



Alberta's Pandemic Influenza Plan

March 2014



Acknowledgements

Alberta's Pandemic Influenza Plan represents the collaboration of dedicated individuals who have worked together to create a single, strategic provincial response and recovery plan for pandemic influenza. This plan was collaboratively developed by the following organizations:

- Alberta Emergency Management Agency
- Alberta Health
- Alberta Health Services

Table of Contents

Acknowledgements	2
Table of Contents.....	3
Terms and Acronyms	4
1. Introduction	8
Background.....	8
Legal Framework.....	9
Pandemic Ethics Framework	11
Planning Assumptions	11
Planning Scenarios.....	14
Describing Pandemic Influenza	16
2. Alberta's Response to Pandemic Influenza	18
Roles and Responsibilities.....	18
Emergency Management.....	23
Communications	26
3. Health System Response	28
Surveillance	28
Public Health Measures.....	31
Infection Prevention Control and Occupational Health and Safety	33
Antivirals	35
Vaccines	37
Health Care Services.....	39
Health Workforce	43
Psychosocial Support	45
4. Broader Provincial Response	48
Public Safety Governance System	48
The Alberta Emergency Plan.....	48
Government of Alberta Business Continuity Plan	48
Continuity of Services	49
5. Recovery.....	50
Common Recovery Objectives	50
6. Objectives and Triggers for Action by Section.....	52
7. Resource List	53

Terms and Acronyms

Acute care	Services provided by physicians and other health professionals and staff in the community and in hospitals. These include emergency, general medical and surgical, psychiatric, obstetric and diagnostic services.
AEAE	Ministry of Alberta Enterprise and Advanced Education
AEFI	Adverse Effects Following Immunization
AEMA	Alberta Emergency Management Agency
AEP	Alberta Emergency Plan
AH	Alberta Health
AHS	Alberta Health Services
APIOP	Alberta Pandemic Influenza Operations Plan
APIP	Alberta's Pandemic Influenza Plan
All-Hazards Approach	An All-Hazards Health Emergency Management Approach is a consistent way to plan for and respond to multiple types of hazards.
ACCs	Alternate Care Centres
Business Continuity Plans (BCPs)	Documented procedures that guide organizations to respond, recover, resume and restore to a pre-defined level of operation following disruption.
CPIP	Canadian Pandemic Influenza Preparedness: Planning Guidance for the Health Sector
CMOH	Chief Medical Officer of Health
ECC	Emergency Co-ordination Centre
EOC	Emergency Operations Centre
Emergency Response Plan	A documented plan usually addressing the immediate reaction and response to an emergency situation
Essential Services	Services that must be provided immediately or will definitely result in the loss of life, infrastructure destruction, loss of confidence in the government, and significant loss of revenue. These services normally require resumption within 24 hours of interruption.
F/P/T	Federal, Provincial and Territorial
FNIHB	First Nations and Inuit Health Branch, Health Canada
First Responders	The legislation applies to workers who are or have been first responders in Alberta. <ul style="list-style-type: none"> • Police officers appointed under provincial regulation but excluding the RCMP. • Firefighters (both full-and part-time) as defined in section 24.1 of the Workers' Compensation Act.

	<ul style="list-style-type: none"> • Emergency medical technicians as defined under the Health Disciplines Act. • Sheriffs (as defined under section 7 of the Peace Officer Act).
GoA	Government of Alberta
pH1N1	H1N1 pandemic in 2009
Health Care Worker (HCW)	<ul style="list-style-type: none"> • Health Care Worker (HCW) with close patient contact :Persons who work in settings where critical health care is provided and who during the pandemic would be working within 1 meter of any patients/residents with or without personal protective equipment. • Health Care Worker (HCW) without close patient contact :Persons who work in settings where critical health care is provided and who during the pandemic would not be expected to work within 1 meter of any patients/residents.
ICU	Intensive Care Unit
PVD	Health Provincial Vaccine Depot
HQCA	Health Quality Council of Alberta
High-risk populations	Those groups in which epidemiological evidence indicates there is an increased risk of contracting a disease.
Impact	Refers to the effects of a pandemic on a population.
IPC	Infection Prevention and Control
IACs	Influenza Assessment Centres
ILI	Influenza-like Illness
International Health Regulations (2005) (IHR)	IHRs provide a global legal framework under the WHO to prevent, control or respond to public health risks that may spread between countries.
Isolation	The separation of a person or animal infected with a communicable disease from other persons or animals in a place and under conditions that will prevent the direct or indirect conveyance of the infectious agent from the infected person or animal to a susceptible person or animal.
MOH	Medical Officer of Health
Morbidity	Departure from a state of well-being, either physiological or psychological; illness.
Mortality	Death, as in expected mortality (the predicted occurrence of death in a defined population during a specific time interval).
MEMP	Municipal Emergency Management Plan
National Antiviral Stockpile (NAS)	The NAS is an FPT stockpile that is held and managed by the provinces and territories. The NAS is predominantly composed of the antiviral medications oseltamivir and zanamivir, with oseltamivir dosage formulations that are appropriate for both adults and children.
National	NESS is a federally owned stockpile of emergency supplies. It is held and

Emergency Stockpile System (NESS)	managed by the PHAC and includes a stockpile of oseltamivir and zanamivir. NESS antivirals are intended to provide surge capacity in support of the PT response during a pandemic.
NML	National Microbiology Laboratory
NGO	Non-Governmental Organizations
Non-traditional Healthcare Sites	A Non-Traditional Site is a site offering care for influenza patients. These sites are currently not an established health care site, or are established sites which usually offer a different type or level of care. The functions of a non-traditional site will vary depending on the needs of the community but will focus on monitoring, care and support of influenza patients. These sites include Influenza Assessment Centres (IACs) and Alternate Care Centres (ACCs)
OHS	Occupational Health and Safety
OCME	Office of the Chief Medical Examiner
Pandemic	Referring to an epidemic disease of widespread prevalence around the globe.
PPE	Personal Protective Equipment
Primary care	Primary care is the first level of care, and usually the first point of contact, that people have with the health care system. Primary care involves the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community. It includes advice on health promotion and disease prevention, assessments of one's health, diagnosis and treatment of episodic and chronic conditions, and supportive and rehabilitative care.
ProvLab	Provincial Laboratory (for Public Health)
POC	Provincial Operations Centre
PAB	Public Affairs Bureau
Public Health	<p>Public Health and Public health programs address the social, economic, and environmental factors that affect health. There are 4 major aspects to public health:</p> <ul style="list-style-type: none"> • Health surveillance – monitoring the health status of the population and providing information for planning, implementing and evaluating health strategies. • Health protection – identifying, reducing and eliminating hazards and risks to the health of individuals in the community, including those posed by communicable diseases and food-borne, drug and environmental hazards. • Disease and injury prevention – providing appropriate information and early intervention services to prevent the onset of disease and injury. • Health promotion – enabling healthy choices and developing healthy and supportive environments.
PHA	Public Health Act
PHAC	Public Health Agency of Canada
PHM	Public Health Measures

Quarantine (as defined in the PHA)	(i) In respect of persons or animals, the limitation of freedom of movement and contact with other persons or animals, and (ii) In respect of premises, the prohibition against or the limitation on entering or leaving the premises during the incubation period of the communicable disease in respect of which the quarantine is imposed.
Recovery	Implementing the prioritized actions required to return the processes and support functions to operational stability following an interruption or disaster.
SMOH	Senior Medical Officer of Health, Alberta Health Services
Severity	Refers to clinical severity of disease in an individual
SOLE	State of Local Emergency
SRI	Serious Respiratory Infection
TARRANT	The Alberta Recording and Research Network
Triggers for Action	Triggers for action provide guidance, or what needs to be considered for the initiation of actions and for their modification and cessation.
Vaccine	A substance that contains antigenic components from an infectious organism. By stimulating an immune response (but not disease), it protects against subsequent infection by that organism.
Volunteers (Pandemic)	A volunteer is a person registered with a government agency or government designated agency, who carries out unpaid activities, occasionally or regularly, to help support Canada prepare for and respond to a pandemic influenza outbreak. A volunteer is one who offers their service of their own free will, without promise of financial gain, and without economic or political pressure or coercion.
Vulnerable populations	There are individuals within all jurisdictions whose needs are not fully addressed by traditional services or who cannot comfortably or safely access and use standard resources. Examples of these vulnerable persons include, but are not limited to, individuals who are: <ul style="list-style-type: none"> • physically or mentally disabled (e.g., visually or hearing impaired, mobility limitations, cognitive disorders) • limited or non-English or French speaking • low literacy • geographically, culturally or socially isolated • low income • medically or chemically dependent • homeless or street-involved • housebound or frail seniors • new immigrants and refugees
WHO	World Health Organization
ZEOC	Zone Emergency Operations Centre

1. Introduction

Alberta's Pandemic Influenza Plan (APIP) is a provincial strategic plan jointly developed by Alberta Health, Alberta Health Services (AHS), and the Alberta Emergency Management Agency (AEMA) to guide response and recovery, with an emphasis on how these organizations work together. Pandemic influenza planning and preparedness activities are equally important and are incorporated into all-hazards planning as a continuing part of the emergency management cycle.

The 2014 APIP replaces Alberta's Plan for Pandemic Influenza (2009), the Alberta Pandemic Influenza Operations Plan (2008) and the AHS Pandemic Influenza Plan (2010).

The APIP is reviewed and revised regularly to reflect current knowledge and best practices. It aligns with the Public Health Agency of Canada (PHAC)'s Canadian Pandemic Influenza Preparedness: Planning Guidance for the Health Sector (CPIP) and supports co-ordination between the Government of Alberta (GoA) and AHS pandemic operational plans. It also serves as a reference for local authorities, business and industry and other stakeholder pandemic operational plans.

The APIP applies to human pandemic influenza. It does not apply to seasonal influenza virus, other non-influenza pathogens or influenza affecting animal populations.

Background

Seasonal Influenza versus Pandemic Influenza

Seasonal influenza virus strains constantly change and continually circulate in every part of the world, normally appearing in fall and winter in Alberta. The viruses cause respiratory illness and are contagious. While all age groups can be affected and most people recover from influenza, young children, those with certain chronic diseases such as heart disease and those older than 65 are at higher risk for complications and death.

Pandemic influenza occurs when a novel influenza A virus, to which most humans have little or no immunity, acquires the ability to cause sustained human-to-human transmission that leads to a rapid worldwide spread¹. The novel virus may arise through genetic reassortment (animal and human influenza genes mix together) or genetic mutation (when genes in an animal virus change, allowing the virus to easily infect humans). When exposed to the new virus, most people become ill as they have no immunity.

If the new virus causes severe disease, it can lead to significant numbers of hospitalizations and deaths as well as social and economic disruption.

Pandemic influenza is inevitable. According to the World Health Organization (WHO), there is a high risk for pandemic influenza when there is a concurrent global circulation of two or more influenza virus subtypes.

¹ World Health Organization. Pandemic influenza risk management – WHO interim guidance. 2013. Available from: http://www.who.int/influenza/preparedness/pandemic/influenza_risk_management/en/index.html.

Pandemic Planning in Alberta

Pandemic planning at the provincial and regional levels has been in place since the late 1990s. In 2009, Alberta Health and AEMA consolidated their plans (APIP 2009) and the newly-formed AHS developed a provincial pandemic plan to reflect activities required for the pH1N1 virus.

Post pH1N1, the Minister of Health authorized the Health Quality Council of Alberta (HQCA) to conduct a formal review of the provincial response. In the Review of Alberta's Response to the 2009 H1N1 Influenza Pandemic (December 2010), the HQCA provided a number of recommendations. These recommendations and lessons learned from pH1N1 provided the motivation for this revision.

Goal

The goal of pandemic planning is to provide guidance and direction for activities aimed at:

- Controlling the spread of influenza disease and reducing illness (morbidity) and death (mortality) by providing access to appropriate prevention measures, care, and treatment.
- Mitigating societal disruption in Alberta through ensuring the continuity and recovery of critical services.
- Minimizing adverse economic impact.
- Supporting an efficient and effective use of resources during response and recovery.

Legal Framework

Below is a summary of some of the important legislation in place to govern and support a regional and provincial response to all public health events and emergencies, including pandemic influenza.

During an emergency, the Government of Canada, Alberta Health, AEMA, AHS and local authorities may have powers which overlap. These powers must be co-ordinated to work effectively together.

Provincial and federal legislation are available on the Alberta Queen's Printer (www.qp.alberta.ca) or the Canadian Legal Information Institute (CanLII) website (www.canlii.com).

Provincial Legislation

Public Health Act

The *Public Health Act*, RSA 2000, c. P-37 (PHA) sets out the primary powers and tools available to prevent, treat and control pandemic influenza in Alberta. These powers are allocated to several key partners: the Lieutenant Governor in Council, the Minister of Health, other Ministers, the Chief Medical Officer of Health (CMOH), medical officers of health (MOHs) and regional Health Authorities. These partners work together, with complementary powers, to manage public health issues and public health emergencies in the public interest.

Key supporting regulations to the PHA include the *Communicable Diseases Regulation* (AR 238/85) and the *Emergency Powers Regulation* (AR 187/2009).

Emergency Management Act

The *Emergency Management Act*, RSA 2000, c. E 6.8 and the *Government Emergency Management Regulation* (AR 248/2007) provides the Minister of Municipal Affairs with the power to respond to disasters and outlines the role of the GoA and local authorities. The Alberta Emergency Plan outlines the responsibilities of each government department.

