THUNDER BAY &AREA

PANDEMIC INFLUENZA PLAN

MAY 2009

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Adapted from:

- Niagara Region Influenza Pandemic Plan
- Perth County Influenza Pandemic Plan

CHAPTER 1 - BACKGROUND

1.1 Introduction

Seasonal influenza is a contagious respiratory illness caused by a group of viruses (influenza types A, B, and C) which causes mild to severe illness. Although most healthy people recover from the flu, it is the number one cause of hospitalization and death in Canada for an infectious disease. Health Canada estimates the flu and its complications (pneumonia) cause 4,000 to 8,000 deaths each year.

Unlike seasonal influenza, a pandemic influenza is an especially virulent strain of influenza for which humans will have little or no immunity and which will spread very easily and quickly from person to person, across the country and throughout the world. There will be no vaccine for the pandemic influenza when it first emerges, and it will, therefore, cause serious illness and higher than average death rates.

In the 20th century the world has seen three major influenza outbreaks. The worst of the three, the Spanish Flu of 1918-19, left 20 million people dead worldwide. Experts predict that since influenza pandemics have historically occurred in cycles, the next global pandemic is overdue.

1.2 Impact of a Pandemic on Ontario and Thunder Bay

Experts estimate that when the pandemic occurs, one million to 2.3 million people in Ontario will require outpatient care, 22 000 to 53 000 will be hospitalized and recover, and 5 200 to 12 000 Ontarians will die (Ontario Health Plan for an Influenza Pandemic, July 2007).

In the event a pandemic influenza emerges and spreads to the Thunder Bay District, the Ontario government predicts the following “most likely” effects within the District based on gross attack rates of 15% to 35% (Ontario Health Plan for an Influenza Pandemic, Sept. 2006).

- 12 704 to 29 642 — Outpatient Visits
- 291 to 680 — Cases Requiring Hospitalization
- 68 to 158 — Deaths

1.3 Pandemic Plan for the City of Thunder Bay & Surrounding Area

A pandemic in the City of Thunder Bay would affect several municipalities and impact health services, community infrastructures, and the capacity to provide education, government, business, community and essential services at optimal levels.

To effectively manage, respond to and recover from the pandemic, community partners in Thunder Bay have developed this Thunder Bay & Surrounding Area Pandemic Influenza Plan (Thunder Bay Plan) to achieve a coordinated, resourceful response between the City of Thunder Bay and the surrounding municipalities of:

- Shuniah
- Gilles
- O'Connor
- Conmee
- Neebing
- Oliver - Paipoonge

During a pandemic emergency these municipalities will be included in the Thunder Bay Plan and be represented by Emergency Management Ontario during response activities. (See section Section 1.8 "Activating the Pandemic Plan".)

A pandemic influenza is not isolated to one site or one scene; it will have widespread implications for the health of people over a wide expanse and several jurisdictions.

Because a pandemic emergency in the City and surrounding communities will represent a health risk at provincial, national, and international levels, the Thunder Bay Plan also contains provisions for collaborations with provincial and national health authorities.

1.4 Thunder Bay Plan as an Annex to The Corporation of The City of Thunder Bay Pandemic Plan

The Corporation of the City of Thunder Bay has developed an internal response plan to adjust or maintain City services during a pandemic influenza. The Thunder Bay Plan, which describes the roles of the City and other partners during a community-wide pandemic, will be included as an annex to the Corporation's internal pandemic plan.

1.5 Response Plans for District Communities

Municipalities within the Thunder Bay District have been working with local partners to develop community specific response plans. These plans are independent of the Thunder Bay Plan. In the event of a pandemic, these

municipalities – Nipigon/Red Rock, Schreiber/Terrace Bay, Greenstone, Manitouwadge and Marathon – will activate localized responses. Please see Appendix A.

1.6 Goals of the Pandemic Plan

The emergency control and operations structure described in the Thunder Bay Plan have been developed to:

1. Minimize serious illness and overall deaths through appropriate management of Thunder Bay's health care system.

2. Minimize societal disruption in Thunder Bay and surrounding area as a result of an influenza pandemic.

These goals are directly based on the Canadian Pandemic Influenza Plan (CPIP) and the Ontario Health Plan for an Influenza Pandemic, August 2008 (Ontario Pandemic Plan).

1.7 Structure of The Thunder Bay Plan: Five Planning & Response Activities by Pandemic Period & Phase

Planning & Response Activities

The Thunder Bay Plan presents the specific planning and response activities required during each pandemic period (see below "Pandemic Periods and Phases") The activity areas have been categorized to include:

- Surveillance
- Vaccines and Antivirals
- Communications
- Health Services
- Public Health Measures

For descriptions of each activity area, please see the appropriate section in the Thunder Bay Plan.

Pandemic Periods and Phases

Global Risk Indicators - World Health Organization (WHO)

Pandemic periods and phases have been identified by the WHO to describe the chronological risk and activity levels of the new influenza virus subtype and to guide international response planning. The Thunder Bay Plan, like the Ontario

Pandemic Plan, utilizes the WHO phases and periods to organize response activities. The periods and phases are as follows:

WHO Pandemic Periods and Phases
(Ontario Health Plan for an Influenza Pandemic, September 2006)

Inter-Pandemic 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 subtype 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.
Post Pandemic Period		Return to inter-pandemic period.

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

The current phase and period of the influenza pandemic can be found on the WHO website at: *http://www.who.int/csr/disease/avian_influenza/phase/en/index.html.*

Risk Level in Canada – Public Health Agency of Canada

The Public Health Agency of Canada (PHAC) has developed a numbering system to reflect pandemic influenza activity in Canada:

0 To indicate no activity in Canada
1 To indicate low activity and low risk in Canada
2 To indicate higher activity and risk in Canada

These Canadian activity indicators will be used by PHAC in combination with the WHO phase number to assist in nation-wide response activities. Example:

WHO Phase	Canada Phase	WHO-Canada Phase	Definition
6	**0**	**6.0**	Outside Canada increased and sustained transmission in the general population has been observed. No cases have been detected in Canada.
6	**1**	**6.1**	Single human case(s) with the pandemic virus detected in Canada. No cluster(s) identified in Canada.
6	**2**	**6.2**	Localized or widespread pandemic activity observed in the Canadian population.

1.8 Activating the Pandemic Plan

Declaring a Pandemic in the Community

The Thunder Bay Plan will be activated by the Thunder Bay District Health Unit's (Health Unit) Medical Officer of Health (MOH) or Acting Medical Officer of Health (MOH (A)) in response to a pandemic emergency. This is in accordance with the *Health Protection and Promotion Act* which empowers the MOH to take actions, make declarations and implement powers in response to any public health emergency.

Once a pandemic emergency is declared by the MOH, the Thunder Bay & Area Pandemic Response Group (Pandemic Response Group) will assemble at the Emergency Operations Centre (EOC).

Thunder Bay and Area Pandemic Response Group and Emergency Operations Centre

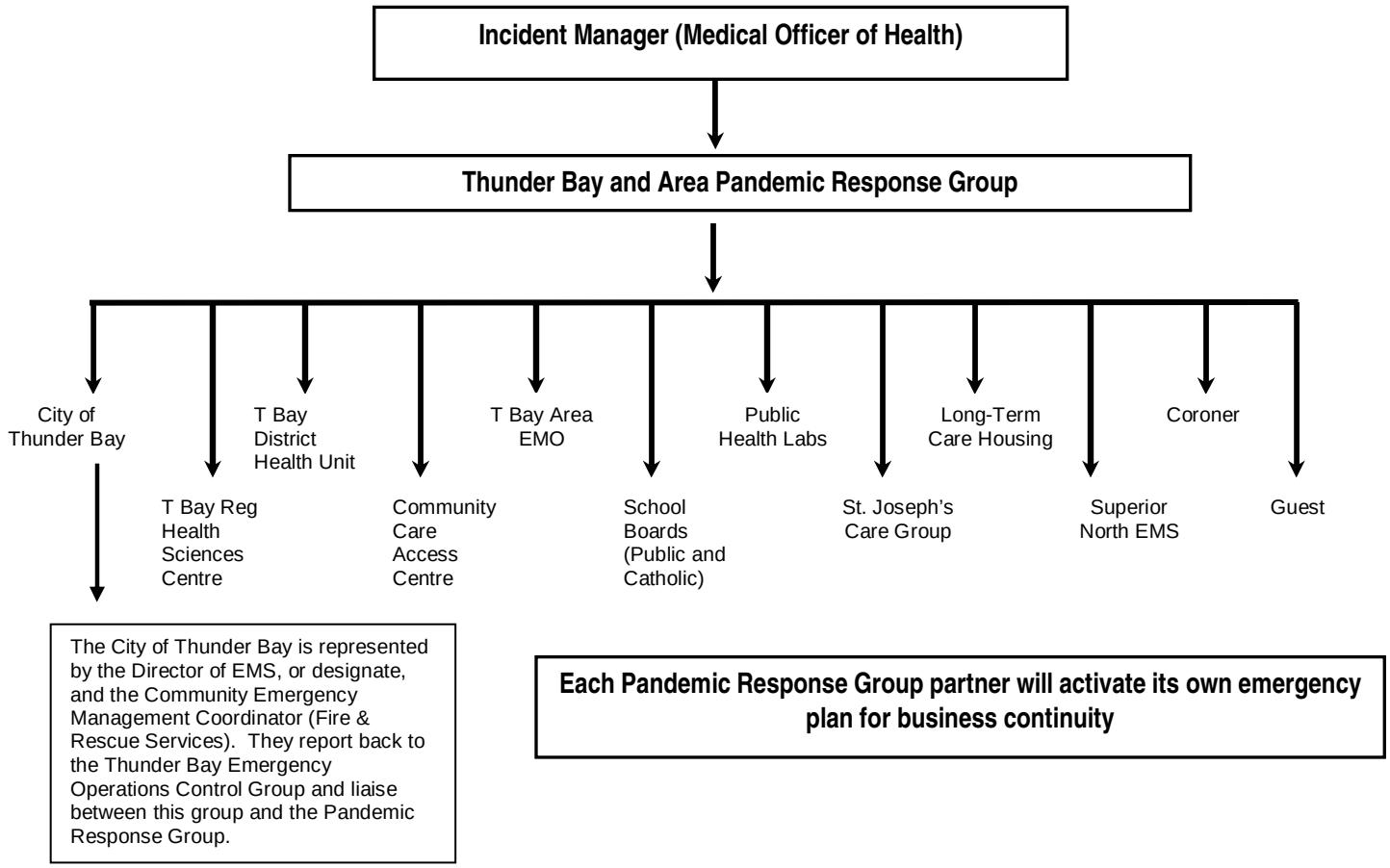
Due to the implications of a widespread public health risk, the responsibility for managing the response to an influenza pandemic emergency is both multi-jurisdictional and multi-agency. As a result, the Pandemic Response Group (see following diagram) will be made up of designated personnel from essential service and community organizations which will be responsible for carrying out the pandemic emergency response activities.

The Pandemic Response Group will assemble at the designated EOC – the Boardroom at the Health Unit's Thunder Bay office at 999 Balmoral Street.

The Thunder Bay and Area Pandemic Response Group is structured as follows:

Thunder Bay and Area
Pandemic Response Group

(Location: Boardroom, Thunder Bay District Health Unit)



The City of Thunder Bay is represented by the Director of EMS, or designate, and the Community Emergency Management Coordinator (Fire & Rescue Services). They report back to the Thunder Bay Emergency Operations Control Group and liaise between this group and the Pandemic Response Group.

Each Pandemic Response Group partner will activate its own emergency plan for business continuity

* For details of Health Unit response structure please see section “Structure of Health Unit Emergency Operations”.

As detailed in the previous chart, the City of Thunder Bay’s emergency response plan will also be activated and will operate concurrently with the Pandemic Response Group.

Incident Manager & Pandemic Response Group

A representative(s) from each member organization will meet at the designated EOC location to implement emergency plans, share information and work in support of conducting the pandemic response. Included within this group are the Incident Manager (IM) and Pandemic Response Group members who are responsible for the overall coordination of pandemic response operations.

