British Columbia’s Pandemic Influenza Response Plan (2012)

Pandemic Preparedness - Be Prepared, Be Well
How to care for yourself and the people you care about

September 2012
ACKNOWLEDGMENTS

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- BC Ministry of Health
- BC Centre for Disease Control
- Fraser Health Authority
- Interior Health Authority
- Northern Health Authority
- Provincial Health Services Authority
- Vancouver Coastal Health Authority
- Vancouver Island Health Authority
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1. INTRODUCTION

1.1 Pandemic Preparedness for Pandemic Influenza

Pandemics occur about every ten to forty years with the last one being declared by the World Health Organization (WHO) in June 2009. The novel virus was a new strain of H1N1 influenza, and the pandemic was simply referred to as “H1N1 (2009)”. Although the overall severity of the H1N1 (2009) influenza pandemic turned out to be “moderate”, with most people recovering from infection without requiring hospitalization or medical care, the next pandemic could be worse.

By using the information provided in this booklet, you can safely look after people at home and will know who to contact if you need advice. This publication contains a series of fact sheets and tools to help you and your family through a pandemic.

2. PANDEMIC INFLUENZA: GENERAL INFORMATION

2.1 Questions and Answers

What is pandemic influenza?

An influenza pandemic is a worldwide outbreak of a new strain of the flu virus, or a strain that may not have circulated among humans for a long time, so people have little or no immunity to it. It is usually highly contagious, causing infections of the respiratory tract, including the nose, nasal passages, throat and lungs.

How often do pandemics occur?

In the twentieth century there were three pandemics: 1918, 1957 and 1968. Then in June 2009 the World Health Organization declared a new pandemic called influenza H1N1. Like the H1N1 pandemic, it is expected that the next influenza pandemic will affect communities in ‘waves’. After a first peak of illness, the rates of illness will drop, only to be followed by a second wave of the pandemic in which illness will again be more evident.

Is there a vaccine for pandemic influenza?

No. A vaccine cannot be developed until a pandemic occurs and the new virus strain is identified. Once the novel strain is known it will take approximately five to six months before a vaccine is ready for administration. Enough vaccine will be ordered to immunize every Canadian citizen who needs and wants it. During the H1N1 pandemic, Canadian influenza experts identified high-risk groups who would benefit the most from receiving the vaccine, to receive it first. Refer to section 2.2 for information concerning high-risk groups for the next pandemic influenza, keeping in mind this information may change.

How is pandemic influenza spread?

Influenza is spread from person to person through droplets produced by coughing or sneezing. These droplets can travel up to 2 metres (6 feet), landing on surfaces and being inhaled by others. If a person touches an object contaminated by droplets and then touches their eyes, mouth or nose, without first washing their hands, they can catch the pandemic influenza. The virus can survive on hard surfaces (i.e. doorknobs, handrails and toys) for up to 48 hours if they are not cleaned. The virus can survive on your hands for up to five minutes.
How long is the pandemic flu virus contagious/infectious?
A person with the flu is contagious for 24-hours before they become sick, and for up to five days after they become sick. The peak infectious period occurs in the first 3-4 days after a person shows symptoms. Children may be contagious for a week or longer.

Will wearing a mask protect me from the virus?
No. In fact, for the general public, the benefits of wearing a mask remain unproven. However, if you have flu symptoms, wearing a simple surgical mask will help protect others from your coughing. Hospitals and health units will not be providing masks to the general public. If you wish to purchase one, check with your local pharmacy for availability.

What symptoms should I watch for?
If you have pandemic influenza, you may experience symptoms such as:
- fever
- cough
- sore throat
- headache
- body aches
- muscle pain
- runny nose

Some people, especially children, may also have nausea, vomiting or diarrhea. Adults over 65 and children under five may not have a fever when sick with the pandemic influenza virus. Although colds and other viruses may cause similar symptoms, influenza generally makes you sicker than other viruses.

Can I still breastfeed if I am sick with the pandemic influenza virus?
Mothers who are breastfeeding can continue to nurse their babies while being treated for the flu. A mother’s milk is made to fight diseases in her baby, and this is really important in young babies when their immune systems are developing.

