another work location?		
If necessary, could staff live at the work location or alternative work location for some period of time?		
Who is your security contact should there be a problem with physical access to your work location and who is their alternate?		
How are courier packages generally sent out and received?		
Procurement of additional resources		
Who has the responsibility for procurement matters, e.g., ordering resources and/or equipment during an influenza pandemic?		
Who will be responsible for payment issues related to overtime and/or additional salary issues and who is their alternate?		

Planning Issues	**Completed Yes/No/Not Applicable**	**COMMENTS Document who is responsible for each action and the decision making process**
Who has the authority to hire contract/temporary workers and to take on volunteers and who is their alternate?		
Is there a pre-approval process in place for purchasing additional supplies? If not, how long does it take for the approval process?		

Post Pandemic Influenza

What are the immediate lessons learned from the previous wave when planning for multiple pandemic waves?		
Who will be responsible for evaluating your response to the pandemic?		
What factors should be included in the evaluation?		
Who will have the authority to notify the various employees, clients and stakeholders regarding the agency's return to full service?		
Who will decide to reinstate full service?		

Adapted from the Ministry of Health Pandemic Influenza Response Plan Template – July 27, 2001

7.0 Glossary

A

Acute Care Facility – services provided by physicians and other health professionals and staff in the community and in hospitals, including emergency, general medical and surgical, psychiatric, obstetric and diagnostic services.

Adaptive mutation – or stepwise changes in a virus, which occurs during sequential infection of humans or other mammals. The virus gradually changes to become more transmissible among humans.

Airborne Transmission – the dissemination of microbial aerosols to a suitable portal of entry, usually the respiratory tract. Microbial aerosols are suspensions of particles in the air consisting partially or wholly of microorganisms. They may remain suspended in the air for long periods of time, some retaining and others losing infectivity or virulence.

Antigenic Drift – A gradual change of the hemagglutinin or neuraminidase proteins on the surface of a particular strain of influenza virus occurring in response.

Antigenic Shift – the movement of a type A influenza virus strain from other species into humans. The novel strain emerges by reassortment with circulating human influenza strains or by infecting humans directly. Because they flourish in the face of global susceptibility, viruses that have undergone antigenic shift usually create pandemics.

Antiviral – medication used to treat individuals showing early signs and symptoms of influenza and used to prevent illness when given to those exposed to influenza.

Asymptomatic – without showing signs or symptoms of disease.

Avian Influenza – or “bird flu” is a contagious disease of animals, caused by viruses that normally infect only birds and less commonly pigs.

C

Cleaning – the physical removal of foreign material, e.g., dust, soil, organic material such as blood, secretions, excretions and microorganisms. Physical cleaning removes rather than kills microorganisms. It is accomplished with water, detergents and mechanical action.

Cohort – A group of people. In the case of infection, a group of people who have been exposed to or infected with the same organism.

Communicable disease – an illness due to a specific infectious agent or its toxic products that arises through transmission of that agent or its products from an infected person, animal or inanimate reservoir to a susceptible host; either directly or indirectly through an intermediate plant or animal host, vector or inanimate environment.

Communicable period – the time which an infectious agent may be transferred directly or indirectly from an infected person to another person, from an infected animal to humans, or from an infected person to animals, including anthropods.

Contact transmission – transmission of infection through direct physical contact and/or indirect contact via an intermediate object such as contaminated instruments, door handles etc.

Contact precautions – precautions taken to prevent and control the spread of infection for organisms spread by contact transmission.

Contagious - able to be spread from person to person or living object to nonliving object to living object (such as person to doorknob to person).

Critical Services/Products – what goods or services must be delivered. Information can be obtained from the mission statement of the organization, and legal requirements for delivering specific services and products.

D

Disaster – A disaster is a natural or man-made event that negatively affects life, property, livelihood or industry often resulting in permanent changes to human societies, ecosystems and environment.

Disinfection – killing of infectious agents outside the body by direct exposure to chemical or physical agents.

Droplet precautions – precautions taken to prevent and control the spread of infections for organisms spread by droplet transmission.

