

Appendix 3

City of Greater Sudbury Pandemic Influenza Plan

A Planning Guide for City Divisions

Table of Contents

Chapter 1	Introduction	
1.0	Introduction	Page 4
1.1	Purpose of the Guide	Page 4
1.2	What to Expect	Page 4
Chapter 2	Pandemic Influenza Information	
2.1	About Influenza	Page 5
2.2	When does Influenza become a Pandemic?	Page 6
2.3	How often do Influenza Pandemics Occur?	Page 6
2.4	What is the Difference between Seasonal and Pandemic Influenza?	Page 7
2.5	Annual Influenza Immunization	Page 7
2.6	What is Avian Influenza?	Page 8
2.7	World Health Organization (WHO) Alert Phases	Page 8
2.8	The Health Impact of Pandemic Influenza Influences on the City of Greater Sudbury and Catchment area of the Sudbury & District Health Unit	Page 10
Chapter 3	Who Does What During a Pandemic	
3.1	Municipal Governments and Local Public Health Authorities	Page 11
3.2	Head of Council	Page 11
3.3	City of Greater Sudbury - Emergency Management Program	Page 11
3.4	City of Greater Sudbury - Emergency Management	Page 12
3.5	City Divisions	Page 12
3.6	Board of Health	Page 12
3.7	Sudbury & District Health Unit	Page 13
3.8	Pandemic Clinical Care Committee	Page 13
	Emergency Management Structure for the Interagency Pandemic Response	Page 14
	Decision Centres for Coordinating the City of Greater Sudbury Response to a Pandemic Influenza	Page 15
Chapter 4	Challenges During a Pandemic	
4.1	Employee Absenteeism	Page 16
4.2	Supply Chain Disruption	Page 16
4.3	Public Health Measures	Page 16
4.4	Changes in Demand for Service	Page 16
Chapter 5	Critical Elements of Emergency Preparedness	
5.1	Communication	Page 17
5.2	Education and Training	Page 17
5.3	Skill Set Inventory	Page 17

Chapter 5 Critical Elements of Emergency Preparedness (con't)

- 5.4 Continuity of Operations Plan Page 17
 - A) Establishment of a Steering Committee or Lead individual Page 18
 - B) Service Impact Analysis Page 18
 - C) Service Continuity Plan Page 18
 - D) Readiness Procedures Page 19
 - E) Quality Assurance Page 19
- 5.5 Changes in Staffing and Redeployment Page 19
- 5.6 Human Resources Policies Page 19
 - A) Attendance Management Page 19
 - B) ILL Employees at Work Page 20
 - C) Emergency Scheduling Page 20
- 5.7 Occupational Health and Safety Page 20
 - A) Psychosocial Support Page 20
 - B) Personal Protective Equipment PPE (masks, etc.) Page 21
 - C) Infection Control Measures Page 21

Chapter 6 Planning Checklist

- 6.1 Planning Checklist - short version Page 23
- 6.2 Planning Checklist - long version Page 24

1.0 Introduction

1.1 Purpose of this Guide

This general planning guide has two purposes. First, it identifies issues that the City of Greater Sudbury's divisions 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 develop more detailed continuity of operation plans for their service area. Although Sudbury & District Health Unit 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 the city of Greater Sudbury. Although this guide identifies specific issues associated with pandemic influenza, much of the information applies to other emergencies as well.

For additional information, please see the City of Greater Sudbury Pandemic Influenza Plan which can be viewed on the City website listed below or the websites listed in section 8.0 of this guide:

http://www.city.greatersudbury.on.ca/cms/index.cfm?app=div_emergprep&lang=en/

1.2 What to Expect

- Pandemic influenza will be caused by a new sub-type of influenza A virus (See Sections 2.1 & 2.2)
- Since pandemic influenza will simultaneously affect the City, the Province of Ontario, and other jurisdictions, 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 the City of Greater Sudbury only a short time afterwards.
- There will be two or 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 the City's population 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.
- The City of Greater Sudbury Pandemic Influenza Plan will continue to be updated as local, provincial and federal planning proceeds.

