British Columbia's H1N1 Pandemic Influenza Response Plan (2009)

Guidelines for H1N1 Influenza Pandemic Planning & Response for the Home and Community Care Service Sector

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These guidelines are consistent with other provincial, national and international plans for pandemic influenza preparedness and response, specifically with:

World Health Organization (WHO)

- Guidelines for Pandemic Preparedness (www.who.int/csr/disease/influenza/pandemic/en/)
- Influenza Pandemic Preparedness Plan www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_EDC_99_1/en/)

Public Health Agency of Canada (PHAC)

- Canadian Pandemic Influenza Plan (www.phac-aspc.gc.ca/cpip-pclcpi/)

BC Ministry of Health Services, BC Public Affairs Bureau, and BC Ministry of Public Safety, BCCDC, and Solicitor General/Provincial Emergency Program

- *H1N1 Pandemic Influenza Response Plan* (2009) http://www.health.gov.bc.ca/pandemic/

DEFINITIONS

Antiviral: medicine taken to treat or reduce the severity of an influenza infection; antiviral medications work by either destroying the virus or interfering with its ability to grow and reproduce. An antiviral is not the same as a vaccine.

British Columbia Centre for Disease Control (BCCDC): an agency of the Provincial Health Services Authority that provides scientific support and medical advice to health authorities and the Provincial Health Officer.

Business continuity plan: a set of planned procedures to ensure continuity of an organization's critical business during a disruption in normal business operations.

Chief Medical Health Officers (CMHO): are appointed by health authorities to coordinate activities of local medical health officers within the health authority area.

Emergency plan: an emergency plan is a document that describes how an organization will approach a particular emergency; thus, its content addresses a range of possible emergencies including fire, flood, disease outbreak, etc.

Epidemic: an epidemic occurs when there are more cases of that disease than normal.

Influenza vaccine: a product which generates a protective immune response to prevent infection by the influenza virus. An effective vaccine can only be produced once the specific influenza virus responsible for causing the epidemic or pandemic has been identified and isolated.

Medical Health Officer (MHO): in the event of a threat to the health of the public, within his/her appointed area, medical health officers are empowered by legislation to take the steps necessary to protect the public within that area.

Pandemic: a pandemic is an epidemic that spreads worldwide.

Provincial Health Officer (PHO): in the event of a threat to the health of the public, the Provincial Health Officer has the authority to direct the response to protect the public and works with medical health officers in the health authorities and any other agencies.

Vulnerable/At-risk populations: in terms of an influenza pandemic, these terms are used to refer to groups within the population who are more likely to become ill and/or suffer severe illness or complications from the influenza virus.

1. INTRODUCTION

Guidelines for H1N1 Influenza Pandemic Planning and Response for the Home and Community Care Service Sector provides high-level guidance for pandemic planning and response for all parts of the home and community care sector, both publicly-subsidized and private pay. This document has been developed to acknowledge and explore the unique issues of this important part of the health care system and its clients. This document does not provide comprehensive information about pandemic planning and response but rather is intended as a companion to the many other planning resources available.

Although the home and community care sector is diverse and includes different settings for care, such as home, assisted living residences, and residential care facilities, the common denominator is the client population which, to one degree or another, is vulnerable because it relies on some level of service for support in activities of daily living. Seniors, people with disabilities or chronic or life-limiting health conditions, and people recovering from illness or injury may be more susceptible to severe illness or complications from influenza infection; people who live in communal living situations or who are not able to practice adequate hygiene may be more likely to be exposed to influenza or to become infected. This group requires special consideration because during an influenza epidemic they may not receive the support they usually receive due to staff illness or reassignment and they may also get influenza and require more care. Thus, these guidelines are based on the need to consider how to continue providing necessary services but also on addressing the needs of these people if they contract influenza.

The goal of this document is to guide the planning for and management of an H1N1 influenza pandemic. It is directed to health authorities, caregivers, families, managers, individual health care providers, operators of residential care facilities and assisted living residences, and other organizations who provide home and community care services. The document provides background on this care sector and its regulatory frameworks and speculates on the implications of an H1N1 influenza pandemic for its clients and staff. In terms of pandemic planning for home and community care, the guidelines include planning objectives and assumptions, ethical as well as planning principles, and a set of guidelines applicable to home health services, assisted living residences, and residential care facilities.

In B.C., health authorities have already done considerable planning for pandemic influenza, and facilities are experienced in dealing with outbreaks of seasonal influenza and can apply this knowledge to an H1N1 influenza pandemic. To ensure compatibility and alignment with existing plans, the ministry reviewed the health authorities' plans as these guidelines were developed. The ministry's guidelines are a companion framework to support health authorities, their service providers and staff as they continue collaborative planning and response to influenza pandemic in a coordinated manner on behalf of the highly valued clients and families within their care.

2. BACKGROUND

2.1 Home and Community Care Service Sector

Home and community care services provide a range of health care and support services for eligible residents who have acute, chronic, rehabilitative, and palliative health care needs. The following services are generally thought of as the range of services that defines this sector of the health care system:

- home and ambulatory nursing care
- rehabilitation
- case management and care coordination
- home support
- adult day programs
- respite care
- home oxygen program
- assisted living
- residential care (group homes for independent living, family care homes, and complex care facilities) including care provided in private hospitals and extended care hospitals licensed under the *Hospital Act*
- family care homes and group homes
- end-of-life care delivered at home or in a hospice.

The following are brief descriptions of three settings in which home and community care services are provided and their regulatory frameworks and requirements specific to pandemic planning and the outbreak of communicable diseases.

Home health services include home and ambulatory care nursing, case management, rehabilitation, home support, and palliative care. Other community-based services include adult day programs, services for adults with acquired brain injury and developmental disabilities and meal programs. Home care nursing and community rehabilitation are professional services delivered to clients in the community by registered nurses and rehabilitation therapists. Services may be provided in different combinations, depending upon the needs and choices of the client, and available support from family and friends.

The *Continuing Care Act* and the Continuing Care Programs Regulations identifies designated services and the fee schedule for them, while the home health services themselves are regulated by government policy, specifically:

- Home and Community Care Policy Manual (available from health authorities' Home and Community Care programs), and
- The Personal Assistance Guidelines.

Assisted living residences are a semi-independent form of housing regulated under the *Community Care and Assisted Living Act*. Assisted living residences offer three key services to adults who require regular help with daily activities: housing, hospitality services and prescribed (personal assistance) services. Assisted living is intended for people who are able to make the range of decisions that allow them to live safely in a supportive, semi-independent environment. The vast majority of assisted living residences operating in the province and registered under the Act provide services to seniors and to a lesser extent also to younger adults with physical disabilities. The two prescribed services invariably offered in such residences are:

- regular assistance with activities of daily living, including eating, mobility, dressing, grooming, bathing or personal hygiene, and

- central storage of medication, distribution of medication, administering medication or monitoring the taking of medication.

Assisted living may be provided privately, or through publicly-subsidized units. For publicly-subsidized assisted living services, access, determination of fees and services provided are coordinated through the health authority, regardless of their ownership. Private assisted living providers coordinate access and service packages individually.

The *Community Care and Assisted Living Act* defines an assisted living residence and requires residences that meet the definition to be registered with the Assisted Living Registrar. The Community Care and Assisted Living Regulation defines the prescribed services referred to in the definition of assisted living residence in the Act.

Registered assisted living residences are also regulated by the Assisted Living Registrar's outcome-based Health and Safety Standards and associated policies. The *Health and Safety Standards* include, under Standard #1 (*Registrants must provide a safe, secure and sanitary environment for residents*), the following:

> *1.6.1 Registrants must have a plan in place to prevent, contain and report infectious outbreaks.*

Compliance with this standard is illustrated by the following examples:

- *Written policies and procedures provide guidance for:*
  - *preventing and containing infectious outbreaks;*
  - *reporting infectious outbreaks to the local health authority and medical health officer.*
- *Registrant has received advice on appropriate policies/procedures from the local health authority or the BC Centre for Disease Control.*
- *Staff is trained to respond to infectious outbreaks and the use of "universal precautions." Examples:*
  - *orientation materials*
  - *training modules*
  - *records of staff participation in orientation and training.*

The Office of the Assisted Living Registrar, in collaboration with communicable disease specialists, has created a new policy, *Prevention and Control of Infectious Disease Outbreaks*, available on the website of the Office of the Assisted Living Registrar at http://www.health.gov.bc.ca/assisted/ops_devs/operating.html. The policy explains how registrants can meet Outcome 1.6.1 of the *Health and Safety Standards* regarding the prevention and control of infectious disease outbreaks, and outlines the role of public health in response to infectious diseases in assisted living residences.