Incident Manager

Medical Officer of Health (Health Unit)

Pandemic Response Group Members

A representative(s) from each of the following organizations/agencies:

- Thunder Bay District Health Unit
- Thunder Bay Regional Health Sciences Centre
- City of Thunder Bay
- Northwest Community Care Access Centre
- Superior North EMS
- Thunder Bay Catholic District School Board
- Lakehead District School Board
- Thunder Bay Area EMO
- St. Joseph’s Care Group
- Public Health Laboratories
- Long-Term Care Housing
- Coroner

A “guest” position is also included to accommodate need for specialized consultation, as appropriate.

Pandemic Response Group Responsibilities

The responsibilities of the Pandemic Response Group members in response to a pandemic emergency include, but are not limited to, the following:

- Activating the Thunder Bay Plan on the recommendation of the Medical Officer of Health.

- Communicating with the provincial government to ensure appropriate linkages, direction and alignment of support.
- Identifying issues/actions/needs in support of the pandemic response being led by the Health Unit.
- Establishing an information centre for issuance of accurate media releases and recommendations to the public.
- Assigning tasks in support of the pandemic response being led by the Health Unit.
- Implementing powers granted to the Mayor and the Medical Officer of Health by the *Emergency Management and Civil Protection Act* and the *Health Protection and Promotion Act*, as required.
- Conducting assigned tasks in support of the public health response.
- Initiating agency/organization specific emergency plans to support and assist the Pandemic Response Group and to maintain essential service provisions to the public during a pandemic emergency.
- Communicating with agency/organization management as required to assist agency/organization in implementing pandemic emergency response operations.
- Sharing organizational information with other Pandemic Response Group members.
- Authorizing the expenditure of required organizational funds.

Municipality Emergency Operations

Each local area municipality (Shuniah, Neebing, Gillies, O'Connor and Oliver/Paipoonge) has an emergency operation plan(s) which details the explicit operations to be conducted in response to the specific emergency event.

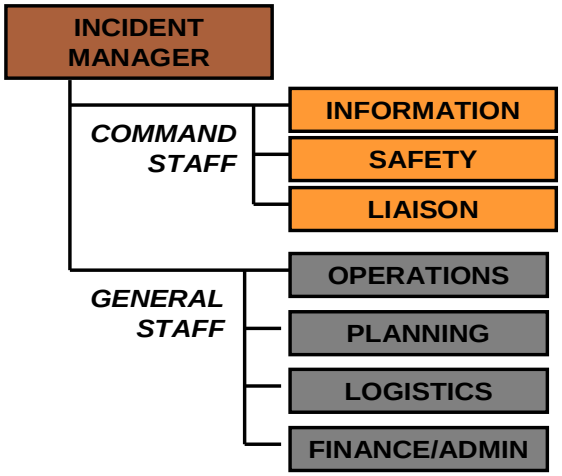
Local municipal business continuity plans (where applicable) serve as the operational guideline for the municipality to maintain essential service provisions to the public during a pandemic emergency, to describe provisions for critical services, and to reallocate staff and resources as required.

Any of the local area municipalities may activate their local emergency plans in response to a pandemic emergency to coordinate municipal support to the community response structure and/or to the Health Unit as lead agency.

Structure *of Health Unit Emergency Operations*

The Health Unit's pandemic emergency operations will be structured according to the Incident Management System (IMS). (See Figure 1)

Figure 1. IMS System



The Incident Management System is an international emergency management structure and best practice model for managing response and recovery to any large-scale emergency situation. It is modular, scalable, adaptable and function-specific, and is the pandemic response model adopted and recommended by the Ontario government. (See Figure 1.)

By implementing the IMS structure during an influenza pandemic emergency, the local public health incident management response and support functions will be standardized with the provincial response, ensuring effective response coordination and integration of functional plans.

Legislative Support

Legislation is currently in place which will provide pandemic managers, health care agencies, emergency response agencies, and those organizations within municipalities involved in the safety and health of the general public authority to carry out pandemic plans and access required resources and information. This legislation includes:

- The Emergency Management and Civil Protection Act
- Health Protection and Promotion Act
- Public Hospitals Act
- Private Hospitals Act
- Nursing Homes Act
- Long-Term Care Act
- Community Care Access Corporations Act
- Regulated Health Professions Act
- Personal Health Information Protection Act
- Health Information Protection Act
- Medicine Act, 1991
- Nursing Act, 1991
- Medical Laboratory Technology Act, 1991
- Health Care and Residential Facilities Regulation
- Occupational Health and Safety Act
- Ambulance Act
- Charitable Institutions Act
- Homes for the Aged and Rest Homes Act
- Health Facilities Special Orders Act

CHAPTER 2 – SURVEILLANCE

2.1 Introduction

Public health surveillance is the continuous and systematic process of collecting, analyzing, interpreting and disseminating descriptive information to help public health decision-makers prevent and reduce illness and death in a timely and appropriate manner. With respect to pandemic influenza, surveillance activities are designed to:

- Detect the arrival of the pandemic influenza virus in Thunder Bay District.
- Track the occurrence, severity and progression of the pandemic based on WHO pandemic phases.
- Describe the affected populations in order to identify high-risk groups, modes of transmission, and risk and protective factors.
- Determine the pandemic's burden on illness and death.
- Determine vaccine efficacy.
- Determine adverse effects of vaccine and antivirals.
- Share surveillance information with responders to help identify disease; guide prevention, control, and research; and evaluate treatment, prophylaxis and education.

This information will help determine the timing and amount of resources required to provide health care and public health services, including when and to whom antiviral drugs should be administered.

2.2 Inter-Pandemic Phase

During the inter-pandemic phase, surveillance is mainly concerned with detecting animals with influenza subtypes which may pose a risk for human infection and humans infected with new subtypes of influenza virus. The first instance of human-to-human transmission of a new subtype of influenza indicates the start of the pandemic alert phase. The more quickly that this is detected, the better chance public health agencies have to put in place control measures to prevent or delay further transmission of the virus. Evidence of such infections is therefore continually monitored worldwide by various public health agencies such as the World Health Organization (WHO), World Organization for Animal Health (OIE), and Center for Disease Control and Prevention (CDC).

The first instance of human-to-human transmission is not likely to occur in or near Canada. The Thunder Bay District Health Unit (Health Unit), therefore, monitors a variety of information sources daily to keep current on the influenza situation internationally, as well as nationally and provincially, through reports

from sources such as the Public Health Agency of Canada (PHAC) and the Ontario Ministry of Health and Long-Term Care (MOHLTC).

Although the likelihood of the pandemic flu virus making its first worldwide appearance in the Thunder Bay District is remote, the Health Unit must still be prepared during the inter-pandemic phase to detect any new or unusual influenza subtypes, unusual symptoms, modes of transmission or high-risk groups in the community. This would be detected through the Health Unit's regular annual influenza surveillance activities, which would include:

- Laboratory confirmed cases of influenza.
- Long-term care facility outbreak reporting.
- Febrile respiratory illness (FRI) reporting (hospital and other institutional reporting of ER and in-patient admissions and deaths due to FRIs).

Other regular influenza-related surveillance activities include:

- Reporting of adverse events related to influenza vaccine by physicians, nurses and pharmacists.
- Tracking influenza vaccine coverage in the community as well as in long-term care facility staff and residents.

Regular Influenza Surveillance Activities

Laboratory Confirmed Cases of Influenza

All cases of influenza which are laboratory confirmed are reportable to the Health Unit. This includes individual "sporadic" cases diagnosed in hospital or a physician's office, as well as cases which are being investigated as part of a cluster. Testing generally occurs at the Thunder Bay Regional Health Sciences Centre and the Thunder Bay Regional Public Health Laboratory. Since few cases of influenza in the community are actually laboratory tested, this is not a very sensitive indicator of the extent of transmission of the virus in the community. It is however, the means by which the Health Unit will be made aware of any new or unusual subtypes of influenza which may indicate the arrival of pandemic flu in Thunder Bay District. During the inter-pandemic and alert phases, reports on all lab confirmed cases will be entered into and reviewed in summary using the Integrated Public Health Information System (IPHIS).

Long-Term Care Facility Outbreaks

Influenza outbreaks in long-term care facilities are considered the most reliable indicator of influenza activity in the community. Long-term care facilities and retirement homes with more than ten residents are required to report any outbreaks of respiratory infection to the Health Unit. The Health Unit confirms an

influenza outbreak in these settings by arranging for and receiving results of laboratory testing of samples from nasopharyngeal swabs.

Febrile Respiratory Illness Reporting

All acute and non-acute facilities and all community care providers are expected to assess all patients/residents/clients for symptoms of febrile respiratory illness (FRI). Cases with a recent travel history to a country with a health alert as well as clusters of FRI are to be reported to the Health Unit. In hospitals these cases are usually reported by the Infection Control Practitioner and include cases from emergency room visits, hospital in-patient admissions and any unusual FRI activity during a hospital stay.

The Health Unit performs follow-up investigations with cases and determines if they could be classified as pandemic flu cases. Health Unit investigators determine FRI cases' recent travel and exposure history including possible laboratory exposure, contact with another health facility and contact with an ill person who has recently traveled to an affected country. The Health Unit also ensures appropriate laboratory testing to confirm diagnoses and performs contact tracing if necessary.

2.3 Pandemic Alert Phase

Once a pandemic alert is issued, public health agencies will want to learn as much as they can about the new subtype of influenza virus, its transmission, as well as patterns regarding how and whom it is affecting. Local surveillance efforts will be focused on quickly detecting the arrival of the pandemic virus into Thunder Bay & District. Regular influenza surveillance activities will be heightened during the pandemic alert phase and pandemic reporting tools will be disseminated to hospitals, long-term care homes, retirement homes with more than ten beds, children's residences, and all facilities operating under the *Developmental Service Act*. These tools are found at the end of the *Surveillance* section.

2.4 Pandemic Phase

During the pandemic phase, surveillance efforts will focus more on determining the impact on the health of Thunder Bay District residents and the resources required to prevent and control further infection. Many of the surveillance activities above are intended to be sustained, as much as possible, during this phase. In addition the following surveillance initiatives will occur:

- Flu assessment centres report number of visits using web-based surveillance system.

- Long-term care homes, hospitals, and other facilities will report aggregate data on flu cases using web-based surveillance system.
- Reports on the number of calls to Telehealth Ontario, Healthline and the Health Unit's information line from Thunder Bay District residents with a respiratory illness.

Paper versions of the web-based surveillance system forms are referenced in the *Surveillance Tools* section below.

2.5 Vaccine and Antiviral Uptake and Adverse Events

The Health Unit will be responsible for monitoring the distribution and uptake of vaccines and antivirals throughout Thunder Bay and District. This will determine to what extent the populations who are in greatest need for vaccine and antivirals are actually receiving this health service, and redirecting distribution and uptake strategies when indicated.

The Health Unit is also responsible for monitoring reports of adverse events related to antivirals and vaccines during a pandemic. Currently, physicians are required to report to the Health Unit adverse reactions which may be due to immunization. During a flu pandemic the Health Unit will focus on the collection of such information specifically for influenza vaccine and antiviral drugs being administered.

The Health Unit may also be involved in collecting data for special studies to help determine vaccine and antiviral efficacy, that is, how effective these agents were in preventing or reducing symptoms of the pandemic flu virus.

2.6 Surveillance Tools

The Ontario Ministry of Health & Long-Term Care has developed and maintains surveillance tools for use by reporting institutions during an influenza pandemic. These tools will be web-based; however, paper versions are below.

