BRITISH COLUMBIA
Ministry of Health

British Columbia Pandemic Influenza Preparedness Plan

Managing Pandemic Influenza
A Guide for BC Local Governments

October 2005 Edition

Foreword

If we can believe historical records, influenza viruses have been attacking us humans every few decades for thousands of years. These minute gatherings of chemicals cannot even reproduce themselves, yet they possess the power to endanger whole civilizations.

People rightly believe pandemic influenza presents a major health issue for us today, but may wrongly assume it therefore falls only to health professionals to defend them. Local governments play a critical role in protecting their employees from harm and their communities from the secondary effects of widespread illness.

By preparing for and managing outbreaks of influenza, local governments can and should ensure continuity of government, maintain essential community services, and assist individuals and local businesses in coping with both illness and its impacts.

While extensive planning for pandemic influenza is ongoing at the international, national, provincial, and regional levels, we recognize that close collaboration among local governments and health professionals throughout the stages of preparedness, response, and recovery is essential where pandemic influenza is concerned.

The BC Ministry of Health prepared this Guide to emphasize the important role local governments can play in controlling risks by taking practical actions to manage pandemic influenza.

With this draft, we seek your comments and suggestions on improving the message to local governments on how to prepare for and respond to the next pandemic threat. Please forward all comments to me by e-mail.

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This document will not be reprinted. Henceforth, this Guide and any revisions will only be available via the Ministry of Health website at: **www.gov.bc.ca/health**.

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1. Introduction

Among the many natural and technological hazards that threaten our modern communities, pandemic influenza represents one of the greatest risks. Medical researchers who track the occurrence of such events warn the world is overdue for an influenza pandemic of major proportions.

Depending on the next version of the influenza virus, the rate of spread and severity of the coming pandemic may exceed anything we have encountered in the last century. The disease may spread easily, resulting in an unprecedented disruption of a community's workforce. Complications from influenza infection may lead to prolonged illness and death among a significant portion of the population. Traditional health services will be overwhelmed by the demand for urgent care.

Fear of infection could cause people to avoid social contact, keep their children home from school, fail to attend work, and shun those who may be infected. Impacts from such actions would ripple throughout the community, affecting retail businesses, restaurants, development proposals, construction projects, and other elements of day-to-day community life. Caring for the sick and the dead will exact an emotional toll on family members and friends.

Local governments, including municipalities, regional districts, and First Nations, will be affected in specific and foreseeable ways. Employees will become ill, and some may die. The resulting loss of skills and knowledge, however temporary, may interrupt the delivery of a diverse set of critical public services, such as police and fire protection, water delivery, and waste disposal.

Well-managed community response and recovery efforts, in partnership with local and regional health authorities, can reduce both the likelihood of widespread infection and the consequences of a pandemic in all respects.

While the consequences of an influenza outbreak may seem overwhelming, there is one important fact to emphasize: **Local governments play a critical role in protecting themselves and their communities**.

Pandemic influenza Defined

The term "**pandemic**" implies a human disease that occurs over a wide geographic area and affects an exceptionally high proportion of the population. The significance of this term becomes clear when one considers that neighbours and other traditional sources of aid may be unable to assist.

"**Influenza**" refers to a family of virus-caused diseases that result in respiratory infection with fairly predictable symptoms. The nature of the pandemic influenza discussed in this Guide is distinguished from the more benign influenza outbreaks that occur in British Columbia each year by the high proportion of the population affected and the expected severity of symptoms, including death.

Why Local Governments Should Act

Diseases are often considered the exclusive domain of health service providers. Although largely a threat to physical wellbeing, an influenza pandemic will affect more than just a community's health systems.

In a pandemic situation, local governments may consider many objectives, including actions to:

Protect Employees – Employees will look to local government managers for leadership and protection, including revising workplace procedures to minimize exposure to the virus. A pandemic influenza of the nature considered in this Guide will result in degradation of the government workforce.

Ensure the Delivery of Essential Services – Workforce reductions will put at risk the delivery of essential local government services, such as police, fire, transportation, water, and sewer services. Interruption of critical public services will make matters worse within a community already beleaguered by influenza.

Support Health Authorities – Local governments will be expected to assist health care officials in delivering health services through non-medical means. For example, local governments may provide access to public facilities to help with mass immunization or quarantine. Local police may be asked to enhance security in and around health operations where bulk vaccines and anti-viral medications require protection.

Assist Community Members – Beyond providing health support, local governments may engage in a number of actions that help community members cope with the consequences of pandemic. Actions may include helping family members find one another, facilitating the transportation of goods through the community, and providing non-medical care to those at home and needing food, medications, and heat.

Minimize Net Financial Impacts – Local government expenses are likely to increase while the community struggles with response and recovery activities. At the same time, local revenues may drop substantially due to failure to pay property taxes and fewer sales of government goods and services. Managing these financial losses will be a necessity.

Protect the Local Economy – The local government also serves as the central organization in collaborative efforts to support social stability and sustain local economic viability. Working with a range of stakeholders, local governments will be expected to lead the protection of local jobs, businesses, and markets.

In short, local governments should act because they can play a significant role in saving lives, reducing human suffering, protecting public health, and reducing the economic and social losses associated with pandemic influenza. The BC *Emergency Program Act* requires local authorities to plan for emergencies and disasters, including human diseases.

First Nations

First Nations may find this guide useful in understanding the threat of pandemic influenza and the actions that may serve to reduce losses. For simplicity in this document, the term "local government" includes First Nations.

First Nations should participate with neighbouring communities in the emergency planning process, and prepare separate plans for implementing response and recovery priorities.

Purpose of this Guide

This Guide summarizes the threat and the many actions that local governments can and should take before, during, and after the arrival of pandemic influenza. As an overview, this document presents the large concepts behind planning for pandemic influenza, and leads readers to sources of additional information.

The intent of this Guide is to offer suggestions for consideration in managing pandemic risks, not to prescribe specific procedures. In every respect, local governments are encouraged to work with their health service counterparts and other local stakeholders in managing the risks of pandemic influenza.

2. Planning for Pandemic Influenza

Early and thoughtful planning by local governments and other stakeholders can reduce health impacts, protect the delivery of critical services, reduce social disruption, and minimize economic losses over the long term.

As with other threats, local government planning for pandemic influenza will require thoughtful research, informed decision-making, and documentation of key policies and procedures.

Guiding Principles

Planning activities suggested in this Guide draw from the following principles:

Guiding Principles

1. Understand the Risk – Planners should base their decisions on a good comprehension of the science underlying an influenza outbreak and the risks involved. In order to execute with confidence the actions available to reduce the risks, local governments must understand the factors contributing to the presence and spread of the disease. It is imperative that elected officials, senior administrators, and general staff members have a clear perception of the likelihood and consequences of pandemic influenza.

2. Focus on Actions – While knowledge is important, only actions can help manage pandemic risks. Local governments are encouraged to take steps to help prevent the spread and severity of the disease. They should prepare now to protect employees, and to assist health authorities in protecting community health when needed. Local governments should also prepare to lead community psycho-social and economic recovery during and following the event.

3. Seek First Internal Protection – A local government's first responsibility is to its employees and the public services they provide. Protecting your workforce will help avoid interruptions to essential services, and may require creative measures in infection control. In addition, local governments should have personnel and facilities available to assist health professionals in caring for community members.

4. Collaborate with Others – Pandemic influenza and its consequences can only be managed through the collaborative efforts of many stakeholders in the community, including health authorities, local businesses, utilities, and institutions. In particular, local government pandemic planning must be consistent with plans prepared by the health authority, coroner, and others with jurisdiction in the community.

Working with Health Authorities

In managing influenza and its effects, local governments will be expected to collaborate with their respective health authorities before, during, and after an event. British Columbia's *Health Act* makes the Provincial Health Officer and Medical Health Officers responsible for public health protection. Under this provincial legislation, Medical Health Officers may direct local governments to undertake certain actions during a health crisis.