It is not necessary for a municipality to declare a State of Local Emergency (SOLE) in order to request additional support and resources from the GoA. However, if deemed necessary, a SOLE can be declared to gain access to the same powers as the Minister of Municipal Affairs within their municipal boundaries under section 24(1)(b) *the Emergency Management Act*.

Regional Health Authorities Act

The *Regional Health Authorities Act*, RSA 2000 c. R-10 provides authority for the Minister to coordinate and direct regional health authorities so that their operational responses reflect provincial priorities as efficiently as possible. AHS is currently Alberta's integrated regional health authority.

Inherent to the responsibilities of a regional health authority set out in section 5 of the *Act* is preparedness for public health emergencies, such as pandemic influenza.

Federal and International Legislation

Given that pandemic influenza is a global concern, federal and international legislation contributes to global public health detection, preparedness, assessment, notification, and response.

The federal *Emergency Management Act*, section 6(1), requires each minister accountable to Parliament for a government institution to identify the risks that are within or related to his or her area of responsibility and prepare emergency management plans with respect to those risks; to maintain, test and implement those plans; and to conduct exercises and training in relation to them.

In accordance with the Act, the federal Minister of Health is primarily responsible for developing, testing and maintaining mandate-specific emergency plans for the federal Health Portfolio, which includes Health Canada and PHAC. These emergency plans outline the federal response to national public health threats or events such as major disease outbreaks (including an influenza pandemic). Furthermore, the *Quarantine Act* strives to prevent the introduction and spread of communicable diseases into and out of Canada by providing the Minister of Health with the authority, including enforcement mechanisms, to take public health measures as required. Pandemic Influenza Type A is listed in the Act's Schedule of Diseases.

The *International Health Regulations (2005)* (IHR), which came into force in 2007, provide a global legal framework under the WHO to prevent, control or respond to public health risks that may spread between countries. Provisions in the IHR include obligations for member states including Canada (e.g., surveillance reporting).

The IHR can be found on the WHO website:

(www.who.int/ihr/publications/9789241596664/en/index.html).

Intergovernmental Agreements to Support Public Health Emergencies

Through reciprocal arrangements, Alberta can access resources from the federal government and other provinces and territories in the event of a public health emergency. Examples include the Federal/Provincial/Territorial (F/P/T) Memorandum of Understanding (MOU) on the Provision of Mutual Aid in Relation to Health Resources during an Emergency Affecting the Health of the Public, the F/P/T MOU on the Sharing of Information during a Public Health Emergency and the

MOU: Management of Influenza Vaccine in the Event of a Pandemic with the First Nations and Inuit Health Branch (FNIHB), Health Canada. However, it should be noted that mutual aid may be limited during a more severe pandemic as all may be affected.

Pandemic Ethics Framework

Public health ethics focus on the health and interests of a population and is distinct from clinical ethics which focuses on the health and interests of the individual. When a health risk like a pandemic influenza affects a population, public health ethics predominate and higher value is placed on collective as opposed to individual interests. Ethical tensions are inevitable; in an effective health system these tensions are held in a dynamic balance. The field of public health ethics is relatively new and principles of public health ethics continue to evolve and may vary between jurisdictions.

A provincial pandemic ethics framework is under development. While such a framework is not intended to predict or assign decisions to possible ethical dilemmas, it will describe agreed-to values as well as outline a transparent and understandable process to provide health decision-makers with guidance needed to make difficult decisions in the event of a pandemic influenza.

Planning Assumptions

Planning assumptions are developed at the provincial, territorial, national, and international levels to guide pandemic influenza planning and response activities. They are reviewed and revised as new evidence becomes available. Assumptions are not predictions, but reflect current expert opinion of reasonable considerations to guide pandemic influenza planning and response activities.

General Assumptions

- The effects of, and response to, a pandemic influenza are not limited to the health sector. A whole of society approach will be used in mitigating the effects of a pandemic influenza including public and private sectors, communities, families and individuals.
- Pandemic planning is aligned with an all-hazards approach to emergency management.
- Alberta Health, AHS and AEMA as well as other stakeholders will use existing pandemic and emergency response plans during a pandemic influenza.
- Increased absenteeism is expected. Schools, workplaces and the health care system will likely experience workforce shortages.
- Antivirals will be effective against the pandemic virus.

Characteristics of a Pandemic Influenza Virus

- The specific epidemiology of the emerging influenza virus will initially be unknown. Information will be learned over time.
- The initial symptoms (clinical presentation) will be consistent with known human influenza strains.
 - The time between infection and symptoms (incubation period) will be one to three days, and could extend up to seven days.

- The course of illness without complications will be approximately five to seven days; symptoms will gradually diminish over several more days.
- Infection without any symptoms can occur.
- Transmission (spread):
 - Since there will be no specific immunity to the new virus, the virus will spread quickly from person to person, resulting in large numbers of infected people.
 - The pandemic influenza virus will spread from person to person in the same way as seasonal influenza, mainly through airborne transmission from coughing or sneezing and contact transmission when a person touches their mouth, nose or eyes after contact with surfaces or objects contaminated with the virus.
 - While transmission of the virus from an individual with no symptoms is possible, more efficient spread occurs when symptoms like coughing and fever are present (when viral shedding is highest).
 - Infected individuals can spread the virus from 24 hours before symptoms start to five days after (for adults) and up to seven days after for children. Longer periods may be found, especially in persons with immune compromising conditions.
 - Individuals who recover from illness caused from a pandemic influenza strain are likely to be immune to further infection by that particular strain.
 - Transmission will be relatively lower in spring and summer and higher in fall and winter as generally found in the pattern of influenza in temperate countries.

Expected Course of the Pandemic Influenza

- The next pandemic could emerge anywhere in the world, at any time of the year (outside of the usual influenza season in Canada or at the same time).
- There may be no lead time, or it may be weeks before the novel virus reaches Canada.
- Pandemic influenza outbreaks may last 12 to 18 months.
 - The first peak of illness in Canada could occur within weeks of the first detection of the novel virus in that area. The first peak in deaths related to the virus is expected to be several weeks after the peak in illness.
 - It will be difficult to determine the spread (circulation) pattern of a pandemic influenza virus. Outbreaks will likely occur simultaneously in multiple locations and areas may experience peak activity at different times.
 - Most communities will experience pandemic influenza in two or more waves. The space between waves may vary from a few months up to 12 months between the start of the first wave and the start of the second wave.
 - In a local community, a pandemic influenza wave of illness will generally last six to eight weeks, but this time period may vary.
- The novel virus will displace other circulating seasonal strains during a pandemic influenza. After the pandemic, the pandemic influenza virus may continue to circulate as a seasonal strain, completely replacing the previously circulating seasonal influenza subtypes or continuing as one of several circulating seasonal subtypes.

Extent and Severity of Illness

- The impact of pandemic is unpredictable in timing, severity of illness, and age groups affected.
- As most of the population will have had limited, if any, previous exposure to the virus, most people regardless of age, will be at risk.
- Clinical symptoms are expected to develop in about two-thirds of people who are infected with the pandemic influenza virus. The general, uncomplicated clinical symptoms of pandemic influenza will be similar to seasonal influenza.
 - The most commonly reported symptoms include:
 - sudden onset of cough, sore throat, feeling unwell, and headache.
 - Fever may not always be present, or may be mild, especially in individuals under five years of age or over 65 years of age.
 - Some individuals (e.g., children under five years) may experience nausea, vomiting and/or diarrhea (gastrointestinal symptoms).
- Similar to seasonal influenza, the underlying conditions putting people at higher risk for complications may include:
 - Individuals with chronic disease:
 - Includes cardiovascular disorders (including hypertension), lung disorders (including asthma, chronic obstructive pulmonary disease, broncho-pulmonary dysplasia and cystic fibrosis), diabetes and other metabolic diseases, immunodeficiency or immunosuppressive conditions, obesity, kidney disease, anemia or other blood disorders, or neurological conditions that decrease the ability to clear airway secretions which are associated with an increased risk of aspiration.
 - Women who are pregnant.
 - Adults over 65 years.
 - Residents of continuing care facilities.
 - Aboriginal populations.
 - Adolescents (under 19 years) receiving long-term acetylsalicylic acid (ASA) therapy.
 - Additional risk groups may emerge depending on the virus strain.

Planning Scenarios

Multiple planning scenarios identify probable implications associated with varying pandemic influenza impact levels on the population and on the health system. Alberta has adopted the four pandemic planning impact scenarios used in the CPIP to reflect varying transmissibility and virulence characteristics (Table 1).

Planning scenarios are not predictions and will be replaced with evidence when a pandemic occurs. The basic scenarios cannot incorporate all potential factors that can affect the impact of a pandemic. Some factors are population-wide and could affect all scenarios, such as seasonality, pre-existing immunity or antiviral resistance, whereas others may be setting-specific, such as the effects on a remote community.

Table 1*: Description and potential impact of the four CPIP pandemic planning scenarios

Nature of impact	Pandemic Influenza Scenario			
	Mild Impact	Moderate Impact	Moderate Impact	Severe Impact
Comparable historical pandemic	pH1N1 (2009)	Asian (1957)	Hong Kong (1968)	Spanish (1918)
Basic virus characteristics	Low transmissibility/low virulence	High transmissibility/low virulence	High virulence/low transmissibility	High transmissibility/high virulence
Nature and scale of illness	<ul style="list-style-type: none"> Similar numbers as in moderate or severe seasonal influenza outbreaks Mild to moderate clinical features (in most cases) 	<ul style="list-style-type: none"> Higher number of cases than large seasonal outbreak, but similar clinical severity Overall increased numbers needing medical care and with severe disease 	<ul style="list-style-type: none"> Similar number of cases as with large seasonal outbreak, but illness is more severe Overall increased numbers needing medical care and with severe disease 	<ul style="list-style-type: none"> Large numbers of people ill High proportion with severe disease

Nature of impact	Pandemic Influenza Scenario			
	Mild Impact	Moderate Impact	Moderate Impact	Severe Impact
Impact on health care services	<ul style="list-style-type: none"> Ambulatory and acute-care services stressed but able to cope Intensive Care Units (ICUs) at capacity Public health and laboratory services stressed Long-term care may or may not be affected (depending on pre-existing immunity) 	<ul style="list-style-type: none"> Ambulatory and acute-care services very stressed Influenza Assessment Centres (IACs) implemented Health care services no longer able to continue all activities ICUs under severe pressure Long-term care may or may not be affected Settings with limited surge capacity such as remote nursing stations may be even more stressed 	<ul style="list-style-type: none"> Ambulatory and acute-care services very stressed Health care services no longer able to continue all activities ICUs under severe pressure Surge plans for Long-term care implemented Settings with limited surge capacity such as remote nursing stations may be even more stressed Selective prioritization of health care services initiated 	<ul style="list-style-type: none"> Ambulatory and acute-care services very stressed Health care services no longer able to continue all activities ICUs under severe pressure Surge plans for Long-term care at capacity. Alternate care centres implemented Settings with limited surge capacity such as remote nursing stations may be even more stressed System wide prioritization of health care services initiated.
Broader societal impact	<ul style="list-style-type: none"> Limited workplace disruption Some school disruption Elevated public concern 	<ul style="list-style-type: none"> High absenteeism Some services experience pressures Schools likely disrupted Some supply chain problems Elevated public concern 	<ul style="list-style-type: none"> Potential absenteeism and school disruption from fear of exposure Considerable public concern over occurrence of very severe disease 	<ul style="list-style-type: none"> High absenteeism Services and businesses under extreme pressure Potentially severe supply chain problems Could disrupt provision of basic services Extreme public concern
Economic impact	<ul style="list-style-type: none"> Minimal if any 	<ul style="list-style-type: none"> Productivity may be affected 	<ul style="list-style-type: none"> Productivity may be affected 	<ul style="list-style-type: none"> Very high

* Note: Adapted from *Canadian Pandemic Preparedness: Planning Guidance for the Health Sector (CPIP)*

Describing Pandemic Influenza

When describing pandemic influenza, jurisdictions will use different descriptions to communicate the impacts from their perspective. Taken together, this information helps the province to assess the overall impacts of a pandemic influenza to the Alberta population.

World Health Organization

In response to lessons learned from pH1N1, the WHO has simplified its pandemic influenza phasing from six phases to four. These phases reflect WHO's risk assessment of a virus with pandemic potential that is infecting humans and describes the spread of the new influenza subtype, taking into account the disease it causes around the world and also enable a more flexible response.

The WHO phases are:

- **Interpandemic phase** – the period between influenza pandemics.
- **Alert phase** – when influenza caused by a new subtype has been identified in humans. This phase is characterized by extra vigilance and careful risk assessment.
- **Pandemic phase** – the period of global spread of human influenza caused by a new subtype. Movement between the interpandemic, alert and pandemic phases may occur quickly or gradually.
- **Transition phase** – reduction of the assessed risk resulting in de-escalation of global actions.

Canada

While the WHO phasing describes the global view, Canada, like other countries, will also follow its own national risk assessment to describe impacts to its population as each country will face different risks at different times during a pandemic influenza. For example, when the WHO announces its global pandemic phase, Canada may already be experiencing domestic outbreaks (as happened in 2009) or still anticipating its first case.

Canada will also use terms such as “start”, “peak” and “end” of a pandemic wave to describe pandemic activity in the country. Pandemic influenza activity can be further characterized for jurisdictions of any size using FluWatch definitions: no activity, sporadic activity, localized activity and widespread activity.²

National, high-level potential triggers have been developed to provide guidance for the initiation of F/P/T activities and for their modification and cessation.