Contents

1. Preliminary/Weekly Institutional Respiratory Infection Outbreak Form
2. Final Institutional Respiratory Infection Outbreak Form
3. Antiviral Use

Ontario Health Plan for an Influenza Pandemic August 2008

Preliminary/Weekly Institutional Respiratory Infection Outbreak Form

To track the occurrence, severity and progression of the pandemic, surveillance data for institutional respiratory infection outbreaks during the pandemic are to be reported by each institution using the web-based surveillance system. This information is usually collected by the institution's infection prevention and control practitioner or designate. Long-term care homes, hospitals and retirement homes with more than 10 beds: please submit preliminary and updated reports through the Ministry of Health and Long-Term Care's web-based surveillance system within 24 hours of an outbreak being declared.

Institution Information	
For updates, reporting time period covered: ((yyyy/mm/dd) to (yyyy/mm/dd):	Institution Master #:
Outbreak #:	Institution Name:
	Institution Address:
Name of person completing report:	City/Town of Institution:
Contact Phone #:	Postal Code of Institution:
Date Outbreak Reported to Health Unit (yyyy/mm/dd):	Date of onset of illness in first case (yyyy/mm/dd):

Institution Type	
Long -Term Care Home	Hospital:Operates under *Public Hospitals Act*? Yes No
Retirement Homes	Type: Acute Chronic Psychiatric Rehab

Outbreak Description					Immunization Information				
	Residents or Patients		Staff *			Residents or Patients		Staff *	
	New Cases▲	Cumulative Number§	New Cases▲	Cumulative Number§		New Cases▲	Cumulative Number§	New Cases▲	Cumulative Number§
Total # cases					# cases immunized prior to outbreak■				
# deaths among cases attributed to outbreak									
Total # in institution	Residents or Patients		Staff*		Of cases who died, # immunized prior to outbreak■				

Laboratory Data		
Lab Confirmation: □ Yes (check causative organism/s) □ Pending □ Specimens NOT submitted □ No. of lab-confirmed cases		
Influenza A	Influenza B	RSV
Rhinovirus	Parainfl uenza	Adenovirus
Enterovirus	Other (specify)_____	

* Staff: All persons who carry on activities in the facility including employees, nurses, students, medical house staff, physicians, contract workers and volunteers.
▲ Initial Report: indicate the total number of cases
▲ Update: indicate the number of new cases since last update
§ Update/s: indicate the cumulative number of cases.
§ For initial reports enter as N/A
■ Prior to outbreak: Immunized with two doses of the pandemic vaccine at least 2 weeks before the onset of the outbreak

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Ontario Health Plan for an Influenza Pandemic August 2008

Preliminary/Weekly Institutional Respiratory Infection Outbreak Form

To track the occurrence, severity and progression of the pandemic, surveillance data for institutional respiratory infection outbreaks during the pandemic are to be reported by each institution using the web-based surveillance system. This information is usually collected by the institution's infection prevention and control practitioner or designate. Long-term care homes, hospitals and retirement homes with more than 10 beds: please submit preliminary and updated reports through the Ministry of Health and Long-Term Care's web-based surveillance system within 24 hours of an outbreak being declared.

Institution Information	
For updates, reporting time period covered: ((yyyy/mm/dd) to (yyyy/mm/dd):	Institution Master #:
Outbreak #:	Institution Name:
	Institution Address:
Name of person completing report:	City/Town of Institution:
Contact Phone #:	Postal Code of Institution:
Date Outbreak Reported to Health Unit (yyyy/mm/dd):	Date of onset of illness in first case (yyyy/mm/dd):

Institution Type	
Long -Term Care Home	Hospital:Operates under *Public Hospitals Act?* Yes No
Retirement Homes	Type: Acute Chronic Psychiatric Rehab

Outbreak Description					Immunization Information				
	Residents or Patients		Staff *			Residents or Patients		Staff *	
	New Cases▲	Cumulative Number§	New Cases▲	Cumulative Number§		New Cases▲	Cumulative Number§	New Cases▲	Cumulative Number§
Total # cases					# cases immunized prior to outbreak■				
# deaths among cases attributed to outbreak									
	Residents or Patients		Staff*		Of cases who died, # immunized prior to outbreak■				
Total # in institution									

Laboratory Data		
Lab Confirmation: □ Yes (check causative organism/s) □ Pending □ Specimens NOT submitted □ No. of lab-confirmed cases		
Influenza A	Influenza B	RSV
Rhinovirus	Parainfl uenza	Adenovirus
Enterovirus	Other (specify)_____	

* Staff: All persons who carry on activities in the facility including employees, nurses, students, medical house staff, physicians, contract workers and volunteers.
▲ Initial Report: indicate the total number of cases
▲ Update: indicate the number of new cases since last update
§ Update/s: indicate the cumulative number of cases.
§ For initial reports enter as N/A
■ Prior to outbreak: Immunized with two doses of the pandemic vaccine at least 2 weeks before the onset of the outbreak

Chapter #5A: Surveillance 5A- 1

Antiviral Use

Were antivirals used during the outbreak? ❑ Yes ❑ No

If an antiviral medication was prescribed during the outbreak, please complete the chart below:

	Residents / Patients		Staff	
Antiviral Used	**Oseltamivir**	**Other (Please specify):**	**Oseltamivir**	**Other (Please specify):**
Total # of individuals who received EITHER a treatment OR a prophylactic dose of antiviral medication				
# of individuals who received a dose of antiviral medication who developed severe side effects (if applicable)				

Please describe any side effects that were severe enough to discontinue antiviral medication:

_____

_____

_____

_____

CHAPTER 3 – ANTIVIRALS AND VACCINE

3.1 Introduction

Vaccination is the primary means to prevent disease and death from influenza during an epidemic or pandemic. However, a vaccine will likely not be available until 4-6 months after the pandemic virus is identified. While vaccine may not be available in time for the first wave of illness in Thunder Bay, it should be available in time to provide protection during the second wave (for those who have not yet been ill). The National Advisory Committee on Immunization (NACI) issues an annual recommendation on the use of influenza vaccine in persons who are most at risk for influenza or those who could spread influenza to persons vulnerable to the serious side effects of influenza. In the event of a pandemic, the Pandemic Influenza Committee (PIC), which includes representatives of NACI, will provide recommendations to provinces and territories on the use of the pandemic vaccine and priority groups for immunization. Once a vaccine is available it will be effective in preventing illness in 70-90% of healthy adults. Ontario will follow the national recommendations for priority groups for influenza immunization, adapting them as required to meet provincial needs. It will use an ethical framework to guide the decision making (OHPIP, Chapter 9 - July 2008 or most current).

Antivirals (anti-influenza drugs) are effective for both influenza treatment and prophylaxis, and may provide an adjunctive management strategy during a pandemic – particularly when a vaccine may not be available for the first wave. Antivirals will likely be the only virus-specific intervention during the initial response. The protection provided by antivirals is virtually immediate and does not interfere with an individual's response to influenza vaccines. At this time there is no evidence that putting large segments of the Canadian population on prophylactic antivirals will slow or stop the spread of a pandemic, although antiviral drugs may be an important option for maintaining critical services until a vaccine becomes available. Early treatment of targeted persons can also help by maintaining essential health and emergency services, by shortening the duration of illness and preventing complications in high risk persons and those who are seriously ill (OHPIP, July 2008, Chapter 9 pg.1-3). The decision to provide antiviral medications for prophylactic use will be made after consideration of provincial and national policies currently under development.

As vaccines and antivirals will be in short supply in the event of a pandemic, the Ontario Ministry Emergency Operations Centre will be responsible for coordinating the distribution of both antivirals and vaccines across the province. The Ministry will work with local pharmacies for distribution of antivirals and with the Thunder Bay District Health Unit (Health Unit) for the distribution of vaccines. The Ontario Plan will address the distribution of antivirals and vaccines to special populations, including those under federal jurisdiction, e.g., First Nations, RCMP, Armed Forces. The Thunder Bay District will use the ethical framework provided by the province to guide the decision-making process (OHPIP, Chapter 9 - July 2008, or most current).

3.2 Goals

The goal is:

To minimize serious illness, societal disruptions and overall deaths through the appropriate distribution of antiviral medications, for prophylactic or treatment use, and vaccine, based on the provincial recommendations for influenza pandemic.

3.3 Objectives

Antiviral Drugs

- To distribute and administer antiviral drugs efficiently and appropriately.
- To monitor the safety and effectiveness of antiviral drugs as well as any development of resistance to antivirals.

Vaccine

- To store, distribute, allocate and administer vaccine supplies efficiently and appropriately.
- To monitor the safety and effectiveness of vaccine programs.

3.4 Antiviral Treatment

The federal government is responsible for approving and licensing antivirals. At present there are three drugs available to prevent and treat influenza: Amantadine, Oseltamivir and Zanamivir. Oseltamivir (Tamiflu ® - Roche Pharma) and Zanamivir (Relenza ® - GlaxoSmithKline) belong to a class of antiviral drugs called neuraminidase inhibitors. When administered within 48 hours of onset of symptoms both Amantadine and the neuraminidase inhibitors are effective in reducing length of illness and hospitalization. Neuraminidase inhibitors are effective in reducing influenza complications.

Prophylaxis Use

The neuraminidase inhibitors can also be used to prevent influenza symptoms. In order to prevent influenza, they must be taken on a daily basis during the time when influenza is circulating. Taking the neuraminidase inhibitor for prevention does not prevent the virus from entering the body but allows the body to develop an immune response to the virus. The neuraminidase inhibitor prevents the virus from growing in the body, thereby preventing the development of influenza symptoms and decreasing the chances that the virus will spread to others.

Prophylaxis with antivirals may play a key role in maintaining critical services, including preventing infection in and providing reassurance to people caring for

individuals with influenza, as well as workers in critical industries, until a vaccine becomes available. The federal and provincial governments will determine if prophylaxis will be provided and will identify who will be eligible to receive prophylaxis. Neuraminidase inhibitors can also be used for prevention after an exposure (called "post exposure prophylaxis"). An example of its use in this way would be to provide the drug to the remainder of the family when a family member is diagnosed with influenza. This has been shown to decrease the risk of illness in exposed family members who do not yet have symptoms.

For prevention, Oseltamivir can be used for a prolonged period of time (up to eight weeks in some studies) and will provide up to 90% protection against influenza illness while the drug is being taken. Oseltamivir can also be given as post-exposure prophylaxis and will provide good protection as long as the drug is being taken. For prevention 75 mg of Oseltamivir is taken once daily for as long as influenza infection is a risk.

Monitoring Adverse Reactions

The Ontario Plan Committee is responsible for setting standards and acceptable rates for adverse antiviral drug reactions. The PHAC and the MOHLTC are responsible for developing, maintaining and enhancing routine and national surveillance activities for adverse antiviral drug reactions. Physicians, pharmacists and consumers will be able to report severe and unusual adverse events to Health Canada through MedEffects.

Allocation Plans

During a pandemic it is imperative that both treatment of ill persons and prophylaxis of front line workers happen simultaneously. The antiviral priority group recommendations may be changed by the province based on the epidemiology of the pandemic strain.

During a pandemic the Ministry Emergency Operations Centre (MEOC) will be responsible for coordinating the distribution of antivirals to hospitals, long-term care homes, pharmacies and flu centres across the province.

3.5 Vaccine

In the fall of 2000, Ontario began offering a free influenza immunization to anyone in the province over the age of six months with no contraindications to influenza immunization. The program provides approximately five to six million doses of trivalent influenza vaccine a year. The Health Unit will continue to actively promote annual universal influenza immunization, particularly with groups identified by the National Advisory Committee on Immunization as being at high risk of complications from influenza. Annual influenza immunization will reduce the morbidity, mortality and demands on the health care system from seasonal influenza strains.

The Health Uni also encourages the use pf pneumococcal vaccine. This vaccine is publicly funded for seniors and for persons over two years of age who have chronic heart, lung, or other chronic conditions. It protects against invasive infections caused by pneumococcal bacteria which frequently complicate influenza infections. During a pandemic there will not likely be time to provide pneumococcal vaccine to those who could benefit from it, therefore, it should be given in advance (OHPIP, Chapter 9 - July, 2008).

