



**BRITISH
COLUMBIA**

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British Columbia's Pandemic Influenza Response Plan (2012)

Introduction and Background

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TABLE OF CONTENTS

Foreword	3
1. How to Use This Document.....	4
2. Preface	4
3. About BC’s Pandemic Influenza Response Plan	5
3.1 Purpose	5
3.2 Scope	6
3.3 Audience	6
3.4 Principles Guiding the Response	6
3.5 Strategic Approach.....	7
3.6 Ethical Considerations.....	7
4. Background	7
4.1 History of Influenza Pandemics.....	7
4.2 About Pandemic Influenza	8
4.3 An Influenza Pandemic	8
5. Chapter Overviews	9
5.1 Operations Coordination and Emergency Management.....	9
5.2 Public Health.....	10
5.3 Clinical Care	10
5.4 First Nations.....	10
5.5 Human Resources	11
5.6 Logistics	11
5.7 Communications and Education.....	11
5.8 Psychosocial	11

FOREWORD

Pandemics of influenza (pandemics) are not new; they occur about every ten to forty years, with three of them occurring in the last century alone: the Spanish flu in 1918 to 1919, the Asian flu in 1957 – 1958, and the Hong Kong flu in 1968 – 1969.

The most recent pandemic began on June 11, 2009 when the World Health Organization (WHO) raised its alert level to Phase 6 (the pandemic phase), signalling a new viral subtype had evolved which was easily spread from human-to-human, resulting in a worldwide outbreak. The novel virus was a new strain of H1N1 influenza, and the pandemic was simply referred to as “H1N1 (2009)”. Although the overall severity of the H1N1 (2009) pandemic turned out to be “moderate”, with most people recovering from infection without requiring hospitalization or medical care, the next pandemic could be worse.

Fortunately British Columbia is in a good position to respond to a pandemic, as we have been planning for it for years. In fact, during the 2009 H1N1 pandemic, BC had already moved to an operational level (equivalent to that of a Phase 6 pandemic level), ensuring effective and efficient interventions were in place, prior to the H1N1 virus being declared a pandemic. Such

preparations included: increasing surveillance activities, updating infection control guidelines and practices, updating guidelines and policies related to outbreak management, increasing communications to key stakeholder groups and the public, reviewing and updating pandemic influenza plans and business continuity plans, and linking with public health colleagues on a federal and provincial level to ensure a consistent approach to managing the outbreak across Canada. BC remained at this heightened level of preparation until the WHO decreased the alert level and the virus no longer caused a significant impact in BC.

This BC Pandemic Influenza Response Plan builds on the 2005 B.C. Pandemic Influenza Preparedness Plan: Guidelines for Planning, Response and Recovery, and on the 2009 H1N1 Pandemic Influenza Response Plan. Lessons learned from the H1N1 (2009) pandemic influenza are also incorporated into the plan. Currently, the plan has a general pandemic view, however, in the event of a newly declared pandemic, the intent is to re-focus the plan and provide specific information on the emerging pathogen. It is hoped that this plan will be a primary and valuable resource for health care providers and local organizations in planning and responding to an influenza pandemic.

1. HOW TO USE THIS DOCUMENT

This plan was designed to be truly accessible, web-based and easily navigated. This web-based approach not only enables updates to be posted as new information becomes available, but it also allows health sector organizations, health care providers (HCPs) and the public access to sections of the plan that are relevant to their immediate and specific information needs. It is therefore hoped that a web-based approach to the plan will encourage its use, becoming a primary and valuable resource to all who require information about health sector pandemic

influenza planning, especially to those working on a future response.

The BC Pandemic Influenza Response Plan has divided its primary contents into eight planning streams, and an overview. These nine sections comprise the plan in its entirety. For use, simply click on the section of interest to find specific frameworks, tools (such as posters and checklists), and links to other relevant sources that facilitate HCPs to plan and respond to an influenza pandemic.

2. PREFACE

Pandemics occur about every ten to forty years. An influenza pandemic results when a new viral subtype evolves, capable of human-to-human transmission for which the global population has no immunity, resulting in a worldwide outbreak. Influenza pandemics have the potential to cause severe illness and high death rates. Since the severity of a virus can change throughout the course of a pandemic, and no one can say for certain how a pandemic will unfold, it is essential that planning and response measures be in place to mitigate its impact. Accordingly, the goal of this planning process is to minimize rates of death, illness and suffering, to minimize impacts on the health system as well as to limit the extent of social and economic disruption.