Health authorities have specific responsibilities before and during a pandemic situation, including the following:

Health Authority Responsibilities in Pandemic	
Surveillance • Identify cases and observe early spread of the disease • Report cases to surveillance teams **Infection Control** • Oversee precautions in health care settings **Emergency Response** • Establish health organization command structures • Provide medical resources to support health sites **Public Health Measures** • Trace contacts, if appropriate • Order quarantine and isolation • Reduce social distance (e.g., closures, event cancellations)	**Vaccine and Anti-viral Medications** • Receive and store medications • Administer vaccine at mass immunization clinics • Set priorities if vaccine in short supply **Public Information** • Set out clear lines of information flow • Provide timely updates to province, local governments, public, and news media **Community Interface** • Advise local governments • Counsel schools and businesses on health protection • Other community assistance

Each regional health authority, under the leadership of a Chief Medical Health Officer, is responsible for maintaining a *Pandemic Influenza Contingency Plan* that considers the role of local governments. This is why it is important that local governments work with their respective health authorities to coordinate response and recovery policies and procedures.

Local emergency officials who are not already familiar with their health authority representatives should make contact to synchronize planning for pandemic influenza.

Other Stakeholders

Federal Government – Health Canada is the primary federal agency with authority to oversee the federal response to pandemic influenza. The National Pandemic Influenza Committee will coordinate national influenza response, including surveillance, communication with the World Health Organization and other nations, distribution of vaccine and anti-viral medications, and allocation of the National Emergency Stockpile System (NESS) of emergency hospitals.

Provincial Government – In addition to the BC Ministry of Health, several other provincial agencies bear responsibilities during pandemic influenza.

Provincial Emergency Program (PEP) –PEP will manage a provincial integrated response during pandemic, focussing on consequence management in support of health authorities and local governments. PEP will establish a provincial emergency management structure to support collaboration at the provincial, regional, and local levels.

Police Services – Police at the local and regional levels will provide public safety and security services, including protection of stored vaccine and anti-viral medications. Police may provide enforcement services for those persons who disregard or breach isolation and quarantine orders issued by the Medical Health Officer.

BC Coroner Services – Coroners are responsible for determining the cause of death when a fatality occurs outside of a hospital or due to questionable circumstances. A pandemic influenza epidemic may result in mass fatalities that would overwhelm the morgue capability of health institutions and funeral homes. The Chief Coroner, in collaboration with the Provincial Health Officer, would act to waive current processing requirements in order to allow for rapid processing and burial. Under the authority of the State of Provincial Emergency, the coroner may request the assistance of local governments in the identification, collection, temporary storage, and burial of the deceased.

Min. Children and Family Development – The Ministry has responsibility for unattended and orphan children. The high infection and mortality rate of a pandemic influenza event could result in many children requiring support due to the death or illness of their parents or guardians. Ministry resources may be overwhelmed and therefore the ministry may call upon local governments and non-government agencies to provide assistance in the care and shelter of children who have not been infected.

Ministries and Crown Agencies – Every ministry and Crown agency is required to have a business continuation plan that takes into account the potential workforce impact of a pandemic influenza. Plans are required to maintain essential public services in the event of large-scale absenteeism.

Utilities – Some essential utilities offer regulated services, including those engaged in electrical power generation, natural gas supplies, telecommunications, food distribution, and financial services. These corporations have a legislated responsibility to develop and maintain plans that ensure the continuation of the essential services during emergencies such as pandemic influenza.

Health and Emergency Support Levels

During pandemic response, local governments should seek effective ways of linking with health authorities to coordinate efforts within the community, both in assisting health authorities and in engaging in other emergency services.

An established structure is important when considering the range of issues that may arise. Each local government should address these questions with their health counterparts and with PEP during the planning process:

> **Resource Requests** – How will health authorities let local governments know of any resource needs, such as facilities required for alternative care sites or for mass immunization?
>
> **Information Flow** – How will information about the status of influenza outbreak in the community be shared between local governments and health authorities?
>
> **Expenditure Controls** – How will the local government receive financial assistance for resources requested by a health authority? Will the health authority or PEP authorize expenditures of a certain type or over a certain amount?

One way to organize response operations is to acknowledge the differences in health services and emergency management services within a community. Health facilities will likely focus on direct patient assessment and delivery of medical care, and will require support at strategic levels for resources such as health-related equipment personnel.

Emergency services will be required at the local government level to both support health requirements and to engage in response efforts that are not directly related to health services, such as the delivery of food to needy citizens and burial of the dead where mass fatalities occur.

Figure 1 illustrates one possible way to structure the relationship between health and other emergency management entities, using the principles of the BC Emergency Response Management System. This is only an example; other frameworks may better suit individual communities.

Note in Figure 1 the position of the local government EOC. It supports pandemic response at the site level, and seeks support from the Provincial Regional Emergency Operations Centre (PREOC), as in other types of emergencies.

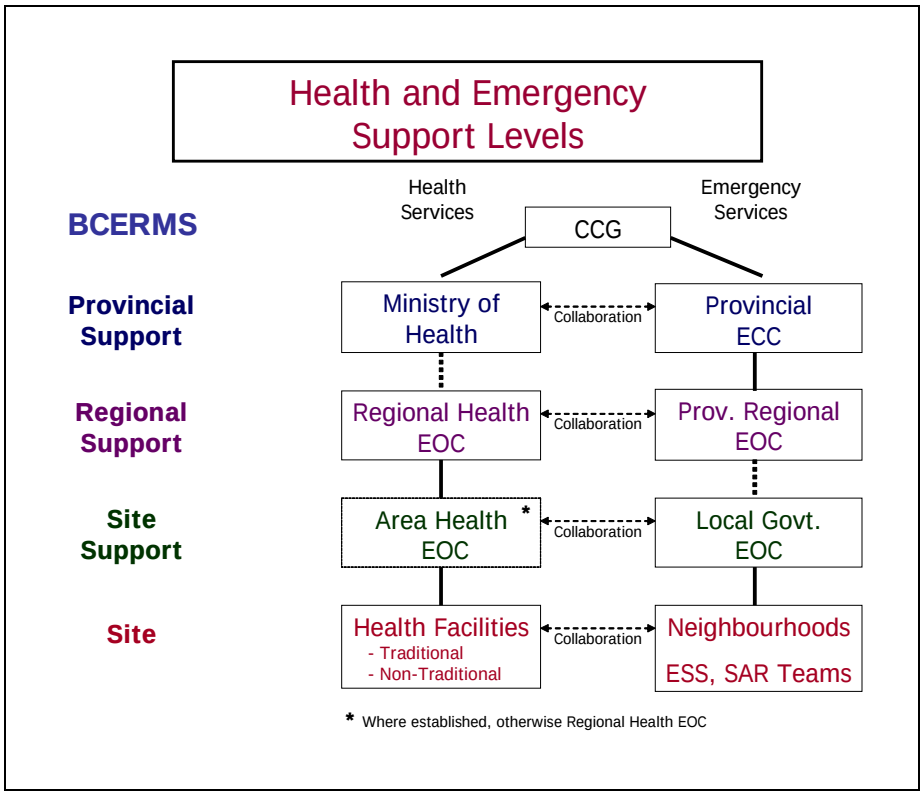

Figure 1. Possible Health and Emergency Support Levels in a Pandemic

The local government EOC also responds to requests from Area or Regional Health EOCs for resources, such as community facilities where medical personnel may provide health services in non-traditional settings.

Funding Pandemic Management

Funds are available to help local governments with the costs of preparing for and responding to severe influenza events through three specific programs:

Joint Emergency Preparedness Program (JEPP) – As with other emergency preparedness projects, local authorities may apply for JEPP assistance with pandemic planning under a cost-sharing arrangement.

Emergency Planning Grants – The Provincial Emergency Program (PEP) plans to continue making grants available to local authorities through the Union of BC Municipalities (UBCM) for use in developing integrated emergency plans and exercises.

Disaster Financial Assistance (DFA) – During and following a pandemic influenza event, local governments may qualify for eligible disaster financial assistance funds to assist with response and recovery costs.

Refer to the Annotated Index for more information on this important topic.