The federal government is responsible for vaccine procurement and supply, including developing the domestic infrastructure, maintaining a standby supply of fertilized hens' eggs ready to convert into vaccines, phasing in new technologies and ensuring security of supply. In the case of a pandemic, the domestic supplier guarantees to manufacture the vaccine for a four-month period starting within four to six months after receipt of the pandemic seed strain in Canada. Ontario has signed a Memorandum of Understanding to participate in the Canadian influenza vaccine procurement and supply process (OHPIP, Chapter 9 - July, 2008).

The province will follow the national recommendations for priority groups for influenza immunization, adapting them as required to meet provincial needs.

During a pandemic the influenza vaccine will be sent only to public health units which will organize mass vaccination clinics for people to attend to be immunized. Larger health care facilities will be given the opportunity to take care of their staff and clients. Provincial and local vaccine distribution plans will also include steps to reach special populations, such as those that fall under federal jurisdiction and people who are homeless.

Distribution and Administration of the Vaccine

The goal of the provincial government is to obtain enough vaccine in order to vaccinate the entire population. Should the vaccine be in short supply, especially during the initial phases of the pandemic, and the provincial government will follow the national recommendations for priority groups for influenza immunization, adapting them as required to meet provincial needs.

The plan for distribution within Thunder Bay is as follows:

- The Health Unit will release vaccine to health care facilities and agencies that can administer the vaccine to their clients and their own employees.
- The Health Unit will release vaccine to employers of societal responders (essential service workers) that can administer the vaccine to their own employees.
- The Health Unit will hold mass vaccination clinics for health care workers or essential service workers whose employers cannot conduct their own vaccination programs.
- The Health Unit will hold mass vaccination clinics for the general public according to provincial priorities and direction.

It is not expected that vaccine will be released to individual family doctors.

Mass Vaccination Clinics

Mass vaccination clinics will be organized and run by the Health Unit for the general public and for others as outlined above. When vaccine receipt is being prioritized, priority group members will be required to prove their eligibility for the vaccination. The MOHLTC will provide guidelines for eligibility criteria and proof required. Clinics for the general public are expected to be open to anyone who lives or works in Thunder Bay. The Health Unit will advertise the locations and hours of mass vaccination clinics on the Health Unit website, through public service announcements on the local cable television channels, via paid advertisements and articles in the local newspaper, through posters and flyers in community centers, and at medical offices.

The Health Unit is currently in the process of identifying locations suitable for mass vaccination clinics. The decision about which sites are appropriate will be based on predetermined criteria, including (but not limited to) the size of the site and accessibility. All clinics will require security, especially during periods when the vaccine is only available to certain priority groups. Clinic staffing will be a major challenge. Currently all nursing employees at the health unit administer vaccines at the influenza clinics in the fall. The health unit will also be training extra administrative employees in clinic procedures to assist in documentation and clerical duties at mass vaccination clinics. There maybe a need to augment additional health professionals or volunteers either as support or administering vaccines.

Storage and Transport of Vaccines

It is the responsibility of the Health Unit to provide safe and adequate storage for the influenza vaccine. To maintain efficacy and safety, vaccines must be stored between +2 to +8 degrees Celsius. Cold chain maintenance is expected of all providers during transportation and storage, including at the clinic sites. Coolers, ice packs and thermometers will be used to transport vaccines to ensure the cold chain is monitored and maintained. The organization receiving the vaccine must be prepared to provide a secure storage location and to maintain the cold chain.

Tracking and Surveillance

All organizations to which the health unit releases vaccine will be expected to administer the vaccine in accordance with provincial priorities, including the documentation and reporting of vaccine use and wastage. The Health Unit will also maintain a tracking system for distribution, administration and uptake of vaccines in the Thunder Bay District.

Adverse reaction to the vaccine may occur, and there is an expectation that all adverse vaccine reactions will be reported using the Ministry's *Adverse Event Following Immunization Report Form*.

CHAPTER 4 – COMMUNICATIONS

4.1 Introduction

Before, during and after a pandemic, the Core Communication Committee (CCC) will take the lead in handling public communications as well as ensuring accurate information is passed to the general public, health care workers and other stakeholders.

The Communications chapter sets out key messages and activities designed to promote consistent, coordinated and effective public communications to Thunder Bay and Area. Key audiences include:

- Public/Media
- Health Care Workers
- Stakeholders
- TBDHU Staff

4.2 Thunder Bay & Area Core Communication Committee (CCC)

The CCC will work together in a pandemic to manage public communications and ensure that communication is flowing between stakeholders throughout Thunder Bay and Area.

The members of the CCC represent the following agencies:

- City of Thunder Bay
- Community Care Access Centre
- St. Joseph's Care Group (Manager)
- Thunder Bay District Health Unit (TBDHU)
- Thunder Bay Regional Health Sciences Centre

All communication during a pandemic is coordinated through the CCC with assistance from the TBDHU's Manager of Communications (or designate).

During a pandemic, the TBDHU will take a lead role in coordinating all communication efforts through the CCC. A detailed list of tasks can be found in Appendix A.

4.3 Communications Activities During Pandemic

The World Health Organization (WHO) has identified phases of a pandemic that guide planning and define responsibilities at the various levels of government. By following the same response structure for communications, the CCC will provide

information that is consistent with information coming from the World Health Organization (WHO), the Public Health Agency of Canada (PHAC) and the Ontario Ministry of Health and Long-Term Care (MOHLTC).

During each phase of a pandemic, the following communications activities will take place.

Inter-Pandemic Period Checklist (Phases 1 & 2)

Phase 1

No new influenza virus subtypes have been detected in humans.

- Develop and maintain a stakeholder database with contact information.
- Test the database.
- Promote the Universal Influenza Immunization Program (UIIP) to the public and to health care workers (HCW).
- Ensure that all influenza educational materials for the public, HCWs and other stakeholders are accurate, up to date and accessible (e.g., different languages, literacy level).
- Continue to reinforce the importance of prevention/mitigation activities (e.g., annual influenza immunization through the UIIP).
- Continue to work with MOHLTC to improve communication/information infrastructure.
- Work with MOHLTC to establish procedures to ensure that all information is accurate at the time at which it is released.
- Circulate copies of the Thunder Bay & Area Plan to key stakeholders.
- Post the Thunder Bay & Area Pandemic Plan on the TBDHU website for public use.
- Ensure CCC contact information is kept up to date and each member is represented at all meetings.
- Arrange with partners one centralized location to release public information.
- Respond to external news stories related to pandemic as needed.
- Prepare templates for media and public communication during pandemic.
- Send out news releases with pandemic updates and prevention/education messages as needed (e.g., Emergency Preparedness Week in May; disseminate information to public about pandemic planning).

Phase 2

A circulating animal influenza virus subtype poses a substantial risk of human disease.

- Continue Phase 1 activities.
- Refine local communication plans, if necessary.

Pandemic Alert Period Checklist (Phases 3, 4 & 5)

Phase 3

Human infection(s) with a new subtype but no human-to-human spread or spread to a close contact only.

- Review, and if necessary, refine local communication plans.
- Confirm when and what to communicate to the public, health care workers and stakeholders. Focus on existing prevention methods and WHO/PHAC updates.
- Review, and if necessary, update contact list.

Phase 4

Small cluster(s) with limited human-to-human transmission but spread is highly localized suggesting virus is not well adapted to humans.

- Continue Phase 3 activities.
- Confirm local spokespeople and back-up personnel for a pandemic.
- Provide crisis communication training.
- Verify list of stakeholder and media contacts.
- Confirm any translation requirements.

Phase 5

Larger cluster(s) but human-to-human spread still localized, suggesting virus is becoming increasingly better adapted to humans but may not yet be fully transmissible.

- Work with MOHLTC to develop public education messages and define the role of spokespersons.
- Participate in crisis communication network.
- Implement plans to communicate with all relevant audiences including the public, media, health care workers, key opinion leaders, stakeholders and TBDHU employees.

Pandemic Period Checklist (Phase 6)

Phase 6

Increased and sustained transmission in general population.

- Activate communication plan.
- Start "Pandemic" log book to track all activities. Clearly mark time and date.
- Continue to work with MOHLTC to provide consistent messages.
- Distribute fact sheets.
- Provide information, in real time, to the public, media, HCW and all stakeholders regarding level of readiness, possible decreases in service and alternate care sites.
    - Advise media as to how local information will be provided (daily news releases, website).
    - Ensure pandemic information is clearly visible on pandemic webpage and easy to access.
    - Check links and content of other local websites to ensure consistency.
    - Establish information telephone lines.
    - Update website daily or as needed.
    - Hold regular briefings for, and communications with, key stakeholders.
- Triage media inquiries.
- Update annual multimedia campaign promoting Universal Influenza. Immunization Plan (UIIP), adding information about current influenza activity.
- Gather information from the field and use to inform/refine the communications plan.
- Monitor effectiveness of local communication strategy and modify as required.

<u>End of First Pandemic Wave, Pandemic Subsiding</u>

- Identify lessons learned.
- Evaluate local communication response.

Post-Pandemic Period Checklist (Return to Phase 1)

- Revise pandemic communications plan, based on experience.
- Return to Phase 1 activities.

4.4 Key Messages

A consistent message is vital in an emergency. To ensure that a consistent message is delivered to the public, all communications activities will be channeled through the CCC.

Direction for the major key messages for a pandemic will come from PHAC and the MOHLTC. The CCC will adjust key messages as needed to provide local information.

Key messages will also be constructed to address issues specific to Thunder Bay and Area. The messages will be constructed using the following principles:

- Context (background) – entire picture from Thunder Bay and Area perspective
- Action (benefits/what is happening)
- Vision ("Here's what you need to do.") Always include an action item.

The information used in the key messages must be accurate and confirmed. Refer to the timing of information to show the public that it is up to date. Continually monitor messages and reappraise when necessary. To prepare public messages, use the **STARCC principle**. Messages should be:

- Simple
- Timely
- Accurate
- Relevant
- Credible
- Consistent

All key messages need to be approved by the MOH or EOCG.

4.5 Communications with Stakeholders

During a pandemic, communications between the CCC and community stakeholders will be critical.

Contact Information

A complete list of stakeholders, including contact names, phone and fax numbers, and e-mail addresses, will be held by the TBDHU's Manager of Communications (or designate) in a password protected document.

Communication Methods

A variety of methods will be used to communicate with stakeholders including telephone, e-mail and fax. During a pandemic, regular teleconferences or briefings may be held to keep stakeholders informed.

The CCC may also delegate some communication activities to specific stakeholders.

Stakeholder List

The stakeholder list will include, but is not limited to, the following organizations:

- All hospitals in Thunder Bay and District
- Emergency responders (police, fire, ambulance)
- Health professionals and health care facility staff; all Long-Term Care Facilities
- Essential services (hydro, etc.)
- Family physicians
- Municipalities directly affected and those impacted
- Members of provincial and federal parliament
- Regional and national media
- Municipal, regional, provincial and federal governments
- Medical laboratories
- Pharmacies
- Funeral Directors' Association
- Key non-governmental associations and organizations
- Industry representatives
- Tourism industry
- Economic Development Corporation
- Regional Housing Authority
- Conservation Authority
- Chambers of Commerce
- Local business improvement associations
- Faith communities
- Area employers
- School boards
- Private educational institutions
- Post-secondary institutions

4.6 Website Management

The pandemic website will be the central information source for pandemic status updates, health information, links to community organizations, related links (PHAC, MOHLTC) and background information for the media.

All stakeholders (hospital, municipal governments, community agencies, businesses) should provide links on their home page to the pandemic website.

The website will be hosted, developed and maintained by the TBDHU through the office of the Manager of Communications (or designate).

The website must be updated as soon as there is new information available, as the public will expect updated information at all times.