Do not stop breastfeeding if you are ill. Continue to breastfeed early and often. If you are too sick to breastfeed, pump and have someone, who is not sick, give the expressed milk to your baby.

2.2 High-risk Groups

The Public Health Agency of Canada has identified high-risk groups who would likely benefit the most from receiving the pandemic influenza vaccine first, in the event of a new pandemic. However, this information may change, depending on the strain of the next pandemic influenza, and who is most affected by the new virus.

People in these groups are most likely to be at high-risk for getting very sick or suffering complications if they get infected with the pandemic influenza virus. These groups include pregnant women and new mothers, adults and children with chronic health conditions, adults 65 years and older, and children less than 24 months of age. If during the next pandemic you fall into one of these categories, speak to your doctor about whether you should get a prescription for antiviral medication (such as Tamiflu®) in advance. If you do begin to have flu symptoms, you can then phone your doctor to get the prescription filled, avoiding a trip to a clinic. Antivirals must only be taken when flu symptoms are present, and work best when taken within 48-hours of flu symptoms starting.
Those who will benefit most from immunization:

- People 65 years and older
- People of any age who are residents of nursing homes and other chronic care facilities.
- People under the age of 65 with chronic conditions
- Pregnant women
- Healthy children 6 months to 23 months of age

Others who are high on the priority list for immunization:

- Health care workers involved in pandemic response or the delivery of essential health care services
- Household contacts and care providers of persons at high-risk who cannot be immunized or may not respond to vaccines
- Those providing regular child care to children <24 months of age, whether in or out of the home.
- Those who provide services within closed or relatively closed settings to persons at high risk (e.g. crew on a ship)
- Persons, mostly Aboriginal, residing in remote and isolated settings or communities were considered higher priority for immunization during the H1N1 (2009) pandemic, and will likely be a priority for other future influenza pandemics. However, it is unknown whether this group’s high risk for influenza and complications relates to living in a remote or isolated area, or whether the risk relates to being Aboriginal.
- Obese people were also at risk for more severe illness or complications from pH1N1 and may be at risk in future pandemics as well.
- Populations otherwise identified as high-risk

Others who would benefit from immunization include:

- Healthy children 2 to 18 (inclusive) years of age
- People who provide essential community services like first responders
- People in direct contact during culling operations with poultry infected with avian influenza.
- Poultry and swine workers
- Healthy adults 19-64 years of age

Are you pregnant?

Pregnant women had more serious illness during the H1N1 pandemic and many required hospitalization. In the event of another pandemic, pregnant women should talk to their doctor about the benefits of taking Tamiflu if they become ill with influenza to prevent serious illness.

2.3 Getting the Vaccine

Once a pandemic is declared, getting your seasonal flu vaccination and the pandemic influenza vaccine (once it becomes available during a pandemic) will help protect you and those around you from getting sick. A safe and effective pandemic flu vaccine should be available to British Columbians within approximately five to six months of the new pandemic strain being identified.

Although there are groups identified who would benefit most from receiving the pandemic flu vaccine, it is expected that everyone in BC who needs and wants it will be able to receive it. For adults, one dose of the vaccine will be sufficient,
while children under 10 years of age may need two half doses spread three weeks apart. Details concerning dose requirements will be announced to the public once a pandemic flu vaccine becomes available.

Once a vaccine is made available during the next pandemic, you should contact your family physician for an appointment, visit the Flu Clinic Locator at www.immunizebc.ca to find the clinic nearest you, contact your local Public Health Office, or watch for advertising in your local media.

Information on the pandemic flu virus vaccine will also be made available at: http://www.health.gov.bc.ca/pho/

3. PANDEMIC INFLUENZA: PREVENTION & PREPAREDNESS

3.1 Avoiding the virus

As well as getting your seasonal and pandemic flu vaccinations, there are many things you can do to avoid catching the virus or spreading it to others.