Residential care facilities provide 24-hour professional nursing care and supervision in a protective, supportive environment for people who have complex care needs and can no longer be cared for in their own homes. Facilities that provide residential care to 3 or more persons must have a valid community care facility licence. Residential care services may be either publicly subsidized or private pay, meaning the client pays privately for their accommodation and care. For publicly-subsidized residential care services, eligibility and access is coordinated by the health authority, which is also responsible for ensuring that all facilities meet standards for quality and safety.

Residential care facilities are regulated by *Community Care and Assisted Living Act* or in some instances the *Hospital Act*. The former defines a care facility, requires facilities that meet the definition to be licensed, and sets out the requirements of licensees of community care facilities.

In regard to pandemic planning, the Residential Care Regulation requires licensees:

- to have employees comply with the Province's immunization and tuberculosis control programs – ss. 37 (1) (e) and 39 (1)
- to require all persons admitted to a community care facility to comply with the Province's immunization and tuberculosis control programs – s. 49 (1) [See page 5 of this document]
- to have an emergency plans that set out procedures to prepare for, mitigate, respond to and recover from any emergency, including procedures for the evacuation of persons in care - s. 51
- to have plans that set out how persons in care will continue to be cared for in the event of an emergency - s. 51
- to ensure that the plans are updated if there is any change in the facility - s. 51
- to ensure that employees are trained in the implementation of the plans, including in the use of any equipment noted in the plan - s. 51
- to display a copy of the emergency plan in a prominent place in the community care facility - s. 51
- ensure that all employees have access, in an emergency, to reliable communications equipment - s. 51.

2.2 Worksafe BC

In relation to the outbreak of infectious diseases, employers must comply with the *Workers' Compensation Act*, and the Occupational Health and Safety Regulation that requires employers to:

- identify infectious diseases that are, or may be, in the workplace;
- develop and implement an exposure control plan[1], when required;
- inform workers about how they may be exposed to infectious diseases in the workplace;
- educate, train, and supervise workers on safe work procedures, including hand washing and the proper use of personal protective equipment;
- offer vaccinations as recommended in the BC Centre For Disease Control's Communicable Disease Control Manual, without cost to workers who are at risk of occupational exposure (see below);
- purchase safety-engineered medical devices, where appropriate;
- tell workers to seek medical attention, as required.

In addition, current collective agreements allow the employer to require immunization of their employees where there are legitimate medical reasons for such immunization. The medical reason for influenza immunization of health care staff is the protection of the high risk patients in their care. For more information, see *Vaccination of Health Care Workers* on B.C.'s pandemic website.

[1] An exposure control plan is a document that describes how workers will be protected from infectious diseases in the workplace. It includes information on the nature of the hazards and the risks associated with exposure, as well as controls such as safe work procedures that the employer will use to protect workers.

2.3 British Columbia's Immunization Control Program

The BC Centre for Disease Control (BCCDC) provides provincial and national leadership in public health through surveillance, detection, treatment, prevention and consultation services. According to B.C.'s Immunization Control Program, which is under the jurisdiction of BCCDC, all health care facilities must develop policies for annual influenza vaccination of residents and staff, as well as policies for identifying, preventing and controlling influenza outbreaks.

In B.C., immunization is not mandatory and facilities cannot force residents or staff to be vaccinated. For details about how to approach the issue of unimmunized staff during an influenza outbreak, please see *Influenza Immunization Policy for BC Facilities*, 2008-09 (BCCDC October 7, 2008) http://www.bccdc.ca/NR/rdonlyres/C03A114D-C939-479F-A4C7-0D405D0BB32A/0/Epid_Guidelines_FacilityFluImmzn_20090602.pdf

For more information on immunization, see the BC Centre for Disease Control http://www.bccdc.ca/imm-vac/default.htm.

2.4 Health Authorities' Emergency Preparedness

The Ministry of Health Services holds health authorities accountable for their performance through legislation, policy, and annual requirements. Health authorities are also required to ensure that contracted service providers comply with provincial legislation and Ministry policy and standards and with the health authority's operating policy. With respect to provincial policies, the *Health Services Management Policy for Health Authorities* (revised May 2002) includes the following policy for health authorities' emergency preparedness.

Health authorities are required to:

- develop effective emergency response and business continuation plans to be implemented in the event of any emergency or disaster that would have fatal or injurious outcomes for residents and/or impact the physical and staffing infrastructure of health services. (e.g. fires, floods earthquakes, terrorist threats, hazardous material exposures, personal violence, power failures, contamination of water supplies, communicable disease outbreaks such as pandemic influenza and may extend to sociological contingencies).
- fulfill the emergency response roles set out in the British Columbia Emergency Response Management System
- integrate local and regional health emergency/disaster plans with those of the Ministry, BC Ambulance Service, other Ministries and agencies (e.g. Provincial Emergency Program, other health authorities and Emergency Social Services) and local and municipal authorities.
- cooperate with and provide assistance to other health authorities in the event of an emergency that requires sharing resources (e.g. evacuation of a facility in an adjacent health authority or accommodating casualties from a disaster elsewhere in the province).

More specifically, health authorities are responsible for planning the health system response to a pandemic influenza within their region with direction from both the provincial and the federal governments. In order to develop effective plans, health authorities organize services and liaise with local partners in advance to facilitate a coordinated response when pandemic influenza strikes in the community.

Health authority pandemic influenza response plans include:

- assessment of capacity for the care of influenza patients
- prioritized delivery of health services
- protocols for vaccine and anti-viral use;
- command structure and operational procedures
- identification of alternative care locations and resources
- continued delivery of acute and residential care services
- risk communication strategies for internal and external stakeholders and
- human resources plan which includes procedures and protocols for managing scarce staff resources and staff safety guidelines specific to pandemic influenza.

In partnership with municipalities and involved stakeholders, health authorities develop plans for establishing and operating mass immunization clinics. Health authority plans are developed, maintained, exercised and reviewed during the pre-pandemic/inter-pandemic period. See the following links for individual health authority plans:

- Vancouver Coastal Health Authority http://www.vch.ca/
- Vancouver island health Authority http://www.viha.ca/
- Fraser Health Authority http://www.fraserhealth.ca/Pages/default.aspx
- Interior Health Authority http://www.interiorhealth.ca/
- Northern Health Authority http://www.northernhealth.ca/

2.5 Pandemic Influenza

Human influenza or the *flu*, is a respiratory infection caused by the influenza virus. Strains circulate every year, making people sick. Influenza typically starts with a headache, chills and cough, followed rapidly by fever, loss of appetite, muscle aches and fatigue, running nose, sneezing, watery eyes and throat irritation. Nausea, vomiting and diarrhea may also occur, especially in children.

People are exposed to different strains of the influenza virus many times during their lives. Their previous bouts of influenza may offer some protection against infection caused by a similar strain of the virus even though the virus changes. However, three to four times each century, for unknown reasons, a radical change takes place in the influenza A virus causing a new strain to emerge. Pandemic influenza occurs when an influenza virus changes into a new strain that is readily transmitted from human to human and against which people have little to no immunity. All the following conditions are necessary for an influenza pandemic to occur:

- a new influenza A virus arising from a major genetic change
- a virulent virus with the capacity to cause illness and death
- a susceptible population with little or no immunity; and
- a virus that is transmitted efficiently from person to person.

Both seasonal and pandemic influenza are spread by breathing droplets that have been sneezed or coughed into the air by someone with the flu, having the droplets land on the surface of the eye, shaking hands with an infected person, or touching a contaminated surface, and then touching your own eyes, nose or mouth. For more information, see the B.C. H1N1 Pandemic Influenza Response Plan (2009) at http://www.bccdc.ca/outbreak-emerg/pandemics/.

2.6 H1N1 Influenza

The H1N1 influenza virus (human swine influenza or human swine flu) is a respiratory disease of humans caused by type A influenza virus. This particular strain originated in swine, although it is now transmitted between people. Spread of H1N1 influenza virus from person to person occurs in the same way as seasonal flu, which is mainly spread person to person through coughing or sneezing by people infected with the influenza virus. People may become infected by touching something with flu viruses or germs on it and then touching their mouth or nose. Germs on hard surfaces, such as counters and doorknobs, can be picked up on hands and spread to the respiratory system when people touch their mouth or nose.

