

## **Chapter 8: Public Health Measures**

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## Chapter 8 Public Health Measures

### 1.0 Introduction

Public Health Measures are non-medical interventions that may be used to reduce the spread of the influenza virus. Public health measures include public education, case and contact management, community-based disease control strategies (i.e., social distancing, school closures and restriction/cancellation of large public gatherings), and travel restrictions and border measures. The type of public health measures used will depend on the epidemiology of the virus (e.g., pathogenicity, modes of transmission, incubation period, attack rate in different age groups, period of communicability, and susceptibility to antivirals).

Important decisions will be made about community-based disease control strategies aimed at minimizing the transmission of influenza in the community. The Medical Officer of Health in consultation with other levels of government will be responsible for decisions regarding the implementation of community-based disease control strategies in order to best protect the public.

Public health measures to curtail community transmission should be consistently applied within and across jurisdictions. The severity of the pandemic strain and the stage of the pandemic, as it unfolds globally, would be considered when making this determination.

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Public Health Measures are being considered in the planning at all levels of government as a means to minimize the transmission of the novel virus during a pandemic. Until early epidemiological information is known, it is difficult to predict which public health measures will be most effective and therefore, need to be implemented in the community. Development of criteria and triggers for the implementation of any public health measure is continuing with the federal and provincial planning workgroups.

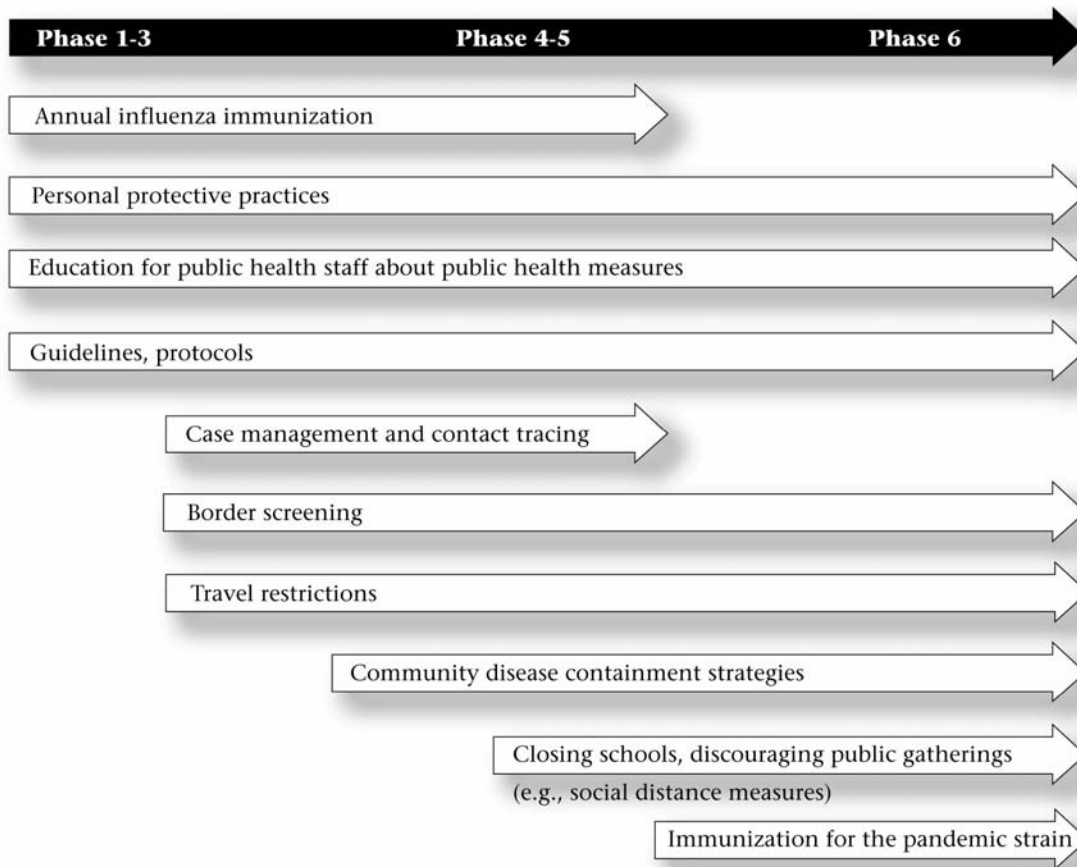
#### **A comprehensive approach to public health measures includes:**

- **Individual public health measures** to protect those who have contact with people with influenza, such as: the use of personal protective equipment and practices (i.e., annual influenza immunization, respiratory etiquette, hand hygiene, stay home if ill, self care if ill), case management and contact tracing, self isolation, and individual activity restrictions.
- **Community –based disease control strategies**, such as canceling public gatherings and closing schools, as described in the following table.

Pandemic Period	Public Health Measures
<b>Interpandemic Period</b>	<p>The effectiveness of public health measures during the interpandemic period depends primarily on:</p> <ul style="list-style-type: none"> <li>• the epidemiology of the pandemic strain - because influenza is highly contagious, the opportunity to avert or contain a pandemic will end once efficient, sustained human-to-human transmission is established.</li> <li>• the ability to implement public health measures – which will be affected by the phase of the pandemic, the human and financial resources available, the associated costs, and the public's acceptance of the measures.</li> </ul> <p>During the interpandemic period, Ontario will:</p> <ul style="list-style-type: none"> <li>• establish protocols for case management and contact tracing at different phases and stages of the pandemic</li> <li>• establish guidelines for the use of measures to increase social distance (e.g., closing schools or day nurseries, discouraging public gatherings)</li> <li>• establish guidelines for travel restrictions, in conjunction with the Public Health Agency of Canada (PHAC),</li> <li>• develop educational materials on influenza and personal protective practices</li> <li>• develop guidelines for public health staff on how to implement public health measures</li> <li>• review, revise and disseminate infection control guidelines.</li> </ul>
<b>Pandemic Alert Period</b>	<p>For public health measures to be effective, they must be used aggressively at the beginning of the pandemic. In the pandemic alert period (Phases 4 and 5), the focus will be on identifying ill individuals early – as well as those who had contact with them, in order to contain the spread of the virus (i.e., case management and contact tracing). Ontario will encourage aggressive follow-up of confirmed and suspected cases.</p>
<b>Pandemic Period</b>	<p>During the pandemic period, when a significant number of people are infected, the focus of public health measures will be on community containment strategies, such as measures to increase social distance (e.g., closing schools, discouraging public gatherings) and providing general messages about how to avoid getting or spreading influenza including:</p> <ul style="list-style-type: none"> <li>• If sick, stay home from day nursery, school, work and public events</li> <li>• Reduce non-essential travel</li> <li>• Avoid crowds</li> <li>• Wash hands frequently and meticulously</li> <li>• Practice respiratory etiquette, including covering one's mouth when coughing or sneezing and proper tissue disposal</li> <li>• Increase fresh air in buildings (i.e., open windows)</li> <li>• How to clean and disinfect environmental surfaces (i.e. walls, tabletops, etc)</li> <li>• When and how to seek medical attention in a way that minimizes exposure to influenza</li> </ul>

*Source: Ontario Health Plan for an Influenza Pandemic - Public Health Measures by Pandemic Periods*

### Timing/Use of Public Health Measures During a Pandemic (OHPIP)



Source: Ontario Health Plan for an Influenza Pandemic September 2006, page 6-6

For information on the roles and responsibilities related to public health measures at the federal, provincial and local levels by pandemic period and phase, please refer to Appendix 34 in Public Health Measures by Pandemic Period and Phase, in Ontario Health Plan for an Influenza Pandemic (OHPIP).

## 2.0 Public Education

An influenza pandemic is a global health emergency and therefore public demand for information will be extremely high and sustained as the illness spreads and is confirmed in Renfrew County. Public education is important during all of the pandemic phases.

