

City of Edmonton Pandemic Influenza Response Plan

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(Updated Version)



DRAFT

Disclaimer

The Pandemic Influenza Response Plan provides general guidance for City Departments to plan for a threat of pandemic influenza. Because of the evolving nature of this threat, up to date information should be sought from other reliable sources referenced in this document.

City of Edmonton Pandemic Influenza Response Plan

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Glossary

Avian influenza	Avian influenza, also referred to as bird flu, is a disease of birds (e.g. ducks, chickens). Although it is primarily a disease of birds a small number of people have also been infected after having close contact with birds.
Contact	A contact is a term used to refer to someone who has been in close proximity with an individual who is, or is suspected of being, infected with an infectious disease like influenza.
Epidemic	A widespread outbreak of disease in a single community, population or region.
Epidemiology	The study of the incidence and distribution of diseases, and of their control and prevention.
Hand hygiene	Hand hygiene is a term that applies to the cleaning of one's hands. This is usually done with soap and water, hand sanitizer, or hand wipes. To kill an influenza virus hands must be washed with soap and water for 15 seconds and hand sanitizers or wipes must be used for 10 seconds and have an alcohol content of at least 60%.
Human-to-human transmission	Human-to-human transmission refers to the ability of an infectious disease to be passed continuously from one person to another. Some viruses can be transmitted between animals (animal-to-animal), some can be transmitted from animal-to-human (and vice versa), and some can be transmitted from human-to-human.
Infection control	Infection control is broad term used to describe a number of measures designed to detect, prevent, and contain the spread of infectious disease. Some measures include hand washing, respiratory etiquette, use of personal protective equipment (PPE), prophylaxis, isolation, and quarantine.
Infectious disease	An infectious disease, or communicable disease, is caused by the entrance of organisms (e.g. viruses, bacteria, fungi) into the body which grow and multiply there to cause illness. Infectious diseases can be transmitted, or passed, by direct contact with an infected individual, their discharges (e.g. breath), or with an item touched by them.
Influenza	Influenza is a viral disease that causes high fever, sore throat, cough, and muscle aches. It usually affects the respiratory system but sometimes affects other organs. It is spread by infectious droplets that are coughed or sneezed into the air. These droplets can land on the mucous membranes of the eyes or mouth or be inhaled into the lungs of another person. Infection can also occur from contact with surfaces contaminated with infectious droplets and respiratory secretions.

Isolation	Isolation is when sick people are asked to remain in one place (e.g. home, hospital), away from the public, until they are no longer infectious.
Mitigation	To make an emergency situation less intense, serious or severe.
Pandemic influenza	A pandemic influenza, or pandemic flu, occurs when a new subtype of influenza virus: 1) develops and there is little or no immunity (protection due to previous infection or vaccination) in the human population; 2) it is easily passed from human to human; 3) is found in many countries; and, 4) causes serious illness in humans.
Personal Protective Equipment (PPE)	PPE is specialized clothing or equipment worn to protect someone against a hazard including an infectious disease. It can range from a mask or a pair of gloves to a combination of gear that might cover some or all of the body.
Preparedness	A state of readiness for the emergencies that pose a risk to the City of Edmonton.
Prophylaxis	Prophylaxis is an infection control measure whereby antimicrobial, including antiviral, medications are taken by a healthy individual to prevent illness before or after being exposed to an individual with an infectious disease (e.g. influenza).
Public Health Emergency	Public Health Emergency means an occurrence or threat of an illness, a health condition, an epidemic or pandemic disease, a novel or highly infectious agent or biological toxin, the presence of a chemical agent or radioactive material that poses a significant risk to the public health.
Quarantine	A quarantine is when people who have been in close proximity to an infected person, but appear healthy, are asked to remain in one place, away from the general public, until it can be determined that they have not been infected.
Respiratory etiquette	Respiratory etiquette, or good coughing and sneezing manners, is one way of minimizing the spread of viruses which are passed from human-to-human in the tiny droplets of moisture that come out of the nose or mouth when coughing, sneezing, or talking. Healthy and sick people should cover their nose and mouth when sneezing, coughing, or blowing their nose and then put the used tissue in the trash to prevent the spread of germs.
Seasonal influenza	Seasonal influenza, commonly referred to as the flu, is an infectious disease. In the Canada, flu season usually occurs between November and April. The influenza virus is one that has the ability to change easily; however, there is usually enough similarity in the virus from one year to the next that the general population is partially immune from previous infection or vaccination. Each year experts monitor the influenza virus and create a new vaccine to address changes in the

virus. For this reason people are encouraged to get a flu shot each year.

Social distancing Social distancing is an infection control strategy that includes methods of reducing the frequency and closeness of contact between people to limit the spread of infectious diseases. Generally, social distancing refers to the avoidance of gatherings with many people.

State of Local Emergency An emergency or disaster which results in the City of Edmonton's Emergency Management Committee making a declaration which may affect all or part of the City. A declaration enables the City to take extraordinary action to deal with the extraordinary demands and challenges brought about by a major emergency or disaster which has had (or threatens to have) significant negative impact upon the City. The declaration of a state of local emergency also imposes specified responsibilities upon the City. The Alberta Emergency Management Act delineates these authorities and obligations.

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1. Purpose

The purpose of the Pandemic Influenza Response Plan is to provide for the continuation of essential municipal services and recovery of services that may be suspended in the event of a pandemic influenza. This plan outlines the course of action that will be taken by the City during an influenza pandemic and the processes that will be followed in recovery to normal operations.

The impact of the pandemic will depend upon the virulence of the new virus strain, how rapidly it spreads and the effectiveness of the response efforts. The plan is a coordinated and phased response that is scalable and based on a scenario in which 35% of the City's workforce is absent.

The objectives during an influenza pandemic are the following:

1. Continuity of local government and maintenance of administrative support.
2. Maintaining public safety services and the integrity of essential public works and municipal services such as water treatment – delivery, waste management, and garbage disposal.
3. Ensuring the health and wellness of City employees.
4. Supporting Alberta Health Services as required.

The concepts and directions laid out in this plan will establish the foundation for decisions regarding the priorities and strategies that will most effectively deal with the challenges created during a pandemic influenza.

2. Scope

The Pandemic Influenza Response Plan will form part of an overall disaster management process and builds on core actions and strategies outlined within the Municipal Emergency Plan.

This plan only considers the effect of a pandemic influenza on the operation of all City services and outlines the manner in which those services deemed essential and necessary will continue to be delivered throughout the influenza. All services offered by the City of Edmonton are considered and rated as **critical, vital, necessary** and **desired**. (see Essential Services Annex A-2)

The structure of the plan utilizes the World Health Organization (WHO) Pandemic Influenza Phases and provides a matrix of integrated responses against these phases. The responses are generic in nature and are applicable to all City Departments.

Actions detailed in this plan should be regarded as a default set of actions. The uncertainties in any pandemic mean that the actual characteristics of the pandemic may be different from the planning assumptions, and that planned actions may need to be modified to take into account the changing circumstances.

3. Supporting Documents

The Pandemic Influenza Contingency Response Plan will be supported in conjunction with the following plans:

City of Edmonton Municipal Emergency Plan (2004).

City of Edmonton Emergency Management Bylaw (2008).

Capital Health Communicable Disease Outbreak Plan (2005).

Alberta Emergency Management Act (2007).

Alberta Health and Wellness Pandemic Influenza Plan (2003).

Alberta Pandemic Influenza Operations Plan (2008).

Canadian Pandemic Influenza Plan (2006).

Best Practice Guideline for Workplace Health & Safety During Pandemic Influenza (2009).

4. Pandemic Influenza Overview and Context

Severe influenza pandemics represent one of the greatest potential threats to the public's health. Pandemics are distinct from seasonal influenza epidemics that happen nearly every year. Seasonal influenza epidemics are caused by influenza viruses which circulate globally in humans. Over time, people develop some degree of immunity to these viruses, and vaccines are developed annually to protect people from serious illness. Pandemic influenza refers to a worldwide epidemic due to a new, dramatically different strain of influenza virus, to which there is no immunity. The new virus strain may spread rapidly from person to person and, if severe, may cause high levels of disease and death around the world. Alberta Health and Wellness estimates that in Alberta alone, an influenza pandemic could infect up to 2.5 million people, with up to 1.3 million becoming ill.