The symptoms of H1N1 flu virus in people are similar to the symptoms of typical human seasonal influenza. Symptoms include high fever, cough, sore throat, headache, body aches, chills, fatigue, eye pain, shortness of breath, and lack of appetite. Some people with human swine flu have also reported nausea, vomiting, and diarrhea. Symptoms or complications such as severe respiratory distress or pneumonia may develop in moderate or severe cases, as well as people with chronic or life-limiting health conditions.

2.7 At-Risk Populations

Although some individuals may experience only mild symptoms of H1N1 influenza, a small number of people will develop more serious illness as a result of a pandemic influenza. Many of these people will have other underlying health conditions, such as heart or lung disease, that put them at increased risk. Based on what we know about seasonal flu and the current pandemic virus, the following groups of people have been identified as likely to be at greater risk of serious illness:

- people who have chronic respiratory disease (including cystic fibrosis, chronic obstructive pulmonary disease, and asthma)
- people who have chronic heart disease
- people who have chronic kidney disease
- people who have chronic liver disease
- people who have chronic neurological disease
- people who are immuno-suppressed (whether caused by disease or treatment)
- people who have diabetes mellitus
- pregnant women
- people aged 65 years and older
- young children aged five years and under.

Current studies show that the risk for novel H1N1 infection among people born before 1957 is less than the risk for younger age groups. Overall, seniors will be less affected by the novel H1N1 virus than other groups. As seniors comprise 78% of the population served by home and community care, this may mean that there will be less direct impact on the majority of home and community care clients. Seasonal influenza strains are still circulating and the existing prevention and control measures for seniors and those who have health conditions that put them at risk for complications continue to apply, including seasonal influenza vaccination and the usual outbreak control protocols for facilities. However, the higher rate of H1N1 infection in younger age groups means that many staff and their families may be affected, as well as high risk groups served by home and community care, such as adults with developmental disabilities, those with physical disabilities who are under 65 years old and adults with acquired brain injury. Thus particular attention to service continuity measures is important this year.

2.8 Implications of H1N1 Influenza Pandemic for Home and Community Care Services

The common implication of an influenza pandemic for home health services, assisted living residences, and residential care is based on the reliance of their client populations on the services they provide. Clients of home and community care services are already vulnerable because of acute and chronic health conditions, resulting isolation and frailty, cognitive loss, and disability, or they may be at the end of their lives. Their health, safety, and well-being depend on the care and services they receive. Those home and community care clients who have chronic diseases or acute illnesses may also be at increased risk of the complications associated with H1N1 influenza. The home and community care services they receive often mean the difference between wellness and illness, function and dysfunction, and good and poor quality of life.

During a pandemic, with the potential for staff shortages due to illness or time required to care for their family members, care and service arrangements may be interrupted or reduced. Without this support, clients may be at risk for adverse events and may become frailer, dependent, or socially isolated, particularly those who live in their own homes.

The following are some implications of an influenza pandemic for home health services, assisted living residences, and residential care facilities.

Home Care

In addition to their existing home health client case loads, home health services may be required to provide follow-up care for people who do not require hospitalization for H1N1 influenza or for whom hospitalization is not the best option. As a result staff caseloads may become overburdened, requiring difficult decisions on allocation of service for individuals in the community. Each health authority will need to coordinate services across acute and community settings, as well as with municipalities and others to establish appropriate plans for the unique issues that may need to be addressed in each area.

In the event of an H1N1 influenza pandemic, anticipated shortages of staff (due to their own illness) and the need to limit social interaction that may spread the virus, means that the large majority of individuals infected with the influenza virus will be cared for at home by family and friends with the assistance and advice of their family physician and other care providers. Given these circumstances, home health staff can expect to be called on to provide care for:

- those medical and surgical patients, not hospitalized because of the pandemic, who are well enough to be discharged early from hospitals to free up hospital beds for more severely ill patients but still require clinical or personal care services
- current home health clients who will continue to need in-home care during the influenza pandemic whether or not they become infected with the influenza virus
- those individuals with the highest need (or who lack other supports such as family and friends) to assist them with their needs, and
- those with chronic, acute and palliative care needs not related to H1N1 who require care.

Assisted Living

People who live in assisted living residences are considered to be living in their own homes where they receive personal care services in that environment. Therefore, the implications of pandemic influenza in this setting are similar to those outlined above for home health services. However, as assisted living includes components of congregate living (e.g., some or all meals eaten in a common dining room), in the event of an influenza pandemic, operators will need to consider the likely consequences of the closed

environment, shared food services, and the heightened possibility of the spread of infection and reduced home health supports as community nurses and personal care staff respond to increased demand and illness of staff members.

While assisted living residences are a semi-closed environment, they are also people's homes; thus, operators cannot order them to stay in or remain in their private living units. As assisted living is a congregate setting, there is the increased likelihood of exposure to and transmission of a virus among residents through shared laundry and housekeeping services and facilities and food services. Staffing challenges may arise if significant numbers of tenants are sick and require tray service in their residences.

Due to the expected patient surge at acute care facilities, assisted living residents who contract the pandemic virus but do not develop an acute illness will need to manage at home with their usual resources and supports. Assisted living residences will have to be largely self-sufficient in addressing these residents' ongoing concerns and care if they become ill. Assisted living residences typically do not have a nurse on site 24 hours a day as they operate in a largely non-professional staffing environment, and may require additional support from home health services if available.

Residential Care

Residential care facilities, which are staffed by licensed health care professionals around the clock, will continue to meet the needs of individuals in the residential care setting. Residential care clients who contract the pandemic virus but do not develop severe illness will be expected to remain at the residential facility, supported by the staff of the facility. Ambulance services may also be strained during a pandemic, and patients requiring transport will be transferred in order of highest priority. It will be very important in these settings to put in place measures to protect residents by screening of others entering the facility for illness and putting in place enhanced hygiene measures.

Potential Pandemic Scenarios

The following scenarios present some of the issues that may arise for health authorities and the home and community care service sector during an outbreak of H1N1 influenza.

Scenario 1: At Home
Mr. P. is a frail 77-year-old man who has just returned home from hospital where he had triple coronary bypass surgery. While he lives alone in his own home, his three children live close by and regularly visit and provide help when needed. After surgery, Mr. P. needs the dressing on his incision changed regularly and daily visits from a community health worker who helps him with personal care. A week after this routine has been established, there is an outbreak of H1N1 pandemic influenza in the community and home health staff are becoming ill. How will Mr. P.'s needs continue to be met?

Scenario 2: Assisted living Residence
Mr. and Mrs. R. have been married for 62 years and live in an assisted living residence where they take their meals in a common dining room and have their bed and bath linens laundered and their unit cleaned once a week. Once a week, they also receive help with bathing. They enjoy the social life offered in assisted living and participate in regular activities and outings. Mrs. R. has severe asthma. Each year the R.s have the regular seasonal flu vaccine and this year are also waiting for the H1N1 vaccine to be available. In late October, ten of the other residents are diagnosed with H1N1 influenza before either vaccinations have been given. What plans should be in place if this were to occur and how would such plans support the continued health and independence of the R.s?

Scenario 3: Residential Care Facility
Elsie W. is a forty-five year old woman who lives in a complex care facility as the result of a major stroke suffered two years ago. She has significant difficulty speaking, and is wheelchair bound. As a result, she requires assistance with dressing, personal and oral hygiene, going to the toilet and eating. Over the past five months Elsie has been having grand mal seizures and her doctor has ordered an electroencephalogram at the local hospital, for which she has been waiting for four months. On the day of her EEG, Elsie has wakened up with a slight sore throat and cough but no fever. One other resident on the unit has the H1N1 virus. The RN has given Elsie a face mask to wear to her appointment. What prior pandemic planning would have influenced how this situation was handled, including other steps that could be taken?

3. Objectives

In spite of the differences in services, mandates, client groups, and settings, planning for and managing during a pandemic should be directed towards the following common objectives:

- To reduce the spread of pandemic influenza among clients, staff, family members and volunteers;
- To maintain essential care and services for clients during a pandemic and thus reduce potential losses in independence, health, and well-being;
- To reduce the impact of both pandemic influenza and the potential changes in service on clients and their families;
- To make appropriate and effective use of the skills and knowledge of staff, volunteers, clients, family, friends, and their support networks during a pandemic.