In addition the websites of all involved stakeholders should include links to other central information sources such as:

Ontario Ministry of Health and Long Term Care	www.health.gov.on.ca
Health Canada	www.hc-sc.gc.ca
Public Health Agency of Canada	www.phac-aspc.gc.ca
World Health Organization	www.who.int

4.7 Preparing Public Communications

Public Communications Formats

During a pandemic, the CCC will use a variety of communication methods to provide both the public and stakeholders with information on public health issues. Information can be delivered in the following formats by target audience:

The Public (via media):

- News Release to Media
- Fact Sheets
- News Conferences and Media Briefings
- Newspaper Articles/Columns
- Media Appearances

The Public (directly):

- Newsletters (workplace, school)
- Information Phone Line
- Pandemic Website
- Door-to-Door Visits (knock and drop)
- Direct Mailings

Health Care Workers:

- Public Health Alerts (faxed)
- E-mail Updates
- Public Health Updates (mailed or faxed)
- Presentations or Education Sessions
- Pandemic Website

Stakeholders:

- Public Health Alerts (faxed)
- Email Updates
- Public Health Updates (mailed or faxed)
- Presentations or Education Sessions
- Pandemic Website

Communications Templates

Templates for the following types of communication documents will be created:

- Media Advisory
- Media Release
- Public Health Alert
- Public Health Update
- Fact Sheet
- Backgrounder

These templates will be available to the CCC through the TBDHU's Manager of Communications (or designate).

Fact Sheets

Fact sheets can be distributed as a single handout, accompany a media release or be included as part of a media kit.

Pandemic fact sheets are also available through the Ministry of Health and Long-Term Care at www.health.gov.on.ca.

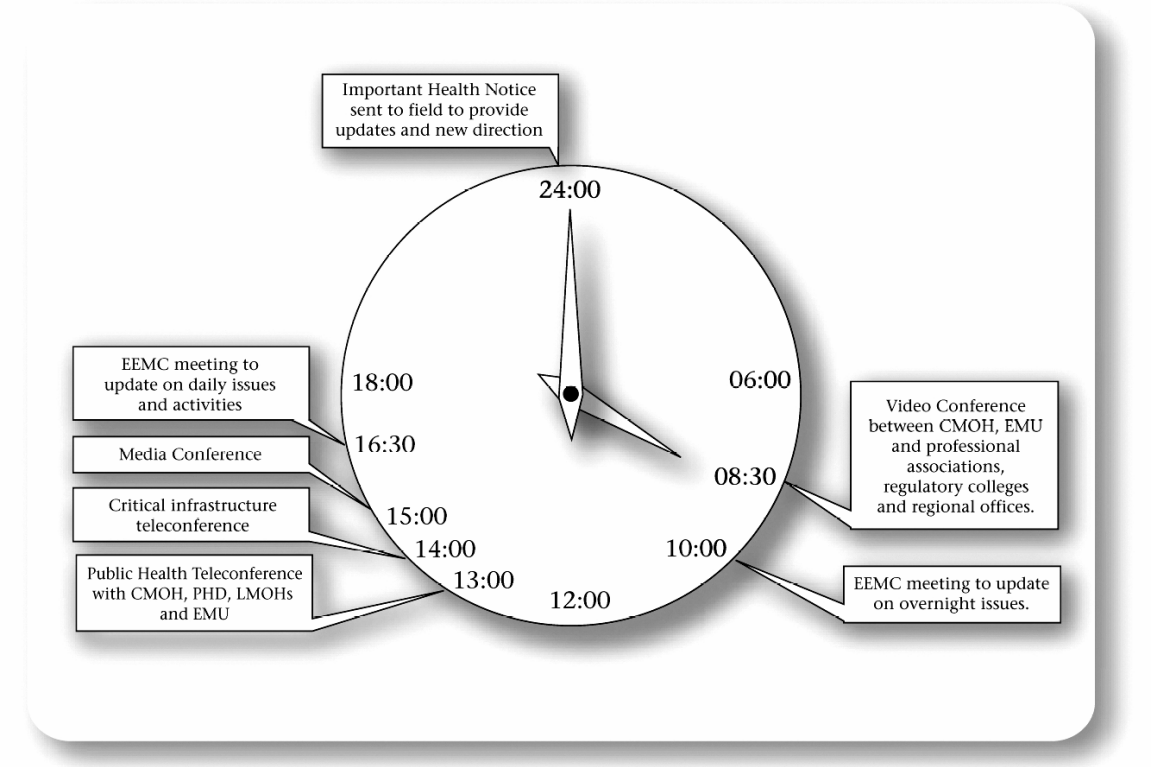
Fact sheets related to a pandemic will be stored in a central location to be determined by the TBDHU's Manager of Communications (or designate). The location of these files will be shared with the appropriate TBDHU staff and will be available to the CCC.

4.8 Media Relations

During a pandemic, the media will provide a vital communications channel to the community. The CCC will ensure that steps are taken to be accessible to the media as well as to develop an open and honest relationship.

Information Cycle

During a pandemic, the CCC will be guided by the information cycles at the MOHLTC and the PHAC. The following is an example of the MOHLTC Information Cycle for Public Health Emergencies.



Given that the MOHLTC will be holding news conferences at 3:00 p.m., the CCC will endeavor to host a media conference shortly thereafter, whenever appropriate.

Spokespeople

The MOH will act as the key spokesperson during a pandemic. Other spokespeople may be called on by the CCC to provide assistance with handling media questions which may pertain to their area of expertise.

News Releases

Media releases will be created by the CCC when:

- Needed to communicate a change in the status of pandemic threat
- Needed to report new information
- Advised by the MOH or EOCG
- Needed to advise public of immunization clinics
- Needed to reiterate key messages or address rumours and trends

The TBDHU's Manager of Communications (or designate) will draft the media release, with input from the CCC. The MOH or EOCG will have final approval.

Interviews with the Media

Before arranging an interview, the TBDHU's Manager of Communications (or designate) will gather the reporter's details and determine which expert spokesperson is best able to handle the interview. The CCC may be consulted to direct the reporter to the appropriate spokesperson.

The TBDHU's Manager of Communications (or designate) will be responsible for collecting and preparing background information on the interview needed by the expert spokesperson.

The TBDHU's Manager of Communications (or designate) will consult with the expert spokesperson to assist them prepare for the interview.

Media Briefings

As pandemic activity increases (between Phases 4, 5 and 6), the MOH or EOCG, in consultation with the CCC, may decide to host a media briefing.

A media briefing will give the MOH or EOCG the opportunity to provide a deeper understanding about the issue of pandemic as well as introduce pandemic spokespeople and key issues. This will allow the MOH or EOCG to build credibility with reporters and to let them know how the pandemic will be handled.

Media briefings are ideally held mid-week in the morning.

News Conferences

The MOH or EOCG, in consultation with the CCC, will determine when to hold a news conference. News conferences will be held between 10:00 a.m. and 3:00 p.m. weekdays, avoiding Fridays if possible.

Media and other stakeholders will be notified at least 24 hours prior, if possible. They will be notified using the quickest, most convenient method(s) available. For example, media will be notified by fax and e-mail, unless there is a power outage.

Notification will be in the form of a Media Advisory and will be prepared and disseminated by the TBDHU's Manager of Communications (or designate). All necessary technical equipment will be accessible to the speaker and will be coordinated by the TBDHU's Manager of Communications (or designate). A media kit with information will be prepared by the TBDHU's Manager of Communications (or designate) and distributed, if necessary.

Inter-Pandemic and Pandemic Alert - News conferences may be held:

- When the status of pandemic threat has changed and is an increasing threat to Thunder Bay and Area residents
- When there is new, critical information available to report
- When news needs to be shared with the public immediately
- As advised by the MOH or EOCG

Pandemic Period - News conferences will be coordinated with the MOHLTC information cycle and may be held:

- Daily or weekly when status and information is constantly changing
- When there is new, critical information to announce
- When there is news that needs to be shared with the public immediately
- To reiterate key messages, assure the public
- As advised by the MOH or EOCG

Post-Pandemic Period - News conferences may be held:

- When there is new information to report
- To instruct community on how to return to “normal life”
- To personally thank all those involved
- As advised by the MOH or EOCG

Location for News Conferences

Inter-Pandemic and Pandemic Alert:

- News conferences will be held at the TBDHU office at 999 Balmoral Street.

Pandemic Period:

- Location(s) for the news conferences will be determined by the MOH or EOCG.

4.9 Evaluating Communications Activities

It will be important to continually evaluate the effectiveness of all types of communications during all phases of a pandemic.

During the Post Pandemic period, an evaluation will be prepared to examine the strengths and weaknesses of the Communications Plan and will identify where improvements are needed. An evaluation report will be submitted to the MOH and EOCG.

To help evaluate the communications, the CCC will track activities including, but not limited to, the following:

- Number of media releases issued
- Type and number of other prepared communications disseminated
- Type and number of media contacts and follow-ups, i.e., using appropriate forms
- Type and number of media interviews
- Type and number of news briefings held
- Rumour control: rumours, responses
- Article clippings from newspaper and internet sites
- Types and number of calls made to Information Lines
- Website hits

CHAPTER 5 – HEALTH SERVICES

5.1 Introduction

The provision of health care services in the midst of an influenza pandemic will be complex. The additional challenges that a pandemic creates will increase the demand for services while dealing with increased employee absenteeism as well as concern for themselves and their families.

Health care facilities will need to plan and work together to ensure that the community receives the best possible level of care. Much of the care for influenza patients will be community and home based. Regardless of this, acute care facilities will likely see an increased demand for emergency and intensive care services. It will be necessary for each health care facility and organization to develop a Business Continuity Plan to determine which services need to be provided, which services can be reduced or suspended, and what staff can be reallocated.

The Thunder Bay District Health Unit (Health Unit) will facilitate discussion amongst health care facilities during a pandemic to address community issues as well as to ensure communication.

All health care decisions will be ethical and will be open and transparent, reasonable, inclusive, responsible and accountable.

5.2 Health Care Response

In Thunder Bay the CEOs/designate of the Thunder Bay Regional Health Science Centre, St. Joseph's Care Group, the Northwest Community Care Access Centre and the Emergency Medical Services will all be members of the Pandemic Response Group. All communication will flow from the Pandemic Response Group directly to the individual organizations. Other partner organizations will be invited to participate in the Pandemic Response Group as necessary.

Health care facilities and organizations are encouraged to develop an internal pandemic plan based on the IMS system. The following health care facilities will need to develop a coordinated approach to deal with the emergency.

- Primary Care – physicians, nurse practitioners, walk-in clinics
- Acute Care Hospital – emergency and intensive care unit at Thunder Bay Regional Health Sciences Centre
- Long-Term Care Facilities
- Northwestern Community Care Access Centre

- Telehealth Ontario
- Superior North EMS
- Laboratory Services
- Thunder Bay District Health Unit
- Northwestern Regional Infection Control Network
- St. Joseph's Care Group

Health care organizations should work collaboratively to develop internal plans as they are dependant on each other for implementation and support. Complex issues that health care organizations will need to address are: transfer of patients, supplies and communication; staffing; and volunteers. Every health care organization is expected to maintain one month of supplies. Provincial discussions are ongoing to determine provisions for extended storage.

5.3 Self Care

Due to increased stress on the health care system, the public will be encouraged to remain at home if sick and practice self care. Information on self care will include education on good hand hygiene, proper cough and sneeze etiquette, staying home when ill, rest, plenty of fluids, fever reduction and limiting close contact. Guidelines will also be available on when and where to seek medical attention.

Information on self care will be available from a variety of sources: radio, television, newspapers, Telehealth and the internet. Fact sheets on self care will be developed and available at all health care facilities.

5.4 Influenza Assessment, Treatment and Referral

During a mild-to-moderate pandemic, existing primary care services should have the capacity to provide increased services with some modifications to their current method of delivery. During a moderate to severe pandemic, primary care services may be overwhelmed and communities will need to look at alternate ways of providing care.

Preliminary plans for an Influenza Assessment, Treatment and Referral Centre have been developed. The business plan for this initial centre will provide the template for other centres to follow as they role out their own business plans.

This centre will be separate from the existing acute care facility. In addition, it will provide the public easier access to influenza services while reducing pressure on the emergency department of our acute care facility and primary care practitioners.