The worldwide public health and scientific community is concerned about the potential for a pandemic to arise from a new widespread influenza A strain. Although many officials believe it is inevitable that future influenza pandemics will occur, it is impossible to predict the exact timing of their arrival. It is difficult to predict the severity of the next pandemic, if it will be associated with the current circulating strain or an entirely different strain, and whether the pandemic virus strain will be treatable with existing medicines.

There are several characteristics of an influenza pandemic that differentiate it from other public health emergencies. Unlike other disasters, where any disruption to business service provision is likely to be infrastructure-related, disruption to business operations in the event of a pandemic is anticipated to be human and material oriented. A pandemic has the potential to cause illness in a very large number of people, overwhelm the health care system, and jeopardize services by causing high levels of absenteeism in the workforce. Basic services, such as health care, law enforcement, fire, emergency response, communications, transportation, and utilities could be disrupted during a pandemic. Finally, the pandemic, unlike many other emergency events, could last many months and affect many areas throughout the world simultaneously.

In a pandemic situation, the goal is to slow the spread of disease to prevent illness. The most effective strategy to accomplish this is through vaccination. However, it is likely that effective vaccines will not be available for many months following the emergence of a new pandemic strain of influenza. Existing antiviral medications may also not be effective or available. Other infection control strategies such as social distancing, improved hygiene and respiratory etiquette, isolation, and quarantine may be used to control the spread of disease.

4.1. What is Influenza?

Influenza is a highly contagious disease caused by a virus that primarily attacks the upper respiratory track – nose, throat and sometimes the lungs of individuals that have been exposed to the virus. The infection usually lasts for about a week and is characterized by high fever, headache, malaise, cough and sore throat.

Influenza viruses are divided into three main groups: influenza A, B and C. Type A viruses are the source of most seasonal flu epidemics and have caused previous pandemics. Whereas influenza B and C viruses infect humans only, influenza A viruses also infects birds and other animals. This ability to jump the species barrier enables influenza A viruses to cause pandemics.

In nature there are 16 different haemagglutinins and 9 different neuraminidases, which are two important surface proteins of the influenza A virus. Influenza virus subtypes are named according to these “H” and “N” proteins. Although all 16 of the H types can infect birds, to date only H1, H2 and H3 have been associated with widespread human disease. It is important to recognize that as birds are the natural reservoir for these influenza viruses, occasionally people who have close contact with infected birds will become infected with novel (new) viruses. Not all novel viruses however will evolve into pandemic viruses; nevertheless, the pandemic potential of any new virus must be considered.

4.2. How is Influenza Transmitted?

Influenza is thought to be primarily spread through large droplets (droplet transmission) that directly contact the nose, mouth or eyes. These droplets are produced when infected people cough, sneeze or talk, sending the relatively large infectious droplets and very small sprays (aerosols) into the nearby air and into contact with other people.

Large droplets can only travel a limited range; therefore, people should limit close contact with others when possible. To a lesser degree, human influenza is spread by touching objects contaminated with influenza viruses and then transferring the infected material from the hands to the nose, mouth or eyes. Influenza may also be spread by very small infectious particles (aerosols) traveling in the air. The contribution of each route of exposure to influenza transmission is uncertain at this time and may vary based upon the characteristics of the influenza strain.

Pandemics are different from seasonal outbreaks of influenza. Seasonal influenza outbreaks are caused by viruses that people have already been exposed to; influenza vaccinations are available to help prevent widespread illness and impacts on society are less severe. Pandemic influenza spreads easily from person to person and can cause illness because people do not have immunity to the new virus.

Key Differences Between Seasonal Flu & Pandemic Flu	
SEASONAL FLU	PANDEMIC FLU
Occurs every year during the winter months.	Occurs three to four times a century and can take place in any season
Affects 10-25 percent of the Canadian population.	Experts predict an infection rate of 25 - 35 percent of the population, depending on the severity of the virus strain
Globally, kills 500,000-1 million people each year, 4000 – 8000 in Canada.	The worst pandemic of the last century -- the “Spanish Flu” of 1918 -- killed 20 to 50 million people worldwide.
Most people recover within a week or two.	Usually associated with a higher severity of illness and, consequently, a higher risk of death.
Deaths generally confined to “at risk groups, such as the elderly (over 65 years of age); the young (children aged 6-23 months); those with existing medical conditions; and people with compromised immune systems.	All age groups may be at risk for infection, not just “at risk” groups. Otherwise fit adults could be at relatively greater risk, based on patterns of previous epidemics. For example, adults under age 40 were disproportionately affected during the 1918 pandemic
Vaccination is effective because the virus strain in circulation each winter can be fairly reliably predicted	A vaccine against pandemic flu may not be available at the start of a pandemic. New strains of viruses must be accurately identified, and producing an effective vaccine could take six months
Annual vaccination, when the correct virus strain is used, is fairly reliable and antiviral drugs are available for those most at risk of becoming seriously ill	Antiviral drugs may be in limited supply, and their effectiveness will only be known definitively once the pandemic is underway

4.3. How do Influenza Viruses Change?

Influenza viruses have one characteristic that enable them to cause seasonal epidemics and even pandemics: the ability to change. Influenza A viruses change their surface proteins, these changes can be minor – known as antigenic drift – or major – known as antigenic shift.

4.4. Antigenic Drift

Antigenic drift occurs constantly among influenza A viruses, which is why we see new strains every year. Some seasonal influenza epidemics are worse than others. This happens when the new strains are very different from earlier strains. The more a strain differs from previous ones, the less immunity people will have to it.

Sometimes, major changes occur in the surface proteins of influenza A viruses. These changes are much more important than those related to antigenic drift. Such changes can create a virus that is different from recently circulating strains, leading to a pandemic. The population would have very little or no immunity to it since they will not have been infected with it or vaccinated against it before. This lack of immunity allows the virus to spread more rapidly and more widely than a seasonal virus.

4.5. Antigenic Shift

Antigenic shift usually occurs in two ways: either as a sudden “adaptive” change when a normal virus reproduces, or from an exchange of genetic material between a human strain of an influenza A virus and an animal strain. This genetic exchange or “reassortment” produces a new virus capable of causing a pandemic in humans.

4.6. World Health Organization Pandemic Phases

The WHO has developed a staged plan, based on its surveillance program for responding to a pandemic threat. Recognition of a novel influenza strain in humans triggers a series of responses, identified as phases that can ultimately lead to the declaration of a pandemic by the WHO.

Designation of global phases, including decisions on up-scaling and downscaling, will be made by the WHO. The activation of the City’s plan will be based upon the impact of the pandemic outbreak within the City and upon notification from Alberta Health Services.

The WHO defines the phases of increasing public health risk associated with the emergence of a new influenza virus subtype with potential for initiating a pandemic influenza. Table 1 outlines the WHO pandemic risk phases and guidelines to establish and link the corresponding response phase with Alberta Health Services and the City of Edmonton.

In the WHO phases, the distinction between phase 1 and phase 2 is based on the risk of human infection resulting from circulating strains in animals; the distinction between phases 3, 4 and 5 is based on an assessment of the risk of human pandemic influenza. Therefore, in phase 1 and 2 all references to no activity, single case(s) activity and localized or widespread activity refer to animal virus subtypes; in phases 3 through 6, the references are related to human cases.

The WHO Pandemic phases provide a common reference point and structure to planning and response activities outlined in this plan. For the purpose of a consistent response and messaging to enhance employee and public confidence, utilization of the phases will be synchronized with the Alberta Health Services, but will take the format of the emergency management phases.