4. Assumptions

This document is based on the assumptions included in the Canadian Pandemic Influenza Plan, and the *BC H1N1 Pandemic Influenza Response Plan (2009),* augmented by planning assumptions specific to the home and community care service sector in British Columbia.

4.1 The Pandemic

- The next pandemic will first emerge outside of Canada and may rapidly spread to Canada.
- The first pandemic influenza peak could occur within 2 to 4 months after the virus arrives in Canada. The first peak in mortality is expected to be approximately 1 month after the peak in illness.
- The influenza pandemic will occur in two or more waves and the length of each wave will be 6 to 8 weeks in localized areas and up to 15 weeks in larger areas such as a province. The influenza pandemic will last 12 to 18 months and more than one wave may occur within a 12-month period.
- A regular seasonal influenza outbreak may occur simultaneously with a pandemic.

4.2 Vaccine and Antivirals

- Vaccine will be the primary means of pandemic influenza prevention. The supply will be limited during the early stages of the pandemic; therefore, plans for the first wave should assume lack of influenza vaccine and priorities for vaccination will need to be established.
- It may take a minimum of four to six months to develop a vaccine.
- Vaccination and the use of antiviral medications require the informed consent of the patient or the patient's health representative or substitute decision maker.
- Home and community care clients and staff are generally included in the priority groups for both vaccination and antiviral treatment.

4.3 The Health System and its Workforce

- Total workplace absenteeism rate due to illness and caretaking may be as high as 20% during the peak two-week period of the first wave.
- The demand for health care services can be expected to increase sharply simultaneous with workforce shortages.
- Maintenance of regular services at all levels of government and in the private sector as well as community services such as garbage, police, fire, utilities will be a challenge and may be interrupted or reduced due to staff shortages.
- Many staff work for more than one employer within the health care system at the same time; for example it is not unusual for nurses to work part-time in acute care while also being on-call for a residential care facility and/or a home health service.
- Private agencies may be able to boost staffing to deliver home and community care services and residential care.
- Health authorities may plan for alternative care sites outside of hospitals, as they might for any major emergency.

4.4 Home and Community Care Client Population

- Pandemic influenza may have more serious consequences for people who have chronic or life-limiting illness, age-related frailty and dementia, compromised immune systems, and disabilities.
- People who use home and community care services do so because they require support and assistance; without these services they are at risk of adverse health outcomes, including hospitalization, institutionalization or death.
- Residential care clients with influenza will be cared for by staff at the facility possibly supplemented by family and volunteers.
- Family members of residents will want to visit their loved ones during a pandemic.
- Individuals living in the community, including Assisted Living residences, will find that health and other services may be reduced or unavailable.
- Deaths will occur during a pandemic, as they do from influenza every year.
- Regardless of its actual effects, an influenza pandemic will generate much uncertainty, anxiety and stress, resulting in prolonged exposure to extraordinary and chronic stress for both staff and home and community care services' clients and their families.

4.5 Roles and Responsibilities

- The Provincial Health Officer is the lead in the province in the event of an influenza pandemic and is responsible for the decision to declare a pandemic in the province and for establishing policies for immunizations and the use of antiviral medications.
- Medical health officers, located within health authorities, have wide-ranging authority for public health including abilities to:
    - minimize gatherings such as at schools, theatres, recreation centres, stadiums or on transit systems where people gather in close proximity;
    - restrict travel and the movement of people;
    - assist with federal screening of travelers at ports of entry;
    - order the isolation and/or the quarantine or isolation of individuals or groups;
    - direct the provision of care for persons infected with pandemic influenza;
    - require the training of alternate care-givers;
    - act as spokespersons with regard to public health issues in consultation with the Provincial Health Officer.
- The Ministries of Health Services and Healthy Living and Sport and BCCDC provide information on H1N1 to the public as well as online support through the 811 service of HealthLink BC.
- Health authorities are responsible for planning for and managing pandemic influenza in their regions.
- Each facility or agency is responsible for developing its own exposure control, business continuity, and pandemic influenza plans.

4.6 Services and Supplies

- Supplies (including medications) over and above normal will be necessary during a pandemic.
- Without very clear communication about the differences between the specific needs based on the current outbreak (i.e. H1N1) and regular procedure (i.e. precautions for usual respiratory outbreak) in the use of supplies and procedures for personal and nursing care, there may be confusion and variation in practice across services that may create unnecessary anxiety among staff and clients.
- It may not be unusual for a health authority or home and community care service provider to run short of supplies during a pandemic.
- Waste products may accumulate during a pandemic.
- All external facility/agency suppliers may also experience service interruption.
- Services and utilities may be disrupted during a pandemic.

5. Ethical Principles

Influenza pandemic plans need to be founded on widely-held ethical values, so that people understand in advance the kinds of choices that will have to be made. Decision makers and the public need to be engaged in discussions about ethical choices so the public considers the plans to optimize public health given a scarcity of resources.

British Columbia has adopted the following ethical principles to guide the health care system during an influenza pandemic.

- respect
- minimizing the harm that a pandemic could cause
- fairness
- working together
- reciprocity
- keeping things in proportion
- flexibility
- good decision-making
    - openness and transparency
    - inclusiveness
    - accountability
    - reasonableness

For more information on ethics during a pandemic and an example of an ethical decision making tool, please see *An Ethical Framework for Decision Making: Supporting British Columbia's Pandemic Influenza Planning and Response* (Ministry of Health Services, 2009) on B.C.'s pandemic website.

6. Planning And Response Principles

The following principles are based on the guiding principles for publicly-funded home and community care services and can be used to guide planners and managers in their approach to an influenza pandemic.

- Services promote the well-being, dignity and independence of clients;
- Services provide the best possible quality of life for clients at all points in their lives including near the end of their lives;
- Clients and their families have the information they require to make their own decisions about lifestyle and care; and
- Clients have the right to make their own care decisions.

See also the planning principles included in the Operations Coordination and Emergency Management section of the *BC H1N1 Pandemic Influenza Response Plan (2009)* on B.C.'s pandemic website.

7. Planning And Response Considerations

7.1 Pandemic Influenza and Ongoing Care

Pandemic planning and management in the home and community care service sector needs to consider that its clients are vulnerable to diminished health and wellness in two ways. Clients may be at risk:

- for increased dependence or ill health if regular service is interrupted
- of contracting and/or suffering more serious illness or complications of influenza, thus requiring more care

7.2 Psychosocial Needs of Clients and Staff

In the event of a pandemic, there may be higher rates of illness and death in the general population that will contribute to sharp surges in demand for services while simultaneously contributing to sudden and significant shortages of personnel and resources, adding to the stress and fatigue of those staff are able and willing to continue working.

Even those clients and staff who do not get sick will bear some or all of the psychosocial consequences of a pandemic, including the real potential for significant economic downturns, the interruption of normal supply chains and public services, and the need to provide additional care for family members at home. Temporary or long-term closures of normal social and recreational activities may make self-care and family care more challenging. The stress, ongoing uncertainty, and the threat or actual loss of family members, friends, and colleagues may cause greater than normal emotional strain and contribute to or exacerbate pre-existing psychological disorders (e.g., depression, anxiety, complicated grief).[2]

Older adults and persons with disability, who derive social benefits from congregate living, receiving care and assistance, entertaining visitors, may experience increased isolation during a pandemic. Social isolation is associated with increased rates of premature death, lower general well-being, more depression, and a higher level of disability from chronic diseases.

For more information, please see, the *British Columbia Pandemic Influenza Psychosocial Support Plan for Health Care Workers and Providers* (Ministry of Health Services, *August 11, 2009)* on B.C.'s pandemic influenza website.

[2] Based on British Columbia Pandemic Influenza Psychosocial Support Plan for Health Care Workers and Providers (Ministry of Health Services, August 11, 2009), page 2.

7.3 Dementia Care

Individuals who have cognitive impairment may become more upset, agitated, frustrated, or exhibit unusual behaviour when their daily routines are disrupted, as they may be during an H1N1 outbreak. To the greatest extent possible, changes to routine, environment and daily structure for individuals with cognitive loss should be minimized. Given that home health and residential care staff may change frequently during a pandemic, regular communication among staff is more important than ever. In addition, prior planning with family is important to ensure that stability is maintained. Some suggestions for caring for clients who have dementia and cognitive loss during an outbreak of pandemic influenza include:

- readily accessible personal information detailing what the person likes to be called, cultural background, names of family and friends, past hobbies and interests, sleep habits, what upsets them, what calms them down, typical patterns of behaviour, normal daily structure and routines, and eating and drinking patterns and abilities.
- anticipation and added precautions for (increased) wandering.
- additional training and information for staff and volunteers who may be required to deal with changes in peoples' behaviour.