3. Understanding Pandemic influenza

The bulk of this Guide contains suggested actions for local governments to consider in managing the risks of pandemic influenza, beginning in the next section.

First, however, it is important to highlight some basic facts about the disease and the rationale behind the actions recommended later in the Guide.

The Agent

Influenza epidemics have plagued humanity for hundreds and probably thousands of years, but it was not until 1933 that the agent of the disease was first identified as a virus. A virus, as you may know, is much smaller than a bacterial cell and behaves differently in many ways. There are three things to know about the influenza virus in contemplating actions to manage risks:

Small Size – The influenza virus is about 1/10,000th the size of an average bacterium. This means that it can pass through screens and filters that would otherwise stop larger particles. The face masks often seen in photos of past influenza outbreaks have pores that are much larger than the virus and therefore offer little protection.

Impervious to Anti-Bacterial Medications – Influenza does not respond to antibiotics in the way other bacterial-related diseases can. The common medications used for bacterial infections, such as penicillin and streptomycin, have no effect on the influenza virus. Some recently-developed "anti-viral" medications can inhibit the dispersal of viral particles inside the body, but there is no medical cure for influenza. This suggests the most effective way to combat the disease is to avoid exposure to the virus.

High Mutation Rate – Perhaps the most dangerous aspect of the influenza virus is its ability to rapidly mutate. Viruses are relatively simple organisms, with no internal checks and balances that control the quality of reproduction. In other words, viruses can and do change readily from one generation to the next. Although the vast majority of offspring may not survive the change, a few may emerge stronger and more dangerous than before. The ability to adapt rapidly means the influenza virus can overcome obstacles to growth, including the body's defences, even during an influenza outbreak. The bottom line is this: We may face one version of the virus at the beginning of a pandemic, and see another more deadly form emerge over time.

Means of Influenza Transmission

People may become exposed to the influenza virus in a number of ways, but the most typical methods involve contact with secretions from an infected individual.

A person may inhale droplets or particles released from the respiratory tract of an infected person. Or someone may pick up the virus on their hands from touching an infected person or a hard surface where the virus is present, and then introduce the virus by bringing their hands to their mouth, nose, or eyes. The virus makes its way to the respiratory track where it goes to work.

Viruses can live on hard surfaces for 24 to 48 hours, and on non-porous surfaces such as cloth, paper and tissue from 8 to 12 hours. Once on the hand, the virus can survive for about 5 minutes.

Understanding the means of transmission is essential in decisions by local governments to control infection and reduce the exposure of staff and the general public to the disease.

Infection Timeline

It is also important to acknowledge what happens when a person becomes infected in considering actions to manage pandemic risks.

Figure 2 offers a simplified illustration of how the body responds to exposure to the influenza virus.

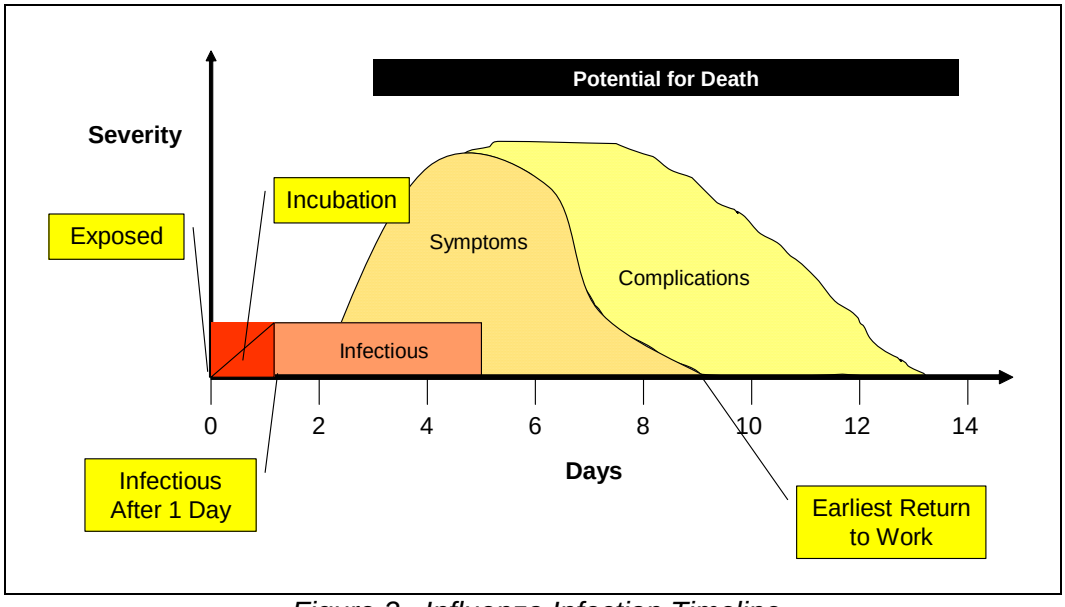

Figure 2. Influenza Infection Timeline

Exposed – Once an individual has been exposed to the virus, influenza particles make their way to the respiratory system, where they invade cells of the lining and begin to replicate. A single virus working with the resources of an invaded cell can produce millions of copies of itself during the "incubation" stage. The incubation period ranges from one to three days.

Infectious – As the virus replicates, its numbers rapidly grow within the body. Depending on the number of virus particles absorbed at the time of exposure, a person may be able to infect others within one day. More importantly, **people can be contagious 24 hours before the appearance of any symptoms**. In other words, we cannot rely on simply sending sick people home to control the spread of the disease. By the time their illness is obvious to them and to others, many people may have been infected. Influenza victims are contagious for a period of three to five days following the onset of symptoms. Note that someone who recovers from influenza is immune from further attack by the same virus.

Symptoms – People respond to the influenza virus in different ways, but the most common symptoms include fever, headache, cough, aches, and weakness. Symptoms may increase in severity rapidly, then gradually subside as the body's defences overcome the virus. Some people who are sick with influenza and contagious to others show little or no symptoms.

Complications – A major threat in past influenza pandemics has been the tendency for the viral infection to exhaust the body's immune capacity. This opens the door for other diseases that would otherwise be easily controlled. Most notable among these complications is pneumonia, a bacterial infection that causes the build-up of fluid in the lungs and bronchial passages. Even if treated with appropriate medications, such complications from a viral infection can result in prolonged illness or death.

Potential for Death – It is difficult to predict the likelihood of death among influenza victims. Much depends on the nature of the viral strain that causes the pandemic, how readily it resists the body's many immune system defences, and the physical condition of those infected. Historic outbreaks of influenza have shown, however, that death can come within hours of the first symptoms, or after a prolonged battle with complications over many weeks.

The implications of these points are important to highlight for local governments.

First and foremost, as influenza enters the community, it will not be possible to assume that anyone – even those who lack symptoms – is free of the disease. This means that essential workers who are responsible for critical services, such as water supply, may have to be separated from others, including their family members. This is known as "sequestering" and should be considered for all work of vital importance to the organization and the community.

Second, it will be imperative to assist those who cannot receive outpatient or hospital care, and identify and treat victims who suffer secondary illnesses, such as pneumonia.

Third, local governments should anticipate unprecedented disruptions in their workforce. Absenteeism may involve a high number of employees at a given time, and workers may return to work about seven days after the onset of symptoms, or longer if complications ensue. There is always the potential for death among employees, and this brings special considerations for service continuity and emotional care among the surviving members of the workforce.

Severity Categories

As noted above, people react to influenza virus invasion differently, depending on a number of factors. Local governments should understand the range of symptoms to anticipate the role they may play in supporting health care delivery.

Figure 3 shows one potential way any given population may respond to influenza.