Alberta

Similarly, Alberta will describe the pandemic based on impacts to the province; global and national levels of impact will provide health officials with a more complete picture when assessing the local situation.

² Public Health Agency of Canada. FluWatch. Influenza Activity Levels Definition for the 2013-2014 Season. Available from: <http://www.phac-aspc.gc.ca/fluwatch/index-eng.php>

To encourage alignment, Alberta will use these high-level triggers or descriptions of the situation from the CPIP. Below are some examples of identified actions that may be taken at the different stages of a pandemic influenza response. This list is not comprehensive but is meant to highlight how this table may be used if other stakeholders would like to map out key response actions to the potential pandemic situations in Alberta.

Table 2*: Pandemic “Triggers” and Sample Accompanying Actions

Trigger	Sample Actions
Novel/pandemic virus detected in Alberta	<ul style="list-style-type: none"> • Ramping up health sector capacity to deal with increasing number of cases • Preparation for vaccine distribution, administration and monitoring • Ongoing surveillance to monitor influenza activity and epidemiological analysis to characterize pandemic • Relevant public and health sector communications • Implementation of clinical guidelines and public health advice
Demands for service start to exceed available capacity	<ul style="list-style-type: none"> • Further escalation of surge capacity • Prioritization of services as needed
The pandemic wave wanes and demand for service falls to more normal levels	<ul style="list-style-type: none"> • Preparation for a resurgence of influenza • Replenishing of supplies as needed in anticipation of another wave • Evaluation of response and revision of plans as required • Ongoing surveillance to detect resurgence
Pandemic vaccine is available for administration	<ul style="list-style-type: none"> • Administration of vaccine as quickly as possible • Monitoring of vaccine uptake, safety and effectiveness
Second or subsequent pandemic wave arrives	<ul style="list-style-type: none"> • Continuation of immunization if already started • Ongoing surveillance to monitor influenza activity, antiviral resistance and strain changes
Pandemic is over and normal activities resume	<ul style="list-style-type: none"> • Completion of pandemic studies and reports • Evaluation of response and revision of plans as required • Return to more normal operations • Preparation for post-pandemic seasonal influenza

* Note: Adapted from *Canadian Pandemic Preparedness: Planning Guidance for the Health Sector (CPIP)*

2. Alberta's Response to Pandemic Influenza

Roles and Responsibilities

The roles and responsibilities of each organization are based on their mandates and expertise. Clear communication and decision-making pathways will facilitate co-ordination at all levels.

Overarching roles and responsibilities for various sectors are stated here; specific roles and responsibilities for Alberta Health, AHS, AEMA, and critical partners (e.g., FNIHB) are outlined in each section.

Individuals

The role of each individual is to play an active part in their own health and well-being by preparing for and responding to emergencies, including pandemic influenza. Individuals should keep themselves and their families healthy and safe by:

- Implementing family emergency preparedness plans.
- Reviewing and acting on provincial health advice and guidance such as seeking immunization and medical attention, or staying home as directed.

Communities

Local Authorities

Under the *Municipal Government Act*, the role of the local authorities (municipalities, Métis communities) is to ensure a safe and viable community through the continuity of local government and critical services and emergency response. Local authorities' responsibilities include:

- Reviewing and implementing response plans (Municipal Emergency Management Plans) and business continuity programs.
- Maintaining the continuity of critical municipal services in consultation with AHS and business and industry (fire, police, water treatment/delivery, waste management).
- Liaising with AEMA, AHS and other partners to align with broader provincial response and recovery.

First Nations Communities

The role of First Nations communities is to maintain the continuity of critical services for their on-reserve residents. Leaders in these communities are responsible for:

- Maintaining and implementing emergency management plan(s) for their community.
- Collaborating with the federal government, local authorities, AEMA, and AHS to ensure that their community pandemic influenza activities align with broader provincial response and recovery.

For more information on First Nations communities, see CPIP– Annex B Influenza Pandemic Planning Considerations in On Reserve First Nations Communities.

Business and Industry

In a response, the role of business and industry is to maintain the continuity of critical services to Albertans. This could be done by:

- Reviewing and implementing emergency response plans that consider business continuity and worker safety.
- Communicating with affiliated Government of Alberta (GoA) Ministries, local authorities and AHS through established day-to-day relationships, where co-ordinated response is required.
- Sharing key information (service impacts, absenteeism, etc.) with affiliated GoA Ministries, local authorities, and AEMA, as appropriate.

Non-Governmental/Voluntary Sector

This sector includes non-governmental organizations (NGOs), volunteer organizations, not-for-profit groups, community groups and faith-based organizations. These organizations have community knowledge and access to an integrated network system.

- In a response, these organizations and groups could:
- Maintain key functions as appropriate.
- Provide voluntary services, depending upon the availability of volunteers.
- Liaise with respective local authorities and partners and uphold pre-arranged support agreements.

Provincial

Alberta Health

The role of Alberta Health is to lead and co-ordinate the provincial pandemic influenza health planning, response, and recovery. Alberta Health's responsibilities specific to response and recovery are to:

- Assess and communicate pandemic influenza severity and impact in Alberta to stakeholders.
- Exercise legislative authority (applies to both the Minister and the CMOH) under the *Public Health Act* and the Communicable Diseases Regulation to protect the health of Albertans, including the declaration of a provincial public health emergency, if required.
- As necessary, develop provincial policies, legislation, guidelines and standards for responding to pandemic influenza.
- Maintain Alberta's portion of the National Antiviral Stockpile (NAS).
- Manage Alberta's pandemic influenza vaccine.
- Seek necessary funding or resources to enable an effective health sector response.
- Connect with F/P/T counterparts on health impacts, resources and communications.
- Direct the provincial communication strategy and messages in conjunction with the Public Affairs Bureau and AHS.
- Collaborate with AHS in the delivery of influenza-related public information and education programs and co-ordinate the dissemination of health information.

- Liaise with and support other GoA Ministries.

Alberta Health Services

The role of AHS is to provide continuity of health services to Albertans. AHS responsibilities specific to response and recovery are to:

- Review and implement pandemic influenza operational health service response and recovery plans.
- Prioritize delivery of critical health services and programs during a pandemic influenza.
- Carry out the legislated roles of the MOH under the *Public Health Act* and the Communicable Diseases Regulation, including advising (in consultation with the CMOH) on the declaration of a local state of public health emergency, if necessary.
- Collaborate with Alberta Health on matters related to policy, resource acquisition and cross-government, and in the delivery of influenza-related public information and education programs.
- Liaise with and provide health advice and counsel to local authorities and stakeholders.

Alberta Emergency Management Agency

Under the Government Emergency Management Regulation, the Alberta Emergency Management Agency is responsible for acting as the co-ordinating and support agency for the GoA and its emergency management partners. In this capacity and in the context of this plan, AEMA will:

- Co-ordinate the cross-governmental response to a pandemic .
- Monitor and assess the impact of pandemic influenza on GoA critical services, and if required, co-ordinate restoration of GoA critical services list as per the GoA Business Continuity Plan
- Co-ordinate and support requests for assistance from local authorities as necessary.
- Co-ordinate requests for assistance under existing F/P/T and international mutual assistance agreements.

Other Government Ministries

GoA Ministries will manage activities in accordance with their legislated mandates and government priorities. In a response, GoA Ministries will:

- Review business continuity plans and activate as appropriate to deal with the impact of pandemic influenza.
- Maintain departmental critical services, and through AEMA, ensure that activities align with the GoA health response and recovery.
- Communicate with AEMA any issues, concerns or requests for assistance.
- Liaise and support their key stakeholder groups in their response and recovery activities.

Federal/National

The high-level roles and responsibilities of the federal government during a pandemic, including working collaboratively with Alberta to ensure federal populations residing in the province have access to pandemic health services similar to those for other residents, is outlined below.

The role of the Government of Canada is to manage the international aspects of emergencies, including:

- Managing all international aspects of pandemic preparedness and response.
- Providing travel health notices and other health related information relevant to international travel.
- Exercising powers under the *Quarantine Act* to protect public health by taking comprehensive measures to help prevent the introduction and spread of communicable diseases in Canada.

Pan-Canadian Public Health Network Council

The role of the Pan-Canadian Public Health Network Council as established by the F/P/T Conference of Deputy Ministers is the senior forum for F/P/T collaboration on public health issues. In a response, the Council is responsible for:

- Providing scientific and policy advice to the F/P/T Conference of Deputy Ministers.
- Serving as a focal point for co-ordination of F/P/T pandemic influenza response.

Public Safety Canada

The role of Public Safety Canada is to direct the federal emergency response using the Federal Emergency Response Plan. This includes responsibility for co-ordinating security and the non-health component of the pandemic influenza response at the national level.

Public Health Agency of Canada (PHAC)

The Public Health Agency of Canada's Centre for Emergency Preparedness and Response (CEPR) is Canada's central co-ordinating point for public health security issues. In a response, CEPR will:

- Continuously monitor outbreaks and global disease events and assess emerging and ongoing public health risks.
- Contribute to keeping Canada's policies in line with threats to public health security.
- Apply federal public health rules governing laboratory safety and security, quarantine and similar issues.

Health Canada

With respect to antiviral medications and influenza vaccine, Health Canada responsibilities in a response include:

- Approval of new drugs and vaccines to treat Canadians and minimize the spread of disease in the event of an outbreak.
- Ensuring that, once one is produced, an influenza vaccine will be available to all Canadians at the earliest possible time.
- Acting as the focal point for vaccine manufacturers and international regulatory collaboration.
- In collaboration with the PHAC, national monitoring of adverse reactions to antiviral medications and vaccines.

The federal First Nation and Inuit Health Branch is responsible for:

- Preparing for, and responding to, the threat of an influenza pandemic in on-reserve First Nations communities.
- Collaborate with the PHAC, Aboriginal Affairs and Northern Development Canada and other federal departments, along with provinces to ensure comprehensive and co-ordinated planning and response activities in the event of emerging infectious diseases.
- Working closely with on-reserve communities to advise on and support the development, testing and periodic revision of their influenza pandemic plans, which should be incorporated into already existing emergency response plans in the community.
- Participating, in collaboration with the provinces, in the distribution, administration, and reporting (of adverse reactions) of vaccines and antivirals using existing arrangements for on-reserve First Nations communities.
- Maintaining a PPE stockpile for health care workers assisting in the delivery of health care services for on-reserve First Nations communities.
- Providing information and guidance, based on guidelines developed by the PHAC or the provinces, to health care workers providing services in on-reserve First Nations communities.

In a pandemic, Health Canada's FNIHB Alberta Region is responsible for providing community and public health services for individuals living on First Nation reserves in Alberta, including:

- Leading and co-ordinating the public health response and recovery of First Nations communities in Alberta.
- Co-ordinating and supporting the provision and administration of pandemic influenza vaccine to individuals living on-reserve, in collaboration with Alberta Health and AHS.
- Collaborating with Alberta Health and AHS to ensure that individuals living on-reserve have equitable access to antiviral medication.
- Providing infection control and self-care education, in co-ordination with Alberta Health and AHS.

International

World Health Organization

WHO's pandemic roles and responsibilities are outlined in the WHO Pandemic Influenza Risk Management Interim Guidance (2013) document and include:

- Co-ordination of the international response under the IHR, including conducting global risk assessments.
- Communication of the global situation using the global pandemic phases.
- Declaration of a Public Health Emergency of International Concern (PHEIC) and pandemic, as determined.
- Provision of information and support to affected States Parties.
- Selection of the pandemic vaccine strain and determination of when to move from seasonal to pandemic vaccine production.

- Provision of oversight and support for implementation of the Pandemic Influenza Preparedness Framework (www.who.int/influenza/resources/pip_framework/en/index.html).

Emergency Management

There are four pillars of emergency management:

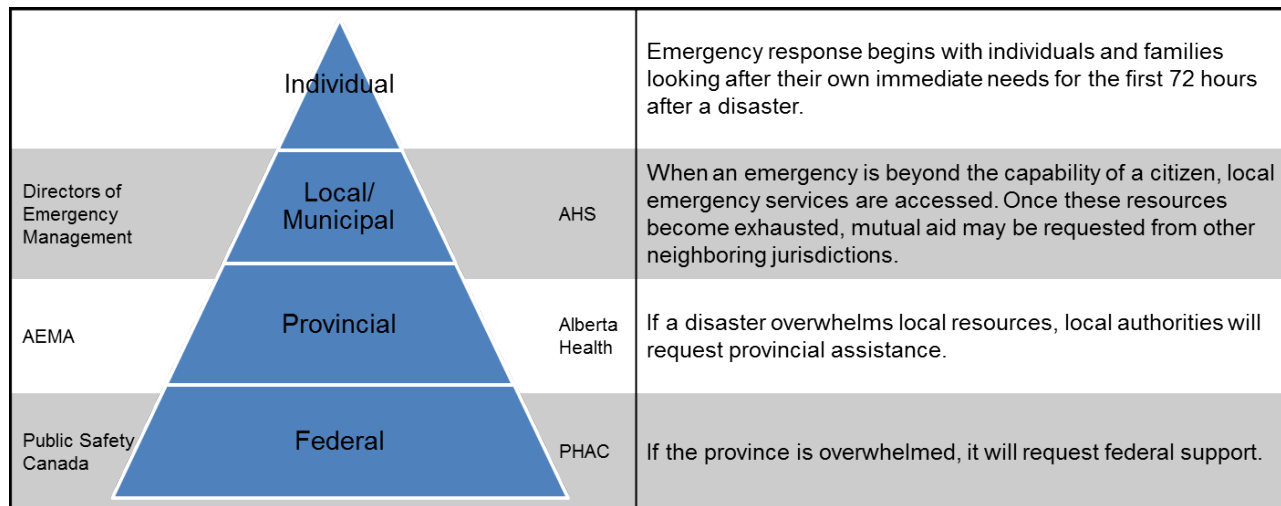
- **Prevention and mitigation** refers to actions taken to identify and reduce the impacts and risks of hazards before an emergency or disaster occurs.
- **Preparedness** increases the ability to respond quickly and effectively to emergencies and to recover more quickly from their long-term effects and involves actions taken prior to an event to ensure the capability and capacity to respond.
- **Response** refers to actions taken during or immediately after an emergency or disaster for the purpose of managing the consequences.
- **Recovery** refers to actions taken after an emergency or disaster to re-establish or rebuild conditions and services.