The Pandemic Influenza Response Plan is a sponsored by Ms. Arlene Paton, Assistant Deputy Minister, Population and Public Health, Ministry of Health (MOH). The plan is

spearheaded by the Emergency Management Unit (EMU) on behalf of the MOH, and has been built with the commitment, support and contributions of multiple partners and stakeholders in the health sector. The MOH co-sponsors/champions include the Office of the Provincial Health Officer (PHO), Health Authorities Division (HAD), Government Communications and Public Engagement (GCPE), Medical Services Division (MSD), Health Human Resources, and Corporate Policy, Legislation and Intergovernmental Relations. Other key partners include the Health Employers' Association of BC (HEABC) and the BC Centre for Disease Control (BCCDC), who provided extensive expertise and leadership for significant portions of the project. Each division was accountable and responsible for a specific set of work packets, grouped into eight planning streams and assigned to the following coordinators:

Planning Stream Sections	Coordinator
Human Resources	HEABC & MSD
Public Health	BCCDC
Communications and Education	GCPE
Psychosocial	Provincial Health Services Authority
Logistics	EMU & Shared Services Organization
Clinical Care	EMU, Fraser Health, HAD & MOH
First Nations	MOH
Operations Coordination & Emergency Management	EMU

The BC Pandemic Influenza Response Plan describes how BC’s health care system will respond to a pandemic, setting out a comprehensive province-wide approach to health sector preparedness and response planning. Building on the 2009 H1N1 Pandemic Influenza Response Plan, and on the lessons learned from that pandemic, the plan attempts to provide sufficient guidance and direction to ensure a generally consistent provincial health response to an outbreak, while still providing flexibility to allow local jurisdictions to respond to different scenarios that may arise during a pandemic. Currently, the plan has a general pandemic view, however, in the event of a newly declared pandemic, the intent will be to re-focus the plan and provide specific information on the emerging pathogen.

This plan is therefore a work-in-progress, which will be updated every two years, where guidelines and information will likely change in accordance with the introduction and progression of and learnings from a novel pandemic influenza virus. It is hoped that this plan will be a primary and valuable resource for health care providers and local organizations in planning and responding to an influenza pandemic.

Users should be aware that this document contains planning guidance only and should not be considered a substitute for appropriate consultation with health care and other professionals. The contributors are not responsible for use or adaptation issues arising from the use of these guidelines. Adaptation of this framework is the sole responsibility of the users.

3. ABOUT BC’S PANDEMIC INFLUENZA RESPONSE PLAN

3.1 Purpose

The primary purpose of BC’s Pandemic Influenza Response Plan is to describe the BC Health Sector’s strategic approach to and preparations for a novel influenza pandemic. It provides information on the likely impacts and sets out some of the key assumptions for use in response planning. The provincial frameworks provided within this plan should assist organizations responsible for planning,

delivering or supporting local responses, to integrate operational arrangements that maintain the consistency necessary for an effective, sustainable and equitable provincial approach, while allowing for flexibility to respond to local needs and circumstances.

The plan provides a strategic perspective for the health aspects of an integrated, province-wide

response to an influenza pandemic. In addition the plan sets out roles, responsibilities and tasks for the Health Ministry, Regional Health

Authorities and other provincial health entities prior to, during, and immediately following a pandemic event.

3.2 Scope

The scope of the BC Pandemic Influenza Response Plan is one of a general pandemic view.

It should also be noted that plans are only as effective as the people and organizations that use them. Health authorities in BC are

encouraged to set their own committee(s) or working group(s) to develop and implement regional pandemic plans. It is recommended that these provincial guidelines be followed as closely as possible to ensure consistency among health authorities.

3.3 Audience

This plan will primarily be of interest to those in the health sector responsible for planning, coordinating, and responding to an influenza pandemic. Those developing policies and

strategies or coordinating, managing, maintaining or testing contingency arrangements for responding to an influenza pandemic will also find the information useful.

3.4 Principles Guiding the Response

To guide the response, the following principles have been identified:

- The priority during an influenza pandemic is to reduce the impact on public health (i.e. reduce illness and save lives). Interventions are therefore to be applied in a fashion that achieves maximum health benefit. However, essential services also need to be maintained. Should there be a conflict between these two aims, values-based decisions will need to be made about priorities for the use of interventions.
- With or without medical interventions to protect or treat large numbers of the population, measures aimed at slowing the

spread of the influenza pandemic may buy valuable time, and help services to cope, even if this prolongs the overall duration of the pandemic.

- The response to an influenza pandemic in BC will require collaboration between the provincial government, health authorities and health sector organizations at all levels together with many partner organizations and the public.

For details pertaining to operations coordination and emergency management refer to the documents entitled Provincial Health Sector Coordination and Health Emergency Coordination Centre.

3.5 Strategic Approach

The strategic approach is based on three key elements:

1. **Planning.** MOH will develop and maintain this BC Pandemic Influenza Response Plan to provide the provincial health system with current information and guidance about the threat and the planned response. The plan will be updated every two years to reflect the most current thinking on response strategies.
2. **Communications.** Accurate and timely public information about pandemic

influenza is essential if the provincial response is to be effective. The Communications and Education framework is an integral part of the overall response process.

