

How is influenza spread?

The flu spreads easily from person to person by:

- Breathing tiny droplets that are in the air after an infected person coughs or sneezes;
- Touching tiny droplets of nose or mouth secretions from an infected person and then touching your nose or mouth; and
- Touching objects like dirty tissues or surfaces that have been handled by an infected person and then touching your nose or mouth.

How long is the influenza virus infectious/contagious?

The flu virus can be spread off of hard surfaces like doorknobs for up to twelve hours, and from softer/porous surfaces, like tissues, for several minutes. The virus can also survive on the hands for up to five minutes. The flu can be spread by an infected person from about one day before symptoms start to appear to as many as seven days after symptoms appear. Children and some adults may be contagious for longer than a week.

How do I know if I have influenza?

You may have the flu if you have a sudden onset of fever, cough, headache, muscle pain, sore throat, a runny nose, and body aches. Some children with influenza will have nausea, vomiting, and diarrhea. Older adults (over 65) and children under 5 may not have a fever when sick with influenza. Although colds and other viruses may cause similar symptoms, influenza weakens a person much more than other viruses. Most healthy people will feel better in about 5 – 7 days. Complications of influenza, such as pneumonia, can be more severe for the elderly, for infants, and for people with chronic health problems.

Is it a cold or influenza?

Symptom	Flu	Cold
Fever	Usual, sudden onset 38°C-40°C and lasts 3-4 days	Rare
Headache	Usual and can be severe	Rare
Cough	Usual and can be severe	Sometimes, but mild
Aches and pains	Usual and can be severe	Rare
Fatigue and weakness	Usual and can last 2-3 weeks or more	Sometimes, but mild
Extreme fatigue	Usual, early onset can be severe	Rare
Nausea, vomiting	In children under 5 years or age	Rare
Runny, stuffy nose	Rare	Usual
Sneezing	Rare	Usual
Sore throat	Rare	Usual
Chest discomfort	Usual and can be severe	Sometimes, but mild to moderate

Staying healthy during an influenza pandemic

Personal health and hygiene

You can reduce your chances of catching the flu and improve your time to recover by looking after yourself.

- Wash your hands often with soap and water or use hand sanitizer. Frequent hand washing has been shown to significantly reduce the incidence of respiratory disease.
- Cover your nose and mouth with a tissue when sneezing or coughing or cough or sneeze into your sleeve.
- Eat healthy foods, including plenty of fruits and vegetables.
- Get plenty of sleep.
- Exercise in moderation.
- Ensure you receive an annual flu shot.
- Refrain from smoking and don't allow others to smoke in the house or car.
- If available, get the pandemic influenza vaccine.
- Stay home if you are sick or feel unwell; rest and drink plenty of fluids.

Avoid crowds

In an influenza pandemic, the more time you spend in contact with others, the more likely you will be in contact with someone who is carrying the influenza virus. Engaging in temporary social distancing can reduce your chances of becoming infected.

- Limit visitors to your home.
- Shop at smaller stores with shorter line-ups.
- Shop at off-peak hours at stores that are open late or 24 hours.
- If possible, phone your grocery order in for pick-up or delivery.
- Pay your bills online or over the phone.
- Cancel or postpone outings or gatherings with family or friends.
- If possible, work from home or arrange to work flexible hours.

Stay healthy at home or work

Take steps to reduce your chances of catching the flu in your home or work environments.

- Wash your hands often with soap and water or use hand sanitizer.
- If possible, work from home or arrange to work flexible hours.
- Clean frequently handled objects, such as door handles and phones, with a disinfectant.
- Keep your office door closed.
- Use stairs instead of crowded elevators.
- If you must meet with someone, stay one metre apart.
- Avoid shaking hands, kissing, or hugging people.
- Cancel unnecessary meetings; use teleconferencing or video conferencing, telephone, emails or fax.
- Travel on public transit at off peak hours, drive your car, ride your bike to and from work or school.
- Take a lunch and eat at your desk or away from others; avoid crowded cafeterias or restaurants.

Preparing for a pandemic

Anyone that becomes ill with the flu should stay at home, rest in bed, and drink plenty of fluids. You should prepare to be at home for up to a week if you have the flu.