Droplet transmission – transmission of infection via large droplets, greater that or equal to 5 microns in size, generated from the respiratory tract during coughing or sneezing, or during procedures such as suctioning or bronchoscopy. These droplets are propelled a short distance (approximately 1metre/3feet or less) through the air and can come in contact with the eyes, nose, or mouth or another person, thus infecting them.

E

Emergency – an emergency may result from an existing danger or it may be a threat of an impending situation abnormally affecting property or the health, safety and welfare of the community.

Emergency Management Program – an emergency management program must consist of:

i. an emergency plan;
ii. training programs and exercises for employees of municipalities and other persons with respect to the provision of required services and procedures to be followed in emergency response and recovery activities;
iii. public education on risks to public safety and on public preparedness for emergencies; and
iv. any other element required by standards for emergency management programs that may be developed by the Minister of Community Safety and Correctional Services.

Emergency Operations Centre – A centralized location from which emergency operations can be directed and coordinated.

Emergency Plan - Documents that describe principles, policies and methods to be applied in carrying out emergency operations and rendering mutual aid during emergencies, including such elements as continuity of government, emergency functions of government agencies, mobilization of resources, and public information.

Endemic – the constant presence of a disease or infectious agent within a given geographic area; it may also refer to the usual prevalence of a given disease within such area.

Epidemic – the occurrence in a community or region of cases of an illness (or an outbreak) with a frequency clearly in excess of normal expectancy.

Epidemiology – a branch of medical science dealing with the transmission and control of disease, including the study of epidemics and epidemic diseases.

F

Flu – a common slang term for influenza which is a highly contagious and common respiratory illness cause by a virus. There are three known types of influenza virus – A, B, and C.

FluWatch – the Centre for Infectious Disease Prevention and Control (CIDPC) produces weekly or biweekly FluWatch reports, summarizing influenza surveillance activities in Canada. Weekly reports are produced during the influenza season (October - May) and biweekly reports are produced during the off season (June - September). Influenza surveillance is a collaborative effort between provincial and territorial ministries of health, participating laboratories, The College of Family Physicians of Canada, sentinel practitioners, and CIDPC.

G

Genetic reassortment – occurs when two different viruses infect the same cell and exchange some gene segments.

I

Immunity – that resistance usually associated with the presence of antibodies or cells having a specific action on the microorganism concerned with a particular infectious disease or on its toxin.

Immunize –to make immune, as in making able to resist a particular disease, most often through administration of a vaccine delivered by a needle.

Incident Management System – is a model for the command, control and coordination of emergency response, used by individual organizations working towards the common goal of stabilizing the incident and protecting life, property and the environment.

Incubation Period – the time interval between initial contact with an infectious agent and the first appearance of symptoms associated with the infection.

Indirect Transmission – occurs when the pathogen is transmitted from an infected person on to an inanimate object and then on to another person.

Infection – condition in which organisms multiply within the body and cause a response from the host's immune defenses. Infection may or may not lead to clinical disease.

Infection Control - The activities aimed at the prevention and the spread of pathogens between people.

Infectious disease – a clinically manifest disease of humans or animals resulting from an infection.

Influenza - is a highly contagious and common respiratory illness cause by a virus. There are three known types of influenza virus – A, B, and C.

Influenza-like-illness – acute onset of respiratory illness with fever and cough and one or more sore throat, arthralgia, myalgia or prostration, which could be due to influenza.

iPHIS – integrated Public Health Information System. iPHIS is a web-based software suite of customized health information management tolls. It offers client level tools for daily case management and health surveillance data fro region/provincial/national data reporting.

Isolation – the separation for the period of communicability of the disease, of an infected person or animal from others in a place and under conditions to prevent the conveyance of the infectious agent to those others.

M

Mitigation - attempts to prevent the disaster from ever occurring, or reduce the effects of the disaster.

Morbidity – illness; departure from a state of well being, either physiologic or Psychological

Morbidity rate – an incidence rate used to include all persons in the population under consideration who become clinically ill during the period of time stated. The population may be limited to a specific gender or age group, or to those with certain other characteristics.

Mortality – death.

Mortality rate – a rate calculated in the same way as an incidence rate by dividing the number of deaths occurring in the population during the stated period of time, usually a year, by the number of persons at risk of dying during the period.

Must Do – critical services that cannot be deferred or delegated.

Mutation – a permanent, transmissible change in the genetic material of a cell.