**The goals of public education are to:**

- Minimize the time needed to disseminate educational materials to the public, both during an alert, and as the pandemic evolves and information needs change
- Increase baseline public knowledge (i.e. before an alert is issued) by providing information on pandemic influenza during the Interpandemic Period.
- Establish Renfrew County & District Health Unit as a reliable and trusted source of information on pandemic influenza through a well-coordinated and prepared educational/communication plan.

During the pandemic, information will be made available on risks, risk avoidance, and how/when to seek health care services. RCDHU's Health Info Line operates Monday to Friday 8:30 a.m. – 4:30 p.m. to address questions and issues from the general public. The hours of operation may be expanded during the pandemic. Information will continue to be shared with the public using a variety of communication channels, including media, print, and website.

**The Public Health Agency of Canada (PHAC) Public Education Recommendations:**

<b>PHAC Recommendations</b>	<b>Renfrew County &amp; District Health Unit</b>
<p><b>Prepare educational material for the general public</b> for use during the Interpandemic Period. Focus on:</p> <ul style="list-style-type: none"> <li>• risks and risk avoidance, universal hygiene behaviour (including respiratory hygiene)</li> <li>• information to reduce transmission of illness (including how to seek medical attention in a way that minimizes exposure opportunities)</li> <li>• preparation for the next phase</li> </ul>	<p><b>Educational Materials</b></p> <ul style="list-style-type: none"> <li>• Question and Answer Sheets</li> <li>• Hand Hygiene</li> <li>• Fact Sheet on Personal Preparedness</li> <li>• General Public Planning Guide</li> </ul> <p>(Provider fact sheets available at minisrty website at : <a href="http://www.health.gov.on.ca/pandemic">www.health.gov.on.ca/pandemic</a> )</p>
<p><b>Review/update educational materials for health care professionals.</b> Reinforce existing recommendations for management of patients presenting with febrile respiratory illness, including providing masks for coughing patients.</p>	<p><b>Educational Materials</b></p> <p>Planning Guides for</p> <ul style="list-style-type: none"> <li>• Hospital</li> <li>• Long-Term Care Homes</li> <li>• Community Health Care Centres (resource from the PIDAC Document)</li> </ul>
<p><b>Anticipate special educational and resource needs</b> e.g. translation requirements and targeted packages for more specific groups like physician offices, school boards, day nurseries, businesses etc.</p> <ul style="list-style-type: none"> <li>• Encourage business continuity planning that is appropriate for the unique challenges that would be presented by an influenza pandemic</li> <li>• Encourage school boards to strategize regarding continuity of education in the event that school facilities are closed.</li> </ul>	<p><b>Planning Guides include:</b></p> <ul style="list-style-type: none"> <li>• Business</li> <li>• Community agencies</li> <li>• Housing, residential and social service providers</li> <li>• Hospitals</li> <li>• Long-Term Care Homes</li> <li>• Upper and Lower Tier Municipalities</li> </ul>

**The Public Health Agency of Canada (PHAC) Public Education Recommendations (cont'd):**

PHAC Recommendations	Renfrew County & District Health Unit
<p><b>Ensure appropriate linkages are in place with communication staff</b> within the public health organization and determine roles, responsibilities and information flow in the event of a pandemic. Together with communication staff:</p> <ul style="list-style-type: none"> <li>• Have a toll-free telephone information line established or ready to be rapidly implemented with transcripts for prepared phone-line staff.</li> <li>• Consider components of the information dissemination process, including web-based postings as well as print material.</li> </ul>	<p><b>Incident Management System (IMS) Model</b></p> <ul style="list-style-type: none"> <li>• Public Information Lead</li> <li>• Internal/External consisting of public health and communication staff</li> </ul> <p><b>Communication Vehicles</b></p> <ul style="list-style-type: none"> <li>• Use of Health Info Line</li> <li>• Internet and Intranet Site</li> </ul>
<p><b>Develop templates for specific purposes</b> such as consent for immunization, and public education regarding antiviral drug therapy, availability and/or prioritization system</p>	<p><b>Templates include:</b></p> <ul style="list-style-type: none"> <li>• Enumeration Package/Tool</li> <li>• Workplace/School Absenteeism Reporting Tool</li> <li>• Respiratory Outbreak Control Package for Acute Care Facilities – Initial Respiratory Outbreak Notification/Respiratory Outbreak Response</li> <li>• Respiratory Outbreak Line Listing</li> <li>• Consent for immunization</li> </ul>
<p><b>Ensure ongoing training of staff</b> within the public health authority, to ensure that expertise is not lost due to staff turnover.</p>	<ul style="list-style-type: none"> <li>• Continuing education/training of staff</li> </ul>

For additional information on public education, refer to chapter 6 – Communications, which provides information about the role of communications and outlines the communication plans and activities RCDHU would use to provide timely, accurate and credible information to its staff, the public, provincial and federal governments, hospitals and other responding agencies.

### 3.0 Case Management

Individuals reported to Renfrew County & District Health Unit with febrile-respiratory illness (FRI) or influenza-like illness (ILI) will be followed using the Provincial Infectious Disease Advisory Committee's (PIDAC) document "Preventing Febrile Respiratory Illness" (2005) available online at [http://www.health.gov.on.ca/english/providers/program/infectious/diseases/ic\\_fri.html](http://www.health.gov.on.ca/english/providers/program/infectious/diseases/ic_fri.html)

This document reflects the best expert opinion on the prevention and control of droplet-spread febrile respiratory illness. Components of these best practices include: influenza immunization, case finding and surveillance, preventive practice, reporting, and evaluation.

Isolation of cases early in the Pandemic Alert Period or Pandemic Period in Renfrew County may prevent secondary cases or slow the spread of the illness within the population. This may also prevent or reduce disruption of the health care system by flattening the epidemic curve, that is reducing the demand for health care services from a short intensive outbreak to a more manageable level of demand over a longer

period. This could also help reduce societal disruption and potentially buy time for vaccine manufacture and administration, thus mitigating the effects of the pandemic in the community as a whole. Individual case management early in the pandemic will facilitate the collection of epidemiological data that could be used to characterize how the virus presents in Renfrew County. Ongoing evaluation of the epidemiological data from individual cases and comparisons with information from other affected countries may help focus control efforts.

### **The Goals of Case Management**

- Increased knowledge about methods to reduce disease transmission.
- Reduced opportunity for transmission of the novel virus.
- Containment of an inefficiently spread virus or delay of the spread of the pandemic virus.
- Documentation and reporting of ill individuals meeting surveillance case definitions.
- An integrated case management system that adapts as the situation evolves.