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, including bleach, disinfectant, dishwashing soap, and paper towels.
- Personal hygiene products such as soap, hand sanitizer, shampoo, toilet and tissue paper.
- Basic over-the-counter medications such as acetaminophen (Tylenol™ or Tempra™) for fever.
- Prescription medications (a two to three month supply, if possible).

Help to look after others with the following measures:

- Check up on family, friends, and neighbours, especially those that live alone.
- Offer to get groceries and run errands for those that are at higher risk of getting influenza or serious complications from influenza, such as seniors or people with chronic medical conditions.
- Keep emergency phone numbers and self-care instructions in a place where everyone in the household can find them.
- Keep books and games at home for children to play with, in case schools and community centres are closed.
- Arrange for child care that reduces your children's exposure to crowds.
- Make arrangements for school work to be done from home.

Housekeeping

Reducing the chances of infection in the home environment can be done with a variety of cleaning methods. Since influenza viruses can live up to 2 days on hard surfaces such as taps, countertops, door handles, telephones, and railings, a cleaning solution of one part water to nine parts bleach should be used to kill the virus. Other surfaces that are frequently touched with hands should also be cleaned thoroughly and often.

If someone in your household becomes sick with influenza:

- Keep their personal items separate from those of the rest of the family.
- Don't share towels.
- Don't share eating utensils, drinks, or food with anyone.
- Keep an adequate supply of products for hand washing and cleaning.

There is no need for special handling of laundry or garbage generated by a person with influenza.

If someone dies

During a pandemic, some people may die at home. The remains of those who have died at home should be wrapped in a sheet and kept in a cool, dry place until funeral services are able to collect the body. Bodies of people who have died from influenza are not contagious to others.

What about pets?

Most family pets are not at risk from getting or transmitting influenza. Pigs, birds, and horses are at risk from getting influenza. If you have any of these animals as pets or live on a farm, ensure that you wash your hands before and after contact with them.

Hand washing

Engaging often in proper hand washing is one of the best ways to reduce the spread of influenza and other infectious diseases.

Washing your hands cleans away viruses and bacteria that you may have picked up from other people, contaminated surfaces, or animals.

You should wash your hands before:

- Handling or eating food or feeding others.
- Brushing or flossing teeth.
- Inserting or removing contact lens.
- Treating wounds or cuts.
- Touching your eyes, nose or mouth.

You should wash your hands after:

- Preparing food.
- Having any contact with a person who has influenza or their immediate environment.
- Going to the toilet or changing a diaper.
- Blowing your nose or wiping a child's nose.
- Coughing or sneezing.
- Handling garbage.
- Treating wounds or cuts.
- Playing with toys shared with other children.
- Touching commonly used items, such as door knobs, bus railings, and bank machines.

It is also good practice to wash your hands when they are dirty and more frequently when someone in your household is sick.

Use soap and warm water to wash your hands. Do not use antibacterial soap; it encourages antibiotic resistance.

Carry hand sanitizer with you to disinfect your hands, if soap and water are not available. You can purchase compact hand sanitizers in most supermarkets and drug stores. Remember though: using hand sanitizer is NOT a replacement for hand washing when soap and water are available.

Proper hand washing and hand sanitizing procedure

Proper hand washing and hand sanitizing procedures should always be followed to prevent the spread of influenza.

Washing your hands properly consists of the following steps:

1. Remove jewelry and watches from fingers and wrists.
2. Wet hands under warm running water.
3. Apply soap and rub hands together for 10 seconds to produce a lather.
4. Wash all surfaces thoroughly, including wrists, palms, backs of hands, between fingers and thumbs, and under finger nails, for 20 seconds.
5. Rinse hands with fingers pointing downward.
6. Dry hands with a clean or disposable towel.
7. Turn off the water with the same towel used to dry your hands. Do not turn off the water with solely your hands as this will only recontaminate them.
8. If single use, dispose of the towel in the nearest waste basket.

Sanitizing your hands properly consists of the following steps:

1. Remove jewelry and watches from your fingers and wrists.
2. Apply an alcohol-based hand sanitizer to your hands.
3. Rub all surfaces thoroughly, including wrists, palms, backs of hands, between fingers and thumbs, and under finger nails, for 20 seconds.

