City of Brantford

Influenza Pandemic Supporting Plan

Approved By:

Emergency Management Program Committee October 2005

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City of **B**rantford **P**andemic **S**upporting **P**lan

1. Aim

The aim of the Pandemic Influenza Response Plan is to protect the life, health and safety of citizens of City of Brantford in the event of an influenza pandemic and ensure that the plan complies with the requirements of the Federal/Provincial Contingency Plans.

2. Purpose

The purpose of this *Influenza Pandemic Response Plan* is to provide a guide on how to detect and respond to an influenza pandemic. The plan describes the emergency management concepts and structure under which Brantford will operate and the roles and responsibilities of local agencies.

The Influenza Pandemic Response Plan should be read and understood prior to an influenza pandemic. The plan will also incorporate changes in response roles and improvements in response capability developed through ongoing planning efforts.

3. Authority and Custodian

This plan is published as a supporting plan to the City of Brantford Emergency Response Plan, as authorized by By-law 511; and the Emergency Management Act, R.S.O. 1990. The custodian of this plan shall be the City of Brantford Community Emergency Management Coordinator (CEMC) and Medical Officer of Health or designate, who is responsible for the annual review, revision and testing of the plan. The pandemic supporting plan will be reviewed and updated on a regular basis because of factors such as, directives from governments, changes in the development and delivery of medications, and community issues impacting the plan.

4. All Agencies and Government Roles and Responsibilities

The health authorities, local governments, local first responders agencies, social services all have roles and responsibilities in terms of developing and supporting local pandemic plans.

The Medical Officer of Health will take the lead in providing advice and counsel to local government. The Medical Officer of Health will take whatever steps are reasonably possible to suppress the disease and protect the public.

5. Background

An influenza pandemic occurs when a large number of people become ill, with the influenza virus, during the same period throughout the world. We will see large numbers of people in our community ill and large geographical areas will be affected simultaneously. The emergency will last about six to eight weeks. In previous pandemics the very young and old in addition to the twenty to forty year olds were

affected. The occurrence of the pandemic will seriously compromise the life, health, and safety of our community.

Second Wave. *After the number of cases of influenza falls and the pandemic appears to be ending, typically a second wave of cases occurs within several months.*

All agencies and health care providers must make use of the interim period to prepare for a resurgence of disease. This includes addressing shortfalls in supplies and personnel.

6. Legislation

Emergency management in Ontario is governed by the Emergency Management Act, RSO, 1990, Chapter E. 9. Administration of the Act is assigned to the Solicitor General under whom the Chief of Emergency Management Ontario is responsible to coordinate, monitor and assist in the development and implementation of emergency management programs. He/She ensures those programs are coordinated with the emergency management programs and plans of the Government of Canada and its agencies. By Order in Council under the Act, the Ministry of Health and Long-Term Care (MOHLTC) is designated with lead responsibility for the provision of emergency health services, control of epidemics and response to large-scale adverse human health events.

7. Planning Assumptions

At the time of the pandemic, decisions and actions of international, federal and provincial levels of government will likely influence the implementation of this plan.

The overall provincial response during a declared provincial emergency will be managed from the Provincial Operations Centre.

7.1 The Course of an Influenza Pandemic

a. Ontario will have a lead time of at most three months, and possibly less, between when a pandemic is first declared by WHO and when it spreads to the province.
b. Pandemics influenza usually spreads in two or more waves, either in the same year or in successive influenza seasons. A second wave may occur within three to nine months of the initial outbreak wave and may cause more serious illness and death than the first. In any locality, the length of each wave of illness.

7.2 Surveillance Assumptions

c. Identification of a novel strain of influenza anywhere else in the world will heighten surveillance activities in Brantford.
d. During a pandemic, Health Canada and the Ministry of Health and Long-Term Care will establish and adjust testing criteria according to the epidemiology of the pandemic.

7.3 Access to Vaccines/anti-virals Assumptions

e. A vaccine will not be available for three to four months after the virus is identified, and will likely not be available for the first wave.
f. Anti-virals may be used during a pandemic prior to an effective vaccine becoming available.
g. During a pandemic, the federal and/or provincial government will release anti-virals to Brant County Health Unit for distribution.
h. In case of a pandemic, the domestic supplier guarantees to manufacture 8 million monovalent doses, per month, for a period of 4 months starting within 3 –4 months after receipt of the pandemic seed strain for Canada.
i. Once available, the vaccine will be in short supply and high demand. It will not be sufficient to immunize the whole population.
j. Because Ontario will not have a large enough initial supply to immunize everyone, Brantford will have to set priorities for who receives limited vaccines and antiviral drugs (see Appendix 2).
k. Priority groups in the Ontario pandemic plan will be first to receive the antiviral drug to maintain essential infrastructure of the community.

7.4 Emergency Measures Assumptions

l. An influenza will be widespread throughout Brantford.
m. The ability to maintain critical community services will be at risk due to widespread absenteeism in the workplace.
n. Local health care providers will be quickly overwhelmed.

7.5 Communication Assumptions

o. Centralizing the release of public information relating to the pandemic as it is happening locally will lessen confusion for the public.

7.6 System Resources Assumptions

p. During a pandemic, the availability of health care workers could be reduced by up to one-third due to illness.
q. Pandemic response is a responsibility shared across the health care and community services sector. Therefore, respective stakeholder agencies will develop and maintain complementary pandemic influenza response plans.
r. Unlike most other emergency scenarios, a pandemic will not be a localized phenomenon and resources of all communities will be simultaneously strained. Therefore, The City of Brantford must be able to demonstrate some amount of self-sufficiency.

8. Planning Stages/Focus

Planning for an influenza is divided into three stages: preparedness, response and recovery.

The WHO (World Health Organization) has identified the following phases of an influenza pandemic. Canada, Ontario and Brantford have adopted these phases to help guide contingency planning and preparedness.

Phase	Description
Interpandemic Period: Phase 1	No new influenza virus subtype have been detected in humans
Interpandemic Period: Phase 2	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 spread to a close contact only.
Pandemic Alert Period: Phase 4	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that a virus is not well adapted to humans.
Pandemic Alert Period: Phase 5	Larger cluster(s) but human-to-human spread still localized suggesting that a virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.
Pandemic Period: Phase 6 - 1	Increased and sustained transmission in general population
Pandemic Period: Phase 6 - 2	Regional and multi-regional epidemics
Pandemic Period – Phase 6 – 3	End of first wave; pandemic subsiding
Postpandemic Period – return to Phase 1	

9. Activation of the Pandemic Influenza Response Plan

The Medical Officer of Health or alternate may activate this plan when:

(a) An influenza pandemic is declared by the Ministry of Health and Long-Term Care (MOHLTC).

Or

(b) A local case(s) or outbreak of the pandemic strain of influenza is confirmed. This occurrence and the expected impact of illness in the population will require the coordinated efforts of most of the health department's staff and resources.

In the event that activation of the Pandemic Influenza Response Plan becomes probable the emergency notification system may be initiated prior to activating the Plan.

This plan may be implemented in whole or part, as required, by the City of Brantford Emergency Operational Advisory Group with or without the declaration of an emergency by the Head of Council. This plan may be activated through notification by the Brant County Health Unit.

The Medical Officer of Health shall activate the Health Unit's Emergency Plan in conjunction with Brantford's Pandemic Influenza Response Plan.

10. Emergency Notification

a) In the event a pandemic influenza is declared in Ontario, the Medical Officer of Health or alternate will be notified by the Chief Medical Officer of Health for Ontario or designate.
b) Upon notification of a declared influenza pandemic in Ontario, the Medical Officer of Health or his alternate shall notify the Brantford Police Services to activate the Notification Fan-out List (Schedule A of the City Emergency Response Plan).
c) Upon implementation, all participating agencies/departments will respond in accordance with the procedures described within this plan.

11. Response Activities By Phase

The following sections will outline the major activities that will take place by the Health Unit and local agencies during an influenza pandemic. The information is organized according to the following stages:

a) Preparedness
b) Response
c) Recovery

The strategies are further divided into phases:

a) Surveillance
b) Vaccines/Anti-virals
c) Health Services
d) Emergency Response
e) Public Health Measures
f) Communications

12. Preparedness

Preparedness planning is essential to ensure that all parts of the health care system and other systems/organizations (as required) have in place the watching/early warning systems and procedures that will allow to identify an influenza pandemic early and take steps to contain its spread and minimize its impact. Preparedness planning is undertaken before there is any known case.

12.1 Surveillance

The pandemic surveillance response is built entirely on the principles of inter-pandemic influenza surveillance. The Health Unit, in conjunction with local stakeholders, has established surveillance procedures for early identification of a novel virus in the community. As a minimum, surveillance system will include:

12.1.1 Brantford

a. Brantford County Health Unit On-going Normal operations.
b. Disease surveillance (influenza is a reported disease).
c. Surveillance activities conducted by the Brant County Health Unit will comply with requirements described in the Ontario Health Pandemic Plan.
d. These requirements are supported by:
    i. existing outbreaks surveillance links between the Health Unit and local health/long term care facilities and school boards; and
    ii. enhanced outbreak surveillance tools currently under development by Ontario Ministry of Health and Health Canada.

12.1.2 Ontario

Surveillance is the means by which Ontario will track the epidemiology, spread and impact of influenza. Ontario's surveillance program attempts to balance the need for information with the capacity of stakeholders to collect and submit information.

Ontario has designated 15 virus laboratories in the Province to participate in the influenza surveillance, including:

- the health laboratories in Toronto, Kingston, Timmins, Windsor, Thunder Bay, Sault Ste. Marie, Orillia, Ottawa, Peterborough and Hamilton; and
- Hospital-based laboratories at Children's Hospital of Eastern Ontario (Ottawa), the Toronto Medical laboratory, the Hospital for Sick Children (Toronto) and St Joseph's Hospital (London).

The integrated Public Health Information System (iPHIS) for public health reporting and surveillance in Ontario will play a major role especially in the interpandemic and pandemic alert phases.