**Recommendations for Case Management by the Public Health Agency of Canada:**

<b>Canadian Pandemic Phase</b>	<b>Case Management</b>
<p><b>Pandemic Alert Period, sporadic activity in Canada - Phase 3</b></p> <p>Sporadic human infections(s) with a novel virus subtype in Canada, with no spread, or at most rare instances of spread to close contacts only.</p>	<ul style="list-style-type: none"> <li>• Facilitate appropriate management of ill individual(s) suspected of having the novel virus identified through a surveillance system               <ul style="list-style-type: none"> <li>⇒ Disseminate messages to front line health care providers in conjunction with enhanced surveillance protocols regarding: the notification/reporting process for ill individuals of concern (i.e., those with a potential risk factor due to travel or contact with an infected avian/animal source), any updates on infection control precautions, clinical management or laboratory testing requirements.</li> </ul> </li> <li>• Report individual cases and facilitate lab testing as agreed upon in the enhanced surveillance process to provincial and federal authorities</li> <li>• Isolate ill individuals in hospital (if clinically indicated or recommended based on available epidemiological data) or at home               <ul style="list-style-type: none"> <li>⇒ In-home management should include follow-up of both the case and their close contacts through active surveillance, education regarding infection control precautions in the home setting and instructions regarding what to do if their illness progresses.</li> <li>⇒ Adults recommended for self-isolation at home should stay there for a minimum of 5 days after onset of symptoms (7 days for young children) or until symptoms have resolved, whichever is longer (Period of communicability may determine length of isolation).</li> <li>⇒ Cases should be given instructions regarding infection control measures to be implemented if they must leave their home to visit a health care provider (e.g., phone ahead, wear a mask).</li> </ul> </li> <li>• Medical management of these individuals would likely include treatment with antiviral drugs (depending on availability and sensitivity profile of the novel virus). This treatment will need to be monitored, with any relevant outcomes (e.g. clinical deterioration despite initiation of antivirals within 48 hours of symptom onset, laboratory evidence of viral resistance or compliance problems/adverse events) reported to the appropriate public health authority.</li> </ul>
<p><b>Pandemic Alert Period, sporadic activity in Canada - Phase 4 or 5</b> Outside of Canada clusters resulting from human to human transmission may be occurring but the virus has not demonstrated the efficiency of transmission necessary to cause a pandemic.</p>	<p>Same as above.</p>

Canadian Pandemic Phase	Case Management
<p><b>Pandemic Alert Period, localized/widespread cluster activity in Canada -Phase 4 or 5</b> Cluster(s) occurring in Canada with "limited" (phase 4) or "substantial" (phase 5) pandemic risk based on various factors. Outside of Canada clusters may be occurring (assuming the virus did not originate in Canada) but the virus has not demonstrated the efficiency of transmission necessary to cause a pandemic.</p>	<ul style="list-style-type: none"> <li>• Same as above.</li> <li>• Aggressively implement protocols for influenza case and outbreak management with consideration of the recommendations in the infection control component of the Canadian Pandemic Influenza Plan. These measures include:               <ol style="list-style-type: none"> <li>1. Isolation of cases</li> <li>2. Laboratory testing of suspected cases</li> <li>3. Closing of affected hospital wards or institutions to visitors etc.</li> <li>4. Aggressive contact tracing and follow-up (refer to contact tracing)</li> <li>5. Individual case reporting to provincial and federal public health authorities</li> </ol> </li> <li>• Medical management of cases presenting within 48 hours of symptom onset may include antiviral treatment depending on the availability of these drugs.</li> <li>• During the Pandemic Alert Period it is anticipated that antiviral drugs will be used to treat the first cases identified in Canada in an attempt to control subsequent spread of these cases. Once the pandemic is declared or the supplies dedicated for this early control strategy are exhausted, the antiviral strategy will change to focus on the overall goal of the pandemic response by encouraging dispensing remaining medications using the nationally agreed upon list of priority groups/indications.</li> <li>• As previously noted, antiviral treatment will need to be monitored with outcomes reported to the appropriate public health authority.</li> </ul>
<p><b>Pandemic Period, Sporadic Cases occurring in Canada - Phase 6</b> Sporadic infection(s) with the pandemic virus detected in Canada. No clusters identified in Canada.</p>	<p>Same as above.</p> <p><b>Note:</b> If the incubation period, period of communicability and method of transmission for the novel strain are consistent with other known influenza strains, it is likely that this phase will have a very short duration or may even be skipped in Canada (i.e., novel virus activity may not be detected prior to the occurrence of a cluster of cases).</p>

Canadian Pandemic Phase	Case Management
<p><b>Pandemic Period, Localized or widespread activity occurring in Canada - Phase 6</b></p> <p>Sustained transmission of the virus resulting initially in clusters followed by localized and widespread activity in the general Canadian population.</p>	<p>⇒ to minimize the possibility of transmission (e.g., have them wear a mask when in public settings).</p> <ul style="list-style-type: none"> <li>• Except when As case numbers increase, operationalize the sections of the plan that apply to clinical care (e.g. coordinate patient flow to appropriate sites/settings).</li> <li>• Switch from individual case reporting to reporting of more broad indicators of pandemic impact, (e.g., activity level, hospitalizations), as per surveillance guidelines.</li> <li>• Provide public messaging on self care (including isolation), reporting of illness, where, when and how to present for medical assessment, and availability of limited resources (discontinue individual-focused active surveillance).</li> <li>• Determine the duration of isolation for ill individuals cared for outside of a health care facility based on the epidemiological data available at the time. <ul style="list-style-type: none"> <li>⇒ In the absence of data, isolate cases until 24 hours after their symptoms have resolved or which-ever is longer. (At the time of the pandemic it may become necessary for essential workers to return to work during their convalescent period when they may still be communicable. In this situation, health authorities may make recommendations for these individuals visiting a health care provider, ill/infected individuals should stay at home during this period and avoid close contact with unexposed household members, (unless an alternative diagnosis is established).</li> </ul> </li> </ul> <hr/> <p>⇒ Consider extending this isolation period for immuno-compromised patients and children, who are more likely to have prolonged viral shedding.</p> <ul style="list-style-type: none"> <li>• Use of antiviral drugs will be based on the priority groups/indications, therefore not all cases occurring during a pandemic may qualify for a treatment course (refer to CPIP Antiviral Annex).</li> <li>• If cases have occurred in Canada prior to this period, it will be necessary to communicate any changes to the recommendations for case management. <ul style="list-style-type: none"> <li>⇒ A more individualized focus may be possible including individual case reporting and management</li> <li>⇒ Consideration should be given to evaluating the implemented case management strategies in order to optimally inform the response to any additional waves or pandemics</li> </ul> </li> </ul>

Compliance among isolated individuals will likely vary with severity of the illness and their perception that they are actually infected with the pandemic virus. Personal situations, for example, the tolerance of employers and/or compensation available may also affect compliance. Legal orders for isolation may be necessary in some situations; however this “individual focused” intervention will not likely be sustainable beyond the earliest stages of the pandemic.

Individual case management practices will likely be stopped once disease transmission has occurred in the general community. Specific criteria and triggers for this decision are to be developed in partnership with the OHPIP Public Measures Workgroup so that consistency in management is maintained with health units throughout Ontario.

### 3.1 Self Isolation

**Individuals who are ill will be asked to stay home from work, school/day nursery and public events. The key message will be to isolate yourself at home**, for a minimum of 5 days after onset of symptoms (7 days for young children) or until symptoms have resolved, or which ever is longer. Infection control measures should be implemented if ill individuals must leave their home to visit a health care provider (e.g., phone ahead, wear a mask).

### 3.2 When to Seek Medical Attention

The decision on when to seek medical attention can be complicated by many factors including things like age, existing health problems, or current medications, to name a few. Below are some points to think about when you are trying to decide whether or not you need to seek medical advice. You may get advice from your family doctor/general practitioner, Renfrew County & District Health Unit’s Health Info Line at (613)-735-8666/1-800-267-1097 ext.666 or Telehealth Ontario’s confidential telephone service (available 24 hours per day, 7 days per week) at 1-866-797-0000. If your symptoms are severe and you think you need immediate attention, go to the closest hospital emergency department or call 911.

#### Adults

If you are a **normal healthy person** and have been suffering with the flu, it is time to call your doctor, health line or 911 if:

- You become short of breath while resting or doing very little.
- Your breathing is difficult or painful.
- You are coughing up bloody sputum.
- You are wheezing.
- You have had a fever for three or four days and you are not getting better – or you may be getting worse.
- You have started to feel better, and suddenly you get a high fever and start to feel sick again.
- You or others note that you are extremely drowsy and difficult to wake up or that you are disoriented and confused.
- You have extreme pain in your ear.