Table 1 WHO Phases / Alberta Health Services Stages of Operations / City of Edmonton Response Phases

WHO Phases		WHO Description	Alberta Health Services Stages of Operations	City of Edmonton Response Phases
Inter-Pandemic Period	Phase 1	<ul style="list-style-type: none"> No new virus subtypes detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection/disease is considered to be low. 	Stage 0 <ul style="list-style-type: none"> Confirm case definitions Conduct surveillance Monitor world activities Resolve issues related to delivery of health services Consider activation of consequence mgmt. team Implement respiratory etiquette program 	
	Phase 2	<ul style="list-style-type: none"> No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease. 		
Pandemic Alert Period	Phase 3	<ul style="list-style-type: none"> Human infection(s) with new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact. 	Stage 1 Suspect Case Identification/Presented to Hospital in Alberta Health Services <ul style="list-style-type: none"> Implement public health measures & education Heighten OHS&W programs Work with lab on diagnostic procedures ↑surveillance Intensify infection control measures 	Mitigation Phase Preparedness Phase
	Phase 4	<ul style="list-style-type: none"> Small cluster(s) but human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans. 		
	Phase 5	<ul style="list-style-type: none"> Large cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (Substantial pandemic risk). 		
Pandemic Period	Phase 6	<ul style="list-style-type: none"> Pandemic: Increased and sustained transmission in general populations. New virus subtype shown to cause several outbreaks in at least one country. 	Stage 2 – Multiple Suspect Cases within Alberta Health Services <ul style="list-style-type: none"> Implement quarantine & additional public health strategies Investigate suspect cases Follow-up of home quarantine Consider restricting access to hospitals ↑Communication to public Consider assessment/triage centres & medical student surge capacity Stage 2 – Confirmed Case <ul style="list-style-type: none"> ↑public health measures ↑infection control ↑OHS&W activities Stage 3 – End of 1 st Wave <ul style="list-style-type: none"> Maintain response team at reduced capacity Return to Stage 2 with next wave 	Response Phase
Post-Pandemic		Post-Pandemic period will entail recovery and gradual return to the Inter-pandemic period (phase 1 & 2).	Stage 4 – Containment/Demobilization <ul style="list-style-type: none"> Partial demobilization & prepare for 2nd wave Review procedures & enter into catch-up programs Return to Stage 2 with next wave Stage 5 – Review & Update Plan <ul style="list-style-type: none"> Complete review of all aspects of the process & make recommendations to update procedures 	Recovery Phase

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4.7. Role of the City of Edmonton

During an influenza pandemic the City of Edmonton will be responsible for maintaining essential community services and supporting Capital Health in the public health response. The City of Edmonton will activate its Emergency Operations Centre (EOC) when a unified response is necessary and communicate with Alberta Health Services Regional Emergency Coordination Centre (RECC) upon their activation. The City will maintain communications with Alberta Health Services and will implement recommended procedures that promote the health and safety of civic employees and the public. Table 2 details activities that the may implement throughout the influenza pandemic response phases.

The epidemiology of the new influenza virus strain and the increasing absenteeism will influence the City’s response. Specific guidance and policies, based on up-to-date information will be provided throughout each phase.

Table 2 City of Edmonton Pandemic Management Overview

Response Phase	City of Edmonton Overview of Possible Activities
Mitigate & Prepare	<ul style="list-style-type: none"> • Finalize, validate and update pandemic influenza plan as required • Develop departmental pandemic influenza plans • Establish necessary policies (Communications & HR) • Educate & increase awareness of employees, stakeholders and general public • Identify essential services & key personnel. • Enhance infection control measures • Stockpile supplies as required
Response	<ul style="list-style-type: none"> • Activate Pandemic Plan, MEP and EOC as required • Manage Essential Services • Re-deploy staff as required • Provide regular information updates to staff, stakeholders and the general public • Intensify infection control measures • Share real-time accurate information • Track employees absenteeism rate
Recovery	<ul style="list-style-type: none"> • Resume normal city services, as able based on staff availability • Assist employees and community in recovery • Evaluate response and update plans • Prepare for the next outbreak.

5. Planning Assumptions

Influenza pandemics are unpredictable. While history offers useful benchmarks, there is no way to know the characteristics of a pandemic influenza virus before it emerges.

The following planning assumptions were used in the development of the Pandemic Influenza Response Plan:

Time Period

- Alberta could have a lead time of 3 months, possibly less between when a pandemic is first declared by the WHO and when it spreads to the province. Due to increased travel and improved transportation methods, there may likely only be limited warning from the first global alert to local outbreak.
- The pandemic may last as long as eighteen months in several waves with mortality and morbidity increasing and decreasing sporadically.
- A pandemic can occur in any season and will occur in 2 to 3 sequential waves that last 6 – 8 weeks with a 3 to 9 month period between waves.

Prevention & Treatment

- A vaccine may not be available for at least 6 to 9 months after an influenza pandemic begins. Initial supplies will not be sufficient to immunize the whole population and prioritization for vaccine administration will be necessary.
- Antiviral medicines may not treat or protect against the pandemic influenza virus strain.
- If effective, antiviral medications may be in very limited supply.
- Infection control (e.g. respiratory etiquette, hand hygiene) strategies will be used to slow the spread of disease.
- Social distancing strategies (e.g. postponing public gatherings) may be used to control the spread.
- Isolation of ill people will be required.
- Quarantine of people exposed to ill people may be implemented until it can be determined that they have not been infected.

Staffing

- Absenteeism rates will depend on the severity of the pandemic. Predictions are that the workplace absenteeism rate could be from 15 – 35%.
- Absenteeism will be the result of workers becoming ill, staying home to care for children or family members, or refusing to go to work.
- Every person who becomes ill is likely to miss several days to many weeks of work.
- In a severe pandemic 0.1% - 2.5% of employees who become ill may die.
- Certain public health measures (closing schools, suspending public transportation, quarantining and isolation) are likely to increase rates of absenteeism.

Vendors of Services/Products

- City services will be stressed, but will remain functional.
- Critical goods and services provided by contractors, consultants and vendors may be erratic.
- The City may not be able to rely on provincial and federal agencies to support local response efforts.
- Due to the broad scope of media that would become involved in an influenza pandemic, the City will need to focus on information management.

6. Concept of Operations

The primary objective for emergency preparedness and business continuity in the City of Edmonton is to provide a coordinated effort from all departments in the preparation for, response to and recovery from a pandemic influenza emergency. The Office of Emergency Preparedness is the focal point of emergency management activities.

In a pandemic influenza emergency, there will be a need for collaboration and coordination of support between the City, Alberta Health Services and other key stakeholders. Procedures will be implemented to respond to the consequent strain on municipal resources, facilities and services due to a reduction in available human resources.

6.1. Pandemic Response Management

The Incident Command System (ICS) model for emergency response will be used to coordinate the efforts of departments, agencies and resources by using a common organizational structure which can be expanded or contracted based on the scope of the response. In a response to a pandemic influenza event, utilization of the ICS response model will maximize the capacity of agencies involved and will ensure that resources and skills are utilized in the most appropriate and efficient manner.

A unified command structure will be established in the EOC for the coordination of activities between multiple agencies. This team approach facilitates achieving the objectives and provides the coordination necessary for response and recovery operations.

The EOC will have a primary role in setting objectives and priorities, which may have an impact on resource allocation and response planning. The EOC will coordinate the deployment of resources and support in the maintenance of essential services.

A pandemic may require additional resources, policy decisions and extraordinary measures to resolve the situation which may necessitate the declaration of a State of Local Emergency.

Management at the earliest phase of a pandemic is most critical and a structured exchange of information will enable the City to devise the most appropriate response strategy.

6.2. Pandemic Response Organizational Framework

Edmonton City Council passed the Emergency Management Bylaw to set the administrative responsibility and structure under the Emergency Management Act. The Emergency Management Bylaw provides for the establishment of the following:

Emergency Management Committee

The Emergency Management Committee is established and defined by the Emergency Management Bylaw. (See Emergency Management Bylaw).

Emergency Management Agency

The Emergency Management Agency is established and defined by the Emergency Management Bylaw. (See Emergency Management Bylaw).