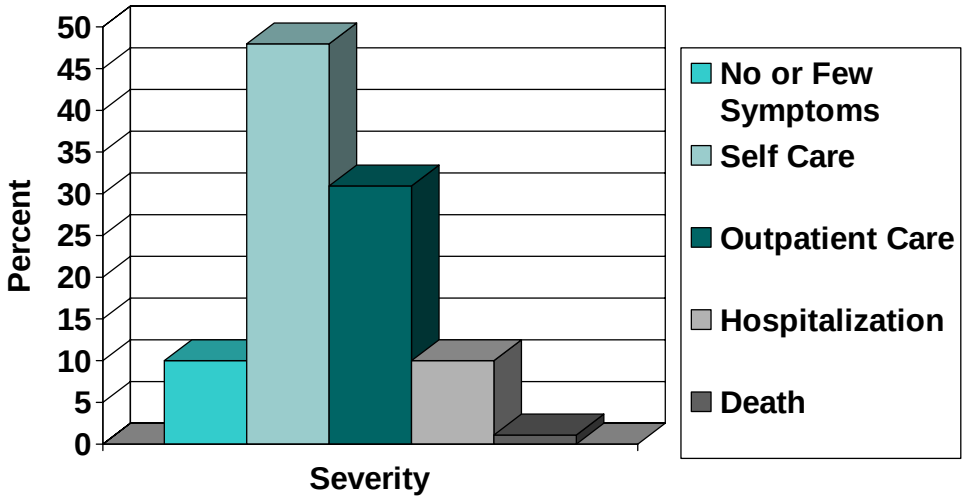

Figure 3. Distribution of Influenza Symptoms in a Sample Population

Few or No Symptoms – Some members of a population may respond to an infection with little or no outward evidence of disease. Either through a natural or acquired immunity, their body's defences may be able to control and eventually eliminate the virus.

Self Care – Depending on the nature of the virus, we can expect that a large portion of those who become ill will not seek medical care. However, even though this group may not require direct health services, they may become so weak over time that they are unable to provide the basics of feeding themselves, creating warmth, and ensuring general cleanliness. Local governments, through their emergency programs, may wish to activate emergency social services to assist these influenza victims. In addition, the homeless in a community should be a concern for any local government.

Outpatient Care – Those with more severe symptoms will likely seek medical care on an outpatient basis. This means that some influenza victims are expected to attend designated health care facilities for short visits – with no requirement of overnight stays. Local emergency programs may want to consider how to support this group of victims, especially by providing transportation. In addition, health authorities may ask local governments for assistance in finding and managing facilities that can augment traditional outpatient care centres.

Hospitalization – Some people will be so ill, either from influenza or from complications, that only hospitalized care will provide relief. Hospitals are expected to be quickly overwhelmed by influenza patients, and health officials may ask local governments for assistance in locating suitable facilities for temporary hospitals, including grounds where tent hospitals may be constructed.

Death – It is inevitable that influenza will claim lives in an infected community, although it is impossible to know ahead of time how many will succumb. People routinely die in all communities, but the expected increase in fatalities will challenge services that would otherwise be able to cope, including the coroner service, funeral homes and mortuaries, and burial services. Local governments may be asked to assist in caring for the dead, including finding refrigeration facilities for the temporary storage of corpses.

Of course, any single influenza victim may progress through each of these severity categories in turn and, therefore, the aggregate numbers may exceed the total population.

Note that the distribution shown in Figure 3 is presented only to illustrate the possible symptom categories. Actual ratios will depend on the nature of the virus at hand. It is impossible to predict how people will react to a virus until medical researchers can observe actual cases. Even with this information, the ratios may differ among communities and may change if the virus mutates over time.

Interventions

Health professional have learned much about influenza over the last eight decades, including how to control the spread of the disease and how to prevent infection. Among the tools and techniques available, three are worth mentioning to local governments.

Provide Immunization – The most powerful tool available in the fight against influenza is a vaccine that stimulates the human immune system to protect the body from infection.

Immunization has its challenges, however. The vaccine must be developed specifically from the virus after it has been identified, and manufacture may require six months or more. Even after a suitable vaccine is ready, it will take time to distribute and must be administered before exposure to the disease to be effective. The virus causing the problem may require two doses of vaccine, delivered one month apart. If the vaccine is in short supply, local governments will be expected to set priorities among employees for immunization.

Slow Initial Spread Rate – With a vaccine unavailable for six months or more, it makes sense to impede the spread of the influenza virus in a community, if possible to do so. The means of influenza transmission suggest that reducing the number of people in one place and limiting the amount of time people spend together will help control the spread of infection. Health authorities are prepared to order the closure of high risk buildings (such as schools) to isolate the sick, and to quarantine people who may have been exposed to the disease. Local governments can play a key role in inhibiting influenza spread by enforcing closures of public and private facilities when ordered by the Medical Health Officer.

Care for Those Affected – The third most influential action in managing pandemic influenza addresses individual care for influenza victims. Some community members will become ill before a vaccine is available. Without care, some will suffer needless health complications and death. To augment health care in traditional medical facilities, local governments can and should offer community care through emergency service groups and outreach volunteers. Even an action as simple as checking on sick community members by telephone could result in life-saving interventions.

Other health measures are possible, of course, and local governments will have to work closely with health authorities to implement creative solutions. The central point is that local governments can play a significant role in saving lives and reducing suffering among community residents.

Pandemic Waves

Records from past influenza pandemics offer an interesting observation. The number of cases usually peaks in two or more waves, arriving over time. Each wave lasts about six to eight weeks, and may be separated by a period of three to nine months.

It is impossible to estimate the intensity or timeframes that will accompany the next pandemic influenza event. However, we can explore some scenarios to help understand the challenges ahead.

Figure 4 shows two scenarios of how the number of influenza cases reported may vary over time.

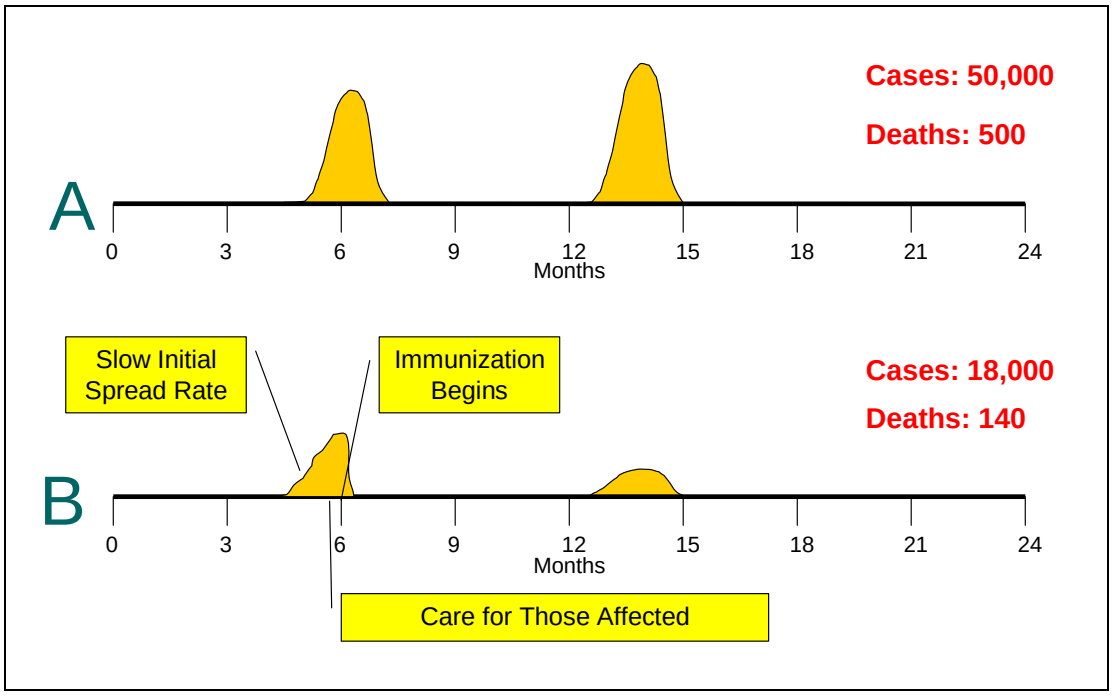

Figure 4. Possible Scenarios of Pandemic Waves

Scenario A, No Interventions – In Scenario A, which anticipates no human intervention to slow or counteract the natural course of influenza, time "0" is assigned to the point when the pandemic virus is identified. Assuming the virus first develops outside Canada, it may take about three months before cases first appear in this country, and another two months for BC to record a significant number of cases in this scenario. In the first wave and over an intense eight weeks beginning in month 5, cases rise rapidly, reach a peak, and fall again in a typical "bell curve." Months later, a second wave hits and results in an even greater impact on the population. New cases of influenza continue to be reported between the waves, but are much fewer in number than during the wave peaks. The total impact from such a scenario on a community population of 100,000 could include 50,000 cases and 500 deaths.