7.4 Communication

Public education and information for clients, families, and staff are vital to pandemic preparedness. If families, friends, neighbours, volunteers, and clients themselves are to play an increased role in care giving and self-care, they must be given accessible and timely information about influenza, its symptoms, and ways of caring for themselves and others. This information is available on B.C.'s pandemic website.

7.5 Consent for Use of Antiviral Medications and Vaccines

The *Health Care (Consent) and Care Facility (Admission) Act* requires that health care providers seek valid consent from patients before providing health care. Valid consent must be voluntary, given by a capable adult, be specific to the treatment being offered, and informed (which obligates the health care provider to inform the patient of the treatments, risks, benefits and any alternatives). If an adult is not capable of giving consent, consent must be sought from their legally-authorized representative or substitute decision maker. Adults and their substitute decision makers have the right to refuse treatment. While consent need not be documented, if consent to the use of antiviral medications or influenza vaccine is to be sought in advance, it should be documented for later verification.

7.6 Summary of Key Activities

- consult and update emergency plan
- update or develop a business continuity plan
- update or develop an exposure control plan
- use checklists
- collaborate with health authorities and other community agencies
- communicate with staff, clients, and families
- educate staff, clients and their families, and volunteers
- encourage clients and their families to develop their own plans
- seek valid consent for use of antiviral medications and vaccines in advance, and give clients and/or their substitute decision makers the most current information.

8. Planning And Response Guidelines[3]

8.1 Planning

To prepare for an H1N1 influenza pandemic, health authorities and home and community care service providers should develop their own plans in coordination with the provincial pandemic plan and the plans of other local providers in the health authority.

Develop a Pandemic Influenza Plan: Every health authority and home and community care service provider should ensure they have a pandemic planning team and a coordinator responsible for pandemic planning. The planning team needs to include people with expertise in infection prevention and control who can work closely with health authorities (e.g., the medical health officer and licensing staff, as appropriate) to develop and implement their pandemic plans.

Pandemic plans ought to be reviewed and updated annually or more frequently if required and should augment or be part of other related plans such as business continuity, exposure control, and emergency plans.

Review and Update Emergency Plans: Because an influenza pandemic is likely to cause social disruption and affect critical services, providers should review their emergency, business continuity, and exposure control plans to ensure they take into account the potential impact of an influenza pandemic.

Coordinate Planning with Other Service Providers: Because an influenza pandemic will affect the whole community, service providers cannot plan in isolation and must work in conjunction with the health authority. Health authorities need to coordinate the development and implementation of their plans with the province and other services that have provincial or regional roles and responsibilities, such as the BC Centre for Disease Control, the BC Ambulance Service, laboratory services, and HealthLink BC.

Regionally and locally, home and community care service providers ought to:

- connect with other service providers in the community, including other home health services and care facilities, adult day programs, pharmacies, physicians, public health offices, transportation services, meal services, volunteer programs, outreach services, churches, municipal governments etc.;
- familiarize themselves with other service providers' pandemic plans and functions;
- identify opportunities to collaborate/ share resources during a pandemic;
- identify possible scenarios and how they would be handled (e.g., if the hospital is unable to admit seriously ill residents, how will care be provided? Can well residents be moved to another location/level of care? How will the system make the best use of human resources?);
- identify alternate agencies that could provide staff in the event of shortages (e.g., private nursing or for-profit home support agencies);
- recruit family members, retired health care professionals, health care students and other volunteers who could provide assistance in a shortage of trained staff;
- work with partners to determine how to apply regional or provincial criteria for who may be admitted to hospital and who may be required to receive care *in situ*.

See Appendix A for examples of planning and response checklists.

[3] These guidelines are based on Chapter 19 of the Ontario Health Plan for an Influenza Pandemic (August 2008)

8.2 Options for Client Care

During a pandemic, routine home health services provided to home and community care clients in their own homes and assisted living residences may be impacted due to staff shortages and the need to re-deploy staff to care for clients who are less stable and sicker. Consequently, pandemic planning should include discussion with clients and caregivers about the need to anticipate potential disruptions in home health services and to develop back-up plans to meet the health care needs of clients.

During a pandemic, families of vulnerable populations living in the community or in a congregate setting may respond by wanting to care for their family members themselves at home without adequate or appropriate resources or information. Health authorities and service providers will need to provide information to allow families to make informed choices about caring for someone at home; if not properly prepared or equipped (for example with mobility and assistive devices or training to lift clients safely), families should be discouraged from removing residents from a congregate setting.

8.3 Services to be Reduced, Enhanced or Deferred

During a pandemic, health authorities and other organizations may need to consider reducing or delaying some services to compensate for staff shortages or to prevent the spread of influenza. Each health authority and organization will need to develop appropriate plans for the needs of clients and communities.

For example, adult day programs may need to be reduced or curtailed based on a lack of capacity to staff them or due to public health measures implemented by the local medical health officer. As long as programs and services have enough staff, they can continue to be delivered unless instructed otherwise by local public health officials. Program participants should be screened for influenza symptoms before participating, and those with active symptoms of H1N1 should receive further assessment in accordance with current clinical guidelines.

Decisions about which services to reduce, curtail, or enhance should be made based on the clinical judgement of a licensed health care professional, clients' care needs, infection control guidelines, and advice from the local public health unit and case managers. Plans to reduce services should be discussed with clients, their families, physicians, regulators and the medical health officer as appropriate.

Note: Some laboratory services may be curtailed during a pandemic and this may affect the routine care and diagnostic services that such facilities provide. In these instances, frequency of testing may be reduced; as a result, physicians will need to provide specific direction for individual client care.

See Appendix B for sample worksheets that may be used to guide providers in evaluating and planning for potential changes to their activities during a pandemic.

8.4 Temporary Care Sites

During an H1N1 influenza pandemic, residential care facilities may need to admit residents beyond the capacity allowed by the conditions of their license, in specific circumstances. These situations must be managed carefully to ensure that the response to stressed acute care hospitals is balanced by the need to ensure the well-being and safety of residents in the facility. In such instances, health authorities will work with their medical health officers and the Provincial Health Officer to facilitate suitable arrangements.

8.5 Managing a Potential Increase in Deaths

Depending on the severity of pandemic strain, there may be an increase in deaths. While health authorities have morgue capacity, most residential care facilities do not have morgues or systems for storing or removing multiple bodies.

During a pandemic, the province, health authorities, service providers and the BC Coroners Service will work together closely to monitor and sensitively address such a situation if it arises.

8.6 Surveillance

The BC Centre for Disease Control conducts routine surveillance for the province of B.C. In the home and community care sector, with the exception of assisted living residences, home and community care service providers also routinely assess clients' health conditions, including surveillance for influenza. When pandemic activity has been reported in the community, providers should enhance their surveillance. During a pandemic, residential care facilities should:

- continue to monitor residents for signs of influenza;
- conduct active surveillance for influenza in visitors, students, staff and new residents;
- notify the Medical Health Officer of any respiratory infection outbreak in the facility;
- take nasal pharyngeal swabs during a respiratory infection outbreak during a pandemic *at the direction of the local Medical Health Officer;*
- increase the frequency of cleaning of high touch areas in the facility;
- Instruct and repeatedly promote staff and visitor compliance with hand hygiene, respiratory etiquette, and the importance of taking seasonal and H1N1 vaccination.

Operators of assisted living residences must pay attention to changes in normal conditions, e.g., noticing when a number of residents and/or staff exhibit similar symptoms. During a pandemic, operators of assisted living residences should seek advice from local public health officials about how best to contain the spread of infection. The advice given may be similar to what is typically recommended to control the spread of infection within any other congregate, unlicensed setting in the community.[4] As well, the advice will be based on and acknowledge the infrastructure and resources available to the registrant. For example, registrants would not be asked to conduct surveillance in the same way as it is conducted at community care facilities or to make diagnoses. Diagnostic assessment and any required laboratory testing should be arranged by the resident's physician as it would be for any other person living in a community setting.

[4] Examples of similar settings to assisted living residences, where people live semi-independently, include supportive housing and boarding schools issues. In assisted living residences, there is limited infrastructure and staff is not necessarily on site 24/7. Staff is mainly non-health professional, although a registered nurse or licensed practical nurse provides clinical oversight of nonprofessional staff.