12.2 Vaccines/Anti-virals

12.2.1 Vaccines

Vaccines are the primary means to prevent disease and death from influenza during an epidemic or pandemic. The Health Unit, through the Communicable Disease Control Services, is responsible to ensure the promotion of vaccines and to manage cases of vaccine preventable illness.

12.2.2 Anti-virals

Anti-virals (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. At this time, there is no evidence that putting large population of Canadians on prophylactic anti-virals will slow or stop the spread of this disease, although antiviral drugs may be an important option for maintaining essential services until a vaccine becomes available.

12.2.3 Preparedness vaccine activities will include:

a. In conjunction with the Brant County Health Unit, the City of Brantford has developed and will maintain a strategy for rapid distribution/administration of antiviral drugs to groups defined as high priority by the MOHLTC (see appendix 3).
b. In conjunction with the Brant County Health Unit, City Departments have included the strategy for rapid distribution/administration of antiviral drugs and vaccines in their Department Pandemic Plans (refer to City Department Plans).
c. Brant County Health Unit & City of Brantford will project human and material resource needs. (Working on)
d. Brant County Health Unit has developed a data management system to track distribution of antiviral drugs and vaccines.
e. City Department Pandemic Plans have identified the use of the generic form to track the process of antivirals distribution within the corporation (see appendix 3).
f. Brant County Health Unit has developed procedures for acquisition, transportation, storage, security, and delivery of vaccine and antiviral drugs.
g. The Brant County Health Unit has established procedures to secure and utilize refrigerated depots for storage of vaccines and other influenza related pharmaceuticals, as well as vehicles for their distribution to selected sites for administration.
h. Based on recommendations in the Canadian and Ontario Pandemic Influenza Plan, City of Brantford has developed a corporate wide priority list for vaccines and antiviral drugs during a pandemic. (see appendix 2). At the time of a pandemic, the priorities will be modified if necessary to reflect the epidemiological features of a pandemic, population susceptibility and vaccine/anti-virals availability. Immunization will be strongly encouraged and promoted in priority groups.
i. The province is in the process of developing an effective antiviral strategy which addresses the key issues of supply, distribution, surveillance, priority groups, clinical guidelines for the use of antiviral drugs, communication/education materials and monitoring efficacy, resistance and adverse events.
j. Priorities for the distribution of antiviral drugs have been established in conjunction with Health Canada and the Ontario MOHLTC. The suggested allocation will be aimed at:
    - Maintaining the health of workers in essential services;
    - Protecting individuals from infection and/or serious illness; and
    - Preventing or minimizing the spread of infection.

k. Despite questions of supply, it is prudent to consider the possibility of large-scale immunization and/or antiviral distribution. It has been estimated that:
    - The Brant County Health Unit has the capacity to securely store at least 50,000 doses of influenza vaccine or courses of anti-viral drug; and
    - Health Unit staff are capable of immunizing or providing antiviral drugs to the estimated 2,000 individuals need to carry out/maintain emergency and core essential services in one day. The priority groups requiring immunization or prophylaxis are listed in the Ontario Health Pandemic Plan.

12.3 Health Services

During a pandemic, demand for some kinds of care will increase and services will be overwhelmed.

a. Ontario has taken some steps to improve its overall emergency preparedness, including:
    - Establishing screening and surveillance programs for febrile respiratory illness (FRI) in all health care settings;
    - Purchasing and equipping a 56-bed mobile hospital that can be anywhere along the province's road network within 24 hours(EMAT); and
    - Maintaining a stockpile of gowns, surgical masks and N95 respirators, gloves, goggles and hand wash consistent with personal protective precautions required during SARS and other outbreaks of agents transmitted by droplet and establishing a province-wide hospital distribution system for these supplies when inventories are exhausted.

12.4 Emergency Response

The Brant County Health Unit will lead the response to an influenza pandemic, emergency responders and necessary community services workers (i.e. police, fire services, mortuary workers, emergency medical services, hospital and utility workers) will play a critical role in the overall emergency response and should be involved in all levels of pandemic planning.

12.4.1 Preparedness Activities

The preparedness activities include:

a. Brant County Health Unit and CEMC have established ongoing communication with local agencies for the purpose of:
    i. Assisting individual agencies/departments to develop contingency plans;
    ii. Identifying essential services;
    iii. Assisting with impact assessment of local primary and secondary health care capacity;
    iv. Encouraging collaboration between emergency services personnel and health unit with coordination of a pandemic response plan; and

v. Establishing a continuous state of “readiness” through ongoing education, testing and updating of response plans.

b. Brant County Health Unit has met with medical, public health and emergency response partners to develop prioritization plan for distribution/administration of vaccines.
c. Brant County Health Unit has a plan in place for surveillance in an influenza pandemic. The Brant County Health Unit plan includes the same components as the province plan (see Brant County Health Unit Plan).
d. Brant County Health Unit and CEMC have promoted development of plans for committing needed resources, services and personnel for pandemic response by other agencies, including private providers (e.g. funeral homes, cemeteries).
e. Brant County Health Unit has selected a site(s) for alternate health care. Alternate care sites are temporary health care sites that could be opened during a pandemic influenza to deal with the overflow of patients seeking medical attention (see appendix 9). Based on equipment availability from the province.
f. Brant County Health Unit has developed strategies for mass immunization clinics. (facilities, staffing, education, marketing, security, etc.) (refer to Brant County Health Unit Plan).
g. Emergency Management Program Committee has identified essential community services (see section 11.1)
h. City of Brantford Departments identified services that could be reduced or consolidated during a pandemic.
    i. Consultations have been held with emergency services and City Departments. Each Department has developed and will maintain a Departmental Pandemic Plan (see individual Department Pandemic Plans).
i. Brant County Health Unit has assessed the surge capacity of hospitals, alternative care sites and other facilities (see Brant County Health Unit Plan and appendix 8).
j. Brant County Health Unit will be responsible for coordinating the distribution of antiviral drug and vaccines (see appendix 3).
k. Brant County Health Unit and the Emergency Management Program Committee have projected numbers of people who may fall within priority groups for antiviral drugs and immunization (see annex 2).
l. Brant County Health Unit will identify volunteer organizations that could assist during a pandemic emergencies (refer to Brant County Health Unit Plan).
m. Social Services will develop a contingency plan to deal with children whose parents and/or family are unable to care for them either on a temporary or permanent basis (see Social Services Pandemic Plan).
n. Social Services in conjunction with Brant County Health Unit to develop contingency plan for delivery of food to people confined to their homes (refer Social Services Pandemic Plan).
o. Public Works Department to maintain an adequate supply of fuel for those delivering supplies to people confined to their home.

12.5 Communications

Communication will be the key to managing an influenza outbreak. The Health Unit must be able to communicate clearly with the public; provide consistent messages; and explain what is being done and what the public can do. Media attention will be intense and information demands will continue over several months. Sustaining public confidence over that time will be a challenge.

Brant County Health Unit will deliver pandemic information to the public pre-pandemic.

12.5.1 Communication preparedness activities include:

a. Developed channels of communication to the public and media (refer to Emergency Information Plan).
b. Medical Officer of Health or designate will be the primary spokesperson during a pandemic.
c. Brant County Health Unit has developed channels of communication with health care providers, health care stakeholders (see Brant County Health Unit Plan).
d. Emergency Information Plan has integrated multi-channel communication strategies that will provide access to timely, frequent, reassuring on consistent messages.
e. Developed and will maintain a communication strategy for the dissemination of timely and accurate information as part of the pandemic influenza response plan (refer to Emergency Information Plan).
f. Circulated copies of the City of Brantford Pandemic Influenza Supporting Plan to stakeholders.
g. Brant County Health Unit and CEMC delivered presentations to key targeted groups and stakeholders to deliver pandemic information/background.

13. Response

If an influenza pandemic occurs, it is likely to affect some parts of Ontario before others. The decision to declare a pandemic will trigger the implementation of the plans, strategies and systems developed during the preparedness stage, as well as ongoing monitoring of those plans and their impact. Response measures will be affected by the epidemiology of the pandemic nationally and globally, the age distribution and severity of the illness, and the efficiency of transmission from human to human. The pandemic response phase may be prolonged, depending on the number of waves and the interval between the waves.

Health and emergency planners at both the provincial and local levels will have to determine which “phases” their jurisdiction is in, so as to respond appropriately.

The command and control structure found in the City of Brantford Emergency Plan will be used to respond to pandemic influenza.

13.1 Minimal Services

Listed below are the minimal services we shall maintain throughout the response phase, if possible. Each department will follow their scale back plans ensuring that essential services identified are maintained during an influenza pandemic.

a. Water Sewage
b. Water Treatment
c. Police Services
d. Fire Services
e. Brantford Power
f. Gas
g. Snow Clearing
h. Landfill (solid waste)
i. Cemeteries
j. IT Services
k. Finance
l. Legal
m. Human Resources
n. Clerks and Council support
o. Social Services
p. Fleet
q. Public Works
r. Transit

13.2 Surveillance

Information on all sporadic cases of influenza is currently being stored in the Provincially mandated Reportable Disease Information System (RDIS), which contains reportable communicable disease data that go back to 1990. The existing surveillance programs will be augmented when the Provincial /Federal Government indicates that a pandemic threat exists. Usually 1-4 months warning will be given prior to a pandemic causing outbreaks of flu locally.

13.2.1 Brantford's surveillance response activities include:

a. The Brant County Health Unit will use the integrated Public Health Information System (iPHIS). The iPHIS is for public health reporting and surveillance in Ontario and will play a major role especially in the inter-pandemic and pandemic alert phases. This near real-time reporting will enable health units and MOHLTC to recognize and trace the path of influenza outbreaks more quickly.
b. When an influenza pandemic is declared the Brant County Health Unit in conjunction with local stakeholders will implement enhanced sentinel surveillance activities including:

i. Sentinel workplaces in the City of Brantford to report, daily, the number of staff absent. The number absent will be reported as a percentage of total workforce;
ii. The sentinel schools located in the City of Brantford will report, daily, the rate of absenteeism of students and staff. The number absent would be reported as a percentage of total enrollment and staff. In addition, Daycare facilities in Brantford will report, daily, the rate of absenteeism of students and staff; and
iii. The daily reports will be recorded by the Health Unit on a flow sheet and will be available, for information, to the Emergency Operations Advisory Group.

c. Other Surveillance Procedures will include daily reports of influenza activity in the Province of Ontario, Canada and other countries. Examples will include:
   - Ontario Ministry of Health Public Health Epidemiological Reports of Ontario.
   - Morbidity and Mortality Weekly Report from the Centre for Disease Control, USA.
   - Bi-weekly Canadian Communicable Disease Report from the Laboratory Centre for Disease Control, Ottawa.
   - World Health Organization Weekly Epidemiological Report.
d. Collaborating with local stakeholders to review enhanced surveillance activities and modify plan as needed.