The APIP focuses on response and recovery. It also aligns with an all-hazards approach: bringing together the common elements of emergency plans to respond to different hazards and focusing on standard functional responses to generate efficiency.

Emergency Response

Alberta has a graduated structure of emergency response, used for all emergencies including pandemic influenza. This means that assistance can be accessed at the next level if the affected level becomes overwhelmed. For example, emergency events are co-ordinated at the municipal level first through the Director of Emergency Management, through AEMA at the provincial level, and through Public Safety Canada at the federal level. A parallel process is followed through the health system.

Diagram 1: Alberta's Graduated Structure of Emergency Response

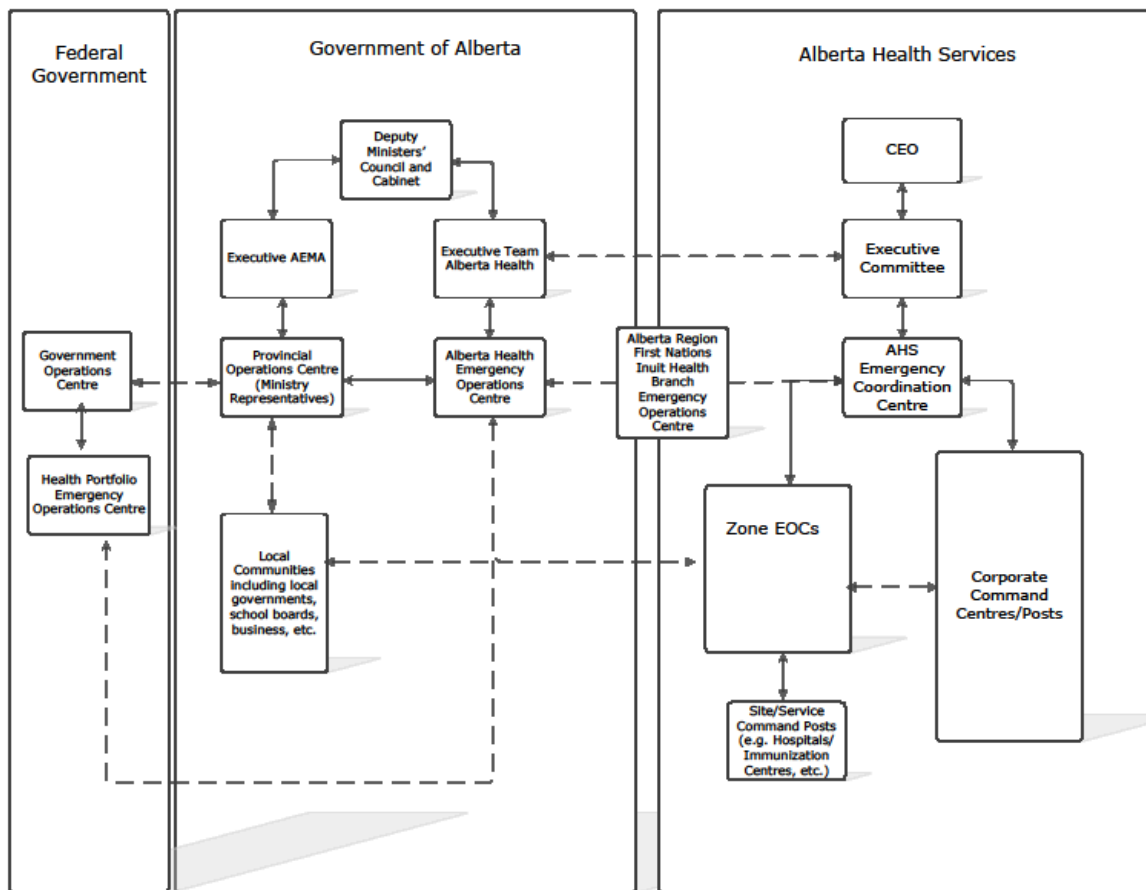


Each organization (Alberta Health, AHS, and AEMA) has an incident management system that is made up of organizational structures, principles, and processes that are implemented when regular processes are stretched beyond capacity. These systems have been developed and co-ordinated as part of the all-hazards approach and will be used during a pandemic influenza.

Where possible, routine business processes and communication pathways will be maintained. However, when an emergency arises, emergency structures are put in place and these processes are modified or adjusted to accommodate the necessary pathways and streamline required decision making.

Once activated, emergency management structures including emergency operations/co-ordination centres will provide a focal point for operational response activities. These respective emergency management structures will be flexible, scalable and integrated depending on need.

Diagram 2: Co-ordination During an Emergency



Roles and Responsibilities – Emergency Management

Specific roles and responsibilities for Emergency Management are below.

Alberta Health	AHS	AEMA
<ul style="list-style-type: none"> In collaboration with AHS, monitor and assess the impact to the health system in Alberta. In collaboration with AHS and FNIHB, to communicate knowledge of situation (e.g., describe impact of pandemic) to stakeholders (federal and provincial) through regular channels. Lead and co-ordinate Alberta's response to pandemic influenza using all-hazards emergency management components. Mobilize extra resources (e.g., interprovincial aid) for health supports as required. 	<ul style="list-style-type: none"> In collaboration with Alberta Health (AH), monitor and assess the impact to the health system in Alberta. Work with AH/FNIHB to communicate knowledge of situation to stakeholders through regular channels. Work with AH to co-ordinate Alberta's response to pandemic influenza using all-hazards emergency management components. Guide and co-ordinate the provincial health services pandemic influenza response. 	<ul style="list-style-type: none"> AEMA will continue to use Public Safety Governance as the situation requires. Monitor and assess the impact to GoA Ministries critical services as per the GoA Business Continuity Plan.

Partner Roles & Responsibilities		
FNIHB	GoA Ministries	Local authorities, Business and Industry
<ul style="list-style-type: none"> • Implement their emergency response/ business continuity plans. • Work with AH/AHS to co-ordinate Alberta's response using all-hazards emergency management components. • Disseminate information to stakeholders through regular channels. 	<ul style="list-style-type: none"> • Review/implement their emergency response/ business continuity plans. • Communicate problems with maintaining their critical services to AEMA. • Disseminate appropriate information to stakeholder groups (e.g., the Ministry of Education communicates with school boards). 	<ul style="list-style-type: none"> • Review/implement their emergency response/ business continuity plans. • Voluntarily communicate issues with maintaining critical services to AEMA.

Communications

Albertans and health care providers need information to guide their response. Although many sources of information will be available, there will be consistent messaging for the province. Alberta Health, AHS, and AEMA have established linkages with local, regional, F/P/T, and international bodies to ensure co-ordinated messages are created and distributed to appropriate audiences. Communications units will work together to ensure questions and requests are directed to the appropriate department or agency (local, regional, F/P/T).

During a pandemic, all GoA messaging will be through Alberta Health and AHS with assistance and oversight from PAB. Integrated communications initiatives may also occur in specific areas, such as vaccine availability, case definitions and case counts to ensure consistent messaging to the public.

Each organization remains responsible for organization-specific operational communications plans and internal co-ordination of communication with their personnel.

Provincial Spokesperson(s)

The CMOH or a designate is the provincial spokesperson for issues related to the health response/ recovery plan specifics and medical information. The Senior Medical Officer of Health (SMOH) or a designate is the AHS spokesperson for issues related to AHS health service operations during pandemic influenza. The CMOH and the SMOH will work jointly to provide consistent information.

Depending on local circumstances, AHS Zone MOHs may be called upon to be spokespeople. Technical experts may also be identified through the CMOH or SMOH to provide media briefings and background information.

Communication Mechanisms, Audiences and Tools

Given the complexity and enormous volume of messaging that occurs at all levels in a pandemic influenza, the three lead organizations have identified audiences, primary sources, and leads for inter-agency, stakeholder and public messaging.

A variety of communications tools may be employed to reach different audiences and will consider the needs of potentially difficult-to-reach audiences. Websites are a primary source of information for most audiences. To serve that purpose, up-to-date information and resources on pandemic

influenza will be posted on the Alberta Health (www.health.alberta.ca), AHS (www.albertahealthservices.ca) and AEMA (www.aema.alberta.ca) websites.

Roles and Responsibilities – Communications

Specific roles and responsibilities for Communications are below.

Alberta Health	AHS	AEMA
<ul style="list-style-type: none"> • AH Communications will work with the Public Affairs Bureau (PAB) and other GoA Ministries to co-ordinate all communications regarding pandemic influenza. • Provide pandemic influenza information to professional regulatory bodies to be shared with their members. • Co-ordinate media response with AHS and monitor and analyze coverage. 	<ul style="list-style-type: none"> • Communicate information to all health care professionals and health service personnel within their jurisdiction. • In collaboration with AH, create, update and provide critical information to the public and stakeholders. • Co-ordinate media response with AH and monitor and analyze coverage. 	<ul style="list-style-type: none"> • Co-ordinate information through POC and PAB to GoA Ministries and Local Authorities. • Provide regular briefing updates for Premier's Office, Ministers and MLAs, CMOH and deputies based on agreed to key messages. • Provide information to Albertans via Alberta Emergency Alert.

Partner Roles & Responsibilities			
FNIHB	Public Affairs Bureau (PAB)	GoA Ministries	Health Professional Organizations, Regulatory Bodies
<ul style="list-style-type: none"> • Communicate information to all health care professionals and health service personnel within their jurisdiction. 	<ul style="list-style-type: none"> • Oversee public communications for the GoA response with AH. 	<ul style="list-style-type: none"> • Communicate information to stakeholder groups (e.g., the Ministry of Education communicates with school boards). 	<ul style="list-style-type: none"> • Co-ordinate provincial pandemic influenza communications with their members.

3. Health System Response

This section describes inter-related, co-ordinated health functions in a pandemic influenza response, primarily provided through Alberta Health, AHS and its contracted providers.

Surveillance

Public health surveillance is “the ongoing and systematic collection, analysis, and interpretation of outcome-specific data for use in the planning, implementation, and evaluation of public health practice.”³ Surveillance systems include data collection and analysis, as well as the timely dissemination of information.

Detection and ongoing surveillance of any influenza virus is the responsibility of a co-ordinated system of international, national, provincial and local authorities who provide laboratory, disease and epidemiological surveillance information.

Surveillance in Alberta will play an important role in identifying the emergence of a novel influenza virus with potential pandemic characteristics, monitoring the impact of pandemic influenza and providing accurate information to inform public health decisions before, during and after a pandemic.

Data

In Alberta, the primary sources of surveillance data are provided by AHS, including the Provincial Laboratory for Public Health (ProvLab). Other sources include: Alberta Health, pharmacy data, Vital Statistics (Service Alberta), Alberta Agriculture and Rural Development, FNIHB, and the Alberta Recording and Research Network (TARRANT⁴). To ensure data quality, consistent standardized forms and timelines are used throughout the province.

Surveillance activity expands or collapses corresponding to the available information on the spread and severity of illness caused by the novel virus. Routine surveillance activities are maintained. If resources become strained, prioritization of surveillance activities may occur.

Surveillance Indicators

Surveillance for pandemic influenza will monitor influenza activity, such as the geographic spread of influenza, populations affected, the intensity of respiratory disease activity, and the impact on health-care services. Below is a list of pandemic influenza indicators based on seasonal influenza indicators reported on a regular basis. Seasonal influenza indicators reported on a regular basis (below) will provide a baseline set of indicators for a novel virus; these will be reviewed and revised as necessary at the time of a pandemic.

³ Thacker SB. Historical development. In: Teutsch SM, Churchill RE, eds. Principles and practice of public health surveillance, 2nd ed. New York, NY: Oxford University Press, 2000.

⁴ TARRANT uses doctor-reported signs and symptoms of respiratory and influenza in the community as an early warning system for influenza outbreaks. Data is collected by volunteer sentinel sites and forwarded to Alberta Health.