**Seek medical attention as soon as possible, in order to prevent your condition from worsening. Bacteria may have infected your damaged tissues. At this point your doctor may consider giving you an antibiotic.**

**If you have heart or lung disease or any other chronic condition that requires regular medical attention, if you are frail, if you have an illness, or if you are on treatments or medications that affect your immune system and you get the flu, call your doctor.** If you are living with a long-term illness, your doctor may suggest changes to your usual management routine and/or provide you with extra help in treating the flu and preventing complications, such as prescribing an antiviral medication. Antiviral medications must be taken within 48 hours of the first symptoms to be effective so call your doctor right away.

### **Children**

The Canadian Pediatric Society recommends that you should contact your doctor or take your child to the emergency department if your child has symptoms of influenza and:

- Has lung or heart disease, has an illness or is taking treatment that affects the immune system, takes acetylsalicylic acid (ASA or Aspirin) regularly for a medical condition or has any other chronic illness requiring regular medical care.
- Is less than 3 months old and has a rectal temperature over 38.5°C.
- Has trouble breathing when resting, is wheezing, has chest pain when breathing or is coughing up bloody sputum (phlegm).
- Drinks very little fluid and has not urinated at least every 6 hours when awake.
- Has vomiting or severe diarrhea.
- Is constantly irritable and will not calm down.
- Is listless, not interested in playing with toys or unusually sleepy.
- Still has a fever and is not feeling better after 5 days or was feeling better and suddenly develops a new fever.

**Take your child immediately to a hospital emergency department or call 911 if your child:**

- Has severe breathing trouble or blue lips.
- Is limp or unable to move.
- Is hard to wake up or does not respond.
- Has a stiff neck.
- Seems confused.
- Has a seizure (convulsion/fit).

## **4.0 Management of Contacts of Cases**

Contact tracing will be a public health measure used only in the initial stages of the pandemic strain entering Renfrew County. According to the Canadian Pandemic Influenza Plan, contacts are those individuals who have had face to face exposure within one metre of a case. RCDHU staff will ask each case to identify close contacts from 24 hours prior to the onset of symptoms until isolation at home or in the hospital. RCDHU staff will contact those individuals and assess them for symptoms.

### **Goals of Contact Management**

- To identify infected contacts of cases prior to their becoming communicable.
- To detect additional cases and any decrease in the interval between onset of communicability and isolation.
- To limit the spread or slow the spread of the virus.
- To ensure that people in close contact with cases will have knowledge regarding how to reduce the possibility of further exposure to the virus.
- To gain knowledge of the impact of implemented strategies.

**General Recommendations:**

- Health care workers who are contacts of cases due to occupational exposure should follow the directions provided by their occupational health and/or infection control departments within their facility.
- Risk assessments should be performed in order to ensure that the following recommendations are tailored to suit the specific situations, especially prior to the declaration of a pandemic.
- All contacts of cases should be provided with information on:
  - Personal protective measures (e.g. hand washing)
  - Symptoms of influenza-like illness (ILI)
  - What to do if they develop symptoms (i.e., who to call and when)
  - How to seek medical attention for any reason, and
  - The objectives and expectations with respect to any activity restrictions
- Educate contacts and members of their household about good hand and respiratory etiquette and to frequently clean and then disinfect household surfaces that could be potentially contaminated, particularly during the 3 days following the last exposure to a case.
- If a contact of a case develops one or more symptoms compatible with influenza, then they should be managed as a case.
- Any use of antivirals for post-exposure prophylaxis should ideally be monitored, with outcomes (break-through infection and any adverse events) reported to the appropriate health authority.

**Recommendations for Contact Management:**

Canadian Pandemic Phase	Contact Management
<p><b>Pandemic Alert Period, Sporadic Activity in Canada - Phase 3</b> Sporadic human infection(s) with a novel virus subtype in Canada, with no spread, or at most rare instances of spread to close contacts only.</p>	<p><b>Monitoring</b></p> <ul style="list-style-type: none"> <li>• Trace contacts of cases and monitor for symptoms of illness for 3 days after last exposure to the case or for the duration of the incubation period associated with the novel virus – which ever is longer.</li> <li>• Monitoring for illness may be passive (i.e., contacts are encouraged to self-monitor and report any illness) or active, with or without activity restrictions, depending on the specific situation and the discretion of Medical Officer of Health.</li> </ul> <p><b>Activity Restriction</b></p> <ul style="list-style-type: none"> <li>• Consider advising contacts to defer travel to unaffected areas for the duration of the monitoring period.</li> <li>• This precautionary measure is intended to reduce the risk that a contact of a case transmits the infection when it is unclear whether human to human transmission is occurring.</li> </ul>

Canadian Pandemic Phase	Contact Management
	<p><b>Antiviral Use</b></p> <ul style="list-style-type: none"> <li>Do not routinely offer post-exposure prophylaxis with antiviral drugs to the household or any other close contacts of human cases in the absence of any suspected human-to human transmission however, consider antiviral drugs in severe or unusual cases or when limited human-to-human transmission cannot be ruled out. (see Human Health Issues related to Domestic Avian Influenza Outbreaks, Interim Guidelines, July 2004 for additional recommendations).</li> <li><b>Recommend annual flu vaccine</b></li> </ul>
<p><b>Pandemic Alert Period, Sporadic</b></p> <p><b>Activity in Canada - Phase 4 or 5</b> Outside of Canada clusters resulting from human-to-human transmission may be occurring but the virus has not demonstrated the efficacy of transmission necessary to cause a pandemic.</p>	<p><b>Monitoring</b></p> <ul style="list-style-type: none"> <li>Trace contacts of cases and implement <b>active surveillance</b> for symptoms of illness for 3 days after last exposure to the case or for the duration of the incubation period associated with the novel virus – whichever is longer.</li> </ul> <p><b>Activity Restrictions</b></p> <ul style="list-style-type: none"> <li>If contacts are promptly identified (i.e. within the incubation period), quarantine them or as a minimum ask them to restrict contact with others for 3 days after last contact with the case or for the duration of the incubation period, whichever is longer. The decision to quarantine would be based on the risk assessment, which takes into consideration the specifics of the situation(s), including severity of illness and pandemic potential of the virus.</li> </ul> <p><b>Antiviral Use</b></p> <ul style="list-style-type: none"> <li>Consider use of antivirals for post-exposure prophylaxis, depending on availability and resistance status of the novel strain.</li> </ul> <p><b>Consider giving annual flu vaccine</b></p>
<p><b>Pandemic Alert Period,</b></p> <p><b>Localized/Widespread cluster activity in Canada - Phase 4</b> Small localized cluster(s) occurring in Canada with "limited" (phase 4 ) pandemic risk based on various factors.</p>	<p><b>Monitoring</b></p> <ul style="list-style-type: none"> <li>Aggressively trace contacts of cases and implement active surveillance for illness in these individuals.</li> </ul>

Canadian Pandemic Phase	Contact Management
	<p><b>Activity Restrictions</b></p> <ul style="list-style-type: none"> <li>• If contacts are promptly identified for the cases (i.e., within the known or expected incubation period), quarantine these individuals or at a minimum ask them to restrict their contact with others for a period of 3 days after last contact with the case or for the duration of the incubation period associated with the novel virus, whichever is longer.</li> <li>• Recommend that contacts refrain from traveling for the duration of the monitoring period.</li> </ul> <p><b>Antiviral Use</b></p> <ul style="list-style-type: none"> <li>• Consider use of antiviral drugs for post-exposure prophylaxis of close contacts depending on the availability of the drugs and resistance status of the novel virus.</li> </ul>
<p><b>Pandemic Alert Period, Localized or Widespread cluster activity in Canada – Phase 5</b> Cluster(s) occurring in Canada with “substantial” pandemic risks based on various factors.</p>	<p><b>Monitoring</b></p> <ul style="list-style-type: none"> <li>• Aggressively implement protocols for influenza case and outbreak management as long as possible with consideration of the recommendations in the infection control component of the CPIP.</li> <li>• Assessment of exposure may involve identifying possible exposure sites (e.g., schools, workplaces) rather than trying to identify individuals that were in close contact with the case.</li> <li>• If feasible consider active surveillance for close contacts of the case(s).</li> <li>• Facilitate and encourage self-monitoring for ILI for individuals linked to possible exposure sites but with unknown exposure to case(s).</li> <li>• Provide instructions and resources for those “self-monitoring” to report any early signs of ILI immediately (24 hours/day, 7 days/week) and receive instructions regarding isolation and medical management.</li> </ul> <p><b>Activity Restrictions</b></p> <ul style="list-style-type: none"> <li>• Quarantine close contacts and individuals linked to the exposure sites or at a minimum ask these individuals to restrict their contact with others for a period of 3 days after last contact with the case or for the duration of the incubation period associated with the novel virus – which ever is longer.</li> <li>• If not quarantined, recommend that contacts and individuals linked to exposure sites refrain from traveling for the duration of the monitoring period.</li> </ul>