Novel virus – a new, unusually virulent strain of virus arising from a mutation, which endows the virus with the capacity to be easily transmitted from one person to another.

O

Oseltamivir – antiviral drug effective against influenza A and B viruses that inhibits the neuraminidase protein, effectively trapping the influenza virus within the host cell and preventing it from infecting new cells. This can help in preventing infection (prophylaxis) or in reducing the duration and severity of illness once infected. If is effective if treatment is started within 48 hours of symptom onset. In Canada and the USA, oseltamivir is sold under the brand name Tamiflu.

P

Pandemic – epidemic disease of widespread prevalence around the globe

Pathogen - Any organism capable of producing disease.

Pathogenicity – the property of an infectious agent that determines the extent to which overt disease is produced in an infected population, or the power of an organism to produce disease.

Personal Protective Equipment – attire used by the workers to protect against airborne or droplet exposure and against exposure to blood and body fluids. PPE generally includes masks, eye goggles, face shields, gloves, gowns and foot-covers.

Pneumonia – is defined as an inflammation, usually caused by infection, involving the alveoli of the lungs.

Primary Care – first level of care and usually the first point of contact, that people have with the health care system. Primary care involves the provision of integrated, accessible health care services by clinicians who are responsible for addressing a large majority of personal health care needs, developing a sustained partnership with patients and practicing in the context of family and community. It includes advice on health promotion and disease prevention, assessments of one's health, diagnosis and treatment of episodic and chronic conditions and supportive and rehabilitative care.

Priority Group – those people at most at risk for influenza or those who could spread influenza to those at great risk.

Prophylaxis – prevention of or protective treatment of disease.

Psychosocial supports – outlines the processes specifically designed to prevent or mitigate the development of post-traumatic stress among individuals.

Public Health Measures – are non-medical interventions that may be used to reduce the spread of the influenza virus during a pandemic.

Q

Quarantine – restriction of the activities of well persons or animals who have been exposed to a case of communicable disease during its period of communicability (i.e., contacts) to prevent disease transmission during the incubation period if infection should occur.

R

Respiratory Etiquette - simple tips that will keep respiratory infections from spreading. You can help stop the spread of these germs by practicing "respiratory etiquette" — good health manners — such as covering your nose and mouth every time you sneeze, cough or blow your nose, putting used tissues in the trash, and washing your hands well and often whenever you or someone you are close to is sick.

S

Screening - checking for disease when there are no symptoms.

Sentinel Surveillance - Surveillance based on selected population samples chosen to represent the relevant experience of particular groups.

Skill Set Inventory – a record of the skills of all employees and those needed to provide the critical services of the organization. The skill set inventory provides the emergency planners with the ability to identify transferable skills that would allow an employee to be transferred from one task, job or workplace to another without extensive training or training or supervising requirements.

Social Distancing – is a way to reduce the risk of being exposed to the influenza virus by reducing or avoiding contact with other people as much as possible.

Stockpile - reserve: something kept back or saved for future use or a special purpose.

Strain - a specific genetic variant of an organism.

Sub-Clinical Infection - infection in which symptoms and signs are not detectable by clinical examination or laboratory tests; this may occur in an early stage(s) of the infection, with symptoms and signs becoming manifest later during the course of the infection, or the symptoms and signs may never become apparent.

Surveillance - is a systematic method for continuous monitoring of diseases in a population, in order to be able to detect changes in disease patterns and then to control them.

Susceptible - A person or animal not possessing sufficient resistance against a particular pathogenic agent to prevent contracting infection or disease when exposed to the agent.

Symptoms – any perceptible, subjective change in the body or its functions that indicates disease or phases of disease as reported by the patient.

T

Tamiflu – name under which oseltamivir is marketed in Canada and the USA

Transmission – any mechanism by which an infectious agent is spread from a source or reservoir to a person.

Triage – system whereby a group of casualties or patients is sorted according to the seriousness of their illness or injuries, so that treatment priorities can be allocated between them. In emergency situations it is designed to maximize the number of survivors.

V

Vaccination – act of administering a vaccine

Vaccine – substance that contains antigenic components from an infectious organism. By stimulating an immune response (but not causing disease), it protects against subsequent infection by that organism.