2.0 Pandemic Influenza Information

2.1 About Influenza

Influenza, the flu, is a highly contagious and common respiratory illness caused by a virus. There are three known types of influenza virus groups: A, B and C but type C rarely causes human illness only influenza A is associated with pandemics. Influenza can cause mild to severe illness.

The flu usually starts suddenly. Common symptoms include: fever (usually high), headache, tiredness (can be extreme), cough, sore throat, runny or stuffy nose, body aches and nausea, vomiting and diarrhea (in children).

A lot of different illnesses, including the common cold, can have similar symptoms. While most healthy people recover from the flu without complications, some people such as; older people, young children, and people with certain health conditions are at high risk for serious complications from the flu.

A highly infectious disease, influenza is directly transmitted from person to person. The virus is primarily spread from people infected with the flu via: Approximately 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.

Droplet spread: droplets of their respiratory secretions come into contact with mucous membranes of the mouth, nose and possibly eyes of another person, i.e., cough or sneeze

Contact spread: the virus in droplets form can survive and remain viable for transmission:

- 24 to 48 hours on hard non-porous surfaces
- 9 to 12 hours on cloth, paper and tissues
- 5 minutes on hands

The incubation period for influenza is from 1 to 3 days. People with influenza are infectious and able to transmit the virus for up to 24 hours before the onset of symptoms and for up to 7 days after (ie. for 3 to 5 days from onset in adults, and up to 7 days in children). People with influenza tend to shed more viruses in their respiratory secretions in the early stages of the illness. Viral shedding tends to last longer in infants, young children and people with weak or compromised immune systems.

2.2 When does Influenza become a Pandemic?

Strains of influenza are circulating throughout the world all the time. When does a strain become a pandemic? Only influenza A viruses are associated with pandemics. Influenza pandemics arise when ALL four of the following occur:

- a novel influenza A virus develops as a result of an “antigenic shift” in the make-up of its DNA (ie. radical changes in the virus that cause a change in its genetic coding)
- the new virus can spread efficiently from human to human
- the new virus causes serious illness and death
- the population has little or no immunity to the new virus

Since people have little or no immunity to this new strain, it can spread quickly causing outbreaks in one or more countries or worldwide. This is called a pandemic. The exact nature of the pandemic virus (eg, virulence, presentation, periods of incubation, transmissibility and routes of transmission) and illness will not be known until it 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 precisely the level of illness that might result.

Adopted from:

Department of Health (England “Pandemic Flu: Frequently Asked Questions” October 19, 2005
<http://www.dh.gov.uk>

2.4 What is the Difference between Seasonal Influenza and Pandemic Influenza?

Seasonal flu	Pandemic flu
Occurs every year (October to April)	Occurred 3 times in the 20 th century
Occurs during the winter	It is typically a more serious infection for everyone
For most people it is an unpleasant but not life-threatening infection	Some people will not recover, even with medical treatment. Due to the higher severity of illness, there is greater risk of death
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	Vaccine 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 vaccines 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 to best effect according to how the disease develops

Adopted from:

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 be immunized each fall. The influenza vaccine (Flu Shot) is processed from particles of influenza viruses which have been killed and contain two types of influenza A and one type of influenza B virus.

Every year doctors and scientists worldwide identify the strains of influenza virus circulating; the vaccine is prepared to protect against the types that are most likely to occur that year. The body needs approximately two weeks post vaccination to build antibodies against the viruses. This protection lasts approximately four to six months. Due to antigenic drifts in influenza viruses a new vaccine for immunization must be created each year.

All City employees should be immunized every fall. Although the pandemic strain will be a new strain of influenza, immunization protects individuals against seasonal strains. Seasonal immunization may also reduce the chances of a new influenza virus emerging through genetic mixing.