8.7 Human Resource Planning

Human resources planning is a critical key to maintaining services during a pandemic in home health and residential care facility settings. Health authorities and home and community care service providers should work closely with Medical Directors and attending physicians, nurse leaders, and others to plan for the delivery of care that may be ordered more often during a pandemic such as intravenous therapy, oxygen administration, and the ordering of laboratory tests. To ensure continuity of physician services, some communities might establish groups of two or three physicians to provide telephone support to all facilities or provide care to all residents in certain facilities (i.e., doctors on wheels) or to all home health clients in specific neighbourhoods. Your health authority may already have such arrangements.

During a pandemic, health authorities and service providers are likely to experience staff shortages in all home and community care settings, and may have to take extraordinary measures to continue to provide care for home health clients including those in assisted living, and residents of residential care facilities. As part of their planning, health authorities and service providers should identify:

- the minimum skills required to meet clients' care needs, including providing care for clients who develop influenza;
- the direct care staff who have those skills or who could be trained to take on more responsibilities within their scope of practice in different roles;
- strategies that could be used to increase capacity (e.g., contracting staff from external agencies, extending working hours, calling staff back to work);
- other staff (e.g., clerical, housekeeping) who possess the skills or could be trained to provide personal assistance or assist with care;
- family members/volunteers who could be trained to help with personal assistance (e.g., how to give a bed bath and assist with feeding and toileting) or care;
- staff /volunteers with skills to provide training to family members and volunteers;
- other organizations in the community that might be able to train or locate family/volunteers with the appropriate skills;
- any labour (i.e., union), insurance or liability issues or Workers' Compensation Board policies or regulations the organization would have to address if it altered staff roles or used temporary workers and volunteers;
- which staff will be responsible for supervising those staff playing different roles, and family members or volunteers who may be providing care;
- the supports and resources that staff and others may need to be able to work (e.g., transportation, accommodation, assistance with child care and other family responsibilities).

Health authorities and service providers should engage members of unions and occupational health and safety committees in their pandemic planning efforts to ensure that their plans include appropriate practice, communication and education.

The *Personal Assistance Guidelines* (Ministry of Health Services, November 2008) provides information regarding the roles of unregulated care providers, health authority home and community care staff, and other service providers, and is found at: http://www.health.gov.bc.ca/library/publications/year/2008/Personal_Assistance_Guidelines.pdf.

8.8 Infection Prevention and Control Measures for Staff and Volunteers

Information on occupational health and safety and infection prevention and control is set out in *PICNet Infection Control Guidelines: Providing Health Care to the Client Living in the Community* (PICNET, August 1, 2009), in *Annex F: Prevention and Control of Influenza during a Pandemic For All Healthcare Organizations* (PHAC), and in the following guidance from the Public Health Agency of Canada:

- *Interim Guidance: Infection Prevention and Control Measures for Health Care Workers in Long-term Care Facilities*.
- *Interim Guidance: Infection prevention and control measures for Health Care Workers in Acute Care Facilities* (Updated: July 28, 2009).

These documents may be accessed through B.C.'s pandemic influenza website.

During a pandemic, in contrast to managing a routine outbreak of seasonal flu, the following activities may be practiced by health authorities and service providers when indicated to prevent and control the spread of pandemic influenza:

- the use of N95 respirators when performing aerosol-generating medical procedures
- ordering antiviral medications for clients and residents in advance of an outbreak;
- confining residents with influenza to their rooms as long as it does not cause them undue stress and can be done without applying physical restraints
- screening all new admissions to care facilities for H1N1pandemic influenza and then taking appropriate precautions when the individual is admitted to the facility;
- following established transfer authorization processes when transferring clients and residents to hospitals or other health care facilities;
- re-deploying health authority staff when and where able and in consultation with the appropriate stakeholders if there are significant staff shortages throughout the health care system.

8.9 Visitors

Visitors will likely be allowed to enter assisted living residences and residential care facilities during a pandemic unless they are ill with pandemic influenza themselves, or if the medical health officer has restricted access due to a declared outbreak. If allowed to enter during an outbreak, visitors may be restricted in terms of where they visit. It is routine for visitors to be encouraged to perform hand hygiene on arrival and departure, and those practices would continue during a pandemic. Any restrictions on visitors should be based on the severity of the pandemic but should also consider the potential emotional hardship to residents and visitors. Procedures should be in place to screen visitors and ensure those that are ill do not enter.

8.10 Outbreak Management

If an outbreak of influenza is detected in an assisted living residence or residential care facility, each setting should follow provincial, health authority and their own policies and procedures and the direction of the medical health officer to manage the outbreak. Direction should be sought from the medical health officer regarding the use of antiviral medications for residents and staff. In addition, the following should be considered:

- prescriptions for antiviral medications for residents made in advance may be filled when there is an outbreak;
- antiviral medications may be used for all residents, staff, and volunteers for outbreak control if pandemic vaccine is not yet available (at the direction of the medical health officer)
- exclusion policies for unvaccinated staff will not apply if there is no vaccine yet available for the pandemic strain
- it is unlikely that public health units will be able to offer on-site assistance however the medical health officer should be consulted for optimal outbreak managing
- the importance of reporting if an outbreak fails to come under control with the use of antiviral medications and taking additional swabs to check for antiviral resistance or other organisms.

8.11 Education

Pandemic preparedness for the home and community care service sector should include ongoing education of staff, clients, residents, volunteers, families and other organizations about influenza and the current pandemic plan. Education should focus on infection control practices and measures to protect the health of staff and clients, with an emphasis on the importance of pneumococcal and influenza vaccination and frequent hand washing. Education plans should be developed in collaboration with staff responsible for occupational health and safety and may include:

- the education required for staff, including staff who do not routinely care for clients but might have to during a pandemic;
- education for volunteers;
- education required in residential care settings for residents, the residents' council, families and the family council, which could include training family members to assist with bed baths, assisting with feeding and toileting etc.;
- education for visitors;
- approaches to training (e.g., team-based approaches that will ensure any temporary workers receive appropriate support and supervision, and cross-training to ensure staff are able to cover one another's' duties, such as tracheostomy care, peritoneal dialysis, tube feedings or other specialized care
- frequency of training (e.g., during orientation, then annually for more frequently if threat of a pandemic is imminent)
- training resources (e.g., pamphlets, fact sheets, web-based information resources and public awareness campaigns).

It is essential that educational resources provided are consistent with those provided or endorsed by the health authority, the BC Centre for Disease Control, and the Province of B.C., particularly where regional or provincial policy about pandemic influenza and its management is stated or implied.

For up-to-date information, see the education resources on B.C.'s pandemic influenza website.

Education and training programs for all home and community care sector staff, clients or residents and their families and caregivers ought to include (but not be limited to):

- the health authority's and service provider's influenza pandemic plan;
- the importance of hand hygiene and its proper technique for staff and clients;
- appropriate cleaning and disinfection of equipment (i.e., any that is permitted to be shared between residents must be cleaned and disinfected after each use);
- appropriate use of personal protective equipment, including the application, removal and disposal of gloves, gowns, eye protection, surgical masks and N95 respirators;
- risks associated with infectious diseases such as febrile respiratory illnesses (FRI) including influenza-like illness (ILl);
- principles and components of routine infection control practices;
- risks of transmission;
- procedures that are considered high risk and the reasons for that risk;
- individual staff responsibility to keep other staff and clients or residents safe;
- the employers' responsibility to protect workers' health;
- requirements for valid consent to immunization and the use of antiviral medications;
- any changes to staff exclusion policies during a pandemic and the reasons for those changes.

See the Communications and Education part of the *BC H1N1 Pandemic Influenza Response Plan (2009)* on B.C.'s pandemic influenza website.

8.12 Staff Support

Health authorities and service providers ought to consider what other supports may be possible to offer staff to help them continue providing care during a pandemic such as:

- assistance with transportation;
- assistance with accommodation and meals;
- flexible scheduling that gives staff time to fulfill family responsibilities with family-related needs;
- assistance with babysitting for children (i.e., if schools are closed or staff are working extra shifts), or caring for elderly family members, and caring for pets;
- access to counselling and psychosocial support to help staff cope with job-related stress or with anxiety about the pandemic.