13.2.2 Ontario surveillance during the pandemic

During a pandemic, Ontario's response will be based on local "triggers" which may or may not correspond to the global situation (i.e., Ontario may be in a different phase than other parts of the world or even other parts of Canada).

13.3 Vaccine and Antiviral Drugs

It is unlikely that a vaccine will be available until 6-9 months after the pandemic has been declared. However, limited quantities of antiviral drugs, if proven effective against the particular strain of virus, may be available immediately.

13.3.1 Vaccine/antiviral response activities will include:

a. The Province will allocate vaccine/antiviral drugs to the Brant County Health Unit.
b. The Brant County Health Unit will distribute antiviral drugs under the direction of the Province. Antiviral drugs may be distributed to pharmacies or physicians as directed by the Province.
c. Brant County Health Unit will store the vaccine in a secured refrigeration unit at temperatures between 2° and 8° C.
d. Vaccine/antiviral drug will be maintained and transported by the Brant County Health Unit according to Ministry of Health guidelines.
e. The Brantford Police Service will provide storage and security for the antiviral drugs at Police Headquarters.

f. Brantford Police Service will provide security for transportation of vaccine and antiviral drug to departments and clinics.
g. Inventory of antiviral drugs/vaccines will be maintained by the Brant County Health Unit.
h. The Health Unit will deliver the antiviral drugs to departments weekly and the departments will distribute antiviral drugs to employees (see Department Pandemic Plans).
i. Once pandemic influenza vaccine is available, the Brant County Health Unit will implement the mass immunization campaign including:
    - Obtaining necessary supplies and equipment;
    - Ensuring security and integrity of the vaccine supply;
    - Overseeing the distribution of vaccine;
    - Monitoring immunization coverage of the priority groups;
    - Setting up mass immunization clinics. (Facilities, staffing, education, marketing, security, etc.);
    - Clinics will be organized and publicized by the Health Unit;
    - If clinics are implemented, health unit staff and additional nursing staff will staff them. The Health Unit will train additional staffing;
    - Clinics could be held at work sites of high priority groups; and
    - If directed by the Ministry, Brant County Health Unit will determine locations for clinics for the general public (schools, malls, arenas, workplaces, libraries, pharmacies, family physician offices, etc).
j. Brant County Health Unit will implement protocols for data maintenance, logistics etc. for vaccine clinics.
    - The Immunization Record Information System (IPHIS) and patient charts will be used to maintain vaccination records. Supplies that may be used at each clinic will include, vaccine, syringes, anaphylactic kits, band aids, garbage bags, cotton balls, alcohol swabs, consent forms, immunization records, wash cloths, and disposable cups (see Brant County Health Units Emergency Plan).
k. The Health Unit will develop and implement a protocol for monitoring and reporting all adverse events.
    - Health Unit staff will prepare an adverse vaccine reaction form for quick and easy completion by any health care worker. The case definition for adverse vaccine events will be on the form. Clear instructions on how and when to complete the form will be prepared. The forms will be distributed to all physicians, health care facilities and nursing staff administering the influenza vaccine. Health care workers will be asked to fax the adverse vaccine forms to the Health Unit upon completion. Health Unit staff will enter relevant data from the forms into the RDIS for transmission to the Ministry of Health.

13.4 Public Health Measures

In a pandemic, the goal of public health measures or interventions would be to slow the spread of the infection in the community, as much as possible, in order to gain time to develop a vaccine. International and national discussions have concluded that disease containment is not a realistic goal.

13.5 Emergency Response

Upon declaration of an influenza pandemic, it is imperative that essential services, public safety and security be maintained. Depending on the severity of local impact, municipal emergency plans may be activated to support communication among municipal agencies.

Brant County Health Unit is on the front lines of responding to a pandemic. They are the ones who will announce the arrival of an influenza pandemic and who will have the powers and measures that can be used to help manage the pandemic.

13.5.1 Emergency Response activities will include:

a. A communication link will be established between the Health Unit and City of Brantford's Emergency Operations Centre (EOC). The Brant County Health Unit will relay information to the City of Brantford's EOC in order to provide consistent information.
b. The Brant County Health Unit will receive updates daily from the Province during a pandemic. We will set our Emergency Operations Advisory Group (EOAG) meeting cycles in conjunction with the provincial plans meeting cycle (see appendix 4).
c. Activation of the City's emergency plan in support of a pandemic emergency.
    - Given that Pandemic Influenza is a health issue; the Brant County Health Unit will assume the primary role in this emergency. The Health Unit will provide updates to the Emergency Operations Advisory Group prior to activation of emergency plans and will ultimately recommend activation of emergency plans when the circumstances are appropriate.
d. Brant County Health Unit will report on the activation of other contingency plans to ensure medical and other essential life-support services (example hospital, Long term-care facilities).
e. The Police Services will implement security measures at key locations such as the EOC, vaccine/antiviral storage, clinic facilities and hospitals etc.
f. The Brant County Health Unit will make recommendations for case and contact managements measures, isolate and home quarantines, individual activity restriction and the use of personal protective equipment. Including community disease containment strategies and guidelines for measures such as canceling public gatherings and closing hospitals/schools.
g. Social Services will open and manage emergency sites for housing, childcare and emergency feeding areas.

h. Social Services will provide food needs to persons confined to their homes.
i. Social Services will coordinate the care of animals due to the owners becoming ill or deceased.
j. The Brant County Health Unit will implement mass vaccination clinics and other related activities, including the set-up of clinics and security of the vaccines.
k. The EOAG may need to determine the use of external facilities to augment mortuaries during a pandemic (see appendix 7).
l. The EOAG may need to determine the means of transportation of corpse (see appendix 7).
m. The Mayor may declare a State of Emergency.
n. Brant County Health Unit will determine various site(s) as an alternate hospital in the event that Brantford General Hospital is overwhelmed (see Brant County Health Unit Plan).
o. The EOAG may need to provide staff for some duties in alternate care site(s). Some duties may include but not limited to set up facilities, cleaning facilities, garbage collection and distributing food etc.
p. The Brant County Health Unit will implement procedures for recognized volunteer organizations for alternate care sites.
    i. Volunteers will be used to assist in the alternate care site. Duties include setting-up, cleaning up, collecting consents, directing clients and groups of people, distributing beverages, distributing consents, distributing posters etc.
q. The EOAG may activate the City of Brantford's Departmental Pandemic Plans to maintain essential services in Brantford, e.g. Fire, Police and Ambulance services (refer to section 11.1 and Departmental Pandemic Plans).
r. Brantford's EOC will co-ordinate with provincial/federal or other municipality emergency measures structures regarding pandemic emergency measures.
s. The Brant County Health Unit and Brantford General Hospital will implement triage management and determine the use of external facilities for alternate medical care (alternate care sites). Based on equipment availability from the province.

13.6 Communication

Upon the declaration of an influenza pandemic, the need for accurate, relevant and timely information to the general public, media and health care providers becomes significant.

The content of the messages will be determined when specifics of the pandemic become available. It is very important that there is provincial coordination of content so that similar information is disseminated. It is also important that messages not be sent too early or people may become overloaded with information and may tune the messages out.

The Brant County Health Unit will receive updates daily from the Province during a pandemic. We will set our EOAG meeting cycles in conjunction with the provincial plans meeting cycle (see appendix 4).

13.6.1 Communication response activities will include:

a. Activating the Emergency Information Plan for maintaining public confidence.
    i. The activation of the Emergency Operations Advisory Group provides the Emergency Information Officer the resources to operate the Public Inquiry Centre and the Media Centre, both vital links to communicating with the public.
    ii. The Emergency Information Plan includes a variety of communication vehicles examples – website updates, press releases, press conferences public inquiry centre phone lines etc.
b. The Emergency Information Officer will open the Public Inquiry Centre to address any City service inquires.
c. The Emergency Information Officer will establish regular press briefings at the Emergency Information Centre. He/She will set the press conferences in conjunction with the province press conferences, if possible.
d. Medical Officer of Health will advise City departments, hospitals, other health care facilities and school boards to activate their internal emergency response plans.
e. The Brant County Health Unit will work with the MOHLTC to provide consistent messages and provide real-time information.
f. Emergency Information Officer will provide information to the public on possible decreased or suspended city services.
g. Ministry of Health and Long Term Care will develop educational material concerning influenza, vaccines and anti-viral drugs. Information concerning preventative and protective measures will also be developed for distribution.
h. Medical Officer of Health may hold regular briefing for key stakeholders.
i. The Medical Officer of Health will provide information to the Emergency Information Officer to educate the public.
    i. Information on influenza disease, including prevention;
    ii. Dates and locations of clinics;
    iii. Information on influenza vaccine;
    iv. Educational material regarding “self-care” and reducing the spread of influenza (see Emergency Information Plan).
j. The City’s Emergency Information Plan and appendix 10 of this plan has educational material regarding “self-care” and reducing the spread of influenza during a pandemic. Examples:
    1. frequently wash your hands with soap and water;
    2. do not share towels;
    3. do not share drinks or eating utensils;
    4. use disposable tissues (not handkerchiefs);
    5. dispose of contaminated tissues appropriately;
    6. get the influenza vaccine, if available;
    7. minimize your contact with ill individuals;
    8. try to keep ill individuals away from infants and elderly if you are a caregiver of an ill person;
    9. get lots of rest and adequate nutrition;

10. clean and sanitize contaminated surfaces (washrooms, kitchens, telephones, etc.);
11. watch for symptoms of influenza;
12. get antiviral drugs as recommended by physician to ill individuals or contacts of ill individuals, if available;
13. cover mouth when coughing
14. designate a healthy person to prepare and serve food, if possible; and
15. stay home if symptoms of influenza initiate

k. In addition to the above, it is anticipated that the Federal and Provincial Ministries of Health will develop and distribute more information.