Scenario B, With Interventions – Scenario B represents the same viral attack conditions as Scenario A, but assumes three successful interventions. First, an effective vaccine is developed and distributed beginning in month 6. This helps to immediately drop the number of cases in the first wave and greatly reduces the number of reported cases in the subsequent wave. Second, efforts to slow the initial rate of spread in the first wave allow more community members to receive the vaccine before being exposed to influenza. This also helps reduce the number of cases. Third, efforts to care for those affected reduce the number of people who succumb to the virus and to complications. The effects of these interventions reduce the total number of cases in a population of 100,000 to 18,000 and reduce the number of deaths to 140.

Although the exact nature of the coming pandemic will almost certainly differ from the fictitious scenarios explored above, the implications for local governments are clear: Local government interventions can work to save lives and reduce suffering.

Secondary Consequences of Pandemic influenza

The health impacts of pandemic influenza on a population may obviously be substantial. In addition, there are some secondary impacts of widespread disease that are of interest to local governments. Depending on the nature of the virus that presents the threat, the secondary consequences of pandemic influenza of relevance to local government may include the following:

Workplace Disruption – Local government employees will be exposed to the influenza virus like any other community member. Inevitably, employees will become ill and fail to report to work. Most are expected to recover after about a week, but some will develop complications that may keep them from their jobs for much longer. Some may die. In addition, even employees who escape the illness may be absent due to their need to care for ill friends or family members. Some employees may refuse work they feel may result in unreasonable exposure.

Interruption of Essential Services – Workplace disruption may mean an interruption of critical community services, such as fire protection, police services, water supply, waste disposal and sanitation, and maintenance of roadways and related infrastructure. These interruptions could compound health effects, potentially adding to the number and severity of influenza cases, and may even lead to unnecessary deaths.

Community Effects – A pandemic will challenge many community elements we normally take for granted. Traditional health service facilities will likely be overwhelmed with demands for care. Illness among wholesale and retail workers may result in shortages in essential goods, including food and medications. Police services will be busy supporting health officials by enforcing facility closures, overseeing quarantines, and safeguarding caches of vaccines and anti-viral medications. Influenza-related deaths may overwhelm funeral and burial services. Local governments will be expected to reduce the potential for such interruptions and facilitate innovative solutions to community challenges.

Social Disruption – School closures will force parents to find alternative care or to stay home from work. Orders to close high-density businesses and entertainment venues will disrupt the social life of every affected community. Fear of infection will isolate many in a community, closing normal channels of information. Churches may be closed to reduce the spread of infection, eliminating a source of social contact and comfort at a time when it will be most needed. Local governments can reduce social disruption by, among other means, sharing accurate and timely information with community residents.

Psycho-Social Effects – One can only imagine the emotional toll a major pandemic will exact from community members. Many of the survivors will suffer psychological trauma from dealing with illness or death among family members, interruption of critical community services, loss of employment, and financial disruption. Local governments can lead recovery efforts that focus on the needs of individuals during and following pandemic, including stress counselling services and holding public ceremonies after the threat has passed.

Economic Effects – Degradation of the community workforce due to illness and death will inevitably result in widespread economic loss. Fear of travelling to communities hit by influenza could reduce the tourist trade substantially. A few companies may go out of business, especially small to mid-size enterprises. Some community residents will lose their jobs and their ability to purchase even the essentials for subsistence. Reduced cash flow within the community will have ripple effects on surviving businesses. Local governments must lead economic recovery by working directly with business leaders in moving forward.

It is important to note that the response and recovery aspects of pandemic influenza will differ greatly from other disasters.

- While a **flood** may impact a predictable quadrant of a community, pandemic influenza can reach every place of business, every isolated residence, every street corner. All segments of a population may be affected, including health and emergency workers and elected officials.
- A **fire** may require an intense period of response, followed by a distinct time of recovery. Influenza, on the other hand, may require a blend of concurrent response and recovery efforts throughout an extended pandemic period.
- Whereas an **earthquake** occurs suddenly, a pandemic will develop over time, and may arrive in two or more waves over a period of many months or years.
- A **severe weather** event that impacts one region will leave others intact and able to provide mutual aid to the affected community. Pandemic influenza may affect all regions at once and may be national in scope. Local governments should expect little or no help from outside jurisdictions.

In addition to helping health authorities cope with increased demand for public health care, local governments will be expected to lead response and recovery efforts to deal with these secondary consequences.

It takes planning to effectively manage the local government and community risks from pandemic influenza. The remainder of this Guide offers some ideas on how local governments can make a difference.

4. Managing the Risks of Pandemic influenza

Local governments can take action in a number of areas to manage the risks of pandemic influenza. Although there are many ways to organize the overall effort, actions can serve five basic objectives:

1. Assess Risks – Effective action depends on a factual understanding of the risks. In assessing the risks of pandemic influenza, the local government should identify the people, facilities, and services most likely to be affected, and gauge their vulnerability to disease.

2. Mitigate Risks – Steps can be taken before a pandemic strikes to reduce the magnitude and severity of potential consequences. Mitigation can reduce demands on responders during the event and the net financial impact on the local government.

3. Preparedness – Preparedness includes identifying individuals who will undertake key functions, developing effective policies and procedures, obtaining the equipment needed to support response, training personnel, and exercising plans.

4. Coordinate Response – As the threat of pandemic unfolds, the local government may implement a series of protective actions to support both internal and community objectives. Response will require the coordination of local government services with health authorities, provincial emergency managers, local businesses, neighbouring communities, and members of the general public.

5. Lead Recovery – The local government should lead recovery to pre-pandemic conditions for both the government and the community. Recovery may require the collaboration of multiple service providers, and will likely include efforts to rebuild community and regional economic sustainability.

Local government actions under each of these five objectives will serve to manage risks in two areas:

For the Local Government (Internal) – On behalf of municipal council, regional district board, or band council, local government planners may consider actions under each of the five objectives summarized above. The purposes of these actions include protection of employees, continuation of public services, and management of economic impacts on the local government.

For the Community (External) – Local governments also bear responsibility for managing community impacts from an influenza pandemic. This may involve actions to protect and support individual and family residents, institutions, farms and small businesses, and the overall economy of the community. Much of this effort will require coordination with other entities within the region.

Figure 5 illustrates the five objectives and two realms addressed in this Guide. The tables that follow set out each objective in terms of action plans that can be evaluated, assigned, implemented, and monitored for progress.

Objective	For Local Government	For Community
1. Assess Risks	✓	✓
2. Mitigate Risks	✓	✓
3. Preparedness	✓	✓
4. Coordinate Response	✓	✓
5. Lead Recovery	✓	✓

Figure 5. Objectives for Local Government Planning

Develop a Pandemic Planning Group

In managing risks for an event as complex as pandemic influenza, every local government should first assemble a **Pandemic Planning Group** to select and implement the actions, policies, and procedures that best represents the government's and the public interest.

The purpose of the Pandemic Planning Group is to:

- Guide local government actions in assessing risks, mitigating risks, and preparing for response and recovery.
- Collaborate with health authorities, neighbouring communities, provincial representatives, and other stakeholders in developing integrated response and recovery plans.
- Inform elected officials and employees of the local government on the status of pandemic influenza planning.

Develop a Pandemic Plan

The development of a **Pandemic Plan** will improve the community's ability to respond and recover, and will reduce human suffering and the economic impact. A *Pandemic Influenza Preparedness Plan* may simply be one component of a local government all-hazards emergency response and recovery plan. The plan may be disease-specific but may have application to **other contagious diseases**, depending upon their nature.

See the Annotated Index for more information on topics of interest.