Director of Emergency Management

The Director of the Emergency Management Agency shall carry out the following responsibilities:

- a) Guide and oversee the activities of the Emergency Management Agency in carrying out the City of Edmonton's emergency preparedness activities as they relate to a pandemic influenza emergency,
- b) Activation of the Pandemic Influenza Response Plan or the activation of the Municipal Emergency Plan (MEP), in part, or in whole,
- c) Authorization of all strategic objectives,
- d) Notification of the Emergency Management Committee when necessary, recommending a declaration of a State of Local Emergency. When appropriate, recommending that the State of Local Emergency be withdrawn or terminated,
- e) Ensuring that the Emergency Management Committee receives situational and system status reports as necessary,
- f) Verifying and authorizing the release of all information, and
- g) Ensuring that post-incident debriefings occur and a final report is prepared for the Emergency Management Committee.

Director, Office of Emergency Preparedness

The Director of the OEP is responsible for:

- a) In consultation with the Director of Emergency Management, the implementation of the Pandemic Influenza Response Plan or the MEP, in part or in whole, and the activation of the Emergency Operations Centre (EOC), in part or in whole,
- b) The overall coordination of EOC activity; including overall responsibility for ensuring adequate support and administrative personnel to support the activities of the EOC.
- c) In consultation with the Director of Emergency Management, recommends to the Emergency Management Committee to have a State of Local Emergency declared,
- d) Ensures that the Emergency Management Agency receives situational and system status reports as necessary,
- e) Arranging and/or conducting post-incident debriefings,
- f) Preparing and submitting a final report summarizing emergency response activity, recovery efforts, financial expenditures and recommendations for improvement, and
- g) Ensuring that any required changes as a result of a training exercise, major emergency or disaster is made to the Pandemic Influenza Response Plan and/or the MEP.

7. Pandemic Management Phases

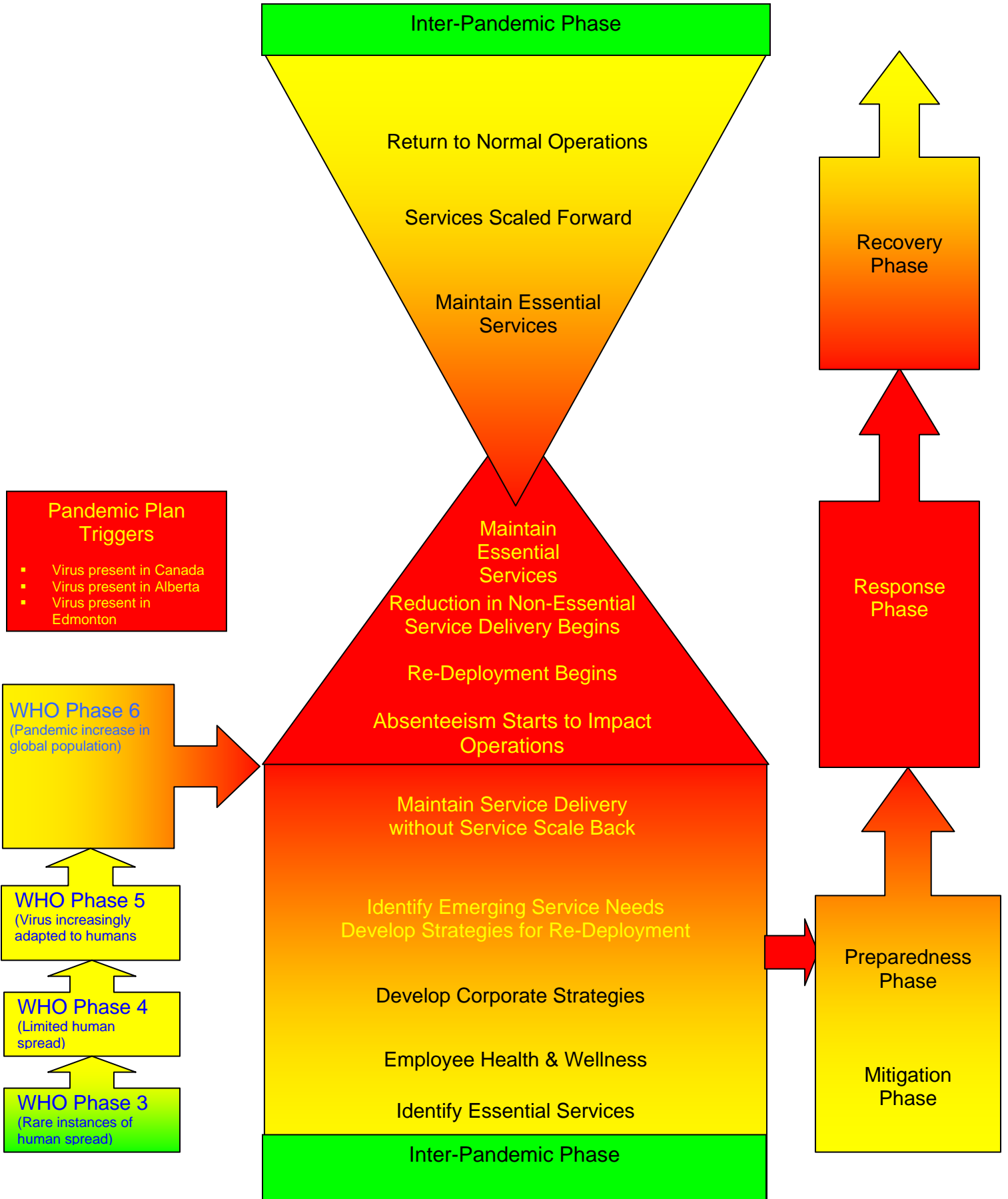
The WHO phases provide statements about the global risk for a pandemic and provides benchmarks against which to measure global response capabilities. However, to describe the City of Edmonton's approach to the pandemic response, it is more useful to characterize the stages of an outbreak in terms of the immediate and specific threat a pandemic virus pose to the City. Utilization of the emergency management phases provides a framework for the implementation of specific actions related to a pandemic response and is consistent with the MEP.

The emergency management phases have been utilized to develop a systematic approach to deal with the impact that an influenza pandemic will have on the City with each phase building on the outcomes of the preceding one. The overall goal is to minimize the health impact and economic and social disruption associated with a pandemic.

- a) **Mitigation:** Activities directed at controlling the pandemic and repressing direct outcomes (mortality and morbidity due to influenza) and indirect associated effects (economic and social disruption). Implementation also involves documenting activities and outcomes to determine if a more extensive response is required or if adjustments to the planned response are necessary.
- b) **Preparedness:** Activities include preparing the actual plans, training and simulation exercises to pretest the plans, communications and other interfaces to inform employees, the public and other stakeholders.
- c) **Response:** Any activity taken immediately before, during, or after a pandemic occurs to save lives and enhance the effectiveness of recovery. Implementation of activities that would involve a series of escalating and potentially varying responses as the pandemic unfolds. Activities may start at different times across the country as the pandemic waves move through the jurisdictions.
- d) **Recovery:** Activities to ensure the restoration of "normal" service levels within the City. Activities would continue until the declaration of the end of the pandemic in Canada and the Inter-pandemic status is restored and normal City services have returned. Response and Recovery activities can occur simultaneously.

The following diagram illustrates how the WHO Phases relate to the City of Edmonton emergency management phases. As the situation for a pandemic escalates specific actions will be triggered within the plan to deal with the situation.

CITY OF EDMONTON PANDEMIC PHASES



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7.1. Mitigation Phase

Activities that are directed at controlling the pandemic and repressing direct outcomes and indirect associated effects. Implementation involves documenting activities and outcomes to determine if a more extensive response is required or if adjustments to the planned response are necessary, including:

- Develop a Corporate Pandemic Influenza Response Plan.
- Development of department specific pandemic influenza plans.
- Develop strategies related to Crisis Communications, Human Resources and Information Technologies issues.
- Strategies to educate & increase awareness of employees, stakeholders and general public regarding pandemic influenza.
- Encourage City personnel to voluntarily participate in annual influenza immunization programs.
- Identification of essential services.
- Consider additional tasks and challenges associated with a pandemic.

Delegation of Authority

During an influenza pandemic the management team of each department will have developed a succession plan that will delegate responsibility for maintaining the operations of their business unit in the event that the pandemic situation escalates.