Canadian Pandemic Phase	Contact Management
	<p><b>Antiviral Use</b></p> <ul style="list-style-type: none"> <li>• Consider use of antiviral drugs for post-exposure prophylaxis of close contacts depending on the availability of the drugs and resistance status of the novel virus.</li> <li>• Assist in coordinating the distribution of antivirals for this purpose as supplies will be limited and this strategy will only be used briefly prior to the declaration of a pandemic in an attempt to control spread of the novel virus.</li> <li>• Discontinue this strategy once a predetermined trigger (e.g. detection of community spread) is met or the supplies dedicated for this early control strategy are exhausted.</li> </ul>
<p><b>Pandemic Period, Sporadic Cases occurring in Canada - Phase 6</b> Sporadic infection(s) with the pandemic virus detected in Canada. No clusters identified in Canada</p> <p><b>Note:</b> If the incubation period, period of communicability and method of transmission for the novel strain is consistent with other known influenza strains, it is likely that this phase will have a very short duration and may not occur at all in Canada (i.e., novel virus activity may not be detected prior to the occurrence of a cluster of cases).</p>	<p><b>Monitoring</b></p> <ul style="list-style-type: none"> <li>• Identify possible exposure settings and instruct all close contacts of the case(s) and individuals linked to the exposure setting (e.g., passengers on same flight) to self-monitor for early signs of ILI for 3 days after last exposure to the case or for the duration for the incubation period associated with the novel virus – whichever is longer.</li> <li>• Provide instructions and resources for those “self-monitoring” to report any early signs of ILI immediately (24 hrs/day, 7 days/week) and receive instructions regarding isolation and medical management.</li> </ul>
	<p><b>Activity Restrictions</b></p> <ul style="list-style-type: none"> <li>• Educate known and potential contacts of cases about the period of communicability for influenza and the need to isolate themselves immediately should they start to develop signs of ILI.</li> <li>• Discourage travel during the “selfmonitoring” period.</li> </ul> <p><b>Antiviral Use</b></p> <ul style="list-style-type: none"> <li>• Support/facilitate distribution of antiviral drugs (from stockpiles) for indications identified in the nationally agreed upon priority list.</li> </ul>

Canadian Pandemic Phase	Contact Management
<p><b>Pandemic Period, Localized or Widespread activity occurring in Canada -Phase 6</b> Sustained transmission of the virus resulting initially in clusters, followed by localized and widespread activity in the general Canadian population</p>	<p><b>Monitoring</b></p> <ul style="list-style-type: none"> <li>• As the number of cases and subsequent contacts increases, advice to contacts should be incorporated in messages directed at the affected community as a whole.</li> <li>• Provide guidance on how to monitor for signs of ILI (e.g., temperature recording or identification of respiratory symptoms).</li> <li>• Contact follow-up may intensify once pandemic activity appears to be declining in order to identify the end of a pandemic wave.</li> </ul> <p><b>Activity Restriction</b></p> <ul style="list-style-type: none"> <li>• If quarantining of contacts was previously implemented consider discontinuing this practice at this phase, (when the virus is known to be efficiently spreading from human to human and resources might be better utilized for other activities).</li> </ul> <p><b>Antiviral Use</b></p> <ul style="list-style-type: none"> <li>• Support/facilitate distribution of antiviral drugs (from stockpiles) for indications identified in the nationally agreed upon priority list.</li> </ul>

Source: Public Health Agency of Canada

**Post-Pandemic Period** - Reports of cases counts and other broad indicators of pandemic activity in Canada suggest that the pandemic virus is no longer causing significant illness in the population.

- Consider evaluation activities examining the effectiveness of the contact management strategies employed during the pandemic wave(s).

## 4.1 Quarantine

Quarantine of well individuals who have been exposed to a confirmed case of influenza is a community-based disease control measure that may be considered in order to slow transmission in the community. If used, it will be most effective in the very early stages of detection of the pandemic influenza strain in Renfrew County. Individuals identified as contacts may be asked to isolate themselves at home for the incubation period of influenza.

Once transmission occurs in the community, this measure will no longer be effective to slow or contain transmission. At that time, Renfrew County & District Health Unit will use community-wide communication strategies to inform the general public of what to do when they have been exposed to influenza, how to care for themselves and how/when to seek health care services. Information will also be posted on the RCDHU pandemic influenza webpage.

Quarantining of contacts will require extensive public health resources as its success as a containment/control strategy is contingent on thoroughness of contact tracing, rapid implementation and ongoing monitoring. This effort will not be sustainable beyond the Pandemic Alert Period and depending on the size of the outbreaks may need to be discontinued prior to pandemic activity in Canada (i.e., Phase 6).

## **5.0 Community Based Disease Control Strategies**

Important decisions will be made about community-based disease control strategies aimed at minimizing the transmission of influenza in the community. The Medical Officer of Health, together with other levels of government, will be responsible for decisions regarding the implementation of community-based disease control strategies in order to best protect the public. The triggers for the following measures will depend on the measure and on the way the pandemic unfolds. In general, implementation decisions regarding these measures will likely be made locally. However, it is recognized that directions may also be forthcoming from the federal and provincial governments to ensure consistency of a broad-based approach.

In the pandemic response phase, the Renfrew County & District Health Unit's general message to the public will be to stay home from public events/locations whenever possible, particularly if they are ill and to practice "social distancing" whenever possible. Reduction of non-essential travel will be stressed.

### **5.1 Stay home (i.e., self-isolate) if you have fever and new onset of respiratory symptoms**

Individuals who are ill will be asked to stay home from work, school/day nursery and public events. The key message will be to isolate yourself at home, adults for a minimum of 5 days after onset of symptoms (7 days for young children) or until symptoms have resolved, whichever is longer. Infection control measures should be implemented if ill individuals must leave their home to visit a health care provider (e.g., phone ahead, wear a mask).

### **5.2 School/Day Nursery Closures**

Closure of schools and day nurseries will need to be considered, as children are known to be efficient transmitters of influenza. Closing schools and large day nurseries may reduce transmission or delay spread of the disease (both in this age group and in younger siblings, parents and close contacts of school and child care attendees). These control measures will undoubtedly cause increased hardship to parents and caregivers and will have profound effects on the business sector, as parents/caregivers may need to take time off work to provide child care. The costs/benefits will need to be weighed before making the decision to implement this control measure. The Canadian Pandemic Influenza Plan outlines advantages and disadvantages of this public health measure. It states that this strategy would be triggered by the declaration of one or more confirmed cases in the community by the local public health authority (i.e., confirmation of pandemic presence) and depending on the epidemiological context (i.e., extent to which these settings are expected to contribute to transmission based on observed age of cases etc.). It would not be necessary or desirable to wait until spread within these settings is demonstrated.