Objective 1 – Assess Risks

For Local Government

Core Concepts

Understand the Threat – Effective risk management begins with understanding the risk factors associated with pandemic influenza. It is important for members of the planning committee to comprehend the nature of the disease, how it spreads, and consequences to the government.

Responsibility to Employees – The local government is first concerned with the well-being of its workers. Primary attention should be afforded to the risks employees face in delivering public services, including the potential for contracting the disease in the workplace.

Public Services – Because influenza attacks employees, illness may interrupt the delivery of local government operations, such as fire, police, water, and sewer systems. Assessing the potential for such secondary losses helps predict the potential consequences. Consider that some public buildings may be closed by the Medical Health Officer.

Financial Impacts – The local government may suffer unavoidable financial consequences associated with a community-wide epidemic, in terms of both increased expenditures and reduced revenues. These financial risks are important to understand ahead of time.

Consider These Actions

1. **Learn about pandemic influenza.**
   - Consult the Annotated Index for topics.
   - Meet with Health Authority.

2. **Estimate impact on local government employees.**
   - Identify total number of employees for each department.
   - Estimate number of employees expected to be unavailable due to illness over time, by department.
   - Identify high risk facilities (e.g., locations of high public contact).

3. **Identify essential services.**
   - Identify essential government services, such as fire, police, and sewer systems.
   - Identify essential utilities delivered by others, such as tele-communications and electrical power.

4. **Identify public buildings that may be closed.**
   - Establish a list of all public buildings.
   - Identify public buildings that may be closed, by priority.

5. **Assess financial impact on local government.**
   - Identify primary sources of tax revenues.
   - Anticipate increased costs associated with sick-leave benefits, death benefits, and re-staffing to replace lost employees.
   - Assess potential economic impacts to local government of pandemic influenza.
   - Conduct a workshop for senior administrators to identify and understand sources of disaster financial assistance.

6. **Hold awareness sessions.**
   - Inform elected officials and staff of the nature and consequences of a pandemic.

Tips for Success

* Develop risk information in cooperation with health officials and neighbouring jurisdictions.
* Review local government impacts in other jurisdictions (e.g., Toronto in 2003. See “SARS.”)

Objective 1 – Assess Risks

For Community

Core Concepts

Public Health Effects – As stewards for community well-being, the pandemic planning group must understand the potential magnitude and importance of an influenza outbreak on the local community. Although impacts depend on the nature of the influenza virus and conditions at the time, existing models can offer examples of credible scenarios.

Interruption of Public Services – Local government services may be interrupted if the workforce is affected. Assessing the probability and consequences of such interruption helps set priorities for mitigation and response.

Social Disruption – Pandemic influenza will be socially disruptive over both short and long terms. Closures of community buildings will cause secondary impacts because community members will no longer be able to follow routines of school, work, and leisure activities.

Economic Impacts – The 2003 SARS outbreak in Canada demonstrated that the economic impact of an infectious disease can be catastrophic and long lasting in a community. Businesses will be impacted by a temporary loss of customers due to public fear, and by closures ordered by the Medical Health Officer to slow the spread of the disease.

Consider These Actions

1. **Estimate impacts on population.**
   - Assess impact of influenza on community demographics:
     - Total population
     - Number expected to care for themselves at home
     - Number expected outpatients
     - Number seeking hospital care
     - Number of dead

2. **Assess impacts of loss of essential services.**
   - Assess the impacts of inability to receive essential services, including utilities outside of local government control.
   - Identify community elements likely to be most affected by failure to deliver essential services.

3. **Identify community buildings that may be closed.**
   - Survey community to identify facilities that may be closed, e.g.:
     - Childcare centres and schools
     - Entertainment and sports venues
     - Conference centres, churches
     - Transportation (ground, air, sea)
   - Identify facility address and contact information for buildings that may be closed by order.

4. **Identify economic impacts to the community.**
   - Establish a joint business-government working group to estimate potential economic impacts.

5. **Inform officials about community risks.**
   - Convey risk information to local officials.

Tips for Success

* Work with local Chamber of Commerce to assess impacts to businesses.
* The joint business-government working group should include key organizations such as the Chamber of Commerce and local economic development commissions.

Objective 2 – Mitigate Risks

For Local Government

Core Concepts

Loss Reduction – Mitigation requires action before an influenza outbreak occurs to reduce the likelihood and consequences of loss. For pandemic influenza, the planning group should consider a wide range of actions that will reduce risks for the local government.

Employee Protection – A number of actions taken now can help local government staff avoid and better cope with the disease. Where employees come in contact with large numbers of the general public, measures can be implemented to deliver services through alternate means. Staff would also benefit from infection control and vaccinations against annual influenza events.

Workforce Interruption – Workforce degradation may be one of the most significant impacts of pandemic because it affects the provision of mission-critical services, and poses a threat to the continuity of local government. Mitigation includes anticipating the need for backup capabilities to fill essential functions vacated by ill officials, managers, and staff members.

Supplier Interruption – Some public services delivered by local government depend on outside suppliers, including transportation and utilities. Alternate suppliers would help mitigate risks.

Revenue Losses – Local governments may face an interruption of revenues during and after an influenza event, representing losses that are not eligible for disaster financial assistance. To enable continued operation, local governments may require sources of contingency funds for such ongoing expenditures as staff wages and vehicle maintenance.

Consider These Actions

1. **Identify ways to separate staff from public.**
   - Develop alternate service delivery methods to limit staff contact with public.
   - Prepare policies allowing tele-commuting and working from home for local government staff and managers.
   - Develop “safe meeting” protocols.

2. **Develop infection control plan.**
   - Develop an infection control plan for local government facilities.

3. **Vaccinate staff, develop hygienic habits.**
   - Facilitate routine, annual influenza vaccinations of staff.
   - Institute good hygiene practices among all employees to develop healthy habits.

4. **Duplicate personnel capabilities.**
   - Ensure all essential positions have at least one alternate, and establish a registry of backup personnel.
   - Resolve with employee unions any issues related to temporarily filling positions vacated by illness or death among staff.

5. **Develop backup suppliers.**
   - Identify current suppliers.
   - Identify impacts if supplies are interrupted.
   - Identify and develop alternate suppliers, where critical.

6. **Develop contingency funds.**
   - Set aside a contingency fund or ensure access to credit to manage exceptional expenses amid revenue losses.

Tips for Success

* Work directly with employee unions in developing and implementing mitigation measures.

Objective 2 – Mitigate Risks

For Community

Core Concepts

Awareness Information – Information is the key to mitigation among members of the general public. Much of the success in pandemic response and recovery will depend on the actions of individuals and families. People are empowered when they understand the threat and know how to protect themselves and their families.

Working Cooperatively with Health Authorities – Health authorities are responsible for informing the public about the health aspects of pandemic. Local governments can help community members mitigate the non-health consequences of a pandemic, including loss of income sources and social disruption. Local governments should work with health officials in disseminating integrated pandemic messages.

Advising Businesses and Institutions – Because the economic impacts of pandemic can be wide-reaching, including loss of revenues for local governments, it makes sense to support businesses in mitigating pandemic risks. Many of the protective measures considered on the previous page for local government would serve equally well for many businesses. It is especially important to identify private facilities that may be closed to control the spread of the disease and discuss with them the rationale for closures and options available.

Consider These Actions

1. **Advise population.**
   - Work with health officials to provide public messages on:
     - Immunization, especially the time required to develop the vaccine
     - Good hygiene and hand-washing
     - Rationale for closures, isolation, quarantine, travel restrictions
   - Advise individuals and families on the need for home preparedness, including:
     - Food, water, and medications
     - Knowing how to care for sick family members
   - Inform community members on the important roles of volunteers during pandemic response and how they can prepare ahead of time, such as taking first-aid courses.