Key personnel need to be identified and alternates designated should the primary or key personnel be unable to fulfill their duties.

Employee Education & Awareness

An influenza pandemic is a global health emergency and therefore employee demands for information will be extremely high and sustained as the illness spreads and is confirmed in Edmonton. Employee education and awareness must occur during all of the City's response phases.

The goal of employee education and awareness will be to:

- Increase baseline knowledge by providing information on pandemic influenza during the mitigation and preparedness phases.
- Minimize the time needed to disseminate educational materials to employees as the pandemic evolves and information needs change.
- Establish an accurate, reliable and trusted source of information on pandemic influenza through a well coordinated and prepared educational/communication plan.

Essential Services

Essential services are those functions that enable the City to provide vital services, exercise civil authority, maintain the safety and well being of the general populace, and sustain the industrial/economic base in an emergency. During a pandemic these essential functions must be continued in order to facilitate emergency management and overall recovery.

Tier 1 – Critical Services

Services which have to be maintained by City staff under any circumstances and are critical to the well being of the City. Compromised service would result in:

- High impact to the health, life, safety and security of the public and City employees.
- Catastrophic costs associated with loss of service or function to economic well-being of the public or the City of Edmonton.
- Business function has no redundancy.

Tier 2 – Vital Services

Those services which are needed to support essential services (Tier 1 – Critical Services) and the well being of the community. Compromised service would result in:

- Potential impact to health, life, safety and security of the public or City employees.
- Services that provide for the operational support to services that directly affect public health and safety, or services that provide essential care and maintenance of public works, utilities, equipment and related support services.
- High cost associated with loss of service.
- Highly visible services and/or those whose loss would significantly diminish public confidence in government.
- Business function has costly redundancy system or low capacity.

Tier 3 – Necessary Services

Those services that sustain a community, but are not critical if discontinued for a short period of time. Compromised service would result in:

- Minimal potential to impact the health, life, safety and security of the public and City employees.
- High cost associated with loss of service or business function.
- Service has moderate or low visibility whose loss would cause minimal decline in public confidence in government.
- Redundancy systems have time limited capability or are cost-prohibitive to sustain.

Tier 4 – Desired Services

Those services which provide quality of life, are driven by public demand, and instill a measure of consistency and control on the community.

- Services that may be delayed due to circumstances, or discontinued entirely without significant hardship to the public.

Further information is provided in Essential Services Annex A-2

Human Resource Policies

The impact that a pandemic outbreak will have on the workforce will create a multitude of issues related to employees, their families and the modifications that will be required to working conditions in order for the City to respond appropriately. Human Resource issues that need to be considered in the Mitigation phase:

- Labour Relations
- Pay and Benefits
- Disability Management
- Employee Health Services
- Occupational Health and Safety
- Staff Needs and Responsibilities

As the pandemic outbreak escalates these issues will be reviewed and updated as required.

Suppliers and Service Vendors

City departments rely on the provision of supplies and services from a variety of vendors. Supply shortages or a disruption in the transportation system could adversely affect some of the services provided by the City.

Each Department / Branch should:

- Ensure the critical suppliers and service vendors contact information is available and up to date. Develop alternative delivery mechanisms should normal routes of delivery be disrupted.
- Inquire with suppliers and service vendors regarding their pandemic contingency plans and how they are going to maintain service delivery.
- Develop a list of alternate suppliers and service vendors.
- Establish whether stockpiles of supplies are required over the period of the pandemic.

See Supply and Service Vendors Annex A-3

Crisis Communication

Providing accurate, timely and credible information to City employees and the public is a key mitigation strategy that will have an impact on the response and recovery actions of the City. Messaging and information dissemination will focus on the following:

Internal Communication

- Face-to-face communication may not be desirable at certain pandemic stages and exclusive use of communication systems may be advised. Lack of ability to communicate with employees could result in the loss of confidence and trust in the City's administration.
- There may be a high level of fear, anxiety, rumors, and misinformation regarding a pandemic. Regularly sharing information through one of the various dissemination platforms is one way to reduce employee stress.

External Communication

- Minimize the impact of a pandemic influenza on businesses by letting them know what services may not be available during a pandemic.
- Minimize the impact of a pandemic influenza on the daily activities of the public by advising them of what services will be scaled back or suspended during an outbreak.
- Communication messages to the public should be culturally and linguistically appropriate.

See Crisis Communication Annex A-5 for further information.

7.2. Preparedness Phase

Activities that include the actual preparation of plans, training and simulation exercises to pretest the plans, communications and other interfaces to inform employees, the public and other partners.

Operational Assessment

1. Assess essential operations.
 - Review essential services and key personnel required to maintain operations of essential services.
2. Assess critical inputs.
 - Maintain updated resource inventories of supplies, equipment, and personnel, including possible sources of replacements.
 - Prepare to procure additional supplies for City departments as required.
3. Assess demand changes.
 - Ensure flexibility to deal with additional tasks.
4. Alternate service delivery.
 - Establish necessary policies (Crisis Communications & Human Resources)
 - Implement educational & awareness program for employees regarding the influenza pandemic.
5. Departments should assess security needs.
6. Departments should develop contingency plans for operating at reduced staffing levels and developing pandemic response plans.
7. Finalize and validate pandemic influenza response plans.

Human Resources Policies

Human Resources issues will continually be re-evaluated and up-dated as information regarding the status of the pandemic changes and information becomes available.

See Human Resource Policies - Annex A-4

Crisis Communication

Communicate regularly with staff to promote confidence in personal safety and the workplace. Updated informational materials will be provided and disseminated as required.

See Crisis Communications Plan Annex A-5 and Informational Material Annex A-7

Infection Control Measures

Provide employees with updated information regarding infection control practices that they can utilize to minimize their exposure and provide information to enhance protection of their family members.

See Infection Control Measures Annex A-7

7.3. Response Phase

Any activities taken immediately before, during, or after a pandemic occurs to save lives, and enhance the effectiveness of recovery. Implementation of activities that would involve a series of escalating and potentially varying responses as the pandemic unfolds. Activities may start at different times across the country as the pandemic waves move through the jurisdictions.

Once Alberta Health Services confirms multiple suspect cases of influenza in the region, the City will move into the Response Phase of the plan.

Monitoring of corporate absenteeism rates will provide information directly related to the delivery of essential services.

Issues that will need consideration by departments / branches:

1. Implement contingency plans for operating at reduced staffing levels.
2. Ensure that public safety service and essential service delivery is maintained.
3. Prepare to close and/or secure City facilities as required.

Pandemic Influenza Response Plan Activation

Upon declaration by the WHO of a pandemic (Phase 6), and notification by Alberta Health Services of a public health emergency in the region, the OEP will provide liaison with Alberta Health Services on the status of the pandemic and this information will be provided to the Senior Management Team and City Council. As the situation intensifies, the frequency of the information provided will increase and will be disseminate at regular briefings.

The Director of Emergency Management or designate will activate the Pandemic Influenza Response Plan and /or the MEP when it is necessary to manage and coordinate a response. The City will activate the necessary contingency plans and set priorities for:

- Continuity of local government and maintenance of administrative support.
- Maintaining public safety services and the integrity of essential public works and municipal services such as water treatment-delivery, waste management, and garbage disposal.
- Supporting Alberta Health Services as required.
- Ensuring the health and wellness of City employees.

Note: Unlike other emergency or disaster situations, a pandemic creates a situation that may not require a typical number of staff to respond to the EOC in order to limit the possibility of exposure to potentially ill individuals. Processes and procedures may need to be developed to allow EOC staff to communication, and provide and exchange information from their own workplace without having to congregate in a confined space such as the EOC.

A declaration of a global influenza pandemic by the WHO does not necessitate the full activation of the Pandemic Influenza Response Plan, the MEP or the EOC. Declaration of a pandemic by the WHO only denotes the spread of the disease related to geographical regions of the globe, it does not indicate the severity of the disease.

Employees will be notified of the activation of the Pandemic Influenza Response Plan. Notification will occur through the mechanisms outlined in the Crisis Communication Plan (Annex A-5).

The City may elect to declare a state of local emergency to provide additional powers in order to deal with the response to the event.