Annual influenza immunization 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 of animals, caused by viruses that normally infect only birds and less commonly, pigs. Avian influenza viruses are highly species specific but have on rare occasions crossed the species barrier to infect humans. Infection with avian influenza viruses cause two main forms of disease in domestic poultry, distinguished by low (ruffled feathers, decreased egg production) and high (rapid spread with high mortality) pathogenicity.

The H5N1 subtype that is currently circulating in Asia and parts of Europe is a highly pathogenic form for birds. The subtype has infected humans and resulted in a high mortality rate among known cases. Although rare, there have been instances of human-to-human transmission of H5N1. In addition there is a possibility that if the virus is given enough opportunity it will change to a form that is highly infectious for humans and spread easily from person-to-person. Such a change could mark the start of a pandemic. Current strains of avian influenza will not necessarily become a pandemic strain. The next influenza pandemic could arise from a different influenza virus.

For current information on human cases of avian influenza please refer to the World Health Organization website at: http://www.who.int/csr/disease/avian_influenza/en/index.html

For additional information on avian influenza, refer to the Public Health Agency of Canada website at: <http://www.phac-aspc.gc.ca/influenza/#avianflu>

2.7 World Health Organization (WHO) Alert Phases

The backbone of pandemic planning is the World Health Organization (WHO) Classification System developed in 1999 and revised in April 2005. The WHO phases are meant to guide planning efforts and are incorporated in the Canadian, Ontario and City of Greater Sudbury plans. The WHO will identify which phase is currently occurring internationally and will declare the beginning of a pandemic. The Public Health Agency of Canada (PHAC) and the Ministry of Health and Long-Term Care will declare the beginning of the pandemic period in Canada and Ontario, respectively.

WORLD HEALTH ORGANIZATION PANDEMIC PHASES

Inter-pandemic Period*	<p>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.</p>
	<p>Phase 2 No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.</p>
Pandemic Alert Period **	<p>Phase 3 Human infections(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.</p>
	<p>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</p>
	<p>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).</p>
Pandemic Period	<p>Phase 6 Pandemic Phase: increased and sustained transmission in general population</p>
Post-pandemic Period	<p>Return to inter-pandemic period</p>

* *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*

2.8 The Health Impact of Pandemic Influences on the City of Greater Sudbury and Catchment area of the Sudbury & District Health Unit

Unlike severe acute respiratory syndrome (SARS), where disease transmission was primarily confined to hospitals and close household contacts, an influenza pandemic will spread quickly throughout the community.

According to the Canadian Pandemic Influenza Plan (CPIP), during a 'normal' influenza epidemic (occurring every winter in North America), an average of 5% to 20% of the public becomes ill.

The highest rates of infection and clinical illness occur in children but serious complications and death occur mainly in the elderly. Pandemic Influenza can lead to as many as 15% to 35% of the population becoming ill, though not at one time. The virus tends to spread in waves that last 6 to 8 weeks, according to the Canadian Pandemic Influenza Plan (CPIP). A common planning scenario is that up to 20% of the population will be infected at some point in the first wave of a pandemic.

Planning for pandemic influenza also involves a range of estimates of morbidity and mortality, based on attack rates of 15% to 35%. When a pandemic begins, epidemiological data will provide more specific information and impact on the City of Greater Sudbury and catchment area of the Sudbury & District Health Unit.

Estimated Direct Health Impact of Pandemic Influenza on the City of Greater Sudbury and catchment area of the Manitoulin and Sudbury District Health Unit

Description	Based on 15% attack rate	Based on 35% attack rate
Clinically ILL	31,000 individuals	79,000 individuals
Require outpatient care	15,733 individuals	36,710 individuals
Require hospitalization	364 individuals	851 individuals
Deaths	86 individuals	200 individuals

* Communicable Disease Surveillance Unit. Based on population estimates of 300 000 by Age Group and Gender based on the 2001 Census for 2003. Statistics Canada, 2004. # Calculations of most likely minimums and maximums from the Ontario Health Pandemic Influenza Plan 2005.