Personal health and hygiene

- Regular handwashing with soap and water, or using an alcohol-based (60-90%) hand sanitizer, greatly reduces the odds of catching a virus or picking up bacteria
- Cover your nose and mouth with a tissue when coughing or sneezing and discard immediately - or cough or sneeze into the crook of your arm
- Eat nutritious foods, including plenty of fruits and vegetables
- Get plenty of sleep and exercise regularly
- Don't share eating utensils, drinks or towels with anyone
- If you smoke, try to quit (www.quitnow.ca), and do not allow others to smoke in the house or car
- Stay home if you are feeling unwell with symptoms of influenza
- If you live with domestic or farm animals take special care to wash your hands after contact with them

At Home

- Clean areas that are touched by many people regularly (i.e. bathrooms and kitchens)
- Regular household cleaners are effective against flu viruses, including pandemic flu

At work or school

- Stay home if you are sick and encourage others to do the same
- Use a disinfectant to clean objects and hard surfaces that are handled by many (i.e. phones, tables, and chairs)
- Consider using teleconferencing or video conferencing, telephone, e-mails or fax, if many people in the office are sick

Visit the following sites for information regarding hand washing:

Print and post this information in kitchens and bathrooms at home, work or school.
3.2 Preparing for illness at home

If you or a family member becomes ill with the pandemic flu, you should be prepared to cope at home for up to a week.

**Supplies to stock up on**
- Non-perishable food items, such as canned or frozen soups, juices, fruits and vegetables, canned fish, crackers, and peanut butter
- Household cleaning supplies, such as bleach or disinfectant, dishwashing soap and paper towels
- Personal hygiene products such as soap, hand sanitizer, shampoo and toilet paper
- A fever thermometer
- Over-the-counter fever medications (i.e. Tylenol™ or Tempra™)
- Prescription medications (2-3 months supply, if possible)

**Housekeeping**
- Wash hard surfaces such as taps, counters, doorknobs, telephones and railings with a disinfectant (i.e. 1 part bleach to 9 parts water) or any commercial cleaner available
- Keep the personal items of those who are sick separate from everyone else’s
- There is no need for special laundering of linens or clothing from a person sick with the pandemic flu, launder as usual
- There is no need for special handling of garbage generated by a person with the pandemic flu

**Look after others**
- Find a person who can be your "flu buddy" so that if you get sick, they can go to the pharmacy or store for you - and you can be someone else's "flu buddy" too
- Check up on family, friends and neighbours, especially those who live alone
- Offer to get groceries and run errands for people who are sick, or are at higher risk of getting serious complications from the pandemic flu virus
- Keep emergency phone numbers and self-care instructions in a place where everyone in the household can find them

3.3 Treating the pandemic flu at home

Caring for yourself or others at home will be common during an influenza pandemic. Ask for help from family members or friends if you need it.

**Controlling the virus**
- Do not go to work or school to avoid spreading the virus to others
- Avoid other people until you feel better and are able to get back to your normal activities (for most people this can be 5 to 7 days)
- Stay in your room as much as possible and try to keep 2 metres (6 feet) distance between you and others; if this is impossible, consider wearing a surgical mask to prevent infecting others
- If more than one person in the home is ill they can share a room
- If possible have only one person care for those who are sick, so that as few people as possible are exposed to the virus
• If possible, this care giver should not be someone who is pregnant or at high-risk for influenza complications

Caring for yourself
• You will probably feel very tired and weak - resting allows your body to recover
• Water, juices, clear broths and soups will replace the lost fluids, especially if you have a fever
• Try to drink a glass of water for every hour that you are awake
• If your urine is dark, that is a sign you need to drink more fluids

Medications and remedies
• Anti fever medications (i.e. acetominophen or ibuprophen) are fine to use - always follow the directions regarding how much and how often to take it
• Never give products containing ASA (i.e. Aspirin™) to any child under the age of 16 years (use of ASA products by children can lead to Reye's syndrome, a serious condition affecting the nervous system and liver)
• Over the counter cold medications can help with symptoms, but should not be used in children under 6 years old

What to do for a fever
• Take off heavy clothing and blankets
• Dress in lightweight clothing and keep room temperature at 20°C
• Give lukewarm sponge or tub baths (never use alcohol rubs)

3.4 Whom to contact

BC residents can visit HealthLink BC's user-friendly website to directly access reliable, up-to-date information during a pandemic flu and to use the influenza symptom checker. Visit HealthLink BC online or call 24-hours a day/seven days a week if you have questions or concerns. Translation services are available in over 130 languages.