The provincial public health measures workgroup is in the process of further developing criteria and triggers for the implementation of this measure. This will help ensure a consistent response across the province. Discussions are beginning at the provincial level with the Ministry of Education.

### **5.3 Large Gathering Restrictions/Cancellations**

Consideration will need to be given to the benefit of canceling large indoor gatherings in the community. This could potentially decrease the number of opportunities for exposure to influenza from close proximity to others. Gatherings may include funeral services, sporting events, religious gatherings, conferences or any other large public events. Planning will need to continue to identify criteria and triggers for such decisions with key stakeholders and the provincial and federal Public Measures Workgroups.

Due to the unknown effectiveness and difficulty with sustainability of canceling or restricting large indoor gatherings, it is not recommended as a broad public health measure. If the epidemiology of the pandemic suggests higher morbidity and/or mortality in specific types of individuals (e.g. adolescents) then cancellation of specific events known to attract this “high risk” group should be considered, especially if the virus is being efficiently transmitted. The objective of these “targeted” cancellations/restrictions would be to reduce transmission.

## 5.4 Social Distancing

Once pandemic influenza has arrived in the community, people may want to consider using “social distancing” as a way to reduce the risk of being exposed to the influenza virus. The more people you are in contact with, the more you are at risk for coming in contact with someone who is infected with influenza. Social distancing means reducing or avoiding contact with other people as much as possible. Some possible strategies for social distancing include:

- Minimize visitors to your home.
- Cancel or postpone family gatherings, outings or trips.
- Avoid shaking hands, hugging, or kissing people as greetings.
- Stock up on household items (6 to 8 weeks) such as groceries or other supplies (e.g. cleaners, tissues, medications) so you do not have to go shopping as often. This will ensure that you are ready in the event of an emergency in the community such as pandemic influenza.
- Avoid peak shopping times and find out which stores are open 7 days a week/24 hours per day.
- Order groceries online or over the phone for delivery.
- Arrange to pay bills at ATMs, online or over the phone.
- Work from home or arrange to work flex hours to avoid rush hour crowding on public transit.
- At work, minimize your contact with other people: keep your office door closed; use stairs instead of crowded elevators; bring your lunch to work and eat at your desk away from others; cancel non-essential face-to-face meetings and instead use teleconferencing, videoconferencing, emails, or fax; and if you need to meet with people, stay at least one meter apart (three feet).
- Consider walking, driving or riding a bike.

## Decision Chart for Situations to Avoid During a Pandemic

**Black box** – Consider canceling or postponing events and avoid places that are listed (or similar to those listed).

**Grey boxes** – If possible avoid places and events in the grey boxes

**Light grey boxes** – May attend places or events in the light grey box, but continue to use good personal and environmental hygiene practices.

		How many people am I in contact with?		
		Very Crowded	Many People	A Few People
How long am I in this situation?	Prolonged (over 4 hours)	<ul style="list-style-type: none"> <li>• Day nursery</li> <li>• Elementary &amp; high school</li> <li>• Post-secondary institutions (including dormitories)</li> </ul>	<ul style="list-style-type: none"> <li>• Closed workplaces</li> </ul>	<ul style="list-style-type: none"> <li>• Home</li> <li>• Baby-sitting</li> </ul>
	Intermediate (over 1 hour)	<ul style="list-style-type: none"> <li>• Entertainment venues (movies, concerts)</li> <li>• Sporting events</li> <li>• Community centres</li> <li>• Swimming pools</li> </ul>	<ul style="list-style-type: none"> <li>• Day tours (via buses, boats)</li> <li>• Religious gatherings</li> <li>• Business conventions and trade shows</li> <li>• Weddings or funerals</li> <li>• Playgrounds</li> <li>• Team sport activities</li> </ul>	<ul style="list-style-type: none"> <li>• Restaurants</li> <li>• Shopping malls</li> </ul>
	Short (less than 1 hour)	<ul style="list-style-type: none"> <li>• Public transit during rush hour</li> <li>• Retail stores during major sales events</li> </ul>	<ul style="list-style-type: none"> <li>• Public waiting areas or lines (e.g. banks, grocery stores, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Home deliveries</li> </ul>

*Adapted from Vancouver Coastal Health Regional Pandemic Influenza*

## 5.5 Community Use of Masks - Use of masks by well individuals

The use of masks is a difficult and unresolved issue. There is no evidence that the use of masks in general public settings will be protective when the influenza virus is circulating widely in the community. However it is acknowledged that individual people who are wearing a surgical mask properly at the time of an exposure to influenza may benefit from the barrier that a mask provides. At this time the Canadian and provincial plans recommend the use of surgical masks and eye protection for health care workers providing direct care (face-to-face contact) to patients with influenza-like illness.

As well, the plans recommend that people who are ill with influenza-like illness who must leave their home to receive medical attention should wear a mask. The plans do not recommend masks as a community-based disease control strategy. However the federal plan states that members of the public may wish to purchase and use masks for individual protection.

If masks are used, they should only be used once and must be changed if wet (because they become ineffective when wet). As well, people who use masks should be trained on how to use them properly to avoid contaminating themselves when removing the mask. In addition, there may be issues of access to masks due to cost or supply shortages and other feasibility concerns.

As of this date the World Health Organization does not have a formal position on the use of masks but will likely be recommending evaluation of the effectiveness of mask use (and respiratory etiquette) with respect to prevention of cases, costs and alleviation of public concern.

Further consideration should be given to the wearing of masks in community situations where potential exposure to infectious individuals is likely and unavoidable e.g. care of an ill family member, large public gatherings. Additional research is urgently needed.

The following table outlines the advantages and disadvantages of the use of masks by well individuals as stated in the Canadian Pandemic Influenza Plan

<b>Advantages of the use of masks by well individuals</b>	<b>Disadvantages of the use of masks by well individuals</b>
<ul style="list-style-type: none"> <li>• May decrease exposure to large droplets containing virus.</li> <li>• Psychologically reassures people that they are taking measures to prevent infection.</li> </ul>	<ul style="list-style-type: none"> <li>• Hands and other surfaces may be contaminated when removing masks (requires public education).</li> <li>• May cause panic if availability of masks is limited.</li> <li>• Public purchase of mask may limit availability of masks in health care settings where they are required.</li> <li>• Not all members of the public can afford to purchase masks – if recommended by public health there could be an expectation that they will be publicly-funded and provided by public health.</li> <li>• It is not feasible to wear masks constantly for the duration of pandemic wave.</li> <li>• Use of masks, apart from other infection control practices, is of limited effectiveness and may provide a false sense of security.</li> </ul>

Source: Canadian Pandemic Influenza Plan

## 5.6 Community Based Strategies Recommended or Not Recommended as a Community Based Intervention

Recommended as a community based intervention	Not recommended as a community based intervention
<ul style="list-style-type: none"> <li>• Staying home from public events/locations (i.e., self-isolate) if you have a fever and respiratory symptoms.</li> <li>• Consideration of school and day nursery closures.</li> <li>• Restrict indoor public gatherings other than schools if “high risk” settings can be identified.</li> </ul>	<ul style="list-style-type: none"> <li>• Broad restrictions on indoor public gatherings other than schools.</li> <li>• Use of masks by well individuals (not including care providers).</li> <li>• Hand-sanitizing stations in public settings.</li> <li>• Increase in the frequency of cleaning of surfaces in public settings.</li> <li>• Urge entire population in an infected area to check for fever at least once a day.</li> <li>• Temperature scanning in public places.</li> <li>• Air disinfection.</li> <li>• Disinfection of clothing, shoes, or other objects of people leaving affected areas.</li> <li>• Actively restrict travel to and from affected areas.</li> </ul>

Source Canadian Pandemic Influenza Plan

## 6.0 Travel and Border Related Measures

An extensive list of measures that could be considered at the international level is addressed in the report from the WHO International Consultation on Public Health Measures. In general the report does not encourage entry screening for travelers from affected areas with except at geographically isolated infection-free areas (e.g. islands) where it is considered to be potentially more feasible. There is potential value of exit screening for all travelers from areas with human infection when human-to-human transmission was known to be occurring (i.e., starting in the Pandemic Alert Period, Phases 4 & 5). This could be achieved through health declarations/questionnaires and potentially temperature screening in combination with widespread messaging recommending that ill persons postpone travel. Implementation of “stop lists” (i.e. of isolated or quarantined persons) may be feasible for certain countries but is generally not encouraged, nor is medical examination for travelers at risk or with fever.