Virulence – the degree of pathogenicity of an infectious agent, indicated by case fatality rates and/or the ability of the agent to invade and damage tissues of the host.

Virus – group of infectious agents characterized by their inability to reproduce outside of a living host cell. Viruses may subvert the host cells' normal functions, causing the cell to behave in a manner determined by the virus.

8.0 ABBREVIATIONS

A

AMOH – Associate Medical Officer of Health

C

CD – Communicable Disease
CDC – Center for Disease Control (U.S.)
CHC – Community Health Centre
CMOH – Chief Medical Officer of Health
CPIP – Canadian Pandemic Influenza Plan
CUPE – Canadian Union of Public Employees

E

EARS – Early Alert Reporting System
EMO- Emergency Management Office
EMU – Emergency Management Unit (MOHLTC)
EOC – Emergency Operation Centre

F

FRI – Febrile Respiratory Illness

H

HCW – Health Care Worker
HPPA – Health Protection and Promotion Act

I

ILI – Influenza Like Illness
IMS – Incident Management System
iPHIS – Integrated Public Health Information System

L

LTCF – Long-Term Care Facility

M

MEOC – Ministry Emergency Operations Centre (MOHLTC)
MHPSG – Mandatory Health Programs and Services Guidelines
MOH – Medical Officer of Health
MOHLTC – Ministry of Health and Long Term Care (Ontario)
MPP – Member of Provincial Parliament

N

NACI – National Advisory Committee on Immunizations
NESS – National Emergency Stock Pile System

O

OHA – Ontario Hospital Association
OH&S – Occupational Health and Safety
OHPIP – Ontario Health Plan for an Influenza Pandemic

P

PHAC – Public Health Agency of Canada
PHIPA – Personal Health Information Protection Act
PIDAC – Provincial Infectious Diseases Advisory Committee

R

RCDHU – Renfrew County & District Health Unit
RCMP – Royal Canadian Mounted Police
RDIS – Reportable Diseases Information System

S

SARS – Severe Acute Respiratory Syndrome
SRI – Severe Respiratory Illness

W

WHO – World Health Organization

9.0 ADDITIONAL INFORMATION

Government of Ontario

http://www.gov.on.ca/

Ministry of Health and Long Term Care
http://www.health.gov.on.ca/

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

Telehealth Ontario
1-866-797-0000
TTY : 1-866-797-0007
http://www.health.gov.on.ca/english/public/program/telehealth/telehealth_mn.html

Emergency Management Unit
http://www.health.gov.on.ca/english/public/program/emu/emu_mn.html

Ontario Best Practice Manual: Preventing Febrile Respiratory Illnesses
http://www.health.gov.on.ca/english/providers/program/infectious/diseases/ic_fri.html

Ministry of Community Safety and Correctional Services
http://www.mpss.jus.gov.on.ca/

Emergency Management Ontario
http://www.mpss.jus.gov.on.ca/english/pub_security/emo/about_emo.html

Government of Canada

http://www.canada.gc.ca/

Public Health Agency of Canada
http://www.phac-aspc.gc.ca/new_e.html

Canadian Pandemic Influenza Plan
http://www.phac-aspc.gc.ca/influenza/pandemicplan_e.html

Health Canada
http://www.hc-sc.gc.ca/

Global Pandemic Influenza Readiness
http://www.hc-sc.gc.ca/ahc-asc/intactiv/pandem-flu/index_e.html

Public Safety and Emergency Preparedness Canada
http://www.ocipep.gc.ca/home/index_e.asp

Critical Infrastructure Protection and Preparedness – Business Continuity Planning
http://www.ocipep.gc.ca/whoweare/speeches/bcp_dec03_e.asp#pillars

U.S. Department of Health and Human Services - Centers for Disease Control and Prevention

http://www.cdc.gov/

Information about Influenza Pandemics
http://www.cdc.gov/flu/avian/gen-info/pandemics.htm

World Health Organization

http://www.who.int/en/

Pandemic Preparedness
http://www.who.int/csr/disease/influenza/pandemic/en/index.html

Global Influenza Preparedness Plan
http://www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_GIP_2005_5/en/index.html

Checklist for Influenza Pandemic Preparedness Planning
http://www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_GIP_2005_4/en/index.html