What to do if someone gets sick

Providing care at home to someone sick with influenza will be common during an influenza pandemic. Ask for help from family members, neighbours, or friends if you live alone, are a single parent with small children, or are having difficulty caring for yourself or others.

Stay at home when you are feeling ill

- Do not go to work; you could spread influenza to others.
- Avoid other people for at least seven days after your symptoms have started.
- Stay in one room or area as much as possible. Try to keep a distance of at least one metre between yourself and others in your household who are not sick.
- If more than one person in the home is ill, they can share a room.

Get plenty of rest

- You will probably feel very tired and weak. Resting allows your body to recover from influenza.

Drink plenty of fluids

- Water, juices, clear broths, and soups will replace lost fluids, especially if you have a fever.
- If your urine is dark, drink more fluids.
- Try to drink a glass of water for every hour that you are awake.
- Warm fluids may help to loosen up mucus in your throat and lungs.

Treat fever and muscle aches at home

- Basic over-the-counter medications such as acetaminophen (Tylenol™ or Tempra™) may provide some comfort. Always follow the directions on the packaging about how much and how often to take acetaminophen.

Never give products containing ASA (acetylsalicylic acid such as Aspirin™) to any child under the age of 18 years. Use of ASA products by children can lead to Reye's syndrome, a serious condition affecting the nervous system and the liver.

If you have any concerns:

Call BC NurseLine

Toll-free in BC

1-866-215-4700

Deaf and hearing impaired

1-866-889-4700

Medications for cough and influenza

Over-the-counter medication

If you are buying an over-the-counter medication, check with the pharmacist to see which might be best for you.

- Tell the pharmacist if you are taking other medications or have any chronic medical conditions.
- Purchase a remedy that treats only one symptom at a time.
- Read the label and instructions carefully to ensure the ingredients treat the symptoms you want to treat.
- Read the label and note any side effects or interactions with other medications.
- Take only the recommended dosage on the label.
- Start with a standard dose first. Extra strength remedies contain a higher dose of medication and may cause more side effects.

If you have any questions about medications, talk to your pharmacist. The BC NurseLine has a pharmacist available from 9 a.m. to 5 p.m. daily.

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Antiviral medications and antibiotics

Antiviral medications such as oseltamivir (Tamiflu™) and zanamivir (Relenza™) must be prescribed to you by your doctor. When used within 48 hours of symptoms appearing, these medications can decrease the length and severity of symptoms due to influenza.

Antibiotics are not normally prescribed for influenza, since they are not effective against viruses. They may be prescribed for complications arising from influenza, such as bacterial pneumonia.

Fevers and fever seizures

In most cases, a fever is not serious and a good sign that your body is fighting off an illness.

What to do for a fever

- Remove any heavy clothing or blankets.
- Dress in lightweight clothing and keep the room temperature at 20°C.
- Give lukewarm sponge or tub baths (never use alcohol rubs to bring down a fever).
- Offer cool fluids frequently when the person is awake
- Give acetaminophen (Tylenol™ or Tempra™) every 4-6 hours for comfort and to reduce fever. Never give ASA (Aspirin™) to children.
- Allow the person to rest and stay home if possible for at least 7 days (to avoid spreading influenza to other people).

What are fever seizures?

A fever seizure is a convulsion in a child caused by a rapid rise of body temperature to over 39°C. Most seizures occur within the first day of the child becoming sick and not always when the fever is the highest. Sometimes the seizure is the first sign of a fever in an infant or child.

Signs that your child may be having a fever seizure

The child may:

- Experience sudden stiffness of the muscles of the face, arms, or legs on both sides of the body.
- Cry or moan.
- Fall if standing and may pass urine.
- Vomit or bite their tongue.
- Stop breathing and may begin to turn blue.
- Begin to have jerky movements.
- Not respond to voice or touch.

A simple fever seizure will stop by itself within a few seconds to 10 minutes. It is followed by a brief period where the child is sleepy or confused. Medication is not needed.