For more information see *British Columbia Pandemic Influenza Psychosocial Support Plan for Health Care Workers and Providers* on B.C.'s pandemic influenza website.

8.13 Antivirals and Vaccine

During an influenza pandemic, the use of antiviral medications and vaccine will be based on provincial policy communicated by the Provincial Health Officer. The BC Centre for Disease Control and health authorities will be responsible for supplying and coordinating the distribution of antiviral medications to facilities, and will be responsible for supplying and coordinating the distribution of vaccine.

To be most effective, antiviral treatment must be started as soon as possible after onset of symptoms and preferably within 12 to 24 hours. Antiviral medications can be taken up to 48 hours after onset of symptoms, but they will be less effective if taken later. Thus, consideration should be given to encouraging clients and residents to obtain prescriptions for antiviral medications from their physicians in advance of an influenza outbreak, to have ready if the doctor agrees later it should be filled. Treatment decisions are the responsibility of the doctor for each client or resident but, because it may be difficult to reach the doctor during an influenza pandemic, service providers with responsibility to administer antiviral medications should seek, receive, and document in advance patient consent to treatment. These procedures will allow administration by service providers within the prescribed and recommended time frames.

Current provincial policy applies for the prophylactic use of antiviral medications in the control of outbreaks in residential care facilities until any new information emerges that necessitates a change. In all cases, the MHO should be consulted in these situations.

Health authorities and home and community care service providers must have the capacity to safely store antiviral medications and vaccine, including cold chain storage that complies with current public health policy and guidelines (i.e., keeps vaccine at a temperature between 2 and 8~), including maintaining distribution records. Pandemic plans should:

- identify the person responsible for receiving, storing and reporting on the use of antiviral medications and vaccine;
- identify where antiviral medications and vaccine will be stored, and how the assigned supply will be kept secure;
- review security procedures to ensure they are adequate;
- have a contingency plan in case of power failure or equipment malfunction;
- set out the expected role of community and/or hospital pharmacies that provide service to residential care facilities and hospices to ensure ready access to antiviral medications, including any required back-up services;
- describe the procedures and mechanisms that must be used to track who receives antiviral medications and vaccine, and how adverse reactions must be reported.

During an influenza pandemic, staff in residential care facilities may be responsible for administering antiviral medications to residents and staff for treatment and outbreak control. Service providers may also be responsible for immunizing other clients, staff, and volunteers.

For more information on the storage and distribution of antiviral medications and vaccine, see the *BC H1N1 Pandemic Influenza Response Plan* (2009).

8.14 Supplies

As part of pandemic preparedness planning, health authorities and home and community care service providers and contractors ought to discuss the type and quantities of supplies (other than antiviral medications and vaccine) that are needed, and purchase and maintain a one-month stockpile. Health authorities may wish to purchase some supplies together to achieve economy of scale.

During a pandemic, traditional supply chains may be disrupted. For example, a supplier in another jurisdiction may have to give priority to local companies. During the preparedness phase, health authorities and service providers should:

- talk to suppliers about their ability to deliver during a pandemic;
- review systems in place to ensure adequate supplies (e.g., environmental cleaning supplies, food, medications, oxygen concentrators);
- establish relationships with alternative suppliers including: equipment suppliers, food suppliers, medical suppliers, pharmacies, oxygen suppliers, physicians and any other health care providers who may provide contracted services to the facility.

8.15 Communication

While health authorities and home and community care service providers will already have plans and procedures in place for routine communication with clients, residents, families, staff, media and other health organizations, they also need to have communication strategies in place in the event of an outbreak or other public health emergency. To provide effective communication during a pandemic health authorities and service providers should:

- maintain up-to-date contact lists for home and community care clients' next-of-kin and their representatives or substitute decision makers, and for staff;
- use influenza fact sheets and other materials provided by the Ministry of Health Services, Ministry of Healthy Living and Sport, HealthLink BC, and the BC Centre for Disease Control (see B.C.'s pandemic influenza website) so that public messages are consistent;
- have an alternate or backup system of communication;
- post signs at building entrances of assisted living residences and residential care facilities to inform visitors of any special considerations or precautions, and to convey key messages (e.g.: advising visitors to not come inside if they are symptomatic with the flu due to the risk of infecting vulnerable residents and staff, and alerting people about any visiting restrictions, etc.);
- use other communication systems as available and appropriate (e.g., printed materials, newsletters, websites, dedicated phones) to maintain communications among residents, family members, visitors and staff.

8.16 Review the Pandemic Response

When the pandemic wave is over, health authorities and home and community care service providers should meet with other providers, their community partners and the province to review the overall response to the pandemic. A lessons-learned approach could be taken with a focus on what was handled well, what could have been improved, and what may need to be done to prepare for the next wave, or, the next pandemic.

APPENDICES

Appendix A: Planning and Response Checklists

RESIDENTIAL CARE FACILITIES PANDEMIC INFLUENZA PLANNING CHECKLIST			
1. Business Continuity Planning			
TASK	**YES**	**NO**	**ACTION REQUIRED**
Have you identified your essential services? Include payroll, systems maintenance, communications systems, support services, client services. unions? workplace safety?			
What services can you discontinue/postpone? Identify services that may be postponed or discontinued for the duration of the pandemic wave in order to free up resources.			
Have you identified recently retired health care workers or casual staff who may be available to assist with resident care during a pandemic?			
Identify supplies and equipment that are essential to the provision of your services. How will you deal with disruptions to the supply chain? Are there supplies that you can stockpile for use in a pandemic, such as gloves, masks, cleaning supplies, etc.?			
Have you developed policies to address liberal, non-punitive sick leave? Be aware of current recommendations for when staff may return to work after illness during a pandemic. Refer to national and provincial guidelines.			
Have you established procedures to cover employees or volunteers who become ill at work?			
Have you developed policies to cover the kinds of work volunteers may undertake during a pandemic?			
Have you designated someone to coordinate pandemic planning and to produce a written Business Continuity/Pandemic Plan?			
Have you designated someone to co-ordinate staff training and education about pandemic influenza?			
2. Influenza Protocols			
TASK	**YES**	**NO**	**ACTION REQUIRED**
Have you developed protocols for annual influenza vaccination of residents (and their family members or key contacts), staff, physicians and volunteers?			
Have you developed protocols to ensure that residents have received pneumococcal vaccine?			
Have you developed protocols for identifying, preventing and controlling influenza outbreaks, including designation of an individual responsible for surveillance for influenza-like illness?			
3. Planning for Pandemic Response			
TASK	**YES**	**NO**	**ACTION REQUIRED**
What level of care will you be able to provide to residents who are acutely ill? Consider your capacity to provide:			
• diagnostic services			
• oxygenation			

• chest x-ray			
• medications, such as antipyretics, analgesics, antibiotics, iv therapy/hypodermoclysis			
What plans have you made to provide enhanced care to residents who may not be able to be accommodated in an acute care facility			
Where will you provide more intensive care? Designate an area for the care of acutely ill residents.			
Have you developed plans for the discharge of stable patients from the "acute care area" to free up resources for those needing more intensive care?			
Have you planned for the need for increased infection control/enhanced cleaning during an influenza pandemic?			
Have you developed plans for limiting visitor or family access during a pandemic?			
Have you developed and discussed with family members plans to discharge residents to the care of family members during a pandemic?			
During a pandemic, there may be a significant increase in the number of deaths that may exceed the capacity of local morgues and funeral homes. Have you considered end-of-life issues such as: • ethical issues • pronouncing death • provision of post-mortem care • disposition of bodies • grieving families • psychosocial supports for staff			
Have you shared your pandemic planning preparations with sister facilities and associations?			