Table 3: Sample of Pandemic Influenza Surveillance Indicators

Laboratory Surveillance	
	<ul style="list-style-type: none"> • Confirmed isolates • Confirmed isolates by age • Sub-typing from PLPH or National Microbiology Laboratory • Antiviral resistance testing results • Number of confirmed influenza positive swabs from sentinels (PHPH)
Epidemiologic Surveillance	
Outbreak Reporting	<ul style="list-style-type: none"> • Number of outbreaks in long-term care facilities • Number of reported outbreaks in schools • Number of reported outbreaks in acute care settings • Number of reported outbreaks in other settings (such as daycares, worksites)
Acute Care	<ul style="list-style-type: none"> • Emergency department visits related to influenza-like-illness (ILI) • Hospitalizations related to ILI • ICU admissions related to ILI
Mortality	<ul style="list-style-type: none"> • Number of deaths related to influenza and specific pandemic strain • Total all cause mortality • Number of deaths registered this period
Physician/Nurse Practitioner Services	<ul style="list-style-type: none"> • Number of clinically diagnosed cases of ILI • Proportion of patients with ILI • Number of cases of acute respiratory infection, bronchitis, and pneumonia • Age specific rate of diagnosis of ILI • Proportion of population diagnosed with ILI by region (map)
Sentinel Surveillance	<ul style="list-style-type: none"> • Number of reporting physicians/nurse practitioners by week • Proportion of patients with ILI • Proportion of patients with lower respiratory tract infections
Immunization	<ul style="list-style-type: none"> • Number of people receiving influenza vaccine • Number of adverse events following immunization with an influenza vaccine
Other	
Animal Surveillance	<ul style="list-style-type: none"> • Number of farms with confirmed influenza among poultry or swine
Health Link Alberta	<ul style="list-style-type: none"> • Number of calls to Health Link Alberta related to influenza and ILI • Call wait times for Health Link Alberta
National and International	<ul style="list-style-type: none"> • Updates on national and international surveillance indicators

Reporting

Alberta Health routinely produces weekly reports of influenza and Influenza Like Illnesses (ILI) activity for the province. This information is shared with AHS and the PHAC and is provided to Albertans through Alberta Health and AHS websites.

During a pandemic, Alberta Health and AHS will collaboratively produce a variety of reports. Alberta Health will determine the frequency and type of reporting required for the Ministry. AHS will determine the frequency and type of reporting required for their internal operations. Situational reports will be circulated to key internal and external stakeholders.

Alberta Health works with other provinces and territories, Health Canada, and the PHAC to ensure consistency in surveillance activities across the country and to support national and international surveillance efforts. This collaboration ensures Canada is able to meet reporting obligations as part of the WHO's IHR. Provincial data will be regularly provided to the PHAC according to a schedule determined and agreed to by all provinces and territories and based on the evidence collected and the overall impact of the pandemic.

ProvLab will continue to monitor and amplify activities as needed to produce reports of pandemic influenza and other respiratory viruses and communicate with other public health laboratories regarding lab specific issues and guidelines.

The Hospitalized Influenza and Serious Respiratory Infection (SRI) Report Form is completed year round on all hospitalized influenza and SRI cases, and will provide the preliminary data for pandemic influenza reporting. The form is available on the public Alberta Health website. A new or revised pandemic influenza case report form will be similarly posted during a pandemic.

Health Notifiable Disease Reporting

The requirements for notifiable disease reporting is found in the *Public Health Act* and the Communicable Diseases Regulation. It is a surveillance tool that collects disease information in Alberta (according to the Notifiable Disease Report Manual) in a manner that allows it to be easily analyzed, interpreted, and disseminated. If required, a new or revised Notifiable Disease Report Manual will be initiated by Alberta Health (including a case definition, reporting guidelines, and the development of necessary forms) to ensure accurate surveillance and reporting of the pandemic influenza.

Roles and Responsibilities - Surveillance

Roles and responsibilities for Surveillance are listed below.

Alberta Health	AHS	AEMA
<ul style="list-style-type: none"> • Co-ordinate surveillance activities for the province: expand/ collapse surveillance activity as required. • Confirm and communicate AHS and the ProvLab reporting requirements. • Assess the seasonal burden of influenza, and recognize early warning signals of a novel virus. 	<ul style="list-style-type: none"> • Collect data, conduct routine surveillance activities that establish baseline influenza activity, assess the seasonal burden of influenza, and recognize early warning signals of a novel virus. • Collect, collate and report regional pandemic influenza surveillance data as requested by AH, including data from sentinel health service utilization sites, if established. <p>ProvLab</p> <ul style="list-style-type: none"> • Co-ordinate pandemic influenza 	<ul style="list-style-type: none"> • No roles and responsibilities specific to Surveillance.

Alberta Health	AHS	AEMA
<ul style="list-style-type: none"> Track and report the incidence, progression, and severity of the virus. Statistical analysis, interpretation, and reporting on the provincial status to the AHS, GoA, Albertans and the PHAC. 	<ul style="list-style-type: none"> identification/isolate data activity with the National Microbiology Laboratory (NML). Provide diagnostic testing services for identification and monitoring of the pandemic influenza virus. Provide influenza virology expertise to support AHS, FNIHB, and AH public health partners. Work with AHS IPC to develop guidelines for containment, Personal Protective Equipment. 	

Partner Roles & Responsibilities			
FNIHB	Sentinel Physicians	Alberta Agriculture and Rural Development	Service Alberta, Vital Statistics
<ul style="list-style-type: none"> Collect data, conduct routine surveillance activities that establish baseline influenza activity, assess the seasonal burden of influenza, and recognize early warning signals of a novel virus. Collect, collate and report regional pandemic influenza surveillance data as requested by AH, including data from sentinel health service utilization sites, if established. 	<ul style="list-style-type: none"> The sentinel physician network TARRANT will report the ILI consultation on a weekly basis. 	<ul style="list-style-type: none"> Report to AH the identification of influenza strains in swine and poultry. 	<ul style="list-style-type: none"> Collect and report mortality data to AH.

Public Health Measures

Public health measures (PHM) are non-pharmaceutical population-based interventions designed to limit and or slow the spread of pandemic influenza.

Public health measures can include, but are not limited to, infection prevention and control interventions, isolation, quarantine, and public education. They are generally started early, prior to vaccine availability and may be introduced in conjunction with medications, such as use of antivirals.

These measures can be implemented at individual, community and social levels and are generally based on a consensus of national and international experts. Not all public health measures are used at all times. Existing knowledge of the pandemic influenza virus and epidemiologic data will guide recommendations for each of the following.

Isolation

In the *Public Health Act*, “isolation” is defined as:

“the separation of a person or animal infected with a communicable disease from other persons or animals in a place and under conditions that will prevent the direct or indirect conveyance of the infectious agent from the infected person or animal to a susceptible person or animal.”

- Isolation is used to separate ill persons who have a communicable disease from those who are healthy. Isolation can occur in a home, hospital or alternate care site and may be implemented prior to case confirmation for precautionary purposes. Compliance by ill persons (self-isolation) may reduce secondary cases and slow the spread of illness in the population.

Quarantine

In the *Public Health Act*, “quarantine” is defined as:

- (i) "in respect of persons or animals, the limitation of freedom of movement and contact with other persons or animals, and
- (ii) in respect of premises, the prohibition against or the limitation on entering or leaving the premises,
during the incubation period of the communicable disease in respect of which the quarantine is imposed."

Quarantine is a public health measure to separate and restrict the movement of persons who may have been exposed to a communicable disease to see if they become ill.

Social Distancing

Social distancing refers to measures taken to restrict when and where people can gather. It is intended to decrease the number of new infections by reducing the opportunities for transmission from infected to non-infected individuals. These measures include, but are not limited to, school or workplace closures, reduced or restricted mass gatherings, and travel restrictions.

Travel and Border Related Measures

Public health travel advisories or public health orders may be issued by the federal or provincial governments.

Federal screening of international travellers from areas with active disease are implemented regularly and may be modified based on the specifics of the particular pandemic influenza virus and related risk-assessment.

Educational Resources

Updated provincial/zone information will be made available to Albertans through clinicians and AHS. Information topics may include:

- Symptoms of influenza (and ILI) and how, when and where to seek medical attention while minimizing potential exposures.
- Infection prevention and control strategies such as good hand-washing and respiratory hygiene, cleaning and disinfecting potentially contaminated surfaces in the home or at work.
- Information regarding pandemic influenza interventions (activity restrictions).

Limitations of Public Health Measures

The recommendations for community-based disease control strategies may be applied to communities in Alberta including those geographically-isolated. Decisions regarding such measures are balanced against the social and economic functioning of a community.

Communities considering restrictive measures outside what has been recommended should consult with an AHS MOH to understand evidence of effectiveness and any potential negative social consequences (e.g., social disruption).

Roles and Responsibilities – Public Health Measures

Roles and responsibilities for Public Health Measures are listed below.

Alberta Health	AHS	AEMA
<ul style="list-style-type: none"> Establish the current level of risk to guide public health measures (e.g., assess characteristics associated with person-to-person spread of influenza). Develop and direct public health measures implementation in consultation with the PHAC, Council of the CMOHs, AHS, and FNIHB as appropriate. Review and update the Public Health Notifiable Disease Management Guidelines as needed. Review and update guidance documents and disseminate to partners and key stakeholders as needed. 	<ul style="list-style-type: none"> Consult with AH on the development of public health measures. Develop, implement, and discontinue as required public health measures that reflect provincial guidance. Prepare and revise, if necessary, educational resources for public health partners and Albertans. Report cases to AH. Manage cases and contacts of cases in Alberta in consultation with the CMOH and SMOH. 	<ul style="list-style-type: none"> Disseminate materials as directed to appropriate audiences as per regular processes.

Partner Roles and Responsibilities	
FNIHB	Health Canada, Correctional Service of Canada (CSC) and other agencies, as well as other GoA Ministries, etc.
<ul style="list-style-type: none"> Develop, implement, and discontinue as required public health measures that reflect provincial guidance. Prepare and revise, if necessary, educational resources for public health partners and Albertans. Report cases to AH. Manage cases and contacts of cases in Alberta in consultation with the CMOH and SMOH. 	<ul style="list-style-type: none"> Liaise with AH and AHS to obtain direction and most accurate pandemic information Consult with AH and AHS on the implementation of PHMs as appropriate

Infection Prevention Control and Occupational Health and Safety

Infection Prevention and Control (IPC) and Occupational Health and Safety (OHS) teams provide information and operationalize direction for preventing and minimizing exposure and transmission of pandemic influenza through the adaptation and reinforcement of IPC measures and OHS workplace health guidance and safety controls.

IPC strategies, policies and procedures are developed from established IPC programs and practices. OHS requirements and measures are built on the Alberta *Occupational Health and Safety Act*, Regulation, and Code, that together set out the legal requirements that employers and workers must meet to protect the health and safety of workers.

The key to meeting these requirements during pandemic influenza is doing hazard assessments and applying varying levels of risk protection measures, called 'controls'. Three levels of IPC and OHS

controls that work together to prevent injury and illness in the workplace during a pandemic, in order of preference, are:

- Engineering: isolate the hazard, ventilate, add physical barriers such as Plexiglass.
- Administrative: manage policies and procedures, administer safe work procedures such as respiratory hygiene, enforce hand hygiene, train and supervise workers, vaccinate.
- Personal methods: personal protective equipment (PPE) such as gloves, masks, gowns, eye protection, protective clothing, and others as appropriate.

Steps to hazard assessment and recommended controls are detailed in the [Alberta Best Practice Guideline for Workplace Health Safety during Pandemic Influenza](#). It provides:

- The minimum OHS legislative requirements for a workplace hazard assessment and a hazard assessment template for use in Alberta.
- Based on the workplace hazard assessment, direction on controls and best practices to protect the health and safety of all Alberta workers during a pandemic threat.
- Tools for training in Alberta workplaces.

A checklist for organizational risk assessment for pandemic influenza is also available in the CPIP Annex F: Prevention and Control of Influenza during a Pandemic for All Healthcare Organizations.

Roles and Responsibilities – IPC and OHS

Overarching roles and responsibilities for IPC and OHS are listed below.

Alberta Health	AHS	AEMA
<ul style="list-style-type: none"> • Liaison between PHAC and health care service delivery (AHS and contracted providers and other health care providers outside AHS such as , dental and medical practices). • In collaboration with OHS (Human Services), and AHS (IPC and OHS) will develop and or update guidance and direction for healthcare providers, workplaces, and the general public in Alberta. • Disseminate materials to appropriate audiences as per regular processes. • Liaise and collaborate with AHS (IPC and OHS) and OHS (Human Services) on any new information, identified issues and ongoing direction. 	<ul style="list-style-type: none"> • In collaboration with AH (IPC) and OHS (Human Services), AHS (IPC and OHS) will develop and or update guidance and direction for healthcare providers, workplaces, and the general public in Alberta. • Disseminate materials to appropriate audiences as per regular processes. • Review, revise, and implement operational activities to reflect agreed to guidance and direction. • Liaise and collaborate with AH (IPC) and OHS (Human Services) on any new information, identified issues and ongoing direction. 	<ul style="list-style-type: none"> • Disseminate materials from AH (IPC), AHS (IPC and OHS) and OHS (Human Services) as directed to appropriate audiences as per regular processes.

Partner Roles and Responsibilities	
Occupational Health and Safety, Human Services (OHS)	Partners include but are not limited to: FNIHB, service delivery partners (e.g., Non-AHS health care

	providers , health professional regulatory bodies.
<ul style="list-style-type: none"> • In collaboration with AH (IPC) and AHS (IPC and OHS) will develop and or update guidance and direction for healthcare providers, workplaces, and the general public in Alberta. • Disseminate materials to appropriate audiences as per regular processes. • Liaise and collaborate with AH (IPC) and AHS (IPC and OHS) on any new information, identified issues and ongoing direction. 	<ul style="list-style-type: none"> • Liaise with AH(IPC), OHS (Human Services) and AHS (IPC and OHS) to obtain, and where appropriate contribute to, pandemic influenza-specific IPC and OHS information.