These numbers are only rough estimates. The number of cases could be more or less depending on the unique characteristics of the pandemic influenza virus. It is important to realize that people who are not hospitalized could be very ill for one to three weeks. When ill, people will be unable to work, shop for groceries, prepare meals or look after their own children. It is clear that such an outbreak will place huge demands on families, community services and the entire health care system.

3.0 Who Does What During a Pandemic

3.1 Municipal Governments and Local Public Health Authorities

The Ontario Health Pandemic Influenza Plan (June 2005) outlines the following tasks for municipal government and local health authorities for pandemic influenza planning:

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

Figure 1 on page 14, 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 Mayor or designate may declare that an emergency exists or has been terminated in the municipality. In the event of a declared emergency in the City of Greater Sudbury, the Mayor ensures that the Solicitor General, Ministry of Community Safety, Correctional Services and members of Council are notified.

3.3 City of Greater Sudbury - Emergency Management Program

As part of the City's Emergency Management Program, and as outlined in the City's Emergency Response Plan, the Community Control Group is responsible for emergency management in the City of Greater Sudbury.

The committee's prime responsibility is to provide the executive leadership and support for the actions required to develop and implement the municipal requirements of the Emergency Management Act.

This CCG is generally responsible for the initiation, coordination and implementation of response plans for all departments, under the jurisdiction of City Council.

During an emergency, the CCG is collectively responsible for the direction and coordination of emergency response operations within the City of Greater Sudbury in order to save lives, reduce suffering, sustain health and morale, minimize property damage, maintain and restore utilities at essential services; in general, to neutralize the efforts of the emergency.

In the event of an emergency, the Community Control Group will immediately convene. The Emergency Operations Centre will be activated by staff of Emergency Management and attended by CCG members to manage emergency response and recover operations.

The Medical Officer of Health is a member of the CCG and has the local role in providing advice and direction on disease related matters.

Other members of the Community Control Group include: Mayor, Deputy Mayor, Chief Administrative Officer, Chief Financial Officer and Treasurer, General Managers of: Growth & Development, Community Development, and Infrastructure & Emergency Services; Executive Director Administration Support Services; Director of Human Resources & Organizational Development; Manager of Corporate Communications; Community Emergency Management Coordinator; Chiefs of: Police, Fire and Emergency Medical Services.

3.4 City of Greater Sudbury - Emergency Management

The City's Emergency Management Division is the coordinating agency for emergency and disaster preparedness, response and recovery activities, as part of the City's Emergency Management Program. The division is responsible for developing the City's Emergency Response Plan and coordinating City agencies in developing supporting documents to the City's Emergency Response Plan.

The supporting documents contain either specific response plans for hazards that may pose a threat to the City or division specific procedures. Senior staff within the City divisions, represented on the CCG (such as EMS, Fire, Police, Housing, Public Works), work together collaboratively in developing the supporting documents.

The Emergency Management Division is responsible for activation of City's Emergency Operation Centre (EOC) and initiating the notification of key personnel and agencies in the event of an imminent or actual emergency or disaster.

3.5 City Divisions

All City divisions 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.

3.6 Board of Health

The Board of Health is the governing body for Sudbury & District Health Unit. 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.