3. **Effective Response.** Throughout an influenza pandemic the health sector must continue to rapidly initiate and maintain a practiced, effective response. Actions will be designed to save lives, alleviate unnecessary suffering and minimize adverse effects to the economy.

3.6 Ethical Considerations

Ethics encompass thoughts about values, duties, and the consequences of actions for others. Ethical decisions in the health care sector, therefore, are made on a daily basis. Such decisions are influenced by factors including societal norms, philosophy and values. They also occur within the context of professional codes of ethics that guide health professionals' ethical decisions about how to protect and enhance the health of patients and populations. With an increased recognition that the volume and complexity of ethically challenging decisions may increase during an influenza

pandemic, the Office of the Provincial Health Officer and the Ministry of Health set out to develop a guiding framework for the health care sector.

This framework does not provide detailed instructions for responding to ethical dilemmas on a case-by-case basis. Instead, it identifies the ethical principles that should guide allocation strategies and processes. Health authorities are encouraged to use this provincial framework to inform influenza pandemic planning and response activities.

4. BACKGROUND

4.1 History of Influenza Pandemics

Pandemics have been documented every ten to forty years dating back to the 1600s, three of which occurred in the last century alone. According to the Public Health Agency of Canada (PHAC), the worst influenza pandemic, commonly referred to as the “Spanish flu”, occurred in 1918 to 1919 and claimed the lives

of an estimated 20 – 50 million people worldwide. Eventually to follow was the “Asian flu” in 1957 – 1958, which according to the WHO killed an estimated 2 million people; and the “Hong Kong flu” in 1968-1969, which resulted in approximately 1 million deaths. During each of these pandemics, the greatest

increase in death rates occurred among persons less than 60 years of age, and during the 1918 – 1919 pandemic, the majority of deaths were among those 20 to 40 years of age.

In 2009 the H1N1 pandemic influenza occurred, and although it was generally

4.2 About Pandemic Influenza

A pandemic influenza, like seasonal influenza, is a highly contagious respiratory illness, transmitted by large droplets, primarily from person to person through coughing or sneezing by people who are infected. Indirect transmission may also occur when people touch something with flu viruses or germs on it and then touch their mouth or nose. Although influenza is primarily transmitted by droplets (that ‘drop’), whether airborne transmission (small aerosolized particles that float) plays a role is unclear, especially during aerosolizing generating procedures.

Symptoms of pandemic influenza may be similar to those experienced from seasonal influenza, such as a high fever lasting several days (not always present among children), a cough, headache, exhaustion, fatigue, a stuffy nose, sneezing, a sore throat, and for children there may be accompanying vomiting and diarrhea. However, depending on the next pandemic virus, the disease could run an

4.3 An Influenza Pandemic

An influenza pandemic results when a new influenza viral subtype evolves, and causes a worldwide outbreak, spreading easily from person to person. Because the human population has no immunity, the virus has the capacity to infect a higher rate of the population and poses a threat to cause serious human illness. In this modern day, the speed at which a pandemic occurs is increased due to the ease

considered to be moderate in severity, it too seemingly affected younger persons (PHAC, 2010. http://www.phac-aspc.gc.ca/alert-alerte/h1n1/fs-fr_h1n1-eng.php).

aggressive clinical course, causing rapid deterioration and result in significant mortality.

Regular seasonal influenza strains have an incubation period of 1 to 3 days, and the period of communicability is 24 hours before symptoms present, lasting up to 5 days in immunocompetent adults and up to 7 days in young children. Although the last pandemic influenza, H1N1 (2009), followed a similar course, the epidemiology and characteristics of a future novel influenza virus are unknown.

Most people who contracted H1N1 influenza during the last pandemic only experienced mild to moderate symptoms and did not require hospitalization; others, particularly pregnant women, young children, and persons with chronic underlying health conditions, especially diabetes, asthma, and morbid obesity, were much more likely to suffer from complications of the H1N1 influenza virus. Again, it is difficult to know how the next pandemic influenza virus will affect persons.

and frequency of global transportation, as well as factors such as urbanization, and overcrowded conditions in some areas. However there are also more mechanisms and interventions at hand to help mitigate the effects of a pandemic, such as vaccines, antiviral medications, and better public policies that promote hand hygiene and cough etiquette measures to reduce transmission.