HealthLink BC  www.healthlinkbc.ca
811 (toll-free)
711 (deaf & hard of hearing)

In case of emergency, call: 911

On the web

Government of BC: www.gov.bc.ca
HealthLink BC: www.healthlinkbc.ca
Immunize BC: www.immunizebc.ca
BC Centre for Disease Control: www.bccdc.ca

Health Authorities

Fraser Health: www.fraserhealth.ca
Interior Health: www.interiorhealth.ca
Northern Health: www.northernhealth.ca
Provincial Health Services: www.phsa.ca
Vancouver Coastal Health: www.vch.ca
Vancouver Island Health: www.viha.ca

Other important contact information that should be readily accessible:
• Doctor
• Local Walk-In Clinics (names, locations and hours of operation)
• Local Pharmacies (names, locations and hours of operation)

The above information is also listed in Appendix E; you may want to print that page and put it on your refrigerator or near your telephone.
4. PANDEMIC INFLUENZA: WHEN TO SEEK MEDICAL CARE

4.1 Tools to help you decide

A person should seek medical care if they experience shortness of breath or difficulty breathing, or if a fever continues more than three days despite taking anti-fever medication. For parents with a young child who is ill, seek medical care if a child has fast or labored breathing, continuing fever or convulsions (seizures).

Supportive care at home - resting, drinking plenty of fluids and using a pain reliever for aches - is adequate for recovery in most cases.

The following appendices provide some decision making tools to help you decide when it is time to seek medical care.

Appendix A: How to Measure Breathing
Appendix B: Pandemic Influenza Decision Making Tool - Adults
Appendix C: Pandemic Influenza Decision Making Tool - Older children (6-16 years)
Appendix D: Pandemic Influenza Decision Making Tool - Infants or young children (0-5 years)

Use the online symptom checker on the HealthLink BC website: www.healthlinkbc.ca
Appendix A: How to Measure Breathing

**Adults and older children:**
Watch the chest rise and fall with each breath. Use a watch or clock and count the number of times the chest rises (or expands) in one minute (60 seconds).

**Children and infants:**
Watch the stomach rise and fall with each breath. You should uncover the child so you can see the stomach. Use a watch or clock and count the number of times the stomach rises (or expands) in one minute (60 seconds).

Compare the number you counted to the chart below. If the child's breathing rate is the same or over the number in the chart, it is a sign that the child is having trouble breathing and you should seek medical attention. If the child has other symptoms or behaviours that you are concerned about, like being lethargic or not wanting to be held, seek medical advice.

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of breaths per minute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 months old</td>
<td>Over 60 breaths per minute</td>
</tr>
<tr>
<td>2 months to 1-year old</td>
<td>Over 50 breaths per minute</td>
</tr>
<tr>
<td>1 to 5-year old</td>
<td>Over 40 breaths per minute</td>
</tr>
<tr>
<td>5 years to adult</td>
<td>Over 30 breaths per minute</td>
</tr>
</tbody>
</table>

**In children under 5 years of age, signs of trouble breathing include:**
- grunting with breathing;
- whisking, squeaking or wheezing noise with breathing;
- flaring nostrils with each breath; and
- chest rising opposite to the stomach rising.
Appendix B: Pandemic Influenza Decision Making Tool – Adults

When to seek medical care for an adult with influenza-like illness

START
Is your temperature 38°C or higher?

Yes

Do you have any of the following?
- Shortness of breath while resting
- Difficulty breathing or painful breathing
- Wheezing
- Drowsiness, difficulty waking, or confusion/disorientation

No

Possible Cause:
Influenza with complications. Seek medical attention. Call HealthLink BC 811 for advice or dial 911 immediately.

Do you have a sore throat and/or a runny or stuffy nose?

Yes

Possible cause: cold

No

Do you have any of the following?
- Chronic heart or lung disease
- A chronic illness (i.e. diabetes or cancer) which is being treated, or any diseases/treatments that affect the immune system (i.e. HIV/AIDS or kidney disease)
- Difficulty getting around or performing daily activities because of general weakness
- Are you pregnant?