3.7 Sudbury & District Health Unit

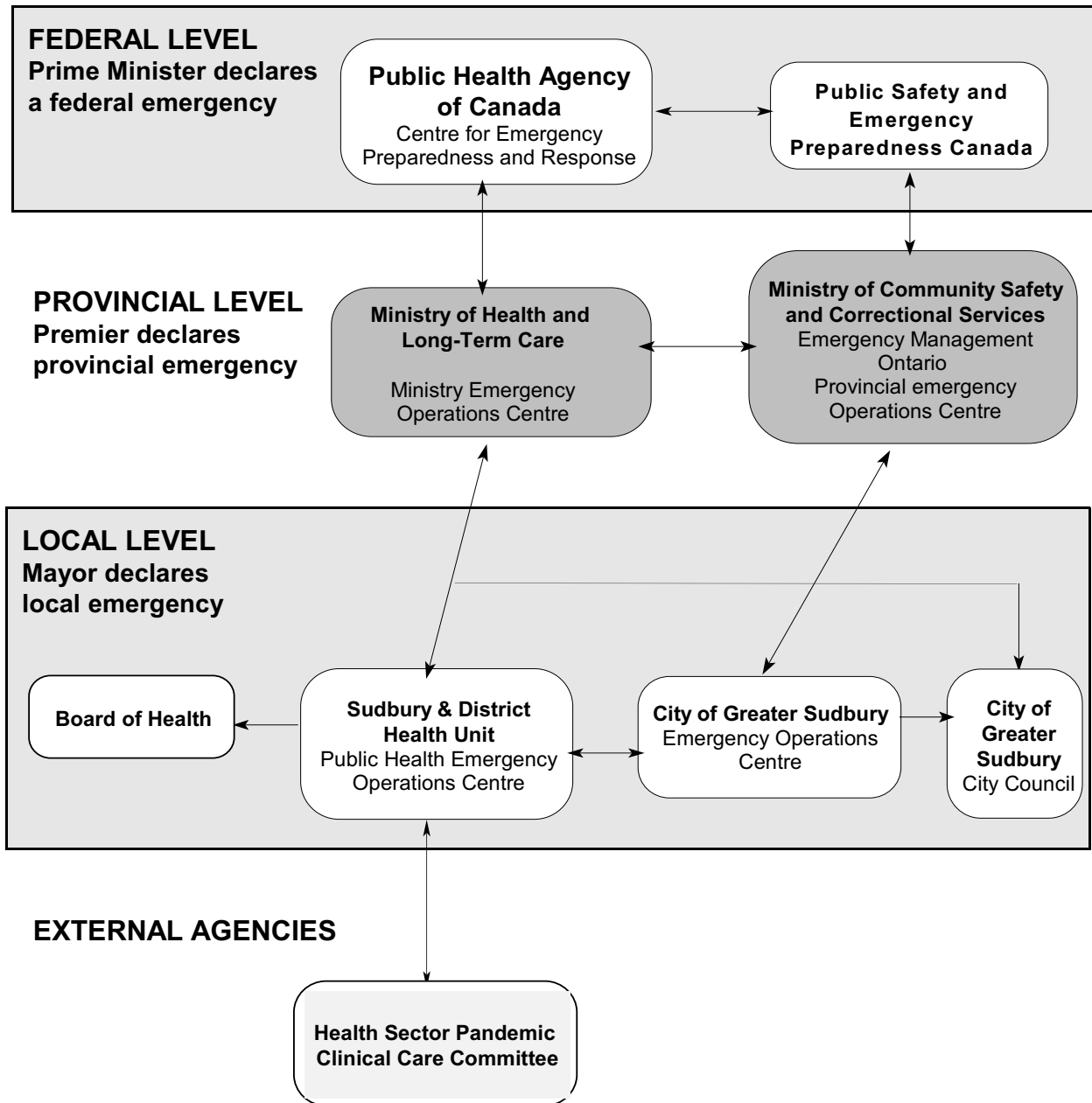
The Sudbury & District Health Unit Pandemic Influenza Plan was released on October 20th, 2005, and is organized according to the WHO Pandemic Phases. The Sudbury & District Health Unit's Plan is developed with key decision elements already established by the federal and provincial plans. Although local planning is critical, many decisions are within federal/provincial jurisdiction and directions must be followed locally, e.g., vaccine priority groups. Federal and provincial plans provide the framework for local planning.

3.8 Pandemic Clinical Care Committee

The Committee's primary focus is to bring together representatives of clinical care provider groups in the catchment area for the Sudbury & District Health Unit, to coordinate the assessment and clinical management of pandemic influenza patients in both the community and hospital settings.