14. Recovery

The recovery stage begins when the WHO or MOHLTC declares an end to the pandemic, and involves activities designed to help communities return to their pre-pandemic state.

14.1 Surveillance recovery activities will include:

a. Evaluate pandemic surveillance systems.
b. Revising surveillance sections of pandemic plan, based on the evaluation.
c. Return to preparedness surveillance activities.

14.2 Anti-virals/Vaccine recovery activities include:

a. Evaluate pandemic antiviral administration plan.
b. Return to preparedness antiviral/vaccine activities.

14.3 Emergency Measures recovery activities include:

a. Evaluate the emergency response and revise.
b. Assessing impact of the pandemic on the local health care system.
c. Assess remaining resources and supplies and re-establish to normal inventories.
d. Facilitate access to stress/grief counseling.
e. Evaluating effectiveness of the pandemic influenza response plan revise as necessary.
f. Assessing staffing shortages and other economic issues.

14.4 Communication recovery activities include:

a. Stand down the Public Inquiry Centre.
b. Medical Officer of Health and/or Emergency Information Officer will be the recovery media spokesperson.
c. Develop a recovery media release for dissemination to media.

15. Agency/Departments Roles and Responsibilities:

15.1 Health Unit

Preparedness activities:

a. Develop procedures to secure and store vaccines and other influenza-related pharmaceuticals, as well as vehicles for their distribution to selected sites for administration and record system to track shipments.
b. Disease and surveillance activities.
c. Project numbers of people who may fall within priority groups.
d. Develop a data management system to track processes of anti-irals and vaccines.
e. Maintaining communication with individual agencies/departments with respect to pandemic planning activities.
f. Identify volunteer organizations that could assist during a pandemic emergency.
g. Develop a contingency plan to maintain essential services to deal with situations of significant staff absenteeism and response to a pandemic.

Response activities:

a. Serve as the primary agency.
b. Providing advise, expertise and staff resources towards identification, monitoring and controlling communicable diseases.
c. Surveillance procedures which include:
    - Monitor and track daily number of cases reported of flu-like illness and pneumonia and number of deaths occurring daily;
    - Monitor and track the daily number of influenza viral lab tests performed; and
    - Monitor and track absenteeism from schools and departments/agencies in Brantford.
d. Implement data management system to track and monitor daily usage of specific anti-flu medications.
e. Implement procedures for distribution and administration of vaccine.
f. Establish and set up vaccine clinics.
g. Develop education material and community advisories on public health issues.
h. Liaison with Social Services in setting up an alternate health care site(s).
i. Acting as the coordinating link for all health services agencies, including the MOHLTC, in responding to the emergency.
j. Adopting measures to prevent the spread of the outbreak.
k. Implementing department's pandemic plan.

Recovery activities:

a. Evaluate pandemic influenza response plan revise as necessary.
b. Return to preparedness activities.

15.2 Police Services

Preparedness activities:

a. Develop a contingency plan to maintain essential services to deal with situations of significant staff absenteeism and response to a pandemic.
b. Encourage agency personnel to receive annual influenza vaccine.
c. Ensure all essential positions are backed up with an alternate.
d. Reviewing contingency and pandemic response plans with all staff.

Response activities:

a. Providing security for the vaccine/anti-virals during storage and transportation and liaising with the Health Unit on matters related to the security of the vaccine/anti-virals.
b. Providing the security of the vaccination clinics, as required and as feasible.
c. Maintaining essential services.
d. Adopting measures to prevent the spread of the outbreak.
e. Implementing department's pandemic plan.

Recovery activities

a. Evaluate pandemic influenza response plan revise as necessary.
b. Return to preparedness activities.
c. Assess ability to resume normal operations.

15.3 Engineering, Public Works, Parks and Recreation

Preparedness activities:

a. Develop a contingency plan to maintain essential services to deal with situations of significant staff absenteeism and response to a pandemic.
e. Encourage agency personnel to receive annual influenza vaccine.
b. Ensure all essential positions are backed up with an alternate.

Response activities:

a. Providing cemeteries duties.
b. Assisting with the set-up and other duties of "alternate health care" sites.
c. Maintain an adequate supply of gasoline for those delivering supplies to people confined to their home.
d. Maintaining essential services.
e. Ensuring transportation is available to those individuals unable to transport themselves to access treatment.
f. Assign staff/crews to assist local funeral homes with tasks associated with burial and/or cremation.
g. Adopting measures to prevent the spread of the outbreak.
h. Implementing department's pandemic plan. .

Recovery activities

a. Evaluate pandemic influenza response plan revise as necessary.
b. Assess ability to resume normal operations.
c. Return to preparedness activities.

15.4 Fire Department

Preparedness activities:

a. Develop a contingency plan to maintain essential services to deal with situations of significant staff absenteeism and response to a pandemic.
b. Encourage agency personnel to receive annual influenza vaccine.
c. Ensure all essential positions are backed up with an alternate.

Response activities:

a. Provide fire protection services.
b. Providing emergency medical services.
c. Providing assistance at mass emergency field site operations (if applicable).
d. Coordinating staff resources to accommodate shortage.
e. Provide appropriate support to other related agencies in staffing crisis, where needed
f. Maintaining essential services.
g. Adopting measures to prevent the spread of the outbreak.
h. Implementing department's pandemic plan.

Recovery activities

a. Evaluate pandemic influenza response plan revise as necessary.
b. Assess ability to resume normal operations.
c. Return to preparedness activities.

15.5 Ambulance Service

Preparedness activities:

a. Develop a contingency plan to maintain essential services to deal with situations of significant staff absenteeism and response to a pandemic.
b. Encourage agency personnel to receive annual influenza vaccine.
c. Ensure all essential positions are backed up with an alternate.

Response activities:

a. Transporting the ill and injured to a medical facility.
b. Prioritization of patients for transportation during a pandemic.
c. Coordinating with other agencies in the distribution of the ill.
d. Maintaining liaison with Central Ambulance Communication centre in the appropriate distribution of patients.
e. Providing assistance at mass emergency field site operations (if applicable)
f. Coordinating staff resources to accommodate shortage.

g. Provide appropriate support to other related agencies in staffing crisis, where needed.
h. Assisting with the set-up of “alternate health care” sites.
i. Maintaining essential services.
j. Adopting measures to prevent the spread of the outbreak.
k. Implementing department’s pandemic plan.

Recovery activities
a. Evaluate pandemic influenza response plan revise as necessary.
b. Assess ability to resume normal operations.
c. Return to preparedness activities.

15.6 Social Services

Preparedness activities:
a. Develop a contingency plan to maintain essential services to deal with situations of significant staff absenteeism and response to a pandemic.
b. Encourage agency personnel to receive annual influenza vaccine.
c. Ensure all essential positions are backed up with an alternate.
d. Develop procedures to provide food and supplies to people confined to their home.

Response activities:
a. Establish and set up a reception and inquiry centre.
b. Opening and managing emergency sites for housing, child care, home care and emergency feeding areas including responding to the needs of persons confined to their homes.
c. Develop local contingency plans to:
    - Provide food and other emergency services for people confined in their homes; and
    - Ensure adequate supplies of food.
d. Providing coordination and direction to the various volunteer groups identified on the plan.
e. Provide food and supplies distribution services for citizens that are unable to leave their home.
f. Coordinate the care of animals due to the owners becoming ill or deceased.
g. Provide food and shelter for children that are unable to be taken care by family due to illness.
h. Maintaining essential services.
i. Adopting measures to prevent the spread of the outbreak.
j. Implementing department’s pandemic plan.

Recovery activities
a. Evaluate pandemic influenza response plan revise as necessary.
b. Assess ability to resume normal operations.
c. Return to preparedness activities.

15.7 Brantford Power and Union Gas

Preparedness activities:

a. Develop a contingency plan to maintain essential services to deal with situations of significant staff absenteeism and response to a pandemic.
b. Encourage agency personnel to receive annual influenza vaccine.
c. Ensure all essential positions are backed up with an alternate.

Response activities:

a. Adopting measures to prevent the spread of the outbreak.
b. Maintaining essential services.
c. Implementing department's pandemic plan. .

Recovery activities

a. Evaluate pandemic influenza response plan revise as necessary.
b. Assess ability to resume normal operations.
c. Return to preparedness activities.

15.8 Hospitals

Preparedness activities:

a. Develop a contingency plan to maintain essential services to deal with situations of significant staff absenteeism and response to a pandemic.
b. Encourage agency personnel to receive annual influenza vaccine.
c. Ensure all essential positions are backed up with an alternate.

Response activities:

a. Activating the Hospital's Emergency Plan and Pandemic Plan.
b. Providing updates to the EOAG on matters pertaining to emergency health care.
c. Ensuring hospital facilities are prepared to prevent the spread of influenza contamination.
d. Working and assisting to establish alternate health care sites as required.
e. Maintaining essential services.
f. Adopting measures to prevent the spread of the outbreak.

Recovery activities

a. Evaluate pandemic influenza response plan revise as necessary.
b. Assess ability to resume normal operations.
c. Return to preparedness activities.

15.10 Emergency Information Officer

Preparedness

a. Develop press release templates.

Response activities:

a. Report to the EOC.
b. Set up the Emergency Information Centre.
c. Set up public inquiry call centre.
d. Work with EOAG members to disseminate information to the public.
e. Prepare media briefings and press release in conjunction with local Health Unit.
f. Schedule regular press release at the Emergency Information Centre.
g. Liaison with Health Unit to coordinate distribution of self-help information to general public.

16. Training and Supplies

Each participating agency is responsible for defining and providing the training required by its own staff in performing its emergency roles at its own cost.