A complex fever seizure lasts longer than 15 minutes, occurs in one part of the body and happens again during the same illness.

What to do if your child has a fever seizure

- Stay calm.
- Leave your child on the floor (you may want to slip a blanket under the child if the floor is hard).
- Loosen tight clothing, especially around the neck.
- Move the child only if he or she is in a dangerous location.
- Turn the child on his or her side or stomach to protect the head and to prevent the child from choking if he or she vomits.
- Don't hold your child down.
- Don't force anything into the mouth as this increases the risk of injury.
- Observe closely and time the fever seizure, so you can tell the doctor what happened.

Seek medical attention:

- A doctor should see children as soon as possible after their first fever seizure.
- If the seizure ends quickly, take your child to the family doctor or emergency department.
- If the seizure lasts longer than 10 minutes, call 9-1-1 to have an ambulance take your child to the hospital.
- A doctor should see the child, if there are repeated seizures during the same illness or if it looks like a new type of seizure for your child.

Prevent further fever seizures

- Give your child acetaminophen at the first sign of fever.
- Sponge or bathe your child in lukewarm water. You may want to apply cool washcloths to the forehead and neck.
- Offer your child cool drinks.

How to take a temperature

There are 3 ways to take a temperature:

1. In the mouth
2. Under the armpit
3. In the ear

The right method for children depends on the child's age. It is important to get the most accurate temperature reading possible. For older children and teenagers, use the adult method.

The following chart will help you decide which method to use.

Age	Best Method	Second Best Method	Third Best Method
Birth to 2 years or age	Armpit	n/a	n/a
2 to 5 years of age	Ear	Armpit	n/a
5 years to adult	Mouth	Ear	Armpit

Taking temperature by mouth

- Place the tip of the thermometer under tongue and closed mouth.
- Do not bite down on the thermometer.
- Do not drink any hot or cold liquids (or smoke) for half an hour prior to taking a temperature.

Taking a temperature in the armpit

- Place the tip of the thermometer against the skin and hold the arm snugly against the chest.

Taking a temperature in the ear

- Use a clean probe tip each time and follow the manufacturer's instructions very carefully.
- Gently tug on the ear, pulling it back and up.
- Gently insert the thermometer until the ear canal is fully sealed off.
- Squeeze and hold the button down for one second.
- Remove the thermometer and read the temperature.

How to measure breathing

For adults and older children, watch the chest rise and fall. Use a watch or clock and count the number of times the chest rises (or expands) in one minute (60 seconds).

Children and infants use their stomachs to breathe. You should uncover the child so you can see the stomach. Count the number of times the stomach or chest rises in 30 seconds using a watch or clock. If you count 30 seconds, you need to multiply by two in order to the number of breaths per minute.

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 behaviour that you are concerned about, seek medical advice.

Definition of fast breathing:

Age	Number of breaths per minute
Less than 2 months of age	Over 60 breaths per minute
2 to 12 months of age	Over 50 breaths per minute
Over 12 months to 5 years of age	Over 40 breaths per minute
Over 5 years of age	Over 30 breaths per minute

In children under 5 years of age, signs of trouble breathing include:

- Grunting with breathing.
- Whistling, squeaking, or wheezing noise with breathing.
- Flaring nostrils with each breath.
- Chest rising opposite to the stomach rising.

Where to find more information

Influenza information

For information about pandemic influenza, contact your local public health office Monday to Friday, 8:30 a.m. to 4:30 p.m.

Locations can be found at www.interiorhealth.ca or by looking in the blue pages of the telephone directory.

Some other useful websites include:

The Public Health Agency of Canada
www.phac-aspc.gc.ca/influenza/index.html

The BC Health Guide
www.bchealthguide.org/kbaltindex.asp

The Canadian Coalition for Immunization Awareness and Promotion
www.immunize.cpha.ca/english/influen.htm

For information on pandemic influenza see these informative websites:

BC Centre for Disease Control
www.bccdc.org/content.php?item=35

BC Ministry of Health
www.health.gov.bc.ca/pandemic

Government of Canada
www.influenza.gc.ca

World Health Organization
www.who.int/csr/disease/influenza/pandemic/en/