To create communication links between health related agencies involved in pandemic preparedness and response, and link to municipal emergency response plans across the relevant service areas.

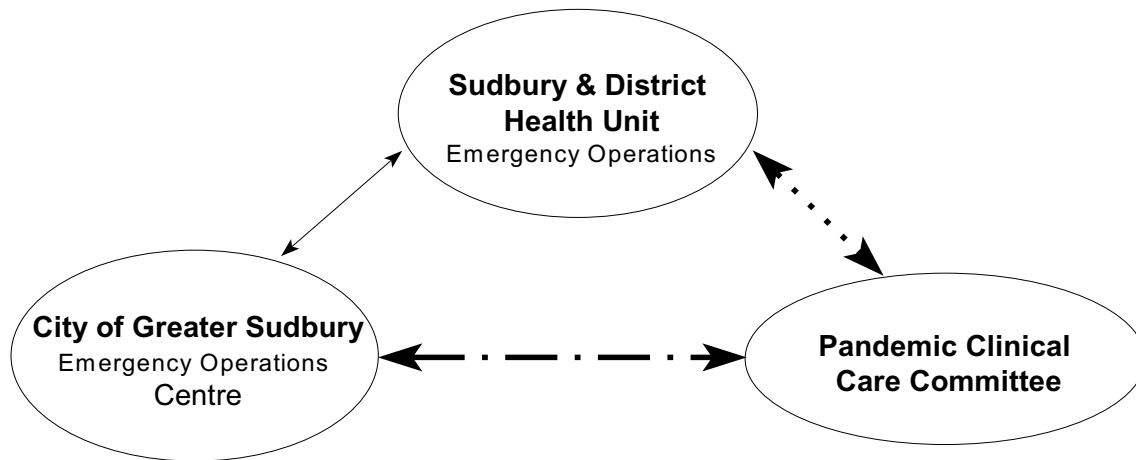
Emergency Management Structure for the Interagency Pandemic Response



Decision Centres for Coordinating the City of Greater Sudbury Response to a Pandemic Influenza

Roles:

- Maintain a local surveillance system
- Provide mass immunization and distribute vaccines
- Supply Public health information
- Liaise with local partners
- Assess the capacity of local health services
- Collaborate with the provincial government
- Set up a hotline
- Implement public health measures



Roles:

- Mitigation, preparedness, response & recovery
- Support of emergency operations at the site(s)
- Overall management of operations
- Risk identification, critical infrastructure protection
- Immediate effective response to an emergency
- Mobilization of all municipal, volunteer and other agencies required
- Establishment of information centres for the public and news media
- Procurement of essential resources
- Restoration of utilities and other essential services
- Rehabilitation
- Define clear communication responsibilities

Roles:

- Provides expert advice regarding specific sector issues
- Coordinates external activities
- Liaise with other external agencies

•••• Consultations between Sudbury & District Health Unit and Stakeholders to assist with sector specific decisions

—••• Some Stakeholders may be requested to provide expert advice at the City of Greater Sudbury EOC.

City of Greater Sudbury Pandemic Plan 2006

4.0 Challenges During a Pandemic

The City of Greater Sudbury divisions 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 City. 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 whenever 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 City 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. City staff will be kept informed of all such measures.

4.4 Changes in Demand for Service

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

To prepare for an influenza pandemic, each division, must develop a service continuity plan that:

- identifies the organization's mandated and critical services
- ranks the services in order or 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 organization may choose to designate one individual 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 City divisions 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. City divisions should review and update their current plans to respond to an influenza pandemic. A continuity of operations plan includes:

A 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 or 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

B Service Impact Analysis

This 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:

- identifying the mandate of the organization and determine which services must continue during an emergency (for example, garbage collection or water purification)
- for each service, identifying:
 - ▶ 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
- identifying any insurance requirements
- ranking 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
- identifying internal and external requirements for providing the services:
 - ▶ internal - employee availability, equipment, facilities, vehicles etc.
 - ▶ external - suppliers, utilities, transportation, federal/provincial governments, etc.