These centres will:

- Provide a consistent approach to assessing patients with influenza-like symptoms and triage patients at the appropriate level of care.
- Provide access to self-care information and treatment for patients who are not ill enough to require hospital care.
- Distribute antivirals.
- Distribute vaccine when available.

Presently there is one site identified and two potential sites. Efforts are ongoing to develop a reasonable business plan for the first site using the Ontario Plan for guidance (OHPIP, Chapter 11). Hospitals are taking the lead in planning but it is expected that implementation will require provincial resources and local collaboration.

The primary site is the 55 Plus Centre and will provide 24/7 service if required. Other potential sites are West Thunder Community Centre and Current River Community Centre. All sites have the capacity to deal with a large number of individuals, are handicap accessible, have sufficient parking and are located somewhat equally across the community.

5.5 Public Health Services

The Health Unit has an internal emergency response plan that outlines the responsibilities of the health unit in the event of an emergency.

During a pandemic the Health Unit will operate an internal IMS and the Medical Officer of Health/designate will act as the Incident Commander for the pandemic related emergency. All public health staff will be considered essential. The Health Unit will refer to its Business Continuity Plan to determine which services are essential and which programs and services can be suspended.

The province has identified four levels of program components/activities in a public health unit:

1. **Must Do** – critical services, cannot be deferred or delegated
2. **High Priority** – do not defer if possible or bring back as soon as possible
3. **Medium Priority** – can wait if pandemic is not too long
4. **Low Priority** – can be brought back when pandemic is over

The Health Unit will focus on: education, pandemic related communication for the public and key partners, implementation of community based public health measures, the potential distribution of limited antivirals, and the provision of mass immunization clinics once vaccine becomes available. Institutional outbreaks and surveillance activities will also be monitored.

5.6 Northwestern Ontario Infection Control Network Role in Pandemic

During the various pandemic phases, the Northwestern Ontario Infection Control Network(NWOICN) will support and, as needed, provide health care workers with additional educational resources and technical advice on issues related to infection prevention and control (IPAC). In addition, the NWOICN will assist in interpretation of best practices and guidelines to enable and promote consistent development and implementation of infection prevention and control policies and procedures across the region. The network may also assist in creating and supporting networking opportunities for health care providers in the region.

The network does not replace or duplicate the work of public health or individual health care facilities or agencies.

5.7 Laboratory Services

In the event of an influenza pandemic, laboratories will be challenged with the need to accommodate the expected surge in volume while working to maintain testing capacity, as both available staff and resources are affected.

Hospital Laboratory

The primary role for the Thunder Bay Regional Health Sciences Centre laboratory is to support the acute care provided to their facility. The overall goal will be to maintain essential testing services, keep blood and blood products at appropriate levels, and prioritize and manage the activity of laboratory staff.

Depending upon the service provided by the hospital, the hospital, in consultation with the private laboratory, will identify a list of tests that will or will not be performed during a pandemic.

The Ontario Agency for Health Protection and Promotion

Influenza Testing

Given the large number of people who will be affected by a pandemic and the potential severity of illness, there will be a dramatic increase in the volume of testing requested to diagnose influenza. At the same time, there will be a decrease in the size of the available public health laboratory workforce due to personal illness and illness within families. In anticipation of limited resources, suspended testing guidelines have been developed for the Ontario Public Health Laboratories.

Because entire laboratories could be rendered non-operational when an influenza pandemic strikes their city or region, a minimum of four public health

laboratories in Ontario will be prepared to handle the volume and type of influenza testing required during the pandemic.

As of the writing of this document there are four public health laboratories in the province equipped for molecular testing, with validated testing available at the central laboratory in Etobicoke. The three regional public health laboratories are Timmins, Hamilton and Ottawa. Samples from the Thunder Bay area will be sent via the Thunder Bay laboratory to one of these sites depending on availability of transportation and capacity at receiving laboratories.

Culture of pandemic influenza can only be performed in a certified CL-3 laboratory, therefore viral culture will not be routinely offered during a pandemic. A public health laboratory with this facility will be designated to receive a limited number of samples in order to propagate virus for study.

Commercial rapid antigen tests are not currently recommended for the diagnosis of influenza due to a pandemic strain. Only when the pandemic strain is identified, and the sensitivity and specificity of commercial kits in detecting it are determined, is there a possibility that rapid testing will be available. Due to pressure on resources this availability will be very limited.

Other Testing

Routine testing may not be sustainable throughout a pandemic. Some testing will be reduced or suspended. The types and number of tests suspended will depend on the severity of the pandemic and its impact on the population of Ontario. Refer to OHPIP Chapter 14 (Table 14.3) for Recommended Public Health Laboratory Activities by Severity of the Pandemic.

Community Laboratories

Ontario's community laboratories have identified a suggested list of tests that would be required to support the provision of basic health care to the whole population and to those affected by influenza see OHPIP, Chapter 14 (Table 14.2). The list of suggested tests varies depending on the severity of the pandemic. During a pandemic with a low attack rate, most routine testing would be reduced or temporarily suspended to increase capacity for other testing.

5.8 Primary Care

Planning is underway in the Thunder Bay District to determine how primary care will be delivered during an influenza pandemic. We have one acute care facility in Thunder Bay that serves the city and regional partners and/or complex continuing care organizations that serve the same geographical area and the

following populations: complex continuing care, rehabilitation, LTC, mental health and addictions.

Thunder Bay is assuming that the primary care physicians will take a role in hospital work, in their clinic (for those who require non-influenza related care) and in triage/assessment centres. Other primary care providers such as nurses, Nurse Practitioners and midwives, will most likely be impacted and will also be expected to assist in the health care sector response. The role of nursing students and other health related field specialties is also being considered.

The Health Unit will communicate with all community providers including pharmacists, dentists and others to ensure that they have the information they need in a timely fashion.

Community partnerships have already been encouraged as we further develop our community based plan.

5.9 Acute Care Resources During a Pandemic

The assumption is that during a pandemic there will be a necessity to temporarily discontinue some of the outpatient and non-urgent programs that the Thunder Bay Regional Health Sciences Centre (TBRHSC) currently offers. The number of influenza cases both in the community and in the facility will determine what action is necessary. Staffing issues (staff ill with influenza) will also determine what level of care can be offered. In-patients will be assessed, and those that can be discharged to community support services or home care-givers, will be discharged.

Emergency Services

Emergency services may be triaged to determine urgent patients vs. non-urgent patients. Non- urgent patients may be encouraged to attend physicians' offices, walk-in clinics or the assessment centres if they have "influenza-like" symptoms or questions about the influenza.

Intensive Care Services

Detailed criteria for admission to the intensive care unit have been developed. As pandemic influenza is a respiratory illness the need for ventilator support may well exceed the available machines. Teleconference may be used to determine criteria prior to transfer from regional facilities or long-term care.

Dialysis Services

Dialysis services will continue to provide their services to patients that require dialysis. Patients will be reviewed to determine if their current schedule must continue or if a scaled down schedule is possible. Pre-dialysis patient clinics may be restricted to those patients whose condition indicates that there is a need for close follow-up. Long-term follow-up may be temporarily discontinued.

Cancer Centre Services

The Cancer Centre will follow the plan that has been developed to classify their patients and determine what patients fit the listed categories. Patients will be seen according to their determined need. Patients will be contacted to determine if their need for urgent assessment has changed. Long-term follow-ups will be cancelled until the pandemic situation resolves.

Outpatient Services

Fracture clinic will be offered only for urgent cases. Non-urgent cases and follow-up cases may be deferred until the pandemic situation has resolved. Outpatient laboratory services and diagnostic testing services will be reduced with urgent cases seen on priority.

Endoscopy Clinic

Endoscopy clinic will also be restricted to urgent cases. Non-urgent cases will be deferred until the pandemic situation resolves.

Surgery and Day Surgery

These cases will be reviewed and the urgent cases will be done as scheduled. Non-urgent cases will be deferred until the pandemic situation resolves. Any non-urgent or elective cases will be reviewed if the patient's symptoms or situation changes.

5.10 Emergency Medical/Transportation Services

Superior North EMS (SNEMS) administration will work closely with allied agencies such as the Thunder Bay Fire and Rescue Service (TBF), Thunder Bay Regional Health Sciences Centre (TBRHSC), Base Hospital (BH), Thunder Bay Police Services (TBP), Ontario Provincial Police (OPP), Royal Canadian Mounted Police (RCMP), Health Unit, Central Ambulance Communications Centre (CACC), Ontario Fire Marshall's Office (OFM), Municipal EOCs and Fire Departments whose services closely impact on the Superior North EMS.

Maintaining Essential Services

Short Term

Should staffing levels begin to decline at SNEMS, notices will be sent to the TBRHSC, District hospitals, operational District Municipal EOCs, the Health Unit and CACC advising them that SNEMS may consider restricting or ceasing all non-emergent EMS calls. This will be done as early as possible.

Should the decision be made to restrict or cease non-emergent service, the Director will:

- Advise the Manager (or designate) of the Central Ambulance Communications Centre.
- Advise the TBRHSC Vice-President of patient care and the TBRHSC Base Hospital Manager or the designated person.
- Advise the designated person in each District hospital.
- Advise operational Municipal EOCs in affective communities.

Should SNEMS stop completing non-emergent calls, the affected hospital and CACC will be notified in writing by the Director. The letter will include the expected date when SNEMS operations may return to normal.

If SNEMS is unable to respond to 911 emergencies in a timely manner, notification will be sent to:

- Any hospital within the response area.
- Any long-term care facility within the response area.
- Police services within the response area.
- Fire services within the response area.
- EMS providers in the Rainy River, Kenora and Algoma Districts if SNEMS cannot respond in adjacent areas.
- The Health Unit.
- The public information officer for the City of Thunder Bay.
- All Municipal EOCs in operation in affected areas.

Long Term

All vacations and scheduled absences will be cancelled when the normal complement of ambulances cannot be maintained. In addition:

- Ambulances will be staffed by two paramedics.
- When less than four ambulances in the City of Thunder Bay or any rural station cannot be staffed by two unionized paramedics, contingency workers will be utilized.
- When contingency workers cannot maintain the above staffing levels, management staff will be utilized.

5.11 Long-Term Care Facilities

Long-term facilities will need to address many of the same issues that acute care facilities will face; supply chain disruption, health care provider absenteeism, lack of volunteers, and use of personal protective equipment and other infection control measures.

There will be a need for long-term care facilities to manage more of their residents in-house as they develop more serious illness. In order to provide continuity of care in the face of a staffing crisis it will be necessary to cross-train staff with different skills than their current position requires. For example, an activity staff member may be trained to provide housekeeping services,and a therapist to provide assistance preparing meals. Priority positions will need to be identified and non-essential staff trained to fill these positions should the need arise.

Discussions will be required between long-term care facilities, other care homes, hospitals, CCAC and physicians to determine the type of support needed and to develop decision guidelines for transferring residents to acute care.

Long-term care facilities and other care homes are encouraged to collaborate on strategies that will ensure staff has access to current information, that staff understands their duty to care, and that they are supported and appreciated through what will no doubt be a very high stress time with their own family lives.

The Health Unit has been providing education and support to our long-term care partners. A febrile respiratory screening tool is in place and respiratory outbreaks are reported to the Health Unit. As well, long term care facilities are diligent in the utilization of the Provincial Transfer Authorization Centre (PTAC).These activities will continue in all pandemic phases.

5.12 Northwest Community Care Access Centre's Pandemic Plan

The Northwest CCAC's Pandemic Plan is aligned with existing provincial guidelines, regulations, and directions, and coordinated with contracted service providers, long-term care homes, and other health care agencies.

Organizational activities will focus on:

- Strategies for increasing client admissions, managing shortage of supplies and resources, and implementation of infection control measures.
- Client prioritization tools.
- Critical case manager functions and roles.
- Waitlist strategies.
- Coordination of Pandemic Plan with service providers.
- Facilitate review of processes/plans with long-term care facilities/hospitals.