The City of Edmonton shall have the authority to suspend the delivery of municipal services as required based on the resources available to deliver those services and to redeploy staff as necessary. Those services defined as desired will be the first to be suspended, followed by those defined as valued.

Operations

During the response phase business units will continue to provide services. However, as the situation escalates and absenteeism rates increase services may be scaled back in order to maintain critical and vital services. Operational assessments will focus on:

1. the ability to provide regular services with available human and material resources,
2. increases and decreases in demand of existing services, and
3. the need for new or alternative services.

Resources will be re-allocated to provide services that are essential, in high demand and/or are new or alternative forms of service delivery.

Human Resources Policies

Will be reviewed and updated as information becomes available.
(See Human Resources Annex A-4).

Crisis Communications

Will be reviewed and updated as information becomes available.
(See Crisis Communications Annex A-5).

Infection Control Measures

(See Infection Control Measures Annex A-6)

Role of the Office of Emergency Preparedness

When the WHO declares that the potential for an influenza pandemic has reached Phase 5 and this is confirmed by Alberta Health Services (City of Edmonton Response Phase) OEP will move to a Level I activation. This level of activation will provided for the continually monitoring of the pandemic status, the gathering of information relevant to the situation, review of the plan and the passage of information to members of the Agency and the Committee.

A declaration by the WHO of an influenza pandemic Phase 6 (confirmed by Alberta Health Services) will result in the continued monitoring of the situation within the City and the initiation of appropriate actions. Once the situation escalates to the point where City operations are affected by increasing employee absenteeism, the Director of the Emergency Management Agency may elect to activate the Pandemic Influenza Response Plan and the MEP in whole or in part.

7.4. Recovery Phase

Recovery and business resumption efforts may be impacted by an unknown duration of the pandemic and factors including the type of facilities that can be opened and staff that will be able to return to normal work assignments. Recovery from an influenza pandemic will begin when it is determined that adequate supplies, resources and response systems exist to manage standard ongoing activities without continued assistance from pandemic response systems.

The EOC will determine when and whether partial, incremental or full return to normal operations is most appropriate based on the information provided from Alberta Health Services.

Lessons learned from previous pandemics indicate that there will be a second and third wave of the pandemic. The subsequent waves maybe of a lesser severity and may have reduced effect because a vaccine may be available. Therefore, the City will re-evaluate to determine its status in terms of staffing, availability of supplies or services and what role the City needs to play in the recovery of public services.

- Deactivate response activities upon notification by Alberta Health Services that the pandemic has concluded.
- Activate strategies to begin the incremental return to normal operations (contingent on employee availability).
- Provided post-incident mental health counseling to employees.
- Continue to provide information to the public and employees regarding the status of recovery
- Review and update the plans to prepare for the next pandemic wave.

Departments / Branches should have strategies in place for the gradual resumption of business functions.

Annexes

- A-1 Authority
- A-2 Essential Services
- A-3 Supply and Service Vendors
- A-4 Human Resources Policies
- A-5 Crisis Communications Plan
- A-6 Infection Control Measures
- A-7 Informational Material
- A-8 Additional Information Sources
- A-9 Templates

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A-1 Authority

The following section outlines the authority for activating and implementing the Pandemic Influenza Response Plan:

Delegation of Authority

During an influenza pandemic, management of the City's Emergency Management Agency is delegated to the Director of Emergency Management or a designated alternative (See Emergency Management Bylaw).

If a designated individual is unavailable, authority will pass to the next individual as defined in the Emergency Management Bylaw.

The designated individual retains all assigned obligations, duties, and responsibilities of the position of the Director of Emergency Management.

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A-2 Essential Services

Essential Services are those functions that enable the City to provide vital services, exercise civil authority, maintain the safety and well being of the general populace, and sustain the industrial/economic base in an emergency. During a pandemic these essential functions must be continued in order to facilitate emergency management and overall recovery of City services.

Identification of Essential Services

Consideration in the determination as to whether a City service is essential should include an assessment of the following categories:

- Services that have a direct effect upon public health and safety
- Services that provide for the operational support to services that directly effect public health and safety
- Services that provide essential care and maintenance of public works, utilities, equipment and related support services
- Services that may be delayed due to the circumstances, or discontinued entirely without significant hardship to the public

In additional to these considerations, critical systems and their support have been identified. Priorities will need to be established to ensure that the public interest is best maintained. A number of factors will also impact the determination of whether a service is essential, e.g. weather, special events, time of year etc.

Branch Managers and Directors will have to assess:

- Which services can be reduced in all affected areas? Time frames to scale back services in an orderly fashion should be assessed to plan for an orderly shut down or reduction of services.
- The minimum skills required to perform the necessary task as well as how many individuals it will take to provide the essential service within the Branch. Can the service be maintained by the available staff if there is a 35% absenteeism rate?
- Where the City may be able to recruit or secure additional personnel. Can staff be re-deployed from other areas to augment staffing requirements for essential services?
- Gathering information from potential suppliers of essential services.
- The availability of critical supplies in the event of a supply chain disruption caused by absenteeism affecting the supply vendor.

Essential Service Definitions

Essential services are those functions that enable the City to provide vital services, exercise civil authority, maintain the safety and well being of the general populace, and sustain the industrial/economic base in an emergency. During a pandemic these essential functions must be continued in order to facilitate emergency management and overall recovery.

Tier 1 – Critical Services

Services which have to be maintained by City Staff under any circumstances and are critical to the well being of the City. Compromised service would result in:

- High impact to the health, life, safety and security of Edmontonians and Civic employees.
- Catastrophic costs associated with loss of service or function to economic well-being of Edmontonians or the City of Edmonton.
- Business function has no redundancy.

Tier 2 – Vital Services

Those services which are needed to support essential services (Tier 1) and the well being of the community. Compromised service would result in:

- Potential impact to health, life, safety and security of Edmontonians or Civic employees.
- Services that provide for the operational support to services that directly affect public health and safety, or services that provide essential care and maintenance of public works, utilities, equipment and related support services.
- High cost associated with loss of service.
- Highly visible services and/or those whose loss would significantly diminish public confidence in government.
- Business function has costly redundancy system or low capacity.

Tier 3 – Necessary Services

Those services that sustain a community, but are not critical if discontinued for a short period of time. Compromised service would result in:

- Minimal potential to impact the health, life, safety and security of Edmontonians and Civic employees.
- High cost associated with loss of service or business function.
- Service has moderate or low visibility whose loss would cause minimal decline in public confidence in government.
- Redundancy systems have time limited capability or are cost-prohibitive to sustain.

Tier 4 – Desired Services





Those services which provide quality of life, are driven by public demand, and instill a measure of consistency and control on the community.

- Services that may be delayed due to circumstances, or discontinued entirely without significant hardship to the public.

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Essential Services Matrix

Definitions:

Tier 1 = Critical Services	
Tier 2 = Vital Services	
Tier 3 = Necessary Services	
Tier 4 = Desired Services	

Department	Branch	Section	Essential Service Tier
City Manager			1
Community Services	Fire / Rescue Services	Fire Suppression	1
		Fire Investigation	1
	Operational Services	Technical Services	1
		Fleet Services	1
Deputy City Manager's Office	Office of Emergency Preparedness		1
Edmonton Police Service			1
Asset Management and Public Works	Corporate Properties	Building & Facility Maintenance	2
	Drainage Services	Drainage Operations	2
	Waste Management		2
Community Services	Operational Services	Logistics	2
Corporate Services	Human Resources	Employees Service Centre	2
		Employee Health & Wellness (EHS)	2
		OH & S	2
	Information Technology		2
	Law	Corporate Security	2
	Materials Management		2
	Mobile Equipment Services	Fleet Support/Services	2
		Municipal Fleet Maintenance	2
	Customer Service Information	311	2
		Inside Information	2
Web Operations		2	
Deputy City Manager's Office	Enterprise Strategic Mgmt.	Corporate Communications	2
Planning & Development	Assessment & Taxation		2
Transportation	Transportation Operations	Roadway Maintenance	2
	Edmonton Transit System	DATS	2
		Security Section	2