2. **Advise businesses / institutions.**
   - Inform businesses on the risks of pandemic and likely impacts to the local economy.
   - Explain public health measures that may affect businesses, including:
     - Rationale for closures and quarantine
     - Travel restrictions
     - Priority vaccinations
   - Advise businesses and community institutions on methods to continue operations during pandemic:
     - Identify essential functions
     - Separate staff from public
     - Hold “safe meetings”
     - Maintain operations with loss of 25 to 50% of staff
     - Cross-training of staff
     - Alternate sources of supplies
     - Set aside a contingency fund, or have access to credit

Tips for Success

* Consider the delivery of community awareness messages through existing organizations, such as service clubs, schools, business organizations, and non-profit institutions.

Objective 3 – Preparedness

For Local Government

Core Concepts

Employee Protection – To enhance the protection of local government workers, protocols may serve in controlling infection and setting priorities for immunization. In addition, a prolonged disease outbreak over a year or more may challenge existing employee health policies.

Business Continuity Plan – Many local governments have developed Business Continuity Plans in anticipation of threats to information systems and facilities, such as those arising from earthquakes, floods, or structural fires. These plans should also account for workforce degradation and impacts of a pandemic disease.

Supplies – Once a pandemic has been announced, local governments may find essential equipment and materials in short supply. Preparedness includes identifying supplies that will be required for local government response, and acquiring essential items ahead of time.

Staff Awareness – Local government staff must be aware of plans for pandemic response within the organization and other aspects of internal preparedness.

Consider These Actions

1. **Develop infection control protocols.**
   - Develop guidelines for surveillance, hygiene, cleaning, and facility closures.
   - Identify "sequester" facilities and procedures where essential staff can seek protection from exposure.

2. **Plan staff immunizations by priority.**
   - Identify priorities for employees to receive anti-virals and vaccines.
   - Inform health authority of the number of personnel who qualify for priority status.

3. **Develop employee over-time, temporary and leave policies.**
   - Develop policies for staff overtime, quarantine, and leave during pandemic.
   - Develop policies for temporary staff working longer than one year.
   - Develop policies for leave for care of family members and for bereavement.

4. **Plan for business continuity.**
   - Identify critical services and effects if they cannot be delivered.
   - Develop methods for overcoming shortfalls in personnel, facilities, supplies, data, and utilities.
   - Update contact lists for internal and external resources.

5. **Obtain supplies.**
   - Stockpile cleaning solutions and facility maintenance equipment.

6. **Inform staff of plans.**
   - Meet with employees to explain risks, infection control measures, immunization priorities, and employee health policies.
   - Advise on home and family preparedness.

Tips for Success

* Meet with regional health authorities to ensure that essential government persons are included on the list for priority distribution of anti-viral medications and vaccines.

Objective 3 – Preparedness

For Community

Core Concepts

Prepare for Community Response – In this context, preparedness anticipates actions by the local government to support the community at large, including individuals, families, institutions, and businesses.

Health Measures – Health officials will likely ask the local government to assist in supporting, delivering, and monitoring health care. Although health authorities will arrange for medically-trained personnel, the local government may be expected to provide non-traditional and non-medical facilities, equipment, personnel, and services to support health objectives.

Emergency Services – In addition to supporting health objectives, local governments will be expected to provide additional services to community members to serve a variety of needs.

Prolonged EOC Activation – Each expected wave will occur over an extended period (six to eight weeks). Therefore, EOC operations will be required over an extended period.

Outside Help May Not be Available – Multi-jurisdictional impacts during a pandemic may preclude the activation of mutual aid agreements between neighbouring local governments.

Consider These Actions

1. **Identify community facilities to support health efforts.**
   - Review and confirm availability of community facilities for health measures, including mass immunization clinics.

2. **Identify volunteer organizations.**
   - Meet with community volunteer organizations to identify potential roles.
   - Train ESS and SAR volunteers in special emergency services, such as monitoring home-bound residents.
   - Meet with health authority to confirm a volunteer management strategy.

3. **Identify and train response personnel.**
   - Train EOC staff in response to pandemic influenza event.
   - Exercise EOC with others, i.e., health authority, coroner, PEP.

4. **Communicate with general public.**
   - Describe what local government is doing to prepare for pandemic influenza.
   - Communicate a likely scenario and the value of health interventions, such as business closures.
   - Advise public to stockpile food, water, and medications.
   - Ensure health authority information strategy includes the local government.

5. **Help businesses.**
   - Meet with Chamber of Commerce and business leaders regarding the need for mutual support among businesses.
   - Support vulnerable private facilities in planning for pandemic influenza by providing information.
   - Meet with private sector providers of essential services.

Tips for Success

* Discuss with health authority the management of volunteers during pandemic response, distinguishing volunteers in health facilities from community volunteers such as SAR and ESS.

Objective 4 – Response

For Local Government

Core Concepts

Employee Protection – When influenza breaks out in the community, the local government will want to respond in ways that first protect its employees. This includes monitoring staff health to identify cases of influenza early, and taking steps to reduce the internal spread of the disease.

Staff Immunization – When the appropriate influenza vaccine is available from the health authority, all staff members should be offered immunization. If the vaccine is in short supply, the health authority should immunize essential local government personnel first.

Facility Closures – If ordered by the Medical Health Officer, some facilities under the control of the local government may be closed to assist in controlling the spread of infection. Closures may require the delivery of services through alternate means.

Continue Public Services – In the face of possible worker shortages, local government response to a pandemic influenza situation should include continuing public services as much as possible, especially essential services. This may require alternative personnel.

Consider These Actions

1. **Practice internal surveillance.**
   - Monitor employees at key facilities.
   - Maintain statistics on new and cumulative cases among employees.

2. **Implement infection control measures among staff.**
   - Activate internal infection control teams for local government offices, especially essential services.
   - Advise staff to work from home or to sequester themselves in small teams to avoid exposure as long as possible.
   - Advise staff to take protective measures.

3. **Immunize staff.**
   - When available, immunize local government employees by priorities.
   - Document immunization of each employee.

4. **Close local government facilities.**
   - Close public buildings as ordered by Medical Health Officer.

5. **Continue local government business.**
   - Implement plans for procedures to address supply and personnel shortfalls.
   - Provide transportation for essential employees to and from the workplace, if required.
   - Maintain the integrity of essential public works and local government services.
   - Assign light-duty jobs to speed re-entry of affected staff to working status.

6. **Inform staff.**
   - Keep staff informed on relevant events and actions throughout the pandemic period.

Tips for Success

- Employees are much less likely to come to work if their family members are ill. Work with health authority to provide vaccine and anti-viral medications to family members of critical employees.

Objective 4 – Response

For Community

Core Concepts

Role of Local Government – Local governments assist health authorities in delivering health services. In addition, local governments are expected to coordinate response on behalf of the community for all non-health related objectives. There is an expectation that the local government emergency operations center (EOC) will operate in accordance with BCERMS.

Role of Health Authority – The Medical Health Officer will take the lead role in requesting local government support of health-related response activities. A health agency representative will be assigned to the local government EOC, if possible. If not, the EOC should send a liaison officer to the appropriate health authority EOC, or keep in touch electronically.

Information Flow – It is critically important that the release of public information be coordinated among all operational levels. Information should flow easily between health services and emergency management organizations, and reach the general public in a timely manner. A lack of accurate information will cause confusion and public resentment, and will erode confidence in both health services and the local government.

Volunteers – Volunteers for some services (care for the home-bound) may depend on availability of medications. Without a vaccine or anti-viral drugs, the availability, numbers and actions of staff and volunteer services may be limited.

Consider These Actions

1. **Provide facilities to health authority.**
   - Arrange for and staff non-traditional health facilities, as directed by health authority.
2. **Provide security and enforcement.**
   - Provide security for vaccination clinics, vaccine and antiviral storage facilities.
   - Enforce private building closures, individual quarantines, and isolation.
3. **Control traffic, travel.**
   - Control movement of people and commodities in and out of the community.
4. **Implement volunteer management plan.**
   - Activate emergency social services, search and rescue, and mental health assistance for pandemic victims.
   - Call for and train volunteers.
5. **Support non-medical home care.**
   - Provide door-step services, including food, medications, and education material.
   - Telephone victims to check status and immediate needs.
   - Maintain database of confined persons.
6. **Activate mass fatalities plan.**
   - Support coroner services, as requested.
   - Assist local funeral directors with burial plots, cremation, and refrigeration.
7. **Advise businesses.**
   - Encourage maintenance of businesses related to pharmaceuticals, food, gasoline, and other commerce deemed necessary.
8. **Keep public informed.**
   - Provide public information via news media, call centres, and website in cooperation with the health authority.