The Northwest CCAC's response is dependent on the stage of pandemic activity based on the World Health Organization's pandemic phases. In the case of pandemic activity in North West Ontario, the Northwest CCAC's actions are as follows:

- Staff will report to work unless they are ill or otherwise informed.
- Home visiting is limited to essential visits only and will require managerial approval.
- All attendance at external meetings will be cancelled.
- All meetings where individuals from external organizations are attending will be cancelled.
- A " no visitor/student" policy will be instituted at all Northwest CCAC offices.
- Prioritization of services and removal of services for some existing clients.
- Provide care to those confined to their homes based on ERL risk codes (1-5). All present Northwest CCAC clients are given an ERL risk code upon admission to services. It may be necessary to change the risk code if the client's health status changes.
- Track absenteeism rates.
- EAP for staff.
- To ensure consistent communication, utilize Health Unit resources such as Health Unit website, help line, if applicable.
- Report cases of illness meeting case definitions to the Medical Officer of Health under the HPPA Ontario Regulation 559/91.

5.13 Telehealth Ontario

Telehealth is a free, confidential telephone service funded by the Ministry of Health and Long-Term Care. It is staffed by registered nurses 24 hours a day, 7 days a week. During a pandemic, residents who have questions regarding their health, including flu-like symptoms, will be encouraged to call this line. Telehealth staff will assess symptoms and suggest self care or refer as needed to local health care providers. It is anticipated that this service will help reduce the demand on local health care services and promote self care in the home when warranted.

CHAPTER 6 – PUBLIC HEALTH MEASURES

6.1 Introduction

Public health measures are non-medical interventions that may be used to reduce the spread of the influenza virus. Public health measures include providing public education, conducting case and contact management, implementing community-based disease control strategies; social distancing, school closures and restriction/cancellation of large public gatherings, issuing travel restrictions and screening travellers.

For public health measures to be effective, they must be used aggressively at the beginning of the pandemic. The severity of the pandemic strain and the stage of the pandemic as it unfolds globally would be considered when making the determination of what measures to put in place.

Important decisions will be made about community-based disease control strategies aimed at minimizing the transmission of influenza in the community. The Medical Officer of Health in consultation with the Ontario Chief Medical Officer of Health will be responsible for decisions regarding the implementation of community-based disease control strategies in order to best protect the public.

The objectives of public health measures are to:

- Decrease the number of individuals exposed to the novel virus and potentially slow the progress of the pandemic.
- Slow disease spread and gain time for implementing medical measures , (e.g., vaccine).
- Reduce the morbidity and mortality caused by the pandemic.

The Health Unit will use the following six public health measures to slow the spread of pandemic influenza.

1. Public Education
2. Travel Restrictions
3. Case Management
4. Contact Management
5. School and Daycare Based IPC and Social Distancing Measures
6. Social Distancing in the Community

Public Education

Public education by the Health Unit will begin as early as possible in the pandemic and continue throughout the pandemic. Clear, consistent, accurate information will be given to the public to help them prepare for a pandemic and to reduce risk. It is anticipated that there will be a high demand for information and Health Unit staff will respond to requests as required, either through telephone or by fax and e-mail.

Provision of general messages about influenza and how it is spread, individual measures, social distancing messaging and influenza care will be made available. The Health Unit will produce messaging on:

- Staying home from daycare, school, work and public events if sick.
- Reducing non-essential travel.
- Avoiding large gatherings or crowds.
- Washing hands frequently and appropriately.
- Practicing respiratory etiquette (e.g. covering your cough).
- Increasing fresh air in buildings (i.e., open windows).
- Enhancing cleaning and disinfecting of environmental surfaces.
- How to access health care advice.
- Where and how to seek medical care in a way that minimizes exposure to influenza.
- Self care and how to care for others who are ill at home.

Travel Restrictions

Depending on the severity of the pandemic strain, restrictions on foreign travel or border closures could begin very early in a pandemic in an effort to keep the pandemic strain out of Canada. These restrictions could continue throughout the pandemic.

Travel restrictions are the responsibility of the Public Health Agency of Canada (PHAC), and Ontario will comply with federal directions. The PHAC website (http://www.phac-aspc.gc.ca) provides Travel Health Advisories about the occurrence of communicable disease around the world and recommends measures to reduce risk. The Health Unit will ensure the residents of Thunder Bay are updated on all federal regulations and will provide directions on how to obtain that information.

Case Management

Case management is highly labour intensive so the Health Unit will likely only be able to use the traditional individual approach early in the pandemic period, when there are a relatively small number of cases and there is an opportunity to contain the virus. The main purpose will be to confirm the presence of the pandemic strain in our area.

Individuals reported to the Health Unit with febrile-respiratory illness (FRI) or influenza-like illness (ILI) will be followed using the Provincial Infectious Disease Advisory Committee's (PIDAC) document *Preventing Febrile Respiratory Illness* (2005). Individual case management early in the pandemic will facilitate the collection of epidemiological data that could be used to characterize how the virus presents in Thunder Bay. Ongoing evaluation of the epidemiological data from individual cases and comparisons with information from other affected countries may help focus control efforts.

Isolation is used when people are infected with an organism and capable of transmitting it to others. Depending on the route of transmission, it may mean isolating in a hospital room or at home, and may include the use of protective clothing or equipment and the special handling of body fluids. Isolation of cases early in the Pandemic Period in Thunder Bay may prevent secondary cases or slow the spread of the illness within the population. Isolation may also prevent or reduce disruption of the health care system by flattening the epidemic curve that is reducing the demand for health care services from a short intensive outbreak to a more manageable level of demand over a longer period. This could also help reduce societal disruption and potentially buy time for vaccine manufacture and administration, thus mitigating the effects of the pandemic in the community as a whole.

Contact Management

Quarantine is the restriction of healthy persons who have been exposed to an infection but who may or may not be infected themselves. Quarantine is applied for the duration of the incubation period, if known, and can be directed to individuals, households, workplaces, classrooms, ships or airplanes.

Quarantine of well individuals who have been exposed to a confirmed case of influenza is a community-based disease control measure and may be considered in order to slow transmission in the community. If used, it will be most effective in the very early stages of detection of the influenza pandemic strain in Thunder Bay. Individuals identified as contacts may be asked to isolate themselves at home for the incubation period of influenza. During this time they may be contacted by telephone by the Health Unit staff.

Once transmission occurs in the community, this measure will no longer be effective to slow or contain transmission. At that time the Thunder Bay District Health Unit will use community-wide communication strategies to inform the general public of what to do if exposed to influenza, how to provide self-care, and how/when to seek health care services. Information will also be posted on the Health Unit influenza pandemic webpage.

School and Daycare Based IPC and Social Distancing

School and daycare based measures are steps designed to reduce the number of contacts that children have in schools and daycare centres. These measures are important because these centres are dense social environments and children without pre-existing immunity to influenza viruses are more susceptible than adults to infection.

Heath Unit staff will work with schools and daycares to ensure they adopt infection prevention and control measures to reduce spread such as hand hygiene practices, respiratory etiquette, cleaning and disinfecting environmental surfaces, and asking parents to keep children home when ill.

In addition, the health unit can request changes in the school environment or school practices that reduce contact between children by limiting the number of children in a given area and keeping children further apart, such as:

- Suspending interschool sports activities.
- Suspending recreational activities such as dances, school trips, assemblies.
- Staggering of recess and lunches.

Closure of schools and daycares will need to be considered as children are known to be efficient transmitters of influenza. Closing schools and large daycares may reduce transmission or delay spread of the disease (both in this age group and in younger siblings, parents, and close contacts of school and child care attendees). This strategy would be triggered by the declaration of one or more confirmed cases in the local community by the Health Unit (i.e., confirmation of pandemic presence, and dependent on the epidemiological context, in which these settings are expected to contribute to transmission based on observed age of cases). It would not be necessary or desirable to wait until spread within these settings is demonstrated.

These control measures will undoubtedly cause increased hardship to parents and caregivers. They will have profound effects on the business sector as parents/caregivers may need to take time off work to provide child care. The costs/benefits will need to be weighed before making the decision to implement this control measure.

The Health Unit will not make any decision to close schools or daycares without discussion with the affected school boards or daycares.

Social Distancing in the Community

Once an influenza pandemic has arrived in the community, people may want to consider using "social distancing" as a way to reduce the risk of being exposed to the influenza virus. The risk of coming in contact with an individual ill with influenza is increased based on exposure to other individuals. Social distancing refers to reducing or avoiding contact with other people as much as possible.

The Health Unit will produce messaging and relay strategies for social distancing include the following:

- Minimizing visitors to your home.
- Canceling or postpone family gatherings, outings or trips.
- Avoiding shaking hands, hugging or kissing people as greetings.
- Stocking up on household items (6 to 8 weeks) such as groceries or other supplies (e.g., cleaners, tissues, medications) so you do not have to go shopping as often. This will ensure that you are ready in the event of an emergency in the community such as an influenza pandemic. Individuals should always have enough water and food to last seventy-two hours aside from a pandemic.
- Avoiding peak shopping times and consider stores that are open twenty-four hours to stagger shopping times.
- Ordering groceries online or over the telephone for delivery.
- Arranging to pay bills at ATMs, online, or over the telephone.

In addition the Health Unit will provide information and education that helps non-health care workplaces and post-secondary institutions implement infection prevention and control measures that will reduce contact between adults.

- Work from home or arranging to work flex hours to avoid rush-hour crowding on public transit.
- At work minimize your contact with other people: keep your office door closed; use stairs instead of crowded elevators; bring your lunch to work and eat at your desk away from others; cancel non-essential face-to-face meetings and instead use teleconferencing, videoconferencing, e-mails, or fax; and if you need to meet with people, stay at least two meters apart (six feet).
- Consider alternatives to public transit such as walking, driving or riding a bike.
- Cohorting students in dormitories in order to keep students with influenza separate from other students.

6.2 Introduction to Mass Fatality Management

Pandemic influenza will result in an excess of deaths in Thunder Bay. Accurate predictions of mortality cannot be made before the virus emerges. The World Health Organization advises that death rates are determined by four factors: the number of people who become infected, the virulence of the virus, the underlying characteristics and vulnerability of affected populations, and the effectiveness of preventative measures.

Funeral directors, cemetery operators, health care facilities, physicians and local coroners are expected to manage this increase in deaths during a time when up to one third of the community and workforce is ill and potentially off work. Business continuity planning is essential for this sector. Given the working and historical relationships, it is expected that the sector will be able to cooperate and provide mutual assistance as necessary to overcome challenges related to the pandemic and any excess deaths.

The following outlines some specific considerations for those involved in the bereavement sector:

1. Infection Control
2. Natural Death Surge Planning Strategy
3. Capacity Inventory for Thunder Bay Funeral Homes
4. Thunder Bay and Area Funeral Home List
5. Thunder Bay and Area Cemetery Contact List

Infection Control

Dead bodies are not considered capable of transmitting influenza. Staff involved with corpse management will benefit from infection control materials directed specifically to the funeral sector. It is expected that this information will be developed by the Funeral Services Association of Canada. In addition, funeral directors will be able to rely on the local public health units for guidance on infection control practices to mitigate pandemic risk. It is expected that at some point during the pandemic, it may become necessary to cancel or limit public gatherings associated with bereavement and burial.

Transmission risk during a pandemic will be greatest for people attending funerals and visitations. Alcohol-based hand sanitizers, tissues and proper disposal containers should be readily available in funeral homes. Signs encouraging the use of these infection control practices should be posted for the public. Funeral home operators will be expected to pay special attention to the environmental cleaning of their premises. Guidance on routine cleaning and disinfection practices may be obtained from either the Funeral Services Association or from the Health Unit.

Natural Death Surge Planning Strategies

To ensure the continuity of the death management process funeral homes and cemeteries have developed business continuity plans**.** The OHPIP - August 2008 *(*Table 22.1) outlines in detail the appropriate steps in the death management process including the proper screening, recognition and reporting of disposition of human remains at the local level. This table will be used by funeral homes and cemeteries to develop their business continuity plans.