In order to help aid countries in planning and preparing for influenza pandemics, the WHO

has classified the following six phases to represent pandemic alert levels:

WHO Pandemic Alert Levels	
Phase 1	No viruses circulating among animals have been reported to cause infections in humans.
Phase 2	An animal influenza virus circulating among domesticated or wild animals is known to have caused infection in humans.
Phase 3	An animal or human-animal influenza virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances.
Phase 4	Verified human-to-human transmission of an animal or human-animal influenza virus able to cause community-level outbreaks.
Phase 5	Human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent.
Phase 6 (Pandemic Phase)	Community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in phase 5.

It is hoped that the majority of individuals who become infected with pandemic influenza will recover without incident. However, the severity

of a virus can often change throughout the course of the pandemic. For this reason it is essential that everyone remains vigilant.

5. CHAPTER OVERVIEWS

This section describes the eight planning streams and includes an overview of the kind of information available to users:

5.1 Operations Coordination and Emergency Management

This Plan section includes the following:

- Basic information about influenza and pandemics, as well as the planning assumptions for a pandemic influenza;
- The strategic approach for the BC response; and,
- The roles and responsibilities of different levels of the health sector, and the

emergency management and decision-making frameworks.

This guidance provides a means of integration for health authorities and other health sector organizations in their pandemic influenza planning efforts. It will help ensure a coordinated, uniform and well-organized response. It will also help align BC’s planning with national and international efforts.

5.2 Public Health

Public health plays an essential role in all aspects of a pandemic influenza response through measures aimed at minimizing serious illness and death, as well as minimizing disruption among British Columbians.

This Plan section includes the following:

- The public health measures that BC will use during an influenza pandemic. Some of these measures are national guidelines adopted by BC;

- The pandemic influenza response plan for BC public health microbiology and reference laboratories and networks;
- The plan for surveillance activities to monitor, track and report the progress and impacts of the influenza pandemic;
- The plan to distribute antivirals; and,
- Vaccination policies, guidelines and plans.

5.3 Clinical Care

This Plan section includes:

- Information, guidance and tools for private physicians to help them plan, organize, manage and respond to a pandemic influenza outbreak;
- Links to the most recent infection control guidelines for a variety of settings.
- Guidance to the health sector on approaches for managing acute care services, home and community care services and primary care during a pandemic influenza outbreak.

During H1N1, the Provincial Health Officer's Website included special pages for Health Care Providers, including pages for physicians, pharmacists and other health care providers. Each page on the site was set up to serve as a single resource portal for information on a pandemic influenza. In the event of a future pandemic, the website would be re-activated to provide up-to-date pandemic influenza information for health professionals.

5.4 First Nations

Experience suggests that First Nations people in Canada, especially people living in remote areas, are particularly vulnerable during an influenza pandemic. As a result, a plan for remote communities has been developed

because some of the policies and guidelines concerning the response differ not only from general (non-First Nations) guidelines, but also for First Nations' people living in urban areas (as compared to remote areas).

5.5 Human Resources

This Plan section includes the following:

- A Framework describing the strategy for managing human resources during an

influenza pandemic. It outlines the broad strategy for ensuring there is an adequate supply of health care professionals;

5.6 Logistics

Effective supply of materiel and medicine is an essential component of the provincial pandemic influenza response. The responsibility for vaccines, antivirals and pandemic supplies, logistics planning, procurement, warehousing and distribution in the BC health sector is shared between the Health Shared Services BC, health authorities, BC Centre for Disease Control and the Pharmaceutical Services Division of the Ministry of Health.

Private sector members of the BC health community such as family physicians source and procure materials through well-established channels with industry suppliers.

Detailed logistics plans are available through the above-mentioned organizations and this Plan section includes a summary of the key logistics plans. Vaccines and antivirals distribution plans are included on the Public Health web page.

5.7 Communications and Education

Timely and accurate communication is essential to informing and educating the public and HCPs, and responding to public concerns and reaction to a spreading pandemic. It enables these two key groups to know how to best protect their health and, in the case of HCPs, how best to serve the public. It will also inspire continued confidence in the Province's response to an influenza pandemic.

The documents listed on this web page describe the approach, procedures, methods, and roles and responsibilities for addressing the key elements of pandemic education and communications. Templates and guidelines are provided to enable the provincial government to be timely, accurate and efficient in its communications both externally with health care providers, the public and its many stakeholders, and internally within the health ministries and the B.C. public service.

5.8 Psychosocial

During a crisis tremendous psychological stress and an increased social burden can often be devastating for health care workers and some members of the public who may be directly touched by an influenza pandemic.

Psychosocial issues are not only felt by those who take ill; distress permeates through the family, community, and beyond. It is therefore important that psychosocial issues are addressed to ease the strain on the public and healthcare workers.

This Plan section includes the following:

- A Psychosocial Plan for Healthcare Workers;
- A Community Pandemic Influenza Psychosocial Plan; and,
- Supporting reference materials and handouts.