Antivirals

Antiviral medications are the only influenza-specific pharmaceutical intervention that can be used from the start of a pandemic.

Recommendations for Use of Antivirals

Alberta Health will continue to follow the pan-Canadian recommendations on the use of antivirals.

Antivirals could be used during pandemic influenza for four purposes:

- **Pre-exposure Prophylaxis.** In Canada, the decision to-date is that to undertake extensive pre-exposure prophylaxis would require stronger scientific evidence.
- **Early Treatment.** The NAS will be primarily used for early treatment of ill individuals who present to a health care provider, preferably within 48 hours of onset of symptoms, in order to reduce the severity and duration of illness, and particularly the occurrence of serious complications, hospitalizations and deaths.
- **Containment.** As part of the early pandemic response and based on a virus-specific risk assessment, antivirals may be used for post-exposure prophylaxis of close contacts together with treatment of cases of novel virus infection. Use of NAS for containment is not recommended once pandemic influenza virus is widespread; therefore, this strategy is limited to the early stages of a pandemic influenza in Alberta.
- **Outbreak control.** Antivirals may also be used for outbreak control in closed facilities, as assessed by the CMOH /local MOH, for treatment of cases and post-exposure prophylaxis of close contacts in closed facilities where high-risk people reside (such as long-term care facilities). The AHS Guidelines for Outbreak Prevention, Control and Management in Acute Care and Facility Living Sites will guide antiviral use in this case.

National Antiviral Stockpile (NAS)

The NAS was created in 2004 to ensure equitable access across Canada to a secure supply of antivirals for pandemic influenza. Each province and territory, maintains their own portion of the NAS. At the time of an outbreak, release of the NAS will be considered based on a risk assessment of the specific virus, the situation and the emerging epidemiology or other data, such as antiviral resistance or optimal treatment course.

Antiviral Distribution

Alberta Health will distribute antiviral medications from the provincial stockpile. AHS and FNIHB will be responsible for the delivery and administration of antivirals to Albertans requiring antiviral treatment in accordance with the guidelines for antiviral release.

Dispensing and recording details will follow provincially accepted policies and standards.

Antivirals from the NAS will be available free of charge through community pharmacies to Albertans with a prescription.

Roles and Responsibilities - Antivirals

Roles and responsibilities for Antivirals are listed below.

Alberta Health	AHS	AEMA
<ul style="list-style-type: none"> Engage with other F/P/T jurisdictions on antiviral recommendations and adapt for Alberta context where necessary. Provide funding for maintenance, distribution, and dispensing of the stockpiled antivirals for Alberta. In collaboration with AHS, co-ordinate procurement, storage, security, distribution and administration of antivirals. In collaboration with AHS, develop messaging and education materials regarding antiviral strategy and disseminate as per normal processes. Provide antiviral dispensing and reporting requirements (including reporting on adverse drug reactions) to all health services providers. Identify and address dispensing-related issues (e.g., pharmacist dispensing fees). Where necessary, communicate with bordering jurisdictions to facilitate awareness of antiviral distribution plans. Monitor for antiviral resistance. 	<ul style="list-style-type: none"> Assess capacity potentially required in the response (e.g., establishing mass clinics). In collaboration with AH, co-ordinate procurement, storage, security, distribution and administration of antivirals. Activate operational antiviral distribution and dispensing plans. Provide infrastructure and training for staff regarding dispensing and reporting requirements. In collaboration with AH, develop messaging and education materials regarding antiviral strategy and disseminate as per normal processes. Raise issues to AH regarding communication with bordering jurisdictions as needed. Monitor for antiviral resistance. 	<ul style="list-style-type: none"> No roles and responsibilities specific to Antivirals.

Partner Roles and Responsibilities	
FNIHB, Federal Corrections, Community Pharmacists	Alberta College of Pharmacists, Alberta Blue Cross, Alberta Medical Association and other health professional organizations.
<ul style="list-style-type: none"> Deliver and administrate antivirals to their appropriate stakeholders (e.g., aboriginal populations, federal inmates and the public). Track the administration of NAS antivirals. Disseminate messaging and education materials regarding antivirals strategy. 	<ul style="list-style-type: none"> Disseminate antiviral information, dispensing and reporting requirements (including reporting on adverse drug reactions) to health services providers across Alberta.

Vaccines

Pandemic influenza-specific immunization is the most effective way to prevent illness and death from influenza. It takes four to six months to develop and produce pandemic vaccine once the virus has been determined; therefore, the pandemic influenza vaccine is unlikely to be available until the second wave of a pandemic.

The approach to pandemic vaccine safety is built on the infrastructure and systems in place for monitoring seasonal influenza and other vaccines. A detailed description of Canada's vaccine safety network can be found in the Canadian Immunization Guide: www.phac-aspc.gc.ca/publicat/cig-gci/p02-01-eng.php.

Vaccine Distribution

As pandemic influenza vaccine supply will likely be limited in the early stages of an outbreak, F/P/T governments will jointly develop an allocation formula and convey this to the manufacturer for delivery purposes. Alberta Health will determine how to distribute Alberta's share of vaccines based on national recommendations, its population numbers, and priorities. Enough vaccine will eventually be produced to immunize all those who need and want it, but as supplies will be delivered in batches, they will be allocated using a transparent and evidence-based process.

Alberta's allotment of the vaccine will include federal populations served by the Correctional Service of Canada and FNIHB, but will not include the Department of National Defence.

The vaccine manufacturer transports vaccine with the appropriate cold chain management (proper temperature controls) to the Alberta Health Provincial Vaccine Depot (PVD). The PVD has the capacity to distribute vaccine to predetermined points of delivery within each AHS Zone as identified by AHS and FNIHB, within a 24-hour period (depending on geography, weather and AHS capacity to receive vaccine - i.e., refrigerator capacity).

AHS will maximize their vaccine depot capacity to receive large quantities of vaccine and dispense to their provincial immunization clinics in an efficient and effective manner.

Vaccine Administration

Through its seasonal influenza vaccination strategies, Alberta Health provides policy guidelines related to the administration of the vaccine that include: a vaccine chart, a list of target groups based on order of priority, a vaccine schedule, a cold chain management guideline, and Adverse Effects Following Immunization (AEFI) monitoring and reporting process.

Operational planners within Alberta will prepare scalable logistical requirements needed to achieve a maximum vaccine administration rate. In establishing this planning, it is assumed that:

- The health system will have the capacity to deliver the first dose of vaccine to all Albertans who want it within one month of the vaccine becoming available from the manufacturer.
- The rate-limiting factor in the ability of the health system to achieve this target will be vaccine availability.

Vaccine Priority Groups

As noted, vaccine will become available in stages. While there will eventually be enough for everyone who wishes to receive it, prioritization of the initial supply is required in order to address the situation in an equitable manner. This involves selecting certain segments of the population (target groups) to be offered vaccine first and encouraging them to get their immunization early. Various

factors will be considered such as disease and vaccine characteristics, ethical considerations, vaccine supply and operational/geographical considerations.

The CPIP Annex D: Preparing for the Pandemic influenza Vaccine Response provides detail regarding considerations associated with prioritization of a pandemic influenza vaccine and the implications for planners. Prioritization decisions will be based on the specific virus situation and not all of the data will be available until the virus has started circulating. National guidelines for vaccine recommendations will be distributed as soon as possible to provide a consistent and equitable approach.

Alberta Health participates in national discussions regarding the review of priority groups and implementation logistics that will be considered in the delivery of vaccine to those groups. Alberta Health also consults with other provincial/ territorial counterparts, the AHS SMOH, Zone MOHs and FNIHB to make recommendations based on Alberta-specific information when a pandemic is in progress. Strategies may be altered depending on pandemic influenza severity, vaccine supply, and operational/ geographical considerations.

Reporting

Alberta Health is responsible for monitoring the uptake of vaccine in Alberta. AHS, FNIHB, community pharmacists, and the Correctional Service of Canada monitor vaccine distribution within their areas and report utilization to Alberta Health.

Following Alberta Health guidelines, daily and weekly reporting will be completed. Alberta Health reports on provincial vaccine supply and delivery to the federal government through the PHAC. A final report on vaccine administration is completed post-pandemic.

Adverse Effects Following Immunization (AEFI)

The surveillance of adverse events related to pandemic influenza vaccine is based on current practice and reporting requirements; vaccine and surveillance program areas work closely together to monitor for AEFI. Alberta Health communicates any change to the requirements that may be necessary for pandemic influenza immunization, including:

- What is a reportable vaccine adverse event?
- What information needs to be captured?
- What is the process for reporting adverse events?

AHS communicates this information, according to provincial guidelines, to physicians, emergency rooms, community partners and others who administer vaccine. This information is also posted on the AHS website (www.albertahealthservices.ca).

Potential of Routine Immunization Series Deferrals

When vaccine delivery is at maximum capacity, regular childhood immunization programs may be deferred. This decision will be made at the discretion of, and for the period defined by, AHS SMOH in collaboration with the CMOH.

Roles and Responsibilities

Roles and responsibilities for vaccines are listed below.

Alberta Health	AHS	AEMA
<ul style="list-style-type: none"> • Establish and review <i>Alberta Influenza Immunization</i> 	<ul style="list-style-type: none"> • Review and revise standards for administration of vaccine as per AH 	<ul style="list-style-type: none"> • No roles and responsibilities

Alberta Health	AHS	AEMA
<p><i>policy.</i></p> <ul style="list-style-type: none"> Review and develop guidelines for distribution of vaccine (cold chain, data collection, etc.). Procure, receive, store, secure, allocate, and distribute pandemic influenza vaccine. Collaborate with AHS to develop the communications strategy for vaccines. Monitor vaccine uptake and vaccine AEFI. Participate in F/P/T discussions regarding vaccine delivery and prioritization groups. 	<p>guidelines.</p> <ul style="list-style-type: none"> Develop and maintain educational materials for staff and the public. Train and educate AHS immunizing staff. Ensure supplies, equipment, safe and secure storage and immunizing locations are ready for a mass immunization response. Disseminate standards and training materials to immunizing partners. Allocate and deliver vaccine to people living or working within Alberta according to clear and established distribution plans. Monitor and report to AH on all vaccine received from the PVD, distributed, and administered, including AEFIs. 	<p>specific to Vaccines.</p>

Partner Roles and Responsibilities	
FNIHB	Partners include community providers as described in the <i>Alberta Influenza Immunization Policy</i> (e.g., pharmacists, EMS).
<ul style="list-style-type: none"> Train and educate FNIHB immunizing staff. Ensure supplies, equipment, safe and secure storage and immunizing locations are ready for a mass immunization response. Disseminate standards and training materials to immunizing partners. Allocate and deliver vaccine to people living or working within on-reserve in Alberta. Monitor and report to AH on all vaccine received from the PVD, distributed and administered, including AEFIs. 	<ul style="list-style-type: none"> Ensure supplies, equipment, safe storage, and immunizing locations are ready and available for a vaccine-based response. Train and educate immunizing staff according to AHS requirements. In collaboration with AHS, administer pandemic influenza vaccine to people living or working within Alberta. Monitor and report on uptake of vaccine and AEFI to AH or AHS as directed.

Health Care Services

The goal of health care service delivery during a response is to provide the best possible care for the most people, to minimize the spread of influenza, and to maximize the efficiency and effectiveness of the delivery of care with the available resources.

This section primarily focuses on the health services as generally provided by AHS and AHS-contracted organizations, rather than office-based and private community health services (e.g., dentistry, private outpatient physiotherapy, private retirement residences), although they too may contribute to the response.

Continuity of Critical Health Care Services

If health care services are overwhelmed and there is no longer the ability to sustain all health care service delivery, prioritization of critical health services and resources across the health care system will be required. Health services could be suspended, deferred, consolidated or ramped up to support health care system operational requirements and population health needs. Other provinces may also be impacted and so unable to assist in meeting additional requirements for support.

Health care workers and volunteers may be asked to provide care that is not normally part of their daily activities, and in non-traditional health care settings. Clinical, logistical, ethical and practical considerations will guide these decisions.

Acute Care Services

To the fullest extent possible, AHS will provide medically appropriate health services, distribute guidelines, prioritize health-care needs, service delivery and access to resources, and co-ordinate clinical care services. AHS will maintain existing referral patterns and use common and standardized approaches for:

- Emergency Medical Services (Ambulance).
- Emergency departments and urgent care centres.
- Hospital admission and discharge of influenza patients.
- Applying clinical practice guidelines.
- Applying infection control guidelines.
- Access to tertiary and specialized care (e.g., cancer therapies, kidney dialysis, blood services).
- Out-of-province referrals.

Critical or Intensive Care Facilities/Units

Critical or intensive care units operate very near to capacity on a regular basis. Surge capacity will be based on optimizing and sharing critical care capacity across the province and focusing on care for ventilated patients or those requiring interventions not available elsewhere in hospitals. Standard triage processes will be activated uniformly in all critical care units across the province.

Out-of-Province Referrals

The capacity of AHS to receive or repatriate patients may change throughout the response. Referral patterns for out-of-province patients will be maintained to the extent possible given resources, changes in health system capacity, and patient status and outcomes. Patients from referring provinces will be repatriated when the elevated response is no longer required.