The following chart outlines the **Usual Process for Corpse Management** and Thunder Bay's Planning Steps.

Steps	Requirements	Limiting Factors	Thunder Bay Planning for Possible Solutions / Expediting Steps
Death Pronounced	• Person legally authorized to perform this task (RNs, NPs and MDs).	• Health care professionals will be taxed by increased outpatient and inpatient care associated with pandemic influenza. • There will be some deaths occurring in the home.	• Hospitals and LTC Homes have these staff on site or available on an on-call roster. These on-call rosters will have to operate on a 24/7 basis. • Community physicians will need to plan for on-call availability to pronounce a patient who dies at home.
Death Certified	• Person legally authorized to perform this task (MDs).	• Same as above. Most deaths will not require an autopsy or a Coroner's examination.	• Same as above. • Community physicians will know and utilize the checklist developed by the Chief Coroner to determine which deaths can be assumed to be due to influenza. • The City of TB will be expected to enhance their capacity to register death in a timely fashion.
Body Wrapped	• Person(s) trained to perform this task • Body bags	• Not all institutions will have enough body bags in stock.	• Funeral Directors prefer that corpses be placed in body bags prior to transport or that bodies be left for the funeral home to wrap.

Steps	Requirements	Limiting Factors	Thunder Bay Planning for Possible Solutions / Expediting Steps
Transportation to the Morgue	• In hospital: trained staff and stretcher • Outside hospital: informed person(s), stretcher and vehicle suitable for this purpose	• There may be a shortage of trays or stretchers if bodies require storage for any increased length of time.	• Look for alternate suppliers • Consider transport vehicles capable of handling more than one corpse per trip. • Provide public education or specific instructions re where to take corpses, whether the family must transport, how to do so appropriately. • Consider keeping old stretchers in storage instead of discarding.
Morgue Storage	• Suitable facility that can be maintained at 4° to 8℃.	• Limited room available in hospitals and funeral homes. • Traditional alternatives may not be realistic or palatable to community (e.g., hockey arenas, refrigerated trucks). • Availability of refrigerated containers/trucks, or storage facilities. • Placement of temporary body storage facility (i.e., close to hospital morgue or funeral home).	• Funeral homes will work together to maximize capacity to embalm bodies and store pre-embalmed bodies as necessary. • Local trucking companies may be utilized for refrigerated storage if excess capacity is required.
Autopsy if Required/ Requested	• Person qualified to perform autopsy and suitable facility with equipment.	• Pathologists may be deployed elsewhere to assist with excess work load.	• Healthcare workers will be expected to use respiratory specimens to assist with the diagnosis and investigation of pandemic-related deaths. • The Coroner's questionnaire is expected to reduce the number of unnecessary autopsies. Hospitals are to address autopsy requirements as part of their business planning.

Steps	Requirements	Limiting Factors	Thunder Bay Planning for Possible Solutions / Expediting Steps
Cremation*	• Suitable vehicle for transportation from morgue to crematorium. • Availability of cremation service. • A cremation certificate.	• Capacity of crematorium /speed of process. • Availability of coroner to review and issue certificate. • Availability of ID/PHI to fulfill PH requirements.	• Crematoriums will be expected to increase hours of operation during pandemic to handle increased demand.
Embalming**	• Suitable vehicle for transportation from morgue. • Trained person. • Embalming equipment. • Suitable location.	• Funeral homes require human and physical resources. • Capacity of facility and speed of process.	• Inventories will be managed by funeral home operators. • Funeral homes will provide mutual aid if colleagues experience staffing shortages.
Funeral Service	• Appropriate location(s), casket (if not cremated), funeral director, timing, infection control measures to reduce risk of disease transmission in large gatherings.	• Thunder Bay has sufficient capacity.	• This is not anticipated to pose a problem.
Transportation to Temporary Vault or Burial Site	• Suitable vehicle and driver.	• Availability of human and physical resources.	• This is not anticipated to pose a problem.
Temporary Vault Storage	• Access to and space in a temporary vault.	• Capacity of cemeteries and mausoleums to hold bodies.	• No shortage of capacity in Thunder Bay at present.
Burial	• Grave digger, space at cemetery.	• Excess cold and snowfall in winter limit burials to larger municipal-owned cemeteries.	• Not anticipated to be a problem. May require MOH to issue an order to operate on a 7-day per week basis.

* Cremated bodies are not usually embalmed; families may choose to have a funeral service followed by cremation or to have the body cremated first and a memorial service later.

** Bodies to be buried may be embalmed and may need to be stored in a temporary vault prior to burial.

Thunder Bay Capacity Inventory For Funeral Homes

The following chart outlines Thunder Bay's *Capacity Inventory for Funeral Homes* as of September 5, 2008.

Name of Funeral Home	# of Body Bags	# of Stretchers	# of Persons Available
Everest Funeral Home	20 (light and heavy duty combined)	7	6-8 F/T, 2-4 P/T
Northwest Funeral Alternative	50	5	3
Sargeant and Son	10	3	4
Harbourview Funeral Centre	12	2	4
Jenkins	6-12	2	3 F/T, 10 P/T
Blake Funeral Chapel	12	3	5

Thunder Bay Funeral Home Contact List

The following chart outlines Thunder Bay's *Funeral Home Contact List* as of September 5, 2008.

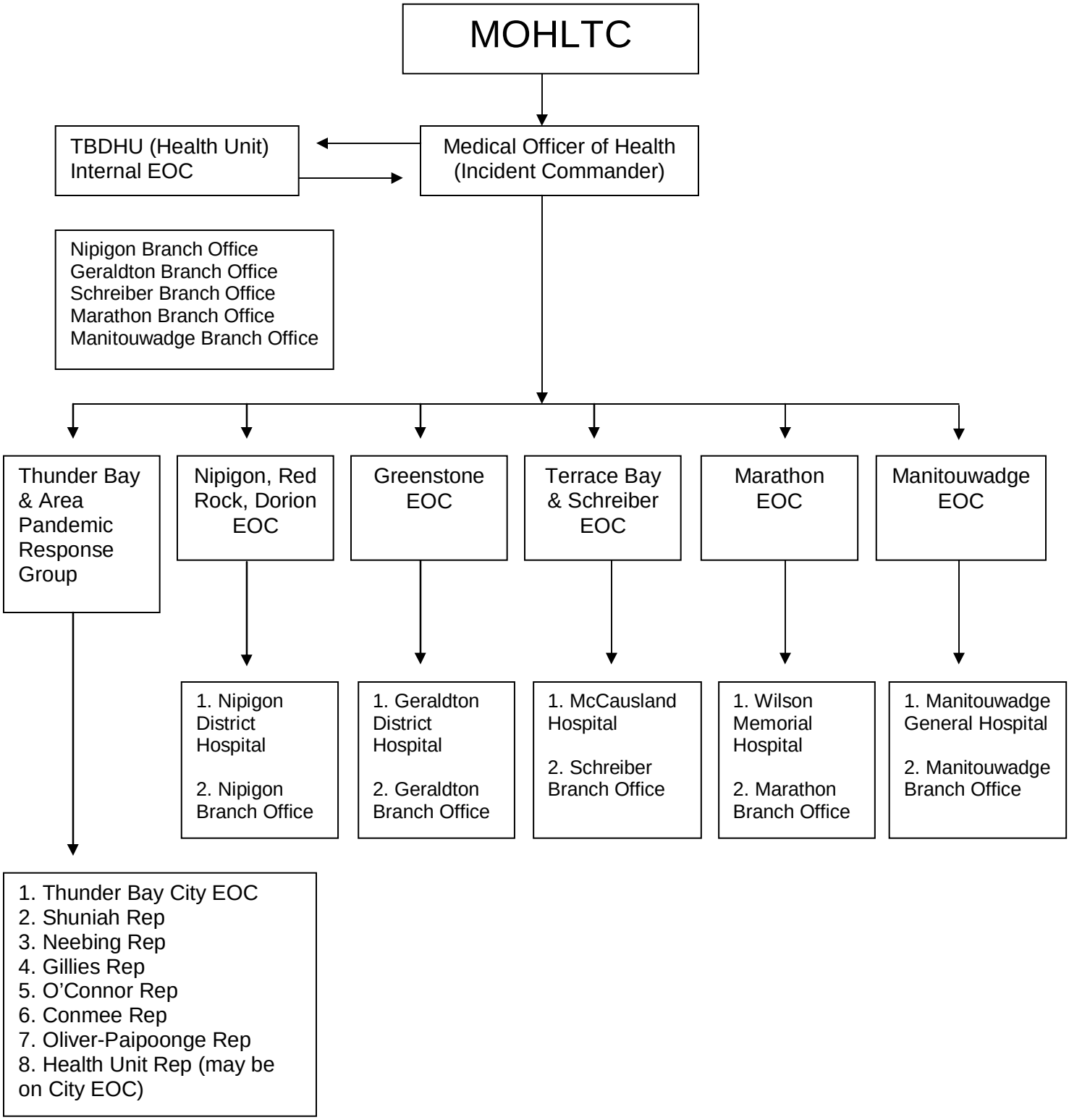
Funeral Home	Name/Position	Location/Contact Number
Everest Funeral Home	John Bryan Gardiner, Manager	299 Waverley St. Thunder Bay, ON 807-344-1121
Northwest Funeral Alt.	Joanne McNicol, Manager	331 May St. N Thunder Bay, ON 807-623-2025
Sargeant and Son	Greg Sargent, Director	21 N. Court St Thunder Bay, ON 807-345-5351
Harbourview Funeral Ctr.	Ryan Venn, Manager	499 Cumberland St. N Thunder Bay, ON 807-346-9880
Jenkins	Brent Trudell, Manager	226 Syndicate Ave, Thunder Bay, ON 807-623-3433
Blake Funeral Chapel	Joe Salini, President Craig Sandberg, Manager	200 S. May St. Thunder Bay, ON 807-623-6446

Thunder Bay Cemetery Contact List

The following chart outlines Thunder Bay's *Cemetery Contact List* as of September 5, 2008.

Cemetery	Name	Location/Contact Number
Mountain View Cemetery		Vickers Heights 807-625-3014
Riverside Cemetery & Cremation	Jim Hansen	800 Oliver Rd. 807-345-8647
St. Andrews Catholic Cemetery	Bernadette Olsen	690 Oliver Rd. 807-343-9313
Sunset Memorial Gardens & Crematorium	Richard Kehrig	204-920 Tungsten St. 807-344-1004

APPENDIX A: DISTRICT OVERVIEW



APPENDIX B: CCC TASKS

Responsibility for additional tasks to be determined by the Core Communication Committee in consultation with the TBDHU's Manager of Communications (or designate).

- Arrange meetings of the Core Communication Committee as needed.
- Ensure minutes are taken and distributed to Core Communication Committee members.
- Activate the Communications Plan under direction of the MOH and the Emergency Operations Control Group (EOCG).
- Ensure that risk communication principles are used in all contact with the public, the media and all community stakeholders.
- Compile key messages for each pandemic phase, as received from federal and provincial governments. Develop or adjust messages as needed for Thunder Bay and Area audience.
- Coordinate preparation and distribution of information for the public, including media advisories, news releases, public health alerts and public health updates under direction of MOH or Emergency Operations Control Group (EOCG).
- During Interpandemic and Pandemic Alert stages, disseminate information to the public, the media and all community stakeholders organizations as needed.
- Ensure all communication with the media is logged.
- Prepare spokesperson(s) for interviews.
- Arrange news briefings & public information sessions.
- Serve as point of contact for Ministry of Health and Long-Term Care Communications staff (e.g. attends teleconferences).
- Evaluate communications activities and response efforts; re-adjust strategies as necessary.
- Ensure the website is always up-to-date with the most current information and that web usage statistics are tracked.
- Monitor radio, television and newspaper reports as well as internet sites and devise plans to address rumours or trends from media reports.
- Help identify critical groups and the appropriate channels to reach the identified groups.