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Department	Branch	Section	Essential Service Tier
Asset Management and Public Works	Corporate Properties	Leasing & Property Mgmt.	3
		Custodial Services	3
	Drainage Services	Design & Construction	3
Community Services	Fire / Rescue Services	Fire Prevention	3
	Neighbourhood & Community Development		3
Corporate Services	Human Resources	Labour Relations	3
	Law	Administrative Services	3
		Litigation	3
		Solicitors	3
		Administrative Law	3
		Risk Management	3
	Mobile Equipment Services	Transit Fleet Maintenance	3
Office of the City Clerk		3	
Transportation	Transportation Operations	Signals & Street Lighting	3
		Traffic Control	3
	Edmonton Transit System	Bus Fleet & Facilities	3
		Bus Operations	3
		LRT Operations	3
		Safety Section	3
		Service Development	3
Asset Management and Public Works	Corporate Properties	Parking Operations	4
	Drainage Services	Drainage Planning	4
	Parks		4
Capital Construction	LRT Design & Construction		4
	LRT Expansion		4
	Buildings Design & Construction		4
	Road Design & Construction		4
City Auditor			4
Community Services	Fire / Rescue Services	Training Academy	4
		Personnel/Clerical Staff	4
	Operational Services	Capital Development	4
	Strategic Services		4
	Rec Facilities		4
Corporate Services	Human Resources	Recruitment & Compensation	4
		Strategy Support	4
		Strategic Advisors	4

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Department	Branch	Section	Essential Service Tier
Deputy City Manager's Office	Enterprise Strategic Management	Business Planning Measurement	4
		Intergovernmental Affairs	
	Program Management	Diversity & Inclusion	4
		Environment & Energy	
		Regional Initiatives	
	Strategic Enterprise Transformation	Culture Based Changes & Value Mgmt.	4
Business Process Improvement			
Planning & Development	Development Compliance		4
	Planning & Policy		4
	Housing		4
Transportation	Transportation Planning	Development & Capital Planning	4
		Evaluation & Monitoring Services	4
		Strategic Planning	4
		Sustainable Transportation	4
	Transportation Operations	Engineering Services	4
		Traffic Safety	4
		Public Involvement	4
	Edmonton Transit System	Business Development	4
		Community Relations	4

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A-3 Supply and Service Vendors

The City of Edmonton relies on a variety of products and services to maintain daily operations of the various business units. In the event of a pandemic, shortages in essential supplies or a disruption in the transportation system could affect some business units. Contact information for each department's supply and service vendors should be identified and documented along with alternate vendors that could be used should the need arise. The attached templates will assist in the identification, of routine and essential products/services utilized by the City and should be attached to the department's plan.

Supply/Service Vendor

Company name: _____
Address: _____
Telephone: _____
Fax: _____
E-mail: _____
Primary contact name: _____
Alternate contact: _____
Account/contract: _____
Materials provided: _____
Frequency of delivery: _____
Notes: _____

If this company is unable to provide materials/services they can be obtained from the following organization(s):

Company name: _____
Address: _____
Telephone: _____
Fax: _____
E-mail: _____
Primary contact name: _____
Alternate contact: _____
Notes: _____

[Copy and attach additional forms to department plan.]

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A-4 Human Resource Policies

The following policies will be activated as part of the Pandemic Influenza Response Plan:

[Human Resources Branch to provide further information.]

Labour Relations

Pay and Benefits

Disability Management

Employee Health Services

OH&S Policies.

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A-5 Crisis Communication Plan

The Crisis Communications Annex ensures that the City of Edmonton is prepared to respond to the public communications challenges associated with an influenza pandemic. It sets out specific activities designed to promote consistent, coordinated and effective communications to both internal and external stakeholders

The City of Edmonton and Public Health officials must communicate clearly and continuously with the public prior to and throughout a pandemic. To maintain public confidence and to enlist the support of individuals and families in disease containment efforts, public officials must provide unambiguous and consistent guidance on what individuals can do to protect themselves, how to care for family members at home, when and where to seek medical care, and how to protect others and minimize the risks of disease transmission.

General Communication Audiences

- Internal – City employees
- External – General public
- Other – Agencies/Partners and Orders of Government

Throughout the response phase the City of Edmonton will need to provide accurate and up-to-date information to key audiences. The information dissemination plan describes who will develop and authorize content, audiences, messages, and the information dissemination strategy.

Responsibility and Authority

Content Development

The following individuals and alternates will be responsible for creating and/or coordinating the development of content for communicating with employees, the general public, and partners.

Position	Contact Information		
	Work	Cellular	Email
Branch Manager, Corporate Communications			
Director, Strategic Communication, Corporate Communications			
Senior Advisor, Corporate Communication			

Approves Content

The following individuals and alternates will be responsible for authorizing the content and information dissemination strategy.

Position	Contact Information		
	Work	Cellular	Email
Director, Emergency Management			
Director, Office of Emergency Preparedness			

Audiences

The City of Edmonton will be responsible for providing information to the following audiences:

- **Mayor and City Council**
- **Senior Management Team**
- **Employees.**
- **City partners**
- **General public.**

See attached table, Modes for Communicating Pandemic Influenza to Primary Audiences.

Crisis Communication Messages

The City of Edmonton will provide ongoing information and guidance to the above audiences throughout each of the City’s pandemic phases. Important communication messages include:

Mitigation Phase (WHO Phase 3 – 5)

- General pandemic influenza information
- Components of the City of Edmonton pandemic influenza contingency plan
- Infection control preparations made by the City
- How to develop a personal/family disaster kit
- Where to get information during an emergency (e.g. website, telephone information line)

Preparedness Phase (WHO Phase 3 – 5)

- Updates on the status of the pandemic
- Policy changes
- Infection measures to be utilized at work
- Services available to the public

Response Phase (WHO Phase 6)

- Updates on the status of the pandemic
- Services available to the public
- Enhanced infection control measures
- Policy changes

Recovery Phase (WHO Post Pandemic Phase)

- Updates on the status of the pandemic
- Services available to the public.
- Review of policy changes and preparation for the next wave

Modes of information Dissemination

Information will be disseminated to audiences throughout each phase using the modes of communication described below. Multiple strategies will be used to create redundancy and ensure that intended recipients receive messages.

- **Telephone Systems.** Internal information line [insert telephone number], external public information line, and mass voice mail message.
- **Electronic Systems***. Mass e-mail message, website posting [insert web address], intranet posting.
- **Hard copy***. Mailing, interoffice mail, mass faxes, notice board postings, pay check mailing
- **In person.** Meeting, presentation, training
- **Media- TV, Radio, Newspaper.** Press releases, press conferences

* Information to employees may be packaged in the form of letters, memos, fact sheets, brochures, newsletters, etc.

Modes for Communicating Pandemic Influenza Information to Primary Audiences

Mode of Dissemination	Audience			Good for urgent communication	Strength/Weaknesses
	Employees	Partners	Public		
Telephone System					
Employee Information Line	✓			Yes	A voice message can be pre-recorded and updated off site. Access to the voice message can be controlled by using a PIN provided to all employees. (Good for relaying instructions on reporting to work.)
Public Information Line	✓	✓	✓	Yes	
Mass Voice Mail Message	✓			Maybe	Some employees may not have a designated work phone with voice mail.
Call center/phone bank	✓	✓	✓	Yes	Some individuals may prefer speaking to a live person vs. a recorded message.
Electronic					
Mass E-mail message*	✓			No	Some employees may not have a designated e-mail address or be able to access e-mail at home.
Website Posting*	✓	✓	✓	Maybe	Not all people will have access to a computer.
Intranet Posting*	✓			No	Not all employees will have access to a computer.
Hard Copy					
Mailing*	✓	✓	✓	No	Delivery may take a few days. May be costly.
Interoffice Mail*	✓				Not all employees will have a mail box for receiving interoffice mail.
Mass Faxes*		✓		Yes	Database with fax numbers and mass fax system required.
Notice Board Posting*	✓		✓	Maybe	
Pay check mailing*	✓			No	All employees will receive information.
In Person					
Meeting/Presentation	✓	✓	✓	Maybe	During some stages it may not be advisable to hold gatherings
Training	✓			No	May take time to coordinate.
Media- TV, Radio, Newspapers					
Press release*	✓	✓	✓	Yes	
Press conference	✓	✓	✓	Yes	

* Examples of informational content include letters, memos, fact sheets, brochures, and newsletters.