ASSISTED LIVING PANDEMIC INFLUENZA PLANNING CHECKLIST			
1. Business Continuity Planning			
TASK	**YES**	**NO**	**ACTION REQUIRED**
Have you identified your essential services? Include payroll, systems maintenance, communications systems, support services, client services.			
What services can you discontinue/postpone? Identify services that may be postponed or discontinued for the duration of the pandemic wave in order to free up resources.			
Have you identified recently retired health care workers or casual staff, friends and family members who may be available to assist with hospitality services and personal assistance during a pandemic?			
Identify supplies and equipment that are essential to the provision of your services. How will you deal with disruptions to the supply chain? Are there supplies that you can stockpile for use in a pandemic, such as gloves, masks, cleaning supplies, etc.?			
Have you developed policies to address liberal, non-punitive sick leave? Be aware of current recommendations for when staff may return to work after illness during a pandemic.			
Have you established procedures to cover employees or volunteers who become ill at work?			
Have you developed policies to cover the kinds of work volunteers may undertake during a pandemic?			
Have you designated someone to coordinate pandemic planning and to produce a written Business Continuity/Pandemic Plan?			
Have you designated someone to co-ordinate staff training and education about pandemic influenza?			
2. Influenza Protocols			
TASK	**YES**	**NO**	**ACTION REQUIRED**
Have you developed protocols to recommend the annual influenza vaccination to residents (and their family members or key contacts), staff and volunteers?			
Have you given thought to in-house vaccination clinics/transportation to vaccination clinics to assist residents and staff with accessing vaccines?			
Have you developed protocols for identifying, preventing and controlling influenza outbreaks.			
3. Planning for Pandemic Response			
TASK	**YES**	**NO**	**ACTION REQUIRED**
What level of assistance will you be able to provide to residents who are acutely ill?			
What plans have you made to provide enhanced assistance to residents who may not be able to be accommodated in an acute care facility			
Have you planned for the need for increased infection control/enhanced cleaning during an influenza pandemic?			
Have you developed plans for limiting visitor or family access during a pandemic?			

Have you developed and discussed with family members any plans to temporarily house residents in the care of family members during a pandemic?			
During a pandemic, there may be a significant increase in the number of deaths, which may exceed the capacity of local morgues and funeral homes. Have you considered end-of-life issues such as: • ethical issues • pronouncing death • provision of post-mortem care • disposition of bodies • grieving families • psychosocial supports for staff			
Have you shared your pandemic planning preparations with residences in the area?			

HOME HEALTH CARE SERVICES: PANDEMIC INFLUENZA PLANNING CHECKLIST (based on Tacoma/Pierce County Health Department)			
1. Structure for planning and decision-making			
TASK	**YES**	**NO**	**ACTION REQUIRED**
Has a planning committee been created to specifically address pandemic influenza preparedness, including representation from administration, nursing, home support, clerical, and other (as applicable)?			
Has a person been assigned responsibility for coordinating planning (a response coordinator)?			
Has a health authority point of contact person been identified for questions/consultation on infection control and other aspects of preparedness planning? Name: ________________________________ Phone number: _________________________			
2. Development of a written pandemic influenza plan			
Has a written plan has been completed or is in progress that includes the elements listed in #3 below?			
3. Elements of a pandemic influenza plan			
3.a Monitoring			
Is there a plan is in place for monitoring for pandemic influenza in the population served? • Has a staff person been assigned to monitor and receive public health advisories about the status of pandemic flu? • Has a system is created to monitor and review influenza activity in patients cared for in the home (i.e., weekly or daily number of patients with influenza-like illness), and to report unusual cases of influenza-like-illnesses?			
3b. Communications			
Has a communication plan has been developed? • A member of the pandemic flu planning team has been assigned as the agency's point person for external communication (e.g., with hospitals, nursing homes, health departments, social service agencies). • Key public health points of contact for pandemic influenza have been identified: • A list has been created of healthcare entities and their points of contact (e.g., other home health care agencies, local hospitals, residential care facilities, social service agencies, emergency medical services, laboratories, relevant community organizations) with whom the home care agency anticipates that it will be necessary to maintain communication and coordination of care during a pandemic. • Other home care agencies in the area have been contacted regarding their pandemic influenza planning efforts. Whenever possible, home care agencies should consider joint planning and coordination opportunities.			

3c. Education and Training			
Is there a plan to provide education and training to ensure that all staff understand pandemic flu and control measures? • The education and training program includes information on infection control measures to prevent the spread of pandemic influenza, including information on measures for home health care personnel during home care of patients. • Information materials on pandemic flu for patients and their families have been identified to guide family members on infection control and care of patients with pandemic flu in the home. A plan is in place to obtain and disseminate these materials. • Staff have been encouraged to develop individual and family preparedness plans.			
3d. Management of Clients/Patients			
Has a plan been developed for the management of patients during a pandemic? • The scope of services that the agency will provide during a pandemic has been clearly defined. (Hospitals may discharge patients to home and home health care agencies early to free-up bed space for critically ill patients.) Develop priority lists of patients to receive services, as resources and personnel become limited. • A system has been developed for phone triage of patients and to refer patients to triage and alternate treatment centers, as designated by the health authority. • The plan considers how the agency will maintain a database of clients who require special care (e.g., ventilators, breathing treatments, suction, pumps, special nutrition, dialysis, etc.). Family members of patients will be advised about care-giving when agency is unable to make visits.			
3e. Infection Control			
Has an infection control plan been developed that includes the following? ▪ An infection control policy for the care of pandemic influenza patients in the home. ▪ A list of supplies (e.g., surgical masks, gloves, hand hygiene products) that will be used during home care of patients with pandemic flu.			
3f. Occupational Health			
Has an occupational health plan has been developed that includes the following? • a sick leave policy for staff who have symptoms or documented illness with pandemic flu, consider: • handling of staff who become ill at work • staff who may return to work after recovering from pandemic flu • staff who need to care for ill family members • psychological impact on staff • evaluating staff before they report for duty			

Have resources have identified that are available to provide counselling to staff during a pandemic?			
Management of staff who are at increased risk for complications from flu (e.g., pregnant women, immuno-compromised workers) by considering alternate work locations or administrative leave.			
Monitor and offer annual influenza vaccine to staff.			
Monitor and offer annual influenza vaccine to staff.			
Staff understand that those staff who have been ill with the pandemic flu, have recovered and are able to return to work, will be assigned to patient contact and care, as they would have an immunity to the viral strain.			
3g. Vaccine and Antivirals			
Has a vaccine and antiviral distribution plan been developed? Has an estimate been developed for the number of personnel who would be targeted as first and second priority to receive pandemic influenza vaccine and antiviral medications?			
3h. Surge capacity			
Have the following issues related to surge capacity during a pandemic been addressed? • Plans are in place for managing a staffing shortage due to illness in staff or their families, including identifying the number and categories of personnel necessary to keep the agency open. • Priorities for providing care to clients have been established. • Anticipated supplies have been estimated (e.g., gloves, masks, hand hygiene products, medical supplies). Primary and contingency plans to address supply shortages have been developed. • Plans include stockpiling at least a week's supply of resources when there is evidence that the potential for pandemic flu has reached B.C..			

Appendix B: Service Levels Worksheets

RESIDENTIAL CARE SERVICES: SERVICE LEVELS WORKSHEET			
Type of service	**Level of care that must be maintained**	**Services that could be reduced**	**Services that could be enhanced**
personal care			
Medications			
meal service and assistance with eating			
Housekeeping			
personal hygiene and grooming			
oral care			
assessment of care needs			
clothing/bedding changes			
toileting and incontinence care			
skin and wound care			
oxygen therapy			
repositioning bedridden residents			
communication with families/decision makers			
non-urgent medical appointments			
contract services			
day programs respite care			
social recreational activities			
management of deaths			

ASSISTED LIVING SERVICES: SERVICE LEVELS WORKSHEET			
Type of service	**Level of care that must be maintained**	**Service that could be reduced**	**Services that could be enhanced**
hospitality services			
Meals			
Housekeeping			
Laundry			
social and recreational activities			
24-hour response system			
personal assistance services			
Bathing			
Toileting			
Dressing			
Grooming			
Washing			
oral hygiene			
perineal care			
incontinence care			
Eating			
Mobility			
medication assistance: ▪ storing ▪ distributing ▪ administering ▪ monitoring			
Other?			

HOME HEALTH CARE SERVICES:[5] SERVICE LEVELS WORKSHEET			
Type of service	**Level of care that must be maintained**	**Service that could be reduced**	**Services that could be enhanced**
home support			
Bathing			
Grooming			
oral hygiene			
skin care			
Toileting			
bed making			
lifting and transferring			
Mobilization			
assistance with eating			
ostomy and urinary drainage care			
management of ventilator equipment			
foot care			
assistance with medications			
respite care? others?			
nursing and rehabilitation			
oxygen therapy			
home iv program			
catheter care			
rehabilitation assessment and treatment			
post-surgical wound care			
palliative care: management of natural deaths			
exercise, activation, and respiratory therapy			
application and removal of prosthetics and orthotics			
Other			
attendance at day programs			
attendance at community bathing programs			
meals programs			
others?			

[5] Based on Ontario Health Plan For Influenza Pandemic August 2008.