Tips for Success

* Consider that people who recover from the illness are immune and may be the best source of volunteers to care for others.

Objective 5 – Recovery

For Local Government

Core Concepts

Internal Recovery – While the pandemic is underway, the local government may be actively engaged in internal recovery, including the restoration of personnel, data, and financial viability.

Staff Morale – Depending on the mortality rate associated with the virus, the local government may face the death of one or more officials, managers, or staff members. Such losses will inevitably impact remaining employees and may require stress counselling.

Replacing Lost Employees – To recover full functionality, the local government may need to hire new personnel to fill temporary or permanent positions vacated by those affected by the disease. Some positions may be filled through a redistribution of existing staff.

Records – Disruption of the local government workforce may result in the incomplete collection of essential records, such as property tax information and permit applications. Restoring or reconstructing such records serves the public interest and may enhance government revenues.

Financial Assistance – The provincial program of disaster financial assistance may be activated following a pandemic event, and could provide substantial funds to local governments engaged in response and recovery.

Debriefing – The conduct of debriefing meetings is common practice following disasters. A debriefing allows the local government to collect lessons learned from the experience and provides an opportunity to improve mitigation, preparedness and response for future events.

Consider These Actions

1. **Support affected employees.**
   - Provide stress counselling for staff.
   - Acknowledge employee fatalities, e.g., ceremonies.

2. **Fill vacancies.**
   - Develop hiring plan to replace incapacitated employees.
   - Select temporary staff to immediately fill essential positions while hiring is underway.
   - Redistribute internal human resources temporarily, as appropriate.

3. **Recover and reconstruct records.**
   - If required, identify and recover critical records, e.g., related to tax revenues.

4. **Apply for response financial assistance.**
   - Apply for compensation of appropriate response costs from the health authority.
   - Apply for provincial disaster financial assistance with costs for response and recovery.

5. **Evaluate impacts.**
   - Review, evaluate and assess impact of pandemic response and recovery.
   - Assess ability to resume normal local government services.
   - Report findings to Council / Board / Band.

Tips for Success

* Ensure all recovery actions for the local government organization are coordinated through a central committee, such as department heads.

Objective 5 – Recovery

For Community

Core Concepts

Recovery Occurs Between Waves – Health officials warn that pandemic illness may occur in two or more waves, arriving between 3 and 12 months apart. The entire pandemic event may persist for years before the Medical Health Officer declares it is "over." Under such circumstances, local governments will likely pursue recovery between the waves of attack.

Local Government Leadership – The general public may be emotionally traumatized by a significant pandemic. The potentially large numbers of grieving families and households where the principal wage-earner is deceased will require both social and financial support. A multi-agency Recovery Task Force will be needed to coordinate psycho-social and economic recovery for the community, led by the local government. This working task force plays an instrumental role in meeting the needs of families, individuals, and small businesses.

Economic Recovery – Community businesses closed by order of the Medical Health Officer and impaired by a lack of customers over an extended period are expected to suffer substantial losses and may be forced to permanently close. This consequence has implications for local employment and tax revenues. It may be both necessary and beneficial for all levels of government to consider financial aid packages to help businesses recover.

Consider These Actions

1. **Designate Recovery Director.**
   - Appoint a Recovery Director and establish a Policy Group.
   - Establish bank account for donated funds.

2. **Establish community recovery task force.**
   - Identify members of Recovery Task Force.
   - Prepare terms of reference.

3. **Identify and support recovery clients.**
   - Provide coordinated support services for persons impacted by pandemic through the Recovery Centre.
   - Engage in an "outreach" effort, including media broadcasts to reach people affected by pandemic.
   - Establish a website for disseminating recovery information.

4. **Identify and promote recovery resources.**
   - Identify local and out-of-community resources by service type.
   - Establish a Needs Committee comprised of key service providers.
   - Estimate the resource needs and time period required for recovery.

5. **Support transition to community services.**
   - Identify methods for enhancing community services that will likely be needed during recovery, e.g., food bank, homeless services, counselling, orphan services.

6. **Support local commerce.**
   - Meet with representatives of local businesses to ensure essential operations remain open.
   - Promote "buy locally" campaigns to help local businesses.

Tips for Success

* Refer to *Community Disaster Recovery – Local Authority Guidelines*, available through the PEP website at www.pep.bc.ca.

5. Additional Information on Pandemic Planning

This Guide offers a number of suggestions on how local governments can manage pandemic influenza. To support the basic concepts presented here, the Ministry of Health has prepared a webpage devoted to additional information on pandemic influenza issues. Working through an *Annotated Index* on the Ministry's website, readers can access more details on specific topics of interest.

The *Annotated Index* also provides links to additional guides, forms, and templates for use in recovery planning and implementation. Figure 6 illustrates the three levels of detail on recovery information available from the Ministry.

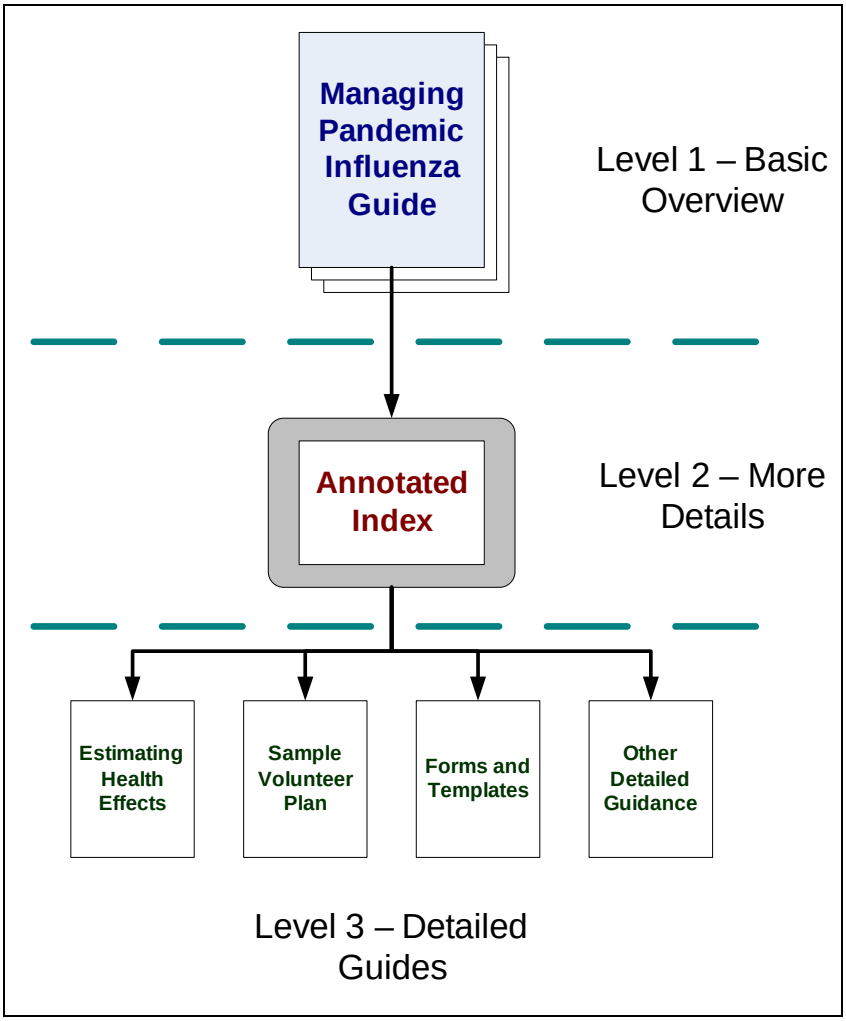

Figure 6. Levels of Detail in Pandemic Planning Information

Readers can access the Ministry of Health webpage at: **www.gov.bc.ca/health**

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