Yes

Visit www.healthlinkbc.ca or call 811 for advice.

No

Do you have dry cough or any of the following?
- Aching muscles
- Headache
- Extreme tiredness
- Runny or stuffy nose
- Sore throat

Yes

Possible Cause:
Uncomplicated influenza. Manage at home, refer to the self-care guide or visit www.healthlinkbc.ca or call 811 for advice.

No

If your symptoms don’t match those on this chart and you are concerned, visit www.healthlinkbc.ca or call 811 for advice.
Appendix C: Pandemic Influenza Decision Making Tool – Older Child (6 – 16 years)

When to seek medical care for an older child (6-16 yrs) with influenza-like illness

**START**

Is your child’s temperature 39°C or higher?

**Does your child have any of the following?**
- Shortness of breath while resting
- Difficulty breathing or painful breathing
- Wheezing
- Vomiting for more than four hours
- Hard to wake up, unusually quiet or unresponsive

**Possible Cause:**
Influenza with complications. Seek medical attention. Call HealthLink BC 811 for advice or dial 911 immediately.

If your child’s symptoms don’t match those on this chart and you are concerned, visit www.healthlinkbc.ca or call 811 for advice.

**Does your child have any of the following?**
- Chronic heart or lung disease
- A chronic illness (i.e. diabetes or cancer) which is being treated, or any diseases/treatments that affect the immune system
- Kidney disease
- A condition requiring regular use of ASA (acetylsalicylic acid or Aspirin)

**Possible cause:**
cold

**Does your child have any of the following?**
- Aching muscles
- Extreme tiredness
- Sore throat

**Possible Cause:**
Uncomplicated influenza. Manage at home, refer to the self-care guide or visit www.healthlinkbc.ca or call 811 for advice.
Appendix D: Pandemic Influenza Decision Making Tool – Young Child (0 – 5 years)

When to seek medical care for a young child (0-5yrs) with influenza-like illness

START
Does your child have ANY of the following?

☑ In an infant 2 months or younger, temperature 38° (or higher), or 36° (or lower) in armpit
☑ Severe trouble breathing or fast breathing (see Appendix A)
☑ Blue lips, sudden pallor or cold up to the knees (poor circulation)
☑ Limp or unconscious, abnormally sleepy, difficult to wake
☑ Extreme lethargy, not interested in playing

☑ Unable to breastfeed or not drinking fluids
☑ Does not urinate at least every 6 hours
☑ Continuous vomiting
☑ Severe diarrhea
☑ Stiff neck or light sensitivity
☑ Convulsions or seizures
☑ Full fontanelle (swollen soft spot)

Does your child have any of the following?
☑ Chronic heart or lung disease
☑ A chronic illness (i.e. diabetes or cancer) which is being treated, or any diseases/treatments that affect the immune system
☑ Kidney disease
☑ A condition requiring regular use of ASA (acetylsalicylic acid or Aspirin)

If your child’s symptoms don’t match those on this chart and you are concerned, visit www.healthlinkbc.ca or call 811 for advice.

Possible Cause:
Influenza with complications. Seek medical attention. Call HealthLink BC 811 for advice or dial 911 immediately.

Possible Cause:
Uncomplicated influenza. Manage at home, refer to the self-care guide or visit www.healthlinkbc.ca or call 811 for advice.
Appendix E: Contact Information

Print this page and put it on your refrigerator or near your telephone.

HealthLink BC  
www.healthlinkbc.ca  
811 (toll-free)  
711 (deaf & hard of hearing)

In case of emergency, call: 911

On the web
Government of BC: www.gov.bc.ca  
HealthLink BC: www.healthlinkbc.ca  
Immunize BC: www.immunizebc.ca  
BC Centre for Disease Control: www.bccdc.ca

Health Authorities
Fraser Health: www.fraserhealth.ca  
Interior Health: www.interiorhealth.ca  
Northern Health: www.northernhealth.ca  
Provincial Health Services: www.phsa.ca  
Vancouver Coastal Health: www.vch.ca  
Vancouver Island Health: www.viha.ca

Important contact information
Doctor

Local Walk-In Clinics (names, locations and hours of operation)

Local Pharmacies (names, locations and hours of operation)