**Travel and Border related measures – Pandemic of International Origin**

<b>Canadian Pandemic Phase</b>	<b>Type of Action</b>	<b>Activities</b>
<p><b>Canadian Pandemic Alert Phase 3.0</b></p> <p>Human infection(s) with a novel virus subtype occurring in one or more locations outside of Canada, but little immediate pandemic risk (no spread, or at most rare instances of spread to a close contact only).</p>	<b>Advisories</b>	<p>PHAC will post travel advisories informing travelers about the following:</p> <ul style="list-style-type: none"> <li>• Occurrence of human infections in specific international geographic regions.</li> <li>• Recommended personal health measures to reduce health risks.</li> <li>• Recommended pre-travel medical consultation for an individual risk assessment.</li> <li>• Recommended post-travel medical consultation for travel related illness.</li> </ul>
	<b>Public Health Measures</b>	<ul style="list-style-type: none"> <li>• Respond to news releases and travel advisories that are posted on PHAC and WHO websites informing travelers of the occurrence of human infection in a specific international geographic region.</li> <li>• Update health care providers in order to:               <ol style="list-style-type: none"> <li>1. Raise awareness of medical staff providing pre-travel consultations.</li> <li>2. Raise awareness of medical staff assessing influenza like illness in returning travelers.</li> </ol> </li> <li>• Manage any cases from a public health perspective.</li> </ul>
<p><b>Canadian Pandemic Alert Phases 4 &amp; 5</b></p> <p>Cluster(s) occurring outside of Canada with “limited” (Phase 4) or “substantial” (Phase 5) pandemic risk based on various factors (e.g., rate of transmission, geographic localization and spread, severity of illness, impact of control measures, presence of genes from human strains (if derived from an animal strain), other information from the viral genome, and/or other factors.</p>	<b>Advisories</b>	<p>PHAC will post either a Travel Health Advisory or a Travel Warning, based on available information. This will inform travelers of the following:</p> <ul style="list-style-type: none"> <li>• Occurrence of human infections in specific international geographic regions.</li> <li>• Need to defer or delay nonessential travel to a specific destination.</li> </ul> <p>These advisories may be targeted to identified groups of at risk individuals or to all travelers.</p>



	<b>Public Health Measures</b>	<ul style="list-style-type: none"> <li>• Manage any identified arriving cases in Canada (see Screening Logistics on next page)</li> <li>• Manage the contacts of cases (see Contact Management Logistics on next page)</li> <li>• Provincial and local public health authorities need to consider how to manage travelers from affected areas who are advised to self-monitor for a fever. The following responses may need to be implemented:             <ol style="list-style-type: none"> <li>1. Case management and monitoring of contacts</li> <li>2. Designated phone lines for self-reporting by symptomatic travelers</li> <li>3. Identification of assessment sites that will be linked to public health surveillance activities.</li> </ol> </li> <li>• Disseminate information regarding Travel Advisories/Travel Warnings to health care settings.</li> </ul>
Scientific information. Sporadic imported cases may be occurring in Canada (denoted by phase 4 and 5)		<ul style="list-style-type: none"> <li>• Provide the latest outbreak information, guidance and support to government and health care settings.</li> <li>• Collaborate with federal and provincial authorities regarding the advanced notification of the arrival of ill travelers. The following may need to be implemented:             <ol style="list-style-type: none"> <li>1. Assessment of ill travelers</li> <li>2. Release of ill travelers</li> <li>3. Detention of ill travelers</li> <li>4. Transfer of ill travelers for medical examination</li> </ol> </li> <li>• PHAC will implement Traveler Contact Information Forms (TCIF) if deemed necessary to appropriate carriers</li> <li>• PHAC will distribute Health Alert notices to international travelers at points of entry.</li> <li>• Increase traveler awareness by using educational materials at the points of entry.</li> </ul>
	<b>Screening Logistics</b>	Screening of ill travelers arriving in Canada will continue under the authority of the Quarantine Act. Thermal screening (temperature taking) will not likely be considered.
	<b>Contact Management Logistics</b>	Contact tracing will be initiated for those arriving on international flights or ships with a confirmed or suspected case. The province will outline the methods used to access the contact information of airline passengers.

**Travel and Border related measures – Pandemic of International Origin (cont'd)**

<b>Canadian Pandemic Phase</b>	<b>Type of Action</b>	<b>Activities</b>
<b>Pandemic Period – Canadian Pandemic Alert Phase 6</b> Amplification and sustained transmission in the population	<b>Advisories</b>	<p>During this phase the wording of travel advisories may be strengthened to specifically recommend not traveling (i.e., under any circumstances), to affected areas. This, however, may not be necessary if the public demand decreases and airline companies cancel service to certain areas.</p> <p>When pandemic activity is increasing in Canada actions implemented during Pandemic Alert Period (Phases 4 &amp; 5) will quickly become unsustainable. Once there is widespread community transmission in Canada, the allocation of resources targeted at keeping the virus out will become unnecessary and resources should be re-allocated.</p>
	<b>Public Health Measures</b>	<ul style="list-style-type: none"> <li>• Similar to Pandemic Alert Period (Phases 4 &amp; 5), until no longer feasible or deemed to be ineffective due to widespread activity.</li> <li>• Public health measures aimed at travelers will likely be discontinued or scaled back at different times in different jurisdictions as the local epidemiology dictates.</li> </ul>
		<ul style="list-style-type: none"> <li>• In subsequent waves of the pandemic, messaging and wording on health declarations and screening activities may need to be revised to take into consideration persons who were ill during the first wave and are now probably immune.</li> </ul>
<b>Post Pandemic Period in Canada</b> Reports of cases counts and other broad indicators of pandemic activity in Canada suggest that the pandemic virus is no longer causing significant illness in the population.	<b>Advisories</b>	<ul style="list-style-type: none"> <li>• Travel advisories would be revised as pandemic activity declines in various geographical areas. Public messaging may once again focus on travelers as sources of infection if the wave has already moved through specific jurisdictions and community transmission is no longer being observed.</li> </ul>
	<b>Public Health Measures</b>	<ul style="list-style-type: none"> <li>• May be similar to Pandemic Alert Period (Phase 3) - that is focus on public and health care provider education as opposed to high levels of activity at airports</li> <li>• Support recommended surveillance activities as per the surveillance annex of the Plan</li> </ul>