Each participating agency will maintain at all times an inventory of supplies as listed in the Resource Inventory. Each agency will provide any inventory changes to the CEMC as needed.

Appendix 1: Estimated Impact of Pandemic Influenza in Brantford as of June 2005

The estimates were calculated using FluAid 2.0 software developed by the U.S. Centers for Disease Control and Prevention (a version of the software can be found online at http://www2a.cdc.gov/od/fluaid/) and utilized 2004 population estimates by Public Health Unit based on the 2001 census.

This information is from Ontario's Pandemic Influenza Plan June 2005. For more information refer to Appendix 1 in the Ontario Pandemic Influenza Plan June 2005.

BRANT COUNTY HEALTH UNIT

POPULATION (NUMBERS AND DISTRIBUTION)					
	0-18 yrs	19-64 yrs	65+ yrs	Total	% Total
Non-high risk	31,437	70,062	10,787	112,286	84.16
High risk	2,149	11,785	7,191	21,125	15.83
Totals	33,586	81,847	17,978	133,411	100

DEATHS (NUMBER OF CASES)						
Gross attack rates				Distribution by age group (% of total): Most likely		
	15%	25%	35%		% High Risk	%Total
0-18 yrs most likely	1	1	1	0-18 yrs	0	2
minimum	0	1	1			
maximum	7	12	17			
19-64 years most likely	26	43	60	19-64 yrs	40	46
minimum	4	6	9			
maximum	48	80	112			
65+ yrs most likely	29	49	69	65+ yrs	43	52
minimum	29	48	67			
maximum	37	61	85			
TOTAL: Most likely	56	93	130	Totals	83	100
Total minimum	33	55	77			
Total maximum	92	153	214			

HOSPITALIZATION (NUMBER OF CASES)						
Gross attack rates				Distribution by age group (% of total): Most likely		
	15%	25%	35%		% High Risk	% Total
0-18 yrs most likely	9	16	22	0-18 yrs	1	4
minimum	5	8	11			
maximum	39	66	92			
19-64 yrs most likely	151	252	353	19-64 yrs	10	63
minimum	22	47	65			
maximum	165	275	385			
65+ yrs most likely	79	131	183	65+ yrs	20	33
minimum	56	94	131			
maximum	99	166	232			
TOTAL: Most likely	239	399	558	Totals	31	100
Total: minimum	83	149	207			
Total: maximum	303	507	709			

OUTPATIENT VISITS (NUMBER OF CASES)						
Gross attack rates				Distribution by age group (% of total): Most likely		
	15%	25%	35%		% High Risk	% Total
0-18 yrs most likely	**2,980**	**4,966**	**6,952**	**0-18 yrs**	3	28
minimum	2,489	4,149	5,808			
maximum	3,470	5,783	8,097			
19-64 yrs most likely	**6,315**	**10,525**	**14,735**	**19-64 yrs**	8	59
minimum	4,534	7,557	10,580			
maximum	9,639	16,065	22,491			
65+ yrs most likely	**1,396**	**2,326**	**3,256**	**64+ yrs**	6	13
minimum	1,317	2,195	3,073			
maximum	2,166	3,611	5,055			
TOTAL: Most likely	**10,691**	**17,817**	**24,943**	**Totals**	**17**	100
Total: minimum	8,340	13,901	19,461			
Total: maximum	15,275	25,459	35,643			

Appendix 2: Priority List

MOHLTC Priority List

The MOHLTC has identified priority groups for the use of antiviral medication and Vaccines. City of Brantford has summated forms to the Medical Officer of Health (see attachments).

Corporate Priority List

Priority list corporate wide – add as an annex to supporting plan - Talk about the gas stations and grocery stores to get antiviral drugs.

Priorities for the distribution of antiviral agents have been established in conjunction with Health Canada and the Ontario MOHLTC. The suggested allocation will be aimed at:

- Maintaining the health of workers in essential services;
- Protecting individuals from infection and/or serious illness; and
- Preventing or minimizing the spread of infection.

Appendix 3: City Departments Distribution of Antiviral drugs

The Health unit will supply and distribute the antiviral drugs to each department on a weekly basis. Each Department will have to keep records of when and who received these antiviral drugs and provide those records to the Brant County Health Unit. Each Department will identify who will be authorized to give out the antiviral drugs and who will be responsible for recording/tracking distribution of antiviral drugs and who is responsible for providing the record forms to the Brant County Health Unit.
City Departments will be responsible for the storage of the antiviral drugs at their own facilities.

Each Department will use the following form for the distribution of antiviral drugs.

CITY OF BRANTFORD'S ANTI-VIRAL DISTRIBUTION SHEET

DEPARTMENT: _____

WEEK OF: _____

ANTI-VIRAL RECEIVED BY: _____

WITNESS TO DISTRIBUTION: _____

DATE	***NAME OF PERSON RECEIVING ANTIVIRALS***	***SIGNATURE – RECEIPT OF ANTI-VIRAL***	***SIGNATURE OF DISTRBUTER***

Appendix 4: City of Brantford Essential Services

Essential Service is defined as follows:

- A service and/or function that when not delivered creates an impact on the health and safety of individuals.
- A service and/or function that may lead to failure of a business unit if activities are not preformed in a specified time period.
- There are some services and/or functions that must be performed to satisfy regulatory requirements.

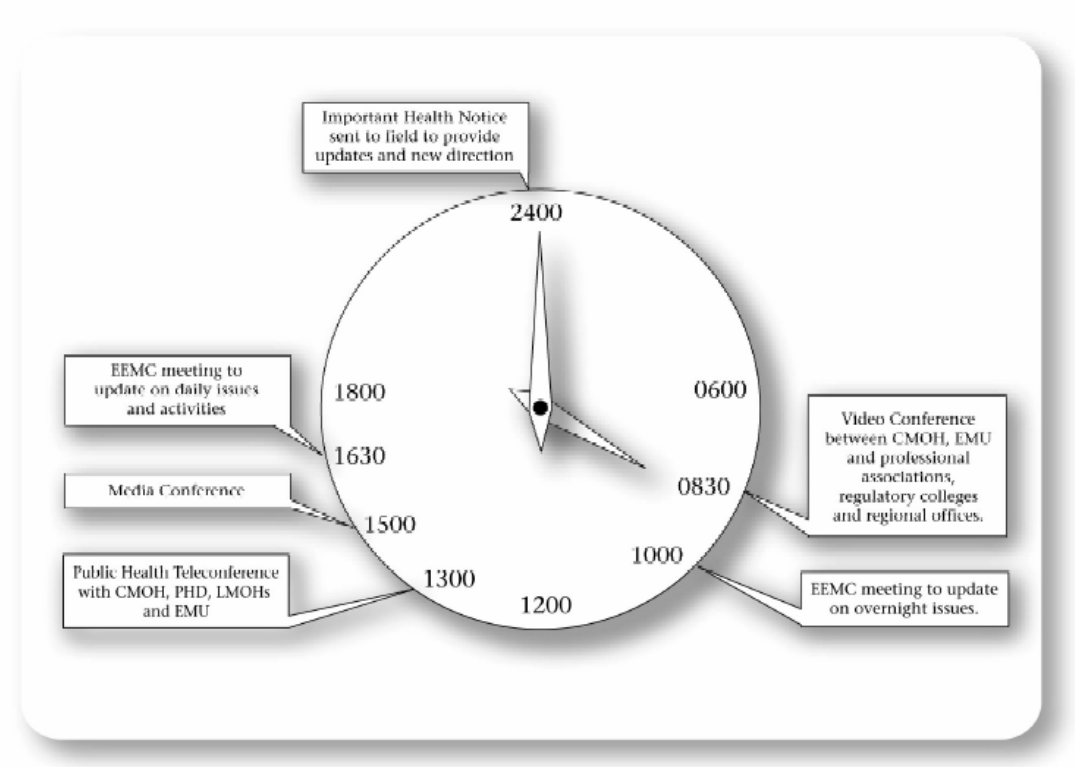
Experts suggest that during a pandemic we could experience a staff absenteeism of 40-50% for an extended period of time. The figure does not include people that may be required to stay home to care for ill family members. This means that departments may be forced to reduce, consolidate or even eliminate services/functions to cope with the impacts of a pandemic emergency. The impact of staff absenteeism may be across the departments or localized to specific departments.

Departments have developed a pandemic plan that includes a sale back plan. Their scale back plans are divided into levels based on the percentage of staff reduction due to absence and outlines what services/functions would be reduced, consolidated or eliminated. They have taken into account the department's roles and responsibilities for providing services stated in the city's pandemic plan.

Essential Services for the City of Brantford are listed in section 13.1.

The Brant County Health Unit will receive updates daily from the Province during a pandemic. The Brant County Health Unit will provide updated information to Brantford's EOC. EOC meeting cycles will be set in conjunction with the provincial plans meeting cycle.

Figure 11: MOHLTC Information Cycle in a Public Health Emergency



The Brant County Health Unit and Ministry of Health and long-Term Care will provide information for distribution during a pandemic i.e. website and Tele-health line and Info Line. We will be referring people to these websites, inforline and Tele-health lines during a pandemic and post information on our City's website. The Province is preparing basic information such as fact sheets to use during a pandemic and Brantford will release information relevant to our community.

The Emergency Information Plan addresses the distribution mechanisms to reach the targets groups (media and public). The Emergency Information Plan has templates and fact sheets on general information on pandemic preparedness (handwashing, staying home, check on family and friends living a lone, signs and symptoms of influenza etc). We will be unable to give detailed information about pandemic until the pandemic has hit. The Brant County Health Unit will provide real-time information during a pandemic.

Appendix 6: All Levels of Government Roles and Responsibilities

Introduction

All governments and all sectors have a role to play in preparing for, responding to and recovering from an influenza pandemic.

Planning and preparedness efforts are continuing at all levels of government. The World Health Organization, Public Health Agency of Canada and the Ontario Ministry of Health and Long-term Care have all released influenza pandemic documents to guide the local planning process.