C Service Continuity Plan

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 City divisions should continue to provide critical services to the community.

In planning for service continuity, organizations should:

- identify risks that might threaten the service and develop methods to eliminate or reduce the risk
- analyse current recovery capabilities and review current recovery plans
- 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

D 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 competency and readiness

E 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 the 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.

5.6 Human Resources Policies

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

A Attendance Management

During an influenza pandemic, SDHU 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.

B 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. The City will need to address the issue of compensation for this type of situation.

C 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 City 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. City 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 employee anxiety.

A 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. The City should build increased support for staff through the Employee Assistance Programs and other services.

B Personal Protective Equipment PPE (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 any 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 homes 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 City 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.

The City should consult with the Ministry of Health and Long-Term Care, the Ministry of Labour, labour unions, and SDHU, and provide up-to-date information and education to employees and unions on this issue.

C 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 is 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 preventative 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 kitchens, 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 - 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.
- **Cleaning workplaces.** The influenza virus can live up to two days on hard surfaces. Surfaces such as bathroom counters and objects such as door handles that have been touched by 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 flexible 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, cancelling non-essential face-to-face meetings and using teleconferencing, video conferencing, e-mails and faxes instead; staying three feet away from others when a meeting is necessary
 - ▶ avoid 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 useful strategy to keep workplaces healthy. SDHU recommends that individuals with influenza-like symptoms avoid going 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.

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 counselling?		
Have you developed a service continuity plan for your organization for decreasing or altering the services that you offer?		
Do you know where 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 or n/a	COMMENTS Document who is responsible for each action and the decision making process
Activation/Termination of Pandemic Flu Response Plan		
Who has the 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?		
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 Stakeholders Communications		
Do you have a list of all relevant agencies and stakeholders?		
Who notified the various stakeholders?		
Communications with Staff and 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?		
If mail service is interrupted, is there 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?		

Planning Issues	Completed Yes / No or n/a	COMMENTS Document who is responsible for each action and the decision making process
Who has authority to issue public service announcements/news 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? <ul style="list-style-type: none"> • vaccine and antiviral medication information • 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? <ul style="list-style-type: none"> • Elected officials • Legal counsel • Community partners • Labour Unions and bargaining agents 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 various 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 City of Greater Sudbury's Emergency Response Plan and 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)		
Has your organization identified possible key functions, staff positions, and supplies for each key service?		

Planning Issues	Completed Yes / No or n/a	COMMENTS Document who is responsible for each action and the decision making process
Testing of the Plan		
How will you test and/or evaluate your continuity of operations plan?		
How will you test your communication systems, i.e., 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? <ul style="list-style-type: none"> • 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?		
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 public transit becomes a problem, can employees arrange alternate forms of transportation to work, i.e., car pooling?		
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 or n/a	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 counselling		
Materials and Supplies		
Who has 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 (i.e., cell phones, pagers, refrigerators, etc.) can be obtained with minimum delay?		
Who has authority for ordering repair/replacement of 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 suppliers and alternate suppliers?		
Planning Issues	Completed Yes / No or n/a	COMMENTS Document who is responsible for each action and the decision making process
Who authorizes repairs and supply/equipment orders? Are there other employees who can take over this responsibility during an influenza pandemic?		
Has a recovery phase been planned for (i.e., depleted supplies or backlogs)?		
Documentation and Record Keeping		
Has your organization developed appropriate record keeping procedures for such items as: • Complaints and issues raised. • Significant decisions that were made. Regular reporting to provincial / federal governments as required.		
Are there people in your organization who have sole access to incoming information (i.e., 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 the public?		

Facilities		
Could any of the organization's services be provided from another work location?		
If necessary, could staff live at the work location of 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?		
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		
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