Continuing Care

Continuing care includes: home care, long term care, transition services, palliative or end-of-life care, adult day programs, and designated supportive living sites. During a pandemic influenza, two primary principles will guide service delivery:

- Care and treat-in-place

- A basic level of care will be maintained for all clients.
- Continuing care will continue to provide services to current clients.
- Continuing care will manage clients who develop ILI and those who develop other medical conditions in the client's home, except when acute episodic illness requires surgical intervention or other urgent acute care services.
- Surge capacity guidelines
 - AHS Zones shall identify surge capacity beds within AHS owned, operated or contracted supportive living and long-term care facilities.

The management and reporting of ILI and influenza cases follows the same processes used to address seasonal influenza outbreaks in continuing care, as outlined in the Guidelines for Outbreak Prevention, Control and Management in Supportive Living and Home Living Sites.

Continuing care providers should have emergency plans, with consideration for business continuity and pandemic influenza, in place to deliver a collective and integrated response among all AHS owned, operated and contracted service providers.

Primary Care

Primary care refers to the community health care providers who act as the point of first medical contact within the health system, manage illness, and co-ordinate care for the patient. These health care professionals, community physicians and pharmacies will continue to provide health care for those with other health care needs. Physicians and other health care practitioners will work with AHS to provide the best care for the most people.

Health Link Alberta

Health Link Alberta is a toll-free telephone-based service accessible to all Albertans 24/7. It is sponsored by Alberta Health and operated by AHS to deliver health advice and service information from health care professionals.

During a pandemic, this service will have an important first-line symptom triage function. Health Link will also offer a primary resource for the public and other stakeholders for information on the pandemic, treatment, and the most appropriate location to seek additional care if required.

Non-Traditional Health Care Settings

A non-traditional health care setting is a location that is not an already established health care site or an established health care site that usually offers a different type or level of care. The functions of a non-traditional site will vary depending on the needs of the community, but will focus on support of influenza patients during a pandemic influenza.

Influenza Assessment Centres

An Influenza Assessment Centre (IAC) is a non-traditional service site that provides timely, accessible clinical assessment services and triage for patients with influenza-like symptoms. IACs will focus on basic assessment of patients and determine whether they should go to a higher level of care, such as an emergency department, or to a lower level of care (e.g., self-care).

The aim of establishing IACs is to reduce the risk of spreading the disease to vulnerable populations through re-directing symptomatic people away from physician general practice or hospital

emergency departments. IACs will screen, assess and treat according to protocols and can provide antivirals and immunization when available.

Alternate Care Centres

Alternate Care Centres (ACCs) refer to established health care sites normally offering different services or locations that are not currently established as health care sites, such as:

- A site where influenza care is provided for individuals who do not require acute hospital services, and who are unable to be maintained, or maintain themselves, in their home.
- A site that provides support to acute care/ hospitals for the purpose of ensuring space and resources are available to manage the more acutely ill patients.
- A site that will provide care for sub-acute patients without ILI if needed.
- A site that will provide support to clients for up to 72 hours and/ or until the provision of alternate services can be arranged.

ACCs will be established as required to augment AHS Zone health service delivery.

Care of the Dead

During pandemic influenza, the same systems and resources that normally manage deaths will be used. The Office of the Chief Medical Examiner (OCME), under Alberta Justice and Solicitor General, is called in when a death meets specific criteria as identified in the *Fatality Inquiries Act* (e.g., unexplained or violent deaths, deaths outside a hospital). The OCME will implement its Mass Fatality Plan and work closely with AHS and AEMA to handle mass fatalities logistics should the number of fatalities under the jurisdiction of the OCME and or AHS stress existing processes. The Bodies of Deceased Persons Regulation under the *Public Health Act* must also be complied with by responsible persons under the regulation.

AHS has plans to accommodate increased number of deaths in a pandemic influenza and will ensure timely completion of death certificates in hospitals prior to releasing a body to mortuary services. Contracted service providers for continuing care would follow their normal procedure for death notification. With a widespread outbreak there is no provincial requirement for autopsies of those who have died of pandemic influenza. Autopsies will be done with permission of the next-of-kin, in those cases where a physician requests one, as per non-pandemic influenza protocols.

Medical Supplies and Equipment

Significant medications, medical equipment and supplies will be required to support the increased demand for health services during a pandemic influenza. AHS holds an emergency stockpile of priority resources and may also request access to the National Equipment Stockpile System (NESS) through Alberta Health if additional supplies are needed.

Roles and Responsibilities – Health Care Services

Roles and responsibilities for health care services are listed below.

Alberta Health	AHS	AEMA
<ul style="list-style-type: none"> • Report to the Minister on impacts of the pandemic influenza on health services. 	<ul style="list-style-type: none"> • Continue to deliver health services and programs to the greatest extent possible. 	<ul style="list-style-type: none"> • No roles and responsibilities specific to Health

Alberta Health	AHS	AEMA
<ul style="list-style-type: none"> Review, revise, and disseminate direction and guidance based on federal recommendations and Alberta context. Assist with procurement of additional or alternate resources (supplies, equipment, workforce, etc.) if required. 	<ul style="list-style-type: none"> Assess and report to AH impacts of the pandemic influenza on health services. Reallocate/re-deploy critical scarce resources and work with AH to identify additional or alternate resources. Suspend or defer, consolidate or ramp up health services to support specific health-care requirements and routine services for all other conditions. 	<p>Services.</p>

Partner Roles and Responsibilities	
FNIHB	Other health services providers, e.g., AHS contracted services, community physicians, pharmacists
<ul style="list-style-type: none"> Disseminate materials to appropriate audiences as per regular processes. Implement guidelines. Assess and report to AH/AHS impacts of the pandemic influenza on health services in First Nations communities in Alberta. 	<ul style="list-style-type: none"> Collaborate with AH and AHS where appropriate. Implement guidelines. Report on impacts to health service. Capacity.

Health Workforce

A Health Care Worker (HCW) is defined as a person in an occupation concerned with providing health care services directly to patients and or an occupation that provides support to professional and technical staff⁵. The majority of Alberta HCWs are employed by AHS, but there is a proportion that does not fall under this employer.

Alberta Health, AHS and contracted partners, FNIHB and provincial health professional regulatory bodies should have business continuity plans in place that consider HCWs in the event of a pandemic influenza.

Mobilization of the Health Workforce

Demand for HCWs will increase during a pandemic influenza. However, HCWs may be in short supply due to absenteeism caused by illness, the need to care for family members, or fear.

The availability and mobilization of HCWs will play a major role in Alberta's ability to effectively meet the demand for increased health services during a response. HCWs may be re-deployed or re-

⁵ Human Resources and Skill Development Canada, The National Occupational Classification (NOC) 2011

assigned to different traditional or non-traditional work settings based on their skill set, and retired HCWs, non-HCWs and volunteers may be called upon to support the increased demand.

Health Workforce Considerations

- **Funding.** The health system and physicians will use existing payment and administrative processes, where feasible, even if duties change in contractual situations. In the event that an existing payment system is not feasible, temporary compensation measures may be activated based on an assessment of the situation.
- **Liability.** Employers will consider liability issues in response to a pandemic influenza, and as they relate to HCWs working outside of their normal area of practice such as a surgeon performing primary care work during a pandemic influenza and worker's compensation benefits and liability coverage for volunteers.
- **Health Program Students, Residents, and Reactivated/Retired Health Professionals.** Alberta Health, in collaboration with stakeholders, such as post-secondary institutions and professional colleges, will establish potential suitable roles, privileging, scheduling, deployment, training and orientation of students, residents, and reactivated/retired health professionals, as appropriate.
- **Role of primary care/community health services.** Primary care or community health providers, such as family physician offices, public health clinics, are a key resource in pandemic influenza and may be the first point of contact for patients with symptoms. AHS operational plans include a role for rural and urban community health service providers in the initial assessment and management of patients with non-ILI.

Roles and Responsibilities – Health Workforce

Roles and responsibilities for Health Workforce are listed below.

Alberta Health	AHS	AEMA
<ul style="list-style-type: none"> • Monitor the health workforce capacity across the province. • Collaborate with AHS to allocate available HCWs according to health service prioritization. • Lead, and collaborate with AHS and the regulatory bodies to develop recommended professional and workforce-related guidelines. • Disseminate clinical guidelines and direction for HCWs to appropriate partners and stakeholders as per regular communication channels. • Lead and collaborate with AHS to provide health care service assistance, if required and available, to other jurisdictions 	<ul style="list-style-type: none"> • Assess and report on the status of workforce capacity to AH. • Collaborate with AH to allocate available HCWs according to health care service prioritization. • Collaborate with AH and regulatory bodies to access and reintroduce re-activated HCWs to practice. • Work with unions regarding collective agreement issues. • Collaborate with AH to provide health care service assistance, if required and available, to other jurisdictions. 	<ul style="list-style-type: none"> • No specific roles and responsibilities specific to Health Workforce.

(e.g., FNIHB, federal correctional facilities, etc.).		
---	--	--

Partner Roles and Responsibilities		
AHS Contracted Facilities and Non-AHS Facilities and Agencies, FNIHB	Health Professional Regulatory Bodies	Ministry of Advanced Education, Post-Secondary Institutions
<ul style="list-style-type: none"> Assess and report health workforce needs to AHS. 	<ul style="list-style-type: none"> Provide critical rapid temporary registration. Have policy and processes in place to confirm scope of practice to meet health workforce demands during a pandemic influenza. Collaborate with AH and AHS to develop and disseminate provincial direction, clinical guidelines, and information. 	<ul style="list-style-type: none"> Co-ordinate with health professional regulatory bodies to develop and disseminate information for scope of practice of students.

Psychosocial Support

The Canadian Pandemic Plan indicates that “The multiple secondary characteristics of the pandemic influenza, along with the primary medical consequences, have significant implications for the psychological, emotional, behavioural or psychosocial well-being of individuals and communities”⁶.

Pandemic influenza will have significant psychosocial impacts on healthcare workers and the community-at-large. Prolonged stress and multiple waves of infection may likely exacerbate illness states and may result in increased risk for various mental health problems and disorders such as post-traumatic stress, depression, anxiety, domestic violence and substance abuse.

In order to lessen and/or manage this impact, a well-developed psychosocial response during pandemic influenza is critical to address specific needs of different populations, as well as contingency plans for ensuring that existing mental health clients are able to receive the services they need.

General Public

Although people are generally resilient, some may become overwhelmed and unable to cope with the challenges of a pandemic influenza. The psychosocial impact of a pandemic varies and may include depression, anxiety, impaired decision-making, fear-driven anti-social behaviours, increase in the development of psychiatric disorders or exacerbation of pre-existing disorders, impaired social and family functioning, and decreased work and school performance.

Public education and information on community supports and stress management, as well as the use and improvement of psychosocial response and resiliency programs is critical to relieve fear, distress, social panic, and serve to decrease mental health risks during a pandemic influenza.

⁶ Annex P, Canadian Pandemic Plan

Each community has unique characteristics; working with municipalities and across sectors (including with faith-based organizations) improves the impact of psychosocial and mental health support services during a response.

Seriously Ill Individuals and their Families

Individuals who are seriously ill with influenza and their families may need specific psychological support to cope with anxiety, stress and possible bereavement and loss. This need is increased by the potential isolation, stigma and loss of social support networks associated with pandemic influenza. As part of a psychosocial response plan, integrated support to bereaved and/or isolated individuals and families will be provided.

Vulnerable Populations

Individuals with pre-existing mental health disorders including mental illness, addiction, dementia and chronic stress may be overwhelmed leading to worsening pre-existing symptoms and illness. In addition, the nature of mental health disorders increases the complexity of reaching this population in terms of education and support. Targeted plans will be used to address individuals with severe and persistent mental health disorders who may have more difficulty accessing their medications and treatment programs (e.g., the homeless).

Workforce

Effective psychosocial support programs for the workforce are needed for those who provide health care and will be most likely to experience extraordinary occupational stress from increased workload, workforce shortages, increase risk of infection for themselves and their families, and exposure to acutely ill and dying patients.

Employers, as part of their business continuity planning, should consider workforce strategies that address increased occupational stress, such as anxiety, insomnia, decreased performance related to stress.

Roles and Responsibilities– Psychosocial Support

Roles and responsibilities for psychosocial support are listed below.

Alberta Health	AHS	AEMA
<ul style="list-style-type: none"> • In collaboration with AHS and FNIHB, review and revise psychosocial support guidance and direction based on current knowledge of the situation. • Support a co-ordinated psychosocial response with other health service providers (private and other GoA department psychologists, social workers) for arising issues. • Work with Corporate Human Resources within government to ensure that GoA workforce resiliency plans are current. 	<ul style="list-style-type: none"> • In collaboration with AH and FNIHB review and revise psychosocial support guidance and direction. • Review and activate AHS social resiliency and psychosocial support response and recovery plans for pandemic influenza. • Work with community partnerships in providing additional psychosocial support services, when health services are overburdened. • Provide subject matter expertise 	<ul style="list-style-type: none"> • Disseminate materials to appropriate audiences as per regular processes.

<ul style="list-style-type: none"> • Provide subject matter expertise and contribute to communications plans where appropriate. • Disseminate materials to appropriate audiences as per regular processes. 	<p>and contribute to communications plans where appropriate.</p> <ul style="list-style-type: none"> • Disseminate materials to appropriate audiences as per regular processes. 	
--	---	--

<p>Partner Roles and Responsibilities</p>
<p>FNIHB</p>
<ul style="list-style-type: none"> • In collaboration with AH and AHS, review and revise psychosocial support guidance and direction. • Disseminate materials to appropriate audiences as per regular processes.