World Health Organization

The World Health Organization (WHO) is responsible for coordinating a global response to a pandemic that include conducting world-wide surveillance and reporting of disease, identify the beginning of a pandemic through the use of the phased response and co-ordinate global response to a pandemic.

Federal - Health Canada

The Public Health Agency of Canada is responsible for coordinating the nation-wide health response to a pandemic. They have entered into agreements and arrangements with international organizations to support the surveillance, coordination and investigation activities. They establish domestic influenza vaccine manufacturing capacity, acquire influenza vaccine and antiviral drugs and allocate them equitably to provinces and territories.

- Liaison with the World Health Organization, the US Centre for Disease Control and other National/international organizations to coordinate surveillance, investigation and vaccine activities.
- Procuring/distributing diagnostic reagents and technical information to provincial public health laboratories.
- Establish a domestic influenza vaccine manufacturing capacity
- Acquiring influenza vaccine and antiviral drugs and allocating them equitably to Province's.
- Developing communication strategies, plans and frameworks.

Provincial – Ontario Ministry of Health and Long-term Care

The Ministry of Health and Long-term Care is responsible for coordinating the province-wide response to a pandemic, including the declaration of a province emergency. They maintain provincial surveillance activities, report diseases caused by influenza and participate in national surveillance activities. They provide guidelines and direction to local public health authorities to ensure a consistent planning and response across the province, coordinate public education programs and provide guidance to the health field during a pandemic.

- Implementing national recommendations for surveillance and immunization programs.
- Providing guidelines and direction to local public health authorities and local planning groups.
- Coordinating public education programs.
- Providing guidance to health field during a pandemic.

Public Health Division of the MOHLTC

The Public Health Division oversees activities relating to Ontario's public system and is led by the Chief Medical Officer of Health and Assistant Deputy Minister. The Infections Diseases Branch provides leadership and support to Ontario's public health system including 36 boards of health. The Infectious Diseases Branch is also responsible for disease-related database, communications and support for health units during outbreaks.

Emergency Management Unit of the MOHLTC

The Emergency Management Unit supports emergency management activities within the MOHTLC and the health care system. Emergency Management Unit is a branch of the Public Health Division and is focused on enhancing an integrated approach to the challenges faced during emergencies.

During an influenza pandemic, the role of the Emergency Management Unit will be to coordinate the Ministry Emergency Operations Centre, which will provide direction and operational management of the health care sector. The Ministry Emergency Operations Centre will be linked with the Provincial Emergency Operations Centre.

Brant County Health Unit

The mandate of the local health care authorities according to OHPIP with respect to pandemic influenza is to:

- Maintain a local surveillance system, reporting clusters of FRI/ILI and investigating outbreaks.
- Develop plans to provide mass immunization and distribute vaccines, antivirals drugs and medical supplies.
- Assess the capacity of local health services, including human resources and helping health services identify additional/alternate resources.
- Collaborate with the provincial government to deliver public information/education programs.
- Deliver mass vaccination program.

Municipal Government

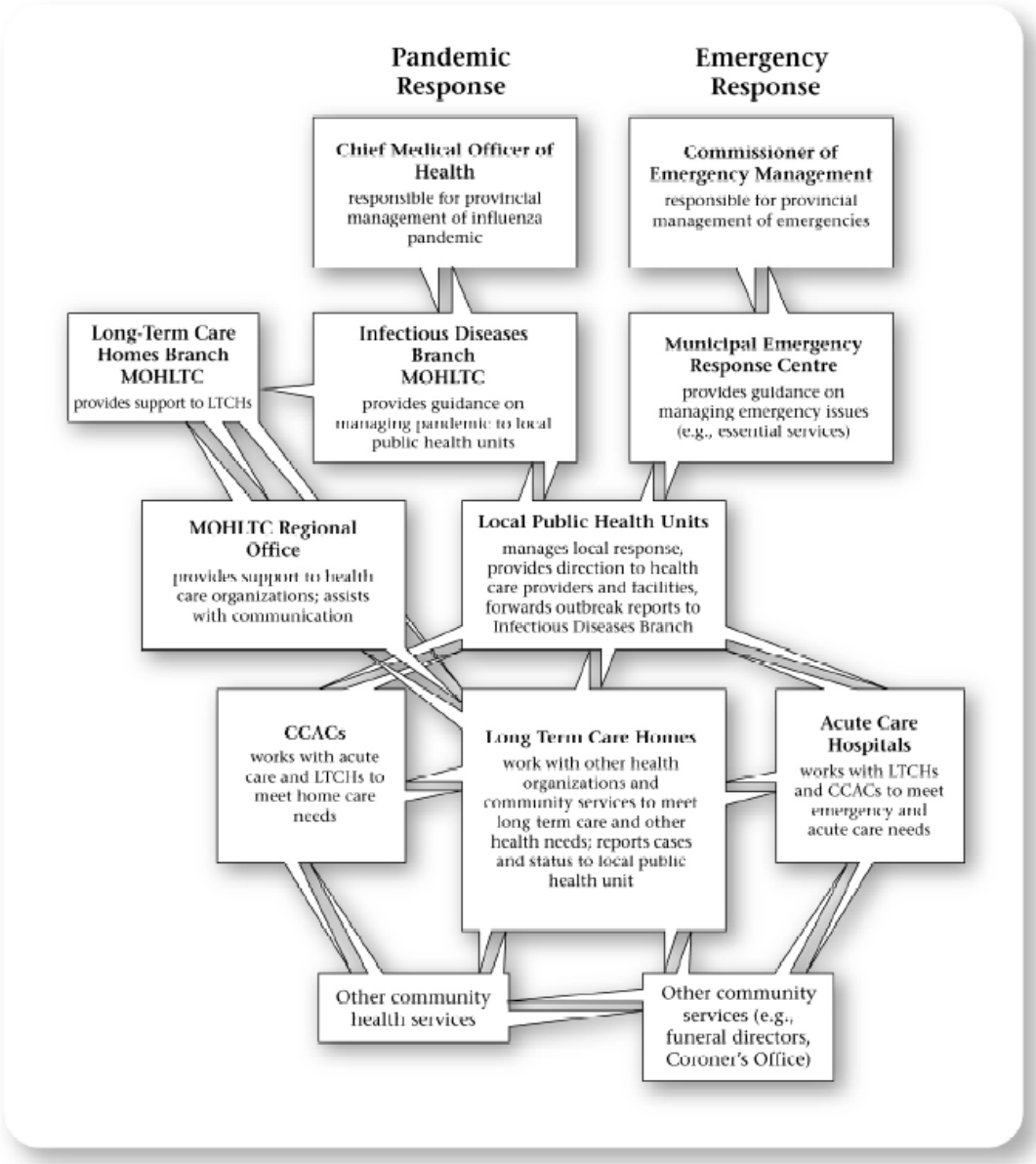
City of Brantford, in conjunction with the Brant County Health Unit, will activate the necessary contingency plans and set priorities for:

- Continuing municipal government.
- Maintain public safety services (e.g., fire and police).
- Maintain essential public works and municipal services such as water treatment/delivery, waste management, garbage disposal and utilities.
- Providing local information and advice to the public with concerns to City services.
- Cooperate with Brant County Health Unit to establish alternate care sites and triage centres.

City of Brantford Departments

The City of Brantford Department's are responsible for developing and maintaining pandemic department plans for ensuring continual readiness for their internal department.

Figure 2: Emergency Management Roles and Relationships at the Community Level



Appendix 7: Temporary Morgues

Canadian Pandemic Plan states:

Additional temporary cold storage facilities may be required during a pandemic, for the storage of corpses prior to their transfer to funeral homes. A temporary morgue must be maintained at 4-8o C. However, corpses will begin to decompose in a few days when stored at this temperature. If the body is not going to be cremated, plans to expedite the embalming process should be developed since in the case of a pandemic, bodies may have to be stored for an extended period of time. In jurisdictions where a timely burial is not possible due to frozen ground or lack of facilities, corpses may need to be stored for the duration of the pandemic wave (6 to 8 weeks).

Arenas and curling rinks, where the required temperature of 4-8 Celsius can be maintained, are options for temporary morgues. Using local businesses for the storage of human remains is not recommended and should only be considered as a last resort. The post-pandemic implications of storing human remains at these sites can be very serious, and may result in negative impacts on business with ensuing liabilities.

In order to deal with the increase in fatalities, it is necessary to develop strategies for morgue capacities.

Infection Control issues

Deceased bodies are not “contagious” and infection control measures are not required for handling of persons who died from influenza. Bodies to be buried may or may not be embalmed and may need to be stored in a temporary morgue prior to burial.

Brantford’s funeral capacity

The City of Brantford and Brant County has 9 funeral homes, each funeral home can handle 5 funerals per day. The capacity for City of Brantford and Brant County equals 45 bodies per day total.

The City of Brantford and Brant County has one crematorium. The crematorium can handle one body every four hours and could run 24 hours to cope with the increased demand.

Temporary morgue storage locations
(Pick a suitable facility(s) that can be maintained at 4 to 8 celsius).

Capacity of existing vaults in Brantford
There are 30 crypts for storage in the Mausoleum.

A vault is a non-insulated storage facility for remains that have already been embalmed, put into caskets and are awaiting burial, as they are often needed from January to April when the ground is frozen and burials are difficult to perform..

Transportation
No special vehicle or driver license is needed for transportation of a corpse. Therefore, there are no restrictions on families transporting bodies of family members if they have a death certificate.

Death Certificate
Death certificate can only be certified by a physician or in certain specified circumstances by a Registered Nurse, Extended Class. Deaths warranting further investigation have to be reported to a coroner (death under circumstances listed in section 10 of the Coroners Act). The attending physician, or in some cases the coroner completes the Medical Certificate of Death and submits it to the funeral home who takes it along with the Statement of Death to the local Division Registrar of the Office of the Registrar General of Ontario.

The Office of the Registrar General is responsible for registering deaths and issuing certified death certificates. Once the Certification of Death and Statement of Death are completed, then a burial permit needs to be obtained. Burials and cremations cannot be performed until the burial permit is issued.