A-6 Infection Control Measures

Safeguarding the health and safety of City employees during an influenza pandemic is a key objective for the City of Edmonton. A variety of infection control measures (non-pharmacological interventions) including heightened hygiene practices, social distancing, and infection control equipment are a component of a comprehensive infection control strategy that may be utilized to slow the spread of disease.

The goal of the City's response to pandemic influenza is to limit the spread of a pandemic; mitigate the impact of the disease; sustain the City's infrastructure and lessen the impact on the economy and the functioning of society.

The pandemic mitigation framework is based upon an early, targeted, layered application of multiple infection control measures. Some of these measures need to be initiated early in the pandemic in order to maintain consistency during the pandemic.

The primary activation trigger for initiating interventions should be the arrival and transmission of pandemic virus in the Edmonton region (as confirmed by Alberta Health Services).

Hygiene

Employees will be educated and reminded of hygiene measures that help to limit the spread of disease. These include:

- Use respiratory etiquette (e.g. covering cough or sneeze with a tissue or cloth).
- Properly clean hands with soap and water or hand sanitizer regularly.
- Avoid direct skin to skin contact with others, such as hand shaking.
- Keep work areas clean and disinfected.
- Stay home when ill.

The following hygiene measures should be implemented to reduce the spread of disease within the work environment.

- Hand washing instructions posted in washrooms.
- Cover Your Cough reminders posted in common areas.
- Hand sanitizer made available in common areas.
- Tissues and trash cans made available in common areas.

Social Distancing

Social distancing is an infection control strategy that includes methods of reducing the frequency and closeness of contact between people to limit the spread of infectious diseases. Generally, social distancing refers to the avoidance of gatherings with many people. Generally, maintaining 6 feet of spatial distance between individuals will slow the spread of diseases.

The City of Edmonton has the ability to utilize the following social distancing strategies to reduce close contact among individuals:

Staggering work shifts. Employees who do not need to perform their work during the same time of the day and can be spread out in a 24 hour period or employees who can work an extended number of hours in fewer days may be able to work staggered shifts.

Face-to-face barriers. Employees who have regular face-to-face contact with the public that can provide services behind a barrier or by telephone can lessen the potential for exposure. Systems that can be put in place to minimize direct face-to-face contact with the public should be identified.

* other infection control strategies can be used to reduce the spread of disease between employees who must have face-to-face contact with others.

Infection Control Supplies

Increased use of infection control supplies may be advisable during an influenza pandemic (Alberta Health Services will provide guidance). The following infection control supplies are regularly available and may be needed by employees during a pandemic.

Supplies	
Soap within bathrooms	Tissues
Soap within kitchen areas	Garbage bags and trash cans
Hand sanitizer (min. 60% alcohol content)	Office cleaning supplies (details below)
Paper towels	

Workplace Cleaning

During a pandemic thorough workplace cleaning measures will be required to minimize the transmission of influenza virus through hard surfaces (e.g. door knobs, sinks, handles, railings, objects, and counters). The influenza viruses may live up to two days on such surfaces.

When a person with suspected influenza is identified and has left the workplace, it is important that their work area, along with any other known places they have been, are thoroughly cleaned and disinfected. Cleaning is the removal of visible dirt or soil. It is usually accomplished by physical scrubbing using detergent and water. To disinfect, use any of the disinfectants listed in the table below and follow the manufacturer's recommendations.

Influenza viruses are inactivated by many approved disinfectants including alcohol and chlorine. Surfaces that are frequently touched with hands should be cleaned and disinfected often, preferably daily. Clean the surface to remove dirt and soil with a cleaning agent and disinfect following manufacturers recommendations (see table below). The person cleaning and disinfecting should wear a mask and gloves and discard them afterwards. Hands must be washed or sanitized at the completion of the procedure.

The use of infection control measures to mitigate an influenza pandemic are a component of a comprehensive strategy and is based upon an early, targeted, layered application of multiple infection control measures. Some of these measures will need to be initiated early in the pandemic in order to maintain consistency during the pandemic.

The primary activation trigger for initiating infection control measures should be the arrival and transmission of pandemic virus in the Edmonton region (as confirmed by Alberta Health Services).

Antiviral Medications

Antiviral medications (anti-influenza drugs) are the only specific medical intervention that targets influenza and that potentially will be available during the initial pandemic response. Antiviral medications can be used to prevent influenza, and unlike vaccines, can also be used to treat cases that are identified early in their illness. While there is good evidence for reduction of complications of influenza, there is not evidence for reduction in influenza mortality. Protection afforded by antiviral medications is virtually immediate and does not interfere with the response to inactivated influenza vaccines. The strategic use of these drugs during the response phase will be critical to achieving the pandemic goals of firstly to minimize serious illness and overall deaths, and secondly to minimize societal disruption as a result of an influenza pandemic.

The effectiveness of antiviral medications in a pandemic, and particular in reducing the number of deaths in cases of severe disease is not known and there is a potential that the pandemic virus may develop a resistance to antiviral drugs.

Vaccines

The most effective defense against an influenza pandemic is the development of a vaccine that would elicit a specific immune response toward the strain of new influenza virus. Because production of the pandemic influenza vaccine can only be started once the pandemic influenza virus has been confirmed, City employee will have to rely upon alternate control strategies (respiratory etiquette, hand hygiene and social distancing) until a vaccine arrives. Pandemic influenza vaccine once manufactured and approved in Canada will be released by the Public Health Agency of Canada in lots allocated to each province/territory according to population.

As a result of this phased availability across the country, Alberta Health Services will distribute/administer the pandemic influenza vaccine based on the nationally predetermined priority groups. Alberta Health Services will provide vaccine to eligible residents as directed by Alberta Health and Wellness and the Public Health Agency of Canada.

A-7 Additional Sources of Information

Alberta Health Services -

[http:// www.capitalhealth.ca/emergencyprep](http://www.capitalhealth.ca/emergencyprep)

Public Health Agency of Canada -

http://phac-aspc.gc.ca/new_e.html

Canadian Pandemic Influenza Plan -

http://www.phac-aspc.gc.ca/influenza/pandemicplan_e.html

World Health Organization -

<http://www.who.int/en/>

Centre for Disease Control and Prevention -

<http://www.cdc.gov/>

A-8 Templates

- **Pandemic Influenza Action Plan Template**
- **Identify Essential Services**
- **Planning For the Orderly Shut-Down Of Non-Essential Services**
- **Planning for the Orderly Shut-Down of Non-Essential Services**
- **Plan for Critical Supplies for Essential Services**
- **Identify Key Security Concerns and Appropriate Actions to Minimize Risk**

Additional information will be added to assist departments/branches in the development of their own specific plans.

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Pandemic Influenza Action Plan Template

Business Unit:	Branch / Department:		
Type of Service: (identify and provide brief description)			
Individuals / Position Responsible: (for implementing specific action plan)	(Name)	(Phone Numbers)	(Alternate #s)
Activation Procedure: (describe)			
Corporate and Community Impact Issues: (list any)			
Action Plan: (list action plan including, notification plans, communications strategy, staff reallocation plans, use of other business unit services, any change in scope of service delivery, monitoring and reporting needs, etc.)			
Resource Needs: (list needs and contact information for resources needs – staffing, equipment, contracting out services)	(Name & Business Address)	(Phone Numbers)	(Email Address)
Training Needs (outline training plan as required)			
Date:	Name:		

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Planning for the Orderly Shut-Down of Non-Essential Services

Department

Branch

Section

Prepared By

Approved By

Service – Brief Description	Main Customer (Both Internal & External)	Plan For Orderly Shut Down Of Service – Including Timing

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Identify Key Security Concerns and Appropriate Actions to Minimize Risk

Department

Branch

Section

Prepared By

Approved By

Concerns	Appropriate Actions / Solutions