Source Canadian Pandemic Influenza Plan

## Travel and Border Related Measures – Pandemic of Domestic origin

Canadian Pandemic Phase	Type of Action	Activities
<p><b>Pandemic: Alert Phase 3</b> Human infection(s) with a novel virus subtype in the Canadian population, but little immediate pandemic risk (no spread, or at most rare instances of spread to a close contact only)</p>	<p><b>Advisories</b></p>	<p>Collaboratively, the Council of Chief Medical Officers of Health (CCMOH) and the PHAC could post on the PHAC website, a Travel Health Advisory aimed at informing Canadians about the occurrence of human infections in a specific domestic geographic area. This advisory would provide up to date and comprehensive information regarding any health risks and indicate whether or not there are recommendations not to travel to the affected geographic area (e.g., the area defined by the local or public health authority where the case(s) occurred). Dissemination of the Travel Health Advisory beyond its posting on the PHAC web site would be dictated by the CCMOH and PHAC. This could involve direct messaging to specific audiences (e.g., Canadian Medical Association) or to media.</p>
	<p><b>Public Health Measure</b></p>	<ul style="list-style-type: none"> <li>• Be prepared to respond to news releases and public health website (PHAC and WHO) postings informing international travelers to Canada and the general Canadian public of the occurrence of human infection with a novel influenza virus in a specific geographic region of Canada.</li> <li>• Provide updates to health care professionals in order to: <ul style="list-style-type: none"> <li>⇒ Raise awareness among Canadian health care professionals who may be required to respond to their clients requests for information regarding their risks, should they be traveling to the affected geographic area in Canada.</li> <li>⇒ Increase awareness of the “travel” risk factors for infection with the novel virus among health care professionals assessing persons with influenza-like-illness in Canadians who may have visited or recently left the affected geographic area.</li> <li>⇒ Ensure that the recommended surveillance measures, infrastructure and links are in place (refer to surveillance section of CPIP for specific recommendations).</li> </ul> </li> <li>• Manage any cases from a public health perspective (see Management of Cases)</li> </ul>

**Travel and Border Related Measures – Pandemic of Domestic origin (cont'd)**

<b>Canadian Pandemic Alert Phases 4 &amp; 5</b> Cluster(s) occurring in Canada with "limited (phase 4) or "substantial" (phase 5) pandemic risk based on various factors (e.g., rate of transmission, geographic localization and spread, severity of illness, impact of control measures, presence of genes from human strains, other information from the viral genome, and/or scientific information)	<b>Advisories</b>	CCMOH and PHAC collaboratively may recommend postponement of all non-essential travel to the affected geographic area within Canada. This recommendation can be targeted at readily identified groups of travelers potentially at very high risk or at all travelers depending on the epidemiological data available from the affected area. Health Alert Notices can be distributed at points of entry to the affected area(s). These notices will contain (i) outbreak information consistent with information provided in Travel Advisories and other formal communications, (ii) guidelines or a questionnaire for self-screening, and (iii) guidelines for reporting specified symptoms (e.g., fever) that start during the interval consistent with the observed/known incubation period, to health care professionals or other officials. Dissemination of similar public messages may be placed at mass transit facilities serving domestic travelers.
	<b>Public Health Measures</b>	<ul style="list-style-type: none"> <li>Affected area – manage cases as specified in Management of Cases (also see "Screening Logistics below).</li> </ul>

### Travel and Border Related Measures – Pandemic of Domestic origin (cont'd)

<p><b>Canadian Pandemic Alert Phases 4 &amp; 5 (cont'd)</b></p>	<ul style="list-style-type: none"> <li>• Affected areas – manage any contacts of cases as specified in Management of Contacts of Cases (also see “contact management logistics” below)</li> <li>• Provinces/Territories, in collaboration with local health authorities, can implement exit screening at domestic airports serving affected areas within Canada in collaboration with PHAC under delegated provincial authority or Emergency Act.             <ul style="list-style-type: none"> <li>⇒ Increase public messaging regarding staying at home and specifically, not traveling when ill.</li> <li>⇒ Ensure directives for symptomatic individuals identified through the health declaration process at airports are clear and consistent with the local response to the pandemic activity.</li> </ul> </li> <li>• Unaffected areas – see “Contact management logistics” and “Screening logistics” below</li> <li>• Provinces/Territories and local public health authorities not in an area experiencing a cluster(s) need to consider how to manage travelers from the affected area(s) who have not been specifically identified as contacts of a case.             <ul style="list-style-type: none"> <li>⇒ May involve active or passive surveillance or designated phone line for self-reporting by symptomatic travelers.</li> <li>⇒ May involve designating assessment sites, which would be linked to public health surveillance activities.</li> </ul> </li> <li>• All areas – ongoing appropriate and timely dissemination of Travel Advisory/Travel Warning updates and latest outbreak information.</li> </ul> <p><b>Contact management logistics:</b> Although it is expected that cases will isolated from the public, contact tracing for any individuals with a confirmed case (or suspect case, as deemed necessary) arriving in an unaffected area on domestic conveyances (e.g., plane, bus, train) can be initiated. If initiated, Provinces/Territories will formally request traveler contact information from domestic air carrier flights and forward all contact information for Canadian travelers to appropriate jurisdictional domestic public health authorities for follow-up contact tracing activities. At the discretion of the provincial authority, PHAC may be asked to contact the air carrier and forward the appropriate information to all involved Canadian jurisdictions. Provinces/Territories will need to forward all contact information for international travelers to PHAC who will forward it to appropriate international public health authorities.</p>
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## Travel and Border Related Measures – Pandemic of Domestic origin (cont'd)

Canadian Pandemic Phase	Actions	Comments
<b>Canadian Pandemic Alert Phases 4 &amp; 5 (cont'd)</b>		<p>In the unlikely event that short term detention (1-3 days) of arriving travelers from a Canadian geographic area of risk proves necessary, P/Ts in collaboration with local public health authorities will take the lead in managing the event. At the discretion of the provincial authority, they may ask PHAC to provide this service. As the occurrence of clusters of cases continues or increases, contact tracing/notification will likely be conducted passively through public messaging rather than actively attempting to contact individual travelers. This transition may occur before the declaration of a pandemic, if increasing notifications make it non-sustainable.</p> <p><b>Screening logistics:</b>  Provinces/Territories (P/T) could implement health assessments of ill travelers arriving on domestic flights originating from the affected area within Canada. Alternatively, the P/T could request assistance from PHAC to implement these health assessments under delegated provincial authority. Exit screening for all travelers from the affected areas within Canada (i.e., those experiencing clusters of human infection) would likely be implemented during this phase in the form of health declaration questionnaires. This would likely be limited to those exiting the area by air travel. At exit points (i.e., airports, sea ports, land border crossings) from the affected area(s) within Canada, modified versions of Health Alert Notices (or "health declarations") containing:</p> <ul style="list-style-type: none"> <li>(i) information about the outbreak consistent with information provided in Travel Advisories and other formal communications,</li> <li>(ii) a questionnaire for self-screening, and</li> <li>(iii) guidance for reporting specified signs of illness, would likely be distributed. Additional screening methods aimed at detecting potentially infected individuals might also be considered at the directive of the CMOH and PHAC.</li> </ul>

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<b>Canadian Pandemic Phase</b>	<b>Actions</b>	<b>Comments</b>
	<b>Public Health Measures</b>	<ul style="list-style-type: none"> <li>• Similar to Pandemic Alert Period (Phases 4 &amp; 5), until no longer feasible or deemed to be ineffective due to widespread activity.</li> <li>• Public health measures aimed at travelers will likely be discontinued or scaled back at different times in different jurisdictions as the local epidemiology dictates.</li> <li>• In subsequent waves of the pandemic, messaging and wording on health declarations and screening activities may need to be revised to take into consideration persons who were ill during the first wave and are now probably immune.</li> </ul>
<b>Post Pandemic Period in Canada</b> Reports of case counts and other broad indicators of pandemic activity in Canada suggest that the pandemic virus is no longer causing significant illness in the population.	<b>Advisories</b>	Travel advisories would be revised as pandemic activity declines in various geographic areas. Public messaging may once again focus on travelers as sources of infection if the wave has already moved through specific jurisdictions and community transmission is no longer being observed.
	<b>Public Health Measure</b>	<ul style="list-style-type: none"> <li>• May be similar to the Pandemic Alert Period (Phase 3) – i.e., focus on public and health care provider education as opposed to high levels of activity at airports.</li> <li>• Support recommended surveillance activities as per the surveillance portion of the Canadian Pandemic Influenza Plan.</li> </ul>

Source: Canadian Pandemic Influenza Plan