Because of the expected increased mortality rates in a pandemic the Emergency Management Unit of the Ministry of Health and Long Long-Term Care is working to develop an expedited process for pronouncement, certification and registration of deaths that would minimize potential roadblocks.

Appendix 8: Brantford General Hospital Capacity

To be updated by the Hospital

Appendix 9: Alternate Care Sites

Brant County Health Unit will designate a location(s) for alternate care facilities.

When opening an alternate care facility, there is a need to plan for spatial separation between patients. Maintain at least a 1 metre spatial separation between beds in patient care areas and chairs in waiting areas. There is a need to plan for separate soiled and clean utility rooms; clean storage areas; dedicated food preparation areas including, dedicated utility versus hand washing sinks; provide an adequate number of toilets and a location to store deceased bodies prior to pick up for funeral services. Settings with carpeted floors are discouraged.

Alternate care sites should adhere to published guidelines (see Canadian Pandemic Plan) to prevent the spread of infections. Staff, patients and visitors should recognize that strict adherence to hand washing/hand antisepsis recommendations is the cornerstone of infection prevention and may be the only preventative measures available during a pandemic.

Hand washing facilities should be available in, or adjacent to rooms where care is provided. If a large room is used for several patients, more than one sink may be necessary. Sinks for hand washing should be used only for hand washing and not for other purposes, e.g., as a utility sink.

When access to sinks is limited, supplies of antiseptic hand rinses and detergent containing towelettes are necessary. Waterless antiseptic hand rinse are superior to soap and water in reducing hand contamination and should be made available in prominent areas throughout the alternate care sites.

The use of masks to minimize the transmission of influenza may be worn when face-to-face with coughing individuals. Gloves should be used as an additional measure, not as a substitute for hand hygiene.

Appropriate housekeeping is required and cannot be overemphasized. Commodes and toilets should be cleaned twice daily and when soiled, ideally bedpans should be reserved for use by a single patient. Daily cleaning of surfaces that are frequently touched (i.e. contaminated) by hands of health care providers and patients, such as surfaces of medical equipment and knobs should be cleaned twice daily or when known to be contaminated. Personal care supplies (e.g., lotion, creams, soaps) should not be shared between patients.

Appendix 10: Pandemic Education/Training

The following information outlines the basis principles of infection control related to influenza. The following information sheets are to be used for training/education sessions for the City of Brantford employees.

Information Sheet 1

Infection Control

Hands can be contaminated with influenza virus by contact with inanimate surfaces or objects in the environment of a patient with influenza infection. Influenza A and B viruses have been shown to survive for 24-49 hours on hard, nonporous surfaces; for up to 8-12 hours on cloth, paper and tissues; and on hands for up to 5 minutes after transfer from environmental surfaces.

The influenza virus is readily inactivated by hospital germicides, household cleaning products, soap, hand wash or hand hygiene products.

Good Hygiene measures to minimize transmission

Disposable one-use tissues for wiping noses; covering nose and mouth when sneezing and coughing; hand washing/hand antiseptics after coughing, sneezing, or using tissues; and the importance of keeping hands away from mucus membranes of eyes and nose.

Plain soap may be used for hand washing. Soaps containing antiseptics are not required.

Liquid hand wash products should be stored in clean closed containers and dispensed from either disposable containers or containers that are washed and dried thoroughly before refilling.

Strict adherence to hand washing/hand antiseptics recommendations is the cornerstone of infection prevention and may be the only prevention measure available during a pandemic.

Emergency Services Workers should adhere to routine infection control practices. All patient's blood and body secretions should be considered infectious.

Waterless hand antiseptics are superior to soap and water for reducing hand contamination and should be made available as an alternative to hand washing. Hand antiseptic are especially useful when time for hand washing or access to sinks is limited.

Wearing gloves does not eliminate the need for proper hand hygiene. As soon as feasible, hands must be washed after the removal of gloves.

Hands should be washed after direct contact with individuals with suspected or confirmed influenza and after contact with their personal articles or their immediate environment.

An educated program for those providing housekeeping/cleaning services should help them understand the effective methods of cleaning and the importance of their work.

Information Sheet 2

Facts About Hand washing

Hand washing, when done correctly, is the single most effective way to prevent the spread of disease. Good hand washing technique is easy to learn and can significantly reduce the spread of infections in both children and adults.

What types of diseases can good hand washing prevent?

Influenza
Common cold
Hepatitis A
E. coli 0157:H7
And many more ....
What is good hand washing technique?

Follow these simple steps to keep your hands clean:

Wet your hands with warm running water.

Add soap, and then rub your hands together, making a soapy lather for at least 15 seconds.

Don't forget about the back of your hands, knuckles, as well as between your fingers and under your nails.

Rinse hands well under warm running water- leave water on.

Dry hands with paper towel.

Turn off tap with paper towel- not with your bare hands.

When should I wash my hands?

After using the washroom (includes changing of diapers) Before and after eating or handling food After touching raw meat, poultry or fish After handling garbage Before and after caring for sick people After playing with animals Any time you think about it!

What are some things I should watch for?

Avoid using single wash clothes and towels to wash a group of peoples' hands.

Avoid using a standing basin of water to rinse hands.

Avoid using sponges or non-disposable towels unless they are laundered or replaced regularly. Remember germs thrive on moist surfaces!

Observe hands for cuts and signs of dryness. Cuts should be covered and hand lotion should be used to prevent dryness.

What type of soap should be used?

Any type of soap may be used (antibacterial soaps are not necessary under normal circumstances). Bar soap should be kept in a self-draining holder that is cleaned thoroughly before new bars are put out. Liquid soap dispensers should be used in public facilities (e.g. public washrooms, day care centres, long term care facilities, and food preparation settings, etc.) and should be cleaned before refilling.

Are there any other ways to get your hands clean?

When hand washing facilities are not available, alcohol based hand rinses or alcohol hand wipes containing at least 60% alcohol can be used as an alternative, as long as hands are not visibly soiled. Keep a bottle of alcohol hand rinse where sinks are not available - purses, travel bags and vehicles are great locations!

What are some ways to teach children good hand washing technique?

It is important to encourage and help children to wash their hands before eating, after playing outdoors or playing with pets, after using the washroom, and after blowing their noses. Even though hands may appear to be clean, they may carry germs that are capable of causing disease.
Don't assume that children know how to wash their hands properly. Supervision, especially at home and in school settings, is an essential element in forming good hand washing habits in children. Children learn by example! Let them learn good hand washing technique from observing you.

What is Influenza?

Influenza (the “flu”) is a respiratory infection caused by the influenza virus. Influenza viruses cause annual epidemics or outbreaks because they are constantly changing. Previous infections or vaccinations (“flu shots”) can lead to partial protection and less severe illness.

Pandemic influenza is a worldwide epidemic caused by an influenza virus that has undergone a major genetic change such that most people have no protection against this new influenza virus. It is believed that pandemic influenza viruses result from the genetic mixing of human and bird influenza viruses. Historically, pandemics have occurred 3 to 4 times each century. In the past century, the worst pandemic was the Spanish Flu of 1918-19 that killed over 20 million people worldwide. Experts expect the next pandemic will occur within the next 5 to 10 years and will cause millions of people to become sick and potentially tens of thousands of deaths in Canada alone. Pandemics generally come in 2 waves - after the first wave of illnesses, there is often a second wave several months later.

How is it spread?

Influenza is spread from person to person through coughing and/or sneezing. It is also spread through contact with unwashed hands, contaminated surfaces and objects. With the increase in global travel in recent years, the pandemic is expected to spread around the world rapidly, within weeks to months.

What do I look for?

Symptoms of influenza include fever, sore throat, headache, muscle aches, fatigue, and cough, which normally last for several days in healthy people. In the elderly, young children and those with chronic medical conditions, influenza can lead to more serious conditions such as pneumonia or even death. Past pandemic influenza strains have tended to cause severe illnesses in young healthy adults as well as the young and the old.

How is it treated and prevented?

Antiviral drugs can be used to decrease the severity and shorten the length of an influenza-related illness, and can also be given to prevent infection when exposure to the virus has occurred or is expected to occur. However, experts are unsure about whether we should be using these drugs in a pandemic, and the supply of antiviral drugs may be limited to those at highest risk of exposure and serious illness. Other treatments are aimed at treating complications of influenza, such as antibiotics for pneumonia. Influenza infections can be prevented with vaccines, however, it will likely be months from the start of the pandemic before an effective vaccine will be developed.

What is being done to reduce the impact of the next pandemic?

Health Canada has developed a Canadian Pandemic Influenza Plan that details how Canada will prepare for and respond to a pandemic when it occurs. The Province of Ontario, Ministry of Health and Long Term Care has also developed a contingency plan in preparation for the next pandemic, based on international and national guidelines. City of Brantford and Brant County Health Unit has developed a Pandemic Supporting Plan.

Why is planning for pandemic influenza required?

Past pandemics have shown that a large number of people can be severely affected. An appropriate, consistent and coordinated approach among all levels of government may greatly reduce the number of deaths and illnesses and the disruption to society that is expected during an influenza pandemic.

When will an effective vaccine be available?

During a pandemic the new influenza virus will be different from all influenza viruses we have encountered in the past. We cannot predict what the new virus will look like, so the development of an effective vaccine cannot begin until the virus has emerged and has been identified. Once the new influenza virus is identified, and assuming a vaccine can be developed with standard technologies, it could take at least 4-6 months for an effective vaccine to be produced. Canada currently has agreements in place to quickly produce an effective vaccine should it become necessary. Because there is no natural immunity to the pandemic influenza strain, two doses of vaccine may be required. The goal is to produce enough vaccine and administer it as quickly as possible to protect all Canadians.

How can I protect my family and myself?

Get your yearly influenza vaccine - this will offer protection against other circulating influenza viruses.

Wash hands frequently and thoroughly with soap and water or use waterless hand antiseptic gels when hands are not visibly dirty. Cover your mouth when you cough or sneeze and wash your hands afterwards.

Do not share personal items, such as towels, eating utensils, etc.

If you are ill, stay at home and isolate yourself from others including your family.