4. Broader Provincial Response

The *Emergency Management Act* and the Government Emergency Management Regulation designate AEMA as the co-ordinating agency for the GoA during an emergency.

Because the effects are not exclusive to the health system, it is critical for the GoA and emergency management partners to use a common approach during a pandemic influenza. AEMA will use enhanced emergency response mechanisms to co-ordinate the broader provincial response in alignment with the health system response.

Public Safety Governance System

Public safety is the shared responsibility of different levels/orders of governments, non-governmental organizations, business and industry and Albertans.

Alberta's public safety governance system addresses those hazards that disrupt routine community functioning and require a rapid and co-ordinated provincial response.⁷ The public safety governance system has pre-established activation levels, communication tools and high level decision protocols that will be used to co-ordinate the response to any emergency event, including pandemic influenza.

The Alberta Emergency Plan

The Alberta Emergency Plan (AEP) describes the roles and responsibilities of government departments and emergency management partners. For example, each government department is responsible for consequence management and business continuity plans containing detailed information on strategies for responding to the consequences of emergency events to their operations. Some departments may have specific operational /tactical plans that will need to be activated in a pandemic influenza to assist with the responsibilities designated under the AEP, such as the Mass Fatality Plan for the OCME.

Government of Alberta Business Continuity Plan

The GoA Business Continuity Plan (BCP) outlines how the government recovers its critical services in the event of a disruption. The GoA BCP was developed to support existing Ministry BCPs and expedite recovery of affected services through implementation of department and cross-government strategies.⁸

During a pandemic, government critical services may be impacted by staff shortages. In the event of widespread disruption of critical GoA services, the GoA BCP will be activated to prioritize recovery efforts.

⁷ Adapted from the Public Safety Governance Report 2011

⁸ Adapted from the Government of Alberta Business Continuity Plan 2013

Continuity of Services

Provincial Government

Essential services for the provincial government are defined in the GoA BCP as “services that must be provided immediately or will definitely result in the loss of life, infrastructure destruction, loss of confidence in the government, and significant loss of revenue. These services normally require resumption within 24 hours of interruption.” The AEMA will co-ordinate and support ministries in maintaining critical services during a pandemic.

Local Authorities

Critical municipal services vary by community. They include, but may not be limited to: police, fire, public works such as water or garbage disposal, utilities, public transportations, and or various social supports. Local authorities will determine these services in their Municipal Emergency Management Plans (MEMP), and provide strategies to ensure their viability throughout the response.

Given the unique nature of a pandemic influenza, AEMA may request that local authorities voluntarily communicate information, including high risk issues in the provision of these critical services, anticipated surpluses and deficiencies, and critical interdependencies. This information will allow AEMA to identify potential shortages and develop alternate arrangements, pre-position resources to areas in need and anticipate requests for provincial or federal support.

Business and Industry

Business and industry are important to the economy of the province, and many sectors are considered critical to the basic needs of Albertans:

- Food production and distribution.
- Electrical production and distribution.
- Oil and gas extraction, production and distribution.
- Transportation (primarily motor vehicles).
- Telecommunications.
- Water treatment and control.
- Finance.

Pandemic influenza with severe impact on the population could affect these services and their staff. Business and industry planning and response should involve not only the protection of their employees and business functions but include business interdependencies and suppliers.

Business and industry are encouraged to have discussions with their GoA Ministry counterparts, local authorities and AHS on areas where co-ordinated response is may be required.

5. Recovery

Recovery is critical to any emergency and should begin with the response activities to assist in transitioning back to a “normal” state of readiness once the emergency is over.

When a pandemic is declared over, systematic steps need to be taken to adjust actions, resources and policies back to their “pre-pandemic” state and to look at the long-term needs for communities, the health system and future planning efforts.

The recovery phase of an emergency often lasts longer than the response and can consume a considerably greater amount of time, resources and budget. Recovery objectives assist in determining the priority efforts, tracking issues and overcoming residual difficulties.

The following table are examples for planning recovery actions during and after a response and may be modified to be applicable to a specific area involved in the response.

Common Recovery Objectives

Objective	Triggers for Action	Actions
Perform de-escalation/ deactivation activities	<ul style="list-style-type: none"> • Is there a reduced need for emergency co-ordination? • Are day-to-day processes sufficient to maintain operations? • Are there sites/ systems that need to be deactivated? • Does the current situation meet deactivation criteria as stated in the operational plans? 	<ul style="list-style-type: none"> • Review and implement de-escalation plans and communicate to appropriate stakeholders and each other. • AEMA liaises with GoA Ministries and Municipalities regarding business continuity issues and de-escalation/ deactivation, as per Public Safety Governance protocols • AH and AHS co-ordinate de-commissioning any non-traditional health centre sites
Provide messaging for recovery period	<ul style="list-style-type: none"> • Is the pandemic influenza wave considered over? 	<ul style="list-style-type: none"> • AH, AHS, and AEMA will: <ul style="list-style-type: none"> • Provide public communication regarding return to regular messaging. • Update websites and messaging as required. • Review recovery messaging and deliver as per communications matrix.
Rescind orders/ Directives	<ul style="list-style-type: none"> • Has the situation changed so that emergency orders/ directives are no longer required? 	<ul style="list-style-type: none"> • Formally terminate provincial or local states of Public Health Emergency and Local or provincial states of emergency. • AH, AHS and AEMA will co-ordinate rescinding any directives that were implemented.
Initiate formal recovery plan	<ul style="list-style-type: none"> • Is there a formal recovery plan to start from? • Were any programs modified or stopped for this event that need to be resumed? 	<ul style="list-style-type: none"> • AH, AHS and AEMA will initiate or revise formal recovery plan. • AH, AHS, AEMA will assess the current situation and provide supports where appropriate for responders, community and staff and determine need for additional focused resources.

Objective	Triggers for Action	Actions
	<ul style="list-style-type: none"> • Are there loaned equipment or supplies that need to be returned? 	<ul style="list-style-type: none"> • AH, AHS, and AEMA to resume day-to-day activities as appropriate.
Evaluate the response and gather lessons learned	<ul style="list-style-type: none"> • Have the lead organizations deactivated their emergency response functions? • Have lessons learned reports been completed by each organization? 	<ul style="list-style-type: none"> • AH, AHS, AEMA conduct a debrief of their respective organization's responses and evaluate for lessons learned. • AEMA leads post-pandemic influenza debrief and lessons learned for the provincial operations response. • AH will bring together the provincial and federal health lessons learned for analysis.
Look at long-term consequences of the pandemic	<ul style="list-style-type: none"> • What are the long-term impacts to Alberta? • What is the long-term recovery plan? • Who will lead the recovery efforts? 	<ul style="list-style-type: none"> • AHS to review frontline health consequences from pandemic. • AH to connect with federal health counterparts on long term impacts of the pandemic from a pan Canadian perspective. • AEMA, AHS and AH will work together to support recovery efforts from a whole of provincial perspective including mental health resources, potential financial supports and potential policy or legislative improvements.

6. Objectives and Triggers for Action by Section

Response and recovery objectives and required actions can change rapidly. The triggers for action listed in the tables should be used in combination with each other. These are a starting point and may link to other operational response plans and procedures in a pandemic influenza response (i.e., all-hazards emergency planning, emergency operations centres standard operating procedures).

Triggers for action questions should be asked multiple times during the pandemic to assess current and anticipated needs. Although the triggers for action questions in the tables below were created for Alberta Health, AHS and AEMA, other stakeholders could use them to inform their response and recovery activities.

Recovery objectives, specific to each section, have been included where appropriate.

Note: Alberta will continue to be informed and affected by international and national health bodies, academic research, and evaluations of pandemic and other health emergency responses in addition to changes within the province. As a result, the tables from this section have been removed to allow the content to be updated regularly.

For further information, please contact Alberta Health (www.health.alberta.ca).

7. Resource List

Alberta Health	www.health.alberta.ca
Alberta Health Services	www.albertahealthservices.ca
Alberta Emergency Management Agency	www.aema.alberta.ca/
Public Health Agency of Canada	www.phac-aspc.gc.ca/index-eng.php
Provincial and Federal Legislation	<p>Alberta Queen's Printer: www.qp.alberta.ca</p> <p>Canadian Legal Information Institute: www.canlii.com</p> <p>International Health Regulations: www.who.int/ihr/publications/9789241596664/en/index.html</p>

Alberta's Response to Pandemic Influenza

Centers for Disease Control and Prevention. CDCD Resources for Pandemic Flu. 2013. Available from: www.cdc.gov/flu/pandemic-resources

Health Quality Council of Alberta. Review of Alberta's Response to the 2009 H1N1 Influenza Pandemic. 2010. Available from: www.health.alberta.ca/documents/HQCA-Review-Pandemic-2009.pdf

Public Health Agency of Canada. Canadian Pandemic Influenza Preparedness: Planning Guidance for the Health Sector (CPIP). 2013. (*Currently under revision*)

Public Health Agency of Canada. CPIP – Annex B: Influenza Pandemic Planning Considerations in On-Reserve First Nations Communities. 2009. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-b-eng.php

Public Health Agency of Canada. FluWatch. 2013. Available from: <http://www.phac-aspc.gc.ca/fluwatch/index-eng.php>

World Health Organization. Pandemic influenza preparedness Framework: for the sharing of influenza viruses and access to vaccines and other benefits. 2011. Available from: http://www.who.int/influenza/resources/pip_framework/en/index.html

World Health Organization. Pandemic Influenza Risk Management: WHO Interim Guidance. 2013. Available from: www.who.int/influenza/preparedness/pandemic/influenza_risk_management/en/index.html

Emergency Management

Alberta Emergency Management Agency. Alberta Emergency Management Plan. 2008. Available from: www.aema.alberta.ca/ps_alberta_emergency_plan.cfm

Public Health Agency of Canada. CPIP – Annex L: Federal Emergency Preparedness and Response System. 2006. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-l-eng.php

Public Safety Canada. Federal Emergency Response Plan. 2011. Available from: www.publicsafety.gc.ca/cnt/rsrscs/pblctns/mrgnc-rspns-pln/index-eng.aspx.

Communications

Public Health Agency of Canada. CPIP – Annex K: Communication. 2009. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-k-eng.php

Surveillance

Alberta Health. Notifiable Disease Report (NDR) Manual. 2013. Available from: www.health.alberta.ca/documents/ND-Report-Manual.pdf

Alberta Health. Alberta Provincial Hospitalized Influenza and Severe Respiratory Illness (SRI) Report Form. Available from: www.health.alberta.ca/documents/Influenza-SRI-Hospitalized-Form.doc

Public Health Agency of Canada. CPIP – Annex C: Pandemic Influenza Laboratory Guidelines. 2008. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-c-eng.php

Public Health Agency of Canada. CPIP – Annex N: Pandemic Influenza Surveillance Guidelines. 2010. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-n-eng.php

Public Health Measures

Alberta Health. Public Health Notifiable Disease Management Guidelines: Influenza. 2012. Available from: www.health.alberta.ca/documents/Guidelines-Influenza-2012.pdf

Public Health Agency of Canada. CPIP – Annex M: Public Health Measures. 2006. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-m-eng.php

Infection Prevention and Control

Alberta Health Services. Infection, Prevention, and Control for Health Professionals. 2013. Available from: www.albertahealthservices.ca/6410.asp

Government of Alberta. Best Practice Guideline for Workplace Health & Safety During Pandemic Influenza. 2009. Available from: http://humanservices.alberta.ca/documents/WHS-PUB_bp002.pdf

Public Health Agency of Canada. CPIP – Annex F: Prevention and Control of Influenza during a Pandemic for All Healthcare Organizations. 2011. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/annf/index-eng.php

Vaccine

Public Health Agency of Canada. CPIP – Annex D Preparing for the Pandemic Vaccine Response. 2008. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-d-eng.php

Antivirals

Alberta Health Services. Guidelines for Outbreak Prevention, Control, and Management in Acute Care and Facility Living Sites. 2013. Available from: www.albertahealthservices.ca/diseases/hi-dis-flu-prov-hlsl.pdf

Public Health Agency of Canada. CPIP – Annex E: The Use of Antiviral Drugs during a Pandemic. 2009. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-e-eng.php

Health Services

Alberta Health Services. *Guidelines for Outbreak Prevention, Control and Management in Supportive Living and Home Living Sites*. 2013. Available from:

www.albertahealthservices.ca/diseases/hi-dis-flu-care-and-treat-guidelines.pdf

Public Health Agency of Canada. CPIP – Annex H: Resource Management Guidelines for Health Care Facilities During an Influenza Pandemic. 2004. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-h-eng.php

Public Health Agency of Canada. CPIP – Annex G: Clinical Care Guidelines and Tools. 2008. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-g-eng.php

Public Health Agency of Canada. CPIP – Annex I: Guidelines for the Management of Mass Fatalities During an Influenza Pandemic. 2009. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-i-eng.php

Public Health Agency of Canada. CPIP – Annex J: Guidelines for Non-traditional Sites and Workers. 2004. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-j-eng.php

Health Workforce

Public Health Agency of Canada. CPIP – Annex H: Resource Management Guidelines for Health Care Facilities During an Influenza Pandemic. 2004. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-h-eng.php

Psychosocial Support

Public Health Agency of Canada. CPIP – Annex P: Pandemic Influenza Psychosocial Annex. 2009. Available from: www.phac-aspc.gc.ca/cpip-pclcpi/ann-p-eng.php