Should a pandemic occur, pay attention to the local media channels (e.g. radio, television, newspaper, internet, etc.) for instructions and/or visit the Brant County Health Unit's website www.bchu.org for up-to-date information.

Information Sheet 4

What is the Flu?

The flu is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness, and at times can lead to death. While most healthy people recover from the flu without complications, some people, such as older people, young children, and people with certain health conditions, are at high risk for serious complications from the flu.

Be Aware of Common Flu Symptoms

The flu usually starts suddenly and may include these symptoms:
Fever (usually high)
Headache
Tiredness (can be extreme)
Sore Throat
Cough
Body aches
Runny Nose
Diarrhea and vomiting also can occur but are more common in children

Know the Risk from the Flu

Some of the complications caused by the flu include bacterial pneumonia, dehydration, and worsening of chronic medical conditions, such as congestive heart failure, asthma, or diabetes. Children and adults may develop sinus problems and ear infections.

Know How the Flu Spreads

The flu spreads in respiratory droplets from coughing and sneezing. It usually spreads from person to person, though occasionally a person may become infected by touching something with virus on it and then touching their mouth or nose.

Adults may be able to infect others **1 day before** getting symptoms and up to **7 days after** getting sick. So it is possible to give someone the flu before you know you're sick as well as while you are sick.

Prevent the Flu

The single best way to prevent the flu is to get a flu vaccine each fall, but there are other measures that can help protect against the flu.

These steps may help prevent the spread of respiratory illnesses like the flu:

Cover your nose and mouth with a tissue when you cough or sneeze—throw the tissue away after you use it.

Wash your hands often with soap and water, especially after you cough or sneeze. If you are not near water, use an alcohol-based hand cleaner.

Stay away as much as you can from people who are sick.

If you get the flu, stay home from work or school. If you are sick, do not go near other people so that you don't make them sick too.

Try not to touch your eyes, nose, or mouth. Germs often spread this way.

What To Do If You Get Sick

If you get the flu, get plenty of rest, drink a lot of liquids, and avoid using alcohol and tobacco. Also, you can take medications to relieve the symptoms of the flu (but never give aspirin to children or teenagers who have flu-like symptoms, particularly fever).

If you are at high risk from complications of the flu, you should consult your health-care provider if you develop flu-like symptoms. Those at high risk for complications include people 65 years or older, people with chronic medical conditions, pregnant women and young children**.**

Look Out for Emergency Warning Signs

In children, emergency warning signs that need urgent medical attention include:

Fast breathing or trouble breathing
Bluish skin color
Not drinking enough fluids
Not waking up or not interacting
Being so irritable that the child does not want to be held
Flu-like symptoms improve but then return with fever and worse cough
Fever with a rash

In adults, emergency warning signs that need urgent medical attention include:
Difficulty breathing or shortness of breath
Pain or pressure in the chest or abdomen
Sudden dizziness
Confusion
Severe or persistent vomiting

Seek medical care immediately (call your doctor or go to an emergency room) if you or someone you know is experiencing any of the signs above. When you arrive, tell the reception staff that you think you have the flu. You may be asked to wear a mask and/or sit in a separate area to protect others from getting sick.

Businesses and the Workplace

Businesses, employers and employees can help prevent the spread of colds and flu in the workplace.

Vaccination against the flu each fall remains the primary way to prevent this disease. In addition to vaccination, the following simple actions, can help decrease the spread of respiratory illnesses like the flu.

Avoid close contact.
Avoid close contact with people who are sick. When you are sick, keep your distance from others to protect them from getting sick too.

Stay home when you are sick.
When you are sick or have flu symptoms, stay home, get plenty of rest, and check with a health care provider as needed.

Cover your mouth and nose.
Cover your mouth and nose with a tissue when coughing or sneezing. It may prevent those around you from getting sick.

Clean your hands.
Washing your hands often will help protect you from germs. When soap and water are not available, alcohol-based disposable hand wipes or gel sanitizers may be used

Avoid touching your eyes, nose or mouth.
Germs are often spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose, or mouth.

Pandemic Flu Planning Checklist for Individuals and Families

You can prepare for an influenza pandemic now. You should know both the magnitude of what can happen during a pandemic outbreak and what actions you can take to help lessen the impact of an influenza pandemic on you and your family. This checklist will help you gather the information and resources you may need in case of a flu pandemic.

1. To plan for a pandemic:

- ❑ Store a supply of water and food. During a pandemic, if you cannot get to a store, or if stores are out of supplies, it will be important for you to have extra supplies on hand. This can be useful in other types of emergencies, such as power outages and disasters.
- ❑ Ask your doctor and insurance company if you can get an extra supply of your regular prescription drugs.
- ❑ Have any nonprescription drugs and other health supplies on hand, including pain relievers, stomach remedies, cough and cold medicines, fluids with electrolytes, and vitamins.
- ❑ Talk with family members and loved ones about how they would be cared for if they got sick, or what will be needed to care for them in your home.
- ❑ Volunteer with local groups to prepare and assist with emergency response.
- ❑ Get involved in your community as it works to prepare for an influenza pandemic.

2. To limit the spread of germs and prevent infection:

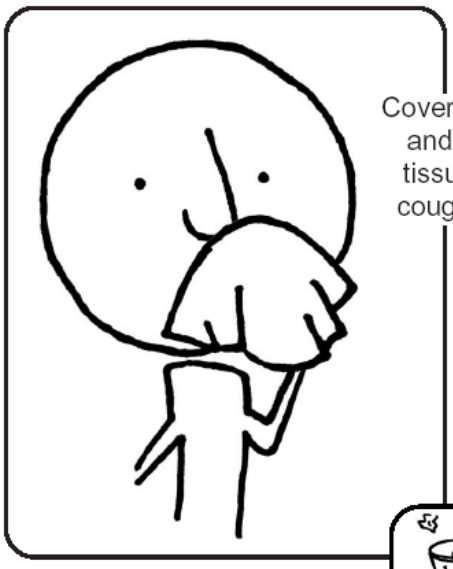
- ❑ Teach your children to wash hands frequently with soap and water, and model the correct behavior.
- ❑ Teach your children to cover coughs and sneezes with tissues, and be sure to model that behavior.
- ❑ Teach your children to stay away from others as much as possible if they are sick. Stay home from work and school if sick.

3. Items to have on hand for an extended stay at home:

Examples of food and non-perishables	Examples of medical, health, and emergency supplies
❑ Ready-to-eat canned meats, fruits, vegetables, and soups	❑ Prescribed medical supplies such as glucose and blood-pressure monitoring equipment
❑ Protein or fruit bars	❑ Soap and water, or alcohol-based hand wash
❑ Dry cereal or granola	❑ Medicines for fever, such as acetaminophen or ibuprofen
❑ Peanut butter or nuts	❑ Thermometer
❑ Dried fruit	❑ Anti-diarrheal medication
❑ Crackers	❑ Vitamins
❑ Canned juices	❑ Fluids with electrolytes
❑ Bottled water	❑ Cleansing agent/soap
❑ Canned or jarred baby food and formula	❑ Flashlight
❑ Pet food	❑ Batteries
	❑ Portable radio
	❑ Manual can opener
	❑ Garbage bags
	❑ Tissues, toilet paper, disposable diapers

Stop the spread of germs that make you and others sick!

Cover your Cough

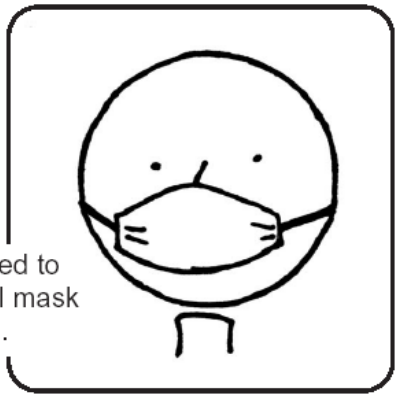


Cover your mouth and nose with a tissue when you cough or sneeze

or

cough or sneeze into your upper sleeve, not your hands.

Put your used tissue in the waste basket.



You may be asked to put on a surgical mask to protect others.

Clean your Hands

after coughing or sneezing.

Wash with soap and water

or

clean with alcohol-based hand cleaner.

Appendix 11: Cleaning Guidelines

Procedure summary

Apply solution to either surface or to a cloth. Change cloth frequently. Always wear gloves when cleaning. Once room has been cleaned discard all cleaning cloths or sponges. Reapply the solution to surfaces for a contact time of 5 minutes. Wipe dry. No rising required.

Bathrooms within a room should be cleaned last.

Recommended Procedures for Detailed Activities

Areas/Surfaces	Tools/Utensils	Procedures
Toilet Bowls	Brush	1. Pour solution inside surface of toilet bowl. Leave for 5 minutes. 2. Scrub with brush. 3. Flush toilet.
Showers	Spray bottle Brush	1. Spray surfaces of shower stall with solution. 2. Use brush to scrub surfaces. 3. Spray shower curtain making sure to cover the seams. 4. After 5 minutes, rinse all areas with water.
Hand washing sinks	Spray bottle Clean rag or sponge	1. Spray the surface if the sink and adjacent counter. 2. After 5 minutes use clean rag or sponge to wipe surface clean. 3. Rinse with water.
Hand railings	Spray bottle Rags or sponge	1. Spray solution onto rag or sponge until it is wet. 2. Thoroughly wipe hand railings down. 3. Allow to hand dry.
Door handles	Spray bottle Rags or sponge	1. Spray solution onto rag or sponge until it is wet. 2. Thoroughly wipe door handles down. 3. Allow to hand dry.
Furniture	Spray bottle Rags or sponge	1. Spray solution on rags until it is wet. 2. Wipe furniture's surface 3. Allow to air dry
Hard Floors	Mop and bucket	Fill bucket with solution. 1. Use clean mop to swipe floors clean. 2. Change the solution when dirty. 3. Allow to air dry.
Counters/Tables	Spray bottle Rags or sponge	1. Spray counter with fine mist of solution. 2. Wipe with clean rag or sponge. Allow to air dry.