

# Pandemic influenza (flu)

## Information for the general public— looking after yourself in a pandemic

### The illness

#### What is pandemic influenza?

Pandemic influenza is a human disease caused by a completely new influenza virus. The virus is different to the seasonal influenza virus that normally affects humans, and may cause infection in many people because almost no one will be immune to it.

#### How does it spread?

Pandemic influenza is very infectious and is spread from person-to-person by respiratory secretions in three ways:

- through spread of droplets from person to another (for example from coughing, sneezing)
- by touching things that are contaminated by respiratory secretions and then touching your mouth, eye or nose
- through spread of particles in the air in crowded populations in enclosed spaces.

#### If I were exposed to pandemic influenza, how long would it take for me to get sick?

The incubation period varies from 1–7 days, but is usually 1–3 days.

#### If I have influenza, how long will I be infectious for?

The infectious period is usually from one day before (although rare) the onset of illness and for approximately seven days. In children aged 12 years or younger, the infectious period is longer—a maximum of 21 days after the onset of illness.

#### What are the symptoms?

The symptoms of pandemic flu are the same as normal flu and include fever, headache, tiredness, dry cough, sore throat, runny or stuffy nose and muscle aches.

Influenza in children usually causes at least two or three of the following symptoms: sudden onset of fever, aches and pains, severe fatigue, headache, cough, sore throat, stuffy or runny nose, nausea, vomiting, diarrhoea, noisy breathing (croup), and not eating or drinking enough.

Most symptoms resolve within 2–7 days, although the cough may persist longer.

#### Can pandemic flu kill people?

Yes, however, there are treatments available and ways to prevent infection from occurring in the first place. Victoria has strategies in place to reduce the spread and impact of the pandemic in the population.

#### What are the complications?

Some of the complications caused by flu include bacterial pneumonia, dehydration and worsening of chronic medical conditions, such as heart disease, asthma or diabetes. Children may get sinus problems and ear infections as complications from the flu. People aged 65 years and older and those of any age with chronic medical conditions are at highest risk for serious complications of flu.

#### How is pandemic flu prevented and treated?

The treatment of influenza includes rest, adequate fluid intake and nutrition, and taking medications to help with fever and pain, such as aspirin (not in children) and paracetamol.

Antibiotics do not work against viruses, so they have no effect on influenza. Some people may need antibiotics because they have a secondary infection, such as pneumococcal pneumonia, as well as influenza. Those who are severely affected may need hospitalisation, supplemental oxygen therapy and respiratory support through artificial ventilation.

There are currently two antiviral drugs that can provide short-term protection against influenza (prophylaxis) or shorten the course of infection if given early in the disease (treatment). These are oseltamivir (common name—Tamiflu) and zanamivir (common name—Relenza) and both of these must be prescribed by a doctor.

The effectiveness of antivirals in treating pandemic influenza is unclear. The *Victorian health management plan for pandemic influenza* provides for some limited use for the management of cases and contacts. However, in the event of a pandemic, these medications will be in short supply.

## Prevention and control

### Protect yourself against influenza

There are a number of measures you can take to protect yourself and others from influenza.

#### a) Hygiene

Good hygiene is always important, regardless of whether an influenza pandemic is occurring. Get into good habits now.

**Handwashing** is one of the most important measures to prevent the spread of infection. Wash your hands especially after being in contact with someone who has a respiratory infection, particularly children. In the event of a pandemic, it is recommended that you avoid shaking hands. Everyone should get into the habit of washing their hands before meals, after using the toilet, and after they cough, sneeze or blow their nose. Tissues should be disposed of in the waste immediately after use.

The sooner children are taught this the better. It is best to wash your hands with soap and warm water, scrubbing your wrists, palms, fingers and nails for 10–15 seconds. Rinse and dry with a clean, dry towel. After touching surfaces try not to rub your eyes or touch your nose or mouth, as this is how you can catch the virus.

**Cough/sneeze hygiene** is important. When you cough or sneeze, turn away from other people and cover your mouth or nose with tissues. Dispose of the tissues then wash your hands.

**Limit contact with other people and things.** Don't visit people who have the flu unless it is absolutely necessary. If a member of your family has the flu, keep their personal items, such as towels, separate from the rest of the family. Clean surfaces (such as bathroom sinks and taps, kitchen sinks and counters) after the ill person has handled them. Remember not to share eating utensils, food or

drinks. You should try to stay one metre or more from sick people to reduce the spread of illness.

**Maintain good health and look after yourself.** Taking good care of yourself physically and mentally may strengthen your overall wellbeing and the ability of your body to fight off infections and stay healthy. Not smoking is particularly important. Maintain hydration by drinking plenty of water. Stay up to date with recommended vaccinations, such as all of the childhood vaccinations and the pneumococcal vaccination for those in high-risk groups.

For more information about preventing spread to others see the *interim pandemic influenza infection control Annex* in the *Australian health management plan for pandemic influenza* and the Department of Health and Ageing's website.

#### b) Immunisation

A pandemic vaccine will be different from the seasonal flu vaccine that you can obtain every year. The seasonal flu vaccine will not protect you against the pandemic virus. Vaccination with the pandemic influenza vaccine is advised once it is available. As the pandemic strain cannot be predicted in advance, there will be a time delay of at least three months before production can commence, and a further delay before there is sufficient vaccine for all Australians (probably about another two months).

#### Who should get the flu vaccine?

As the supply of a pandemic influenza vaccine will take time to become available for widespread use, priority groups will be defined at the time of the pandemic to receive the vaccine first. During the pandemic, to find out about vaccine availability and where it will be administered, contact the Department of Human Services on 1300 651 160.

#### Who should not get the flu vaccine?

People who have a severe (anaphylactic) allergy to eggs or to any of the components of the vaccine, should not be given the flu vaccine. Ask your doctor if you may be allergic to the product components. People with minor illnesses can still get the flu vaccine. However, those with a fever (temperature greater than or equal to 38.5 degrees Celsius) should wait until their symptoms have gone. Discuss the risk and benefits of vaccination with your doctor, especially if you have had significant reactions to other vaccines in the past.

#### What reactions do people have to the flu shot?

The most common reaction to the flu shot is some redness, swelling and pain at the site of the injection. Some people may develop fever, tiredness and muscle aches within a few hours of the vaccination, which may last for one to two days. More serious reactions are rare. You cannot get influenza from the vaccine.

#### c) Influenza antiviral medications

Antiviral medications are effective in preventing and treating acute influenza infection and, during a pandemic, there will be a great demand for these medications. The Australian Government has purchased a large stockpile of antivirals, which will be used to minimise overall illness and death in the population. In the early phases of a pandemic, you may be given the medication (a short course of capsules) if you are sick with pandemic influenza or if a member of your family or work/school place develops influenza, to prevent you from contracting the infection.

People whose work places them at high risk of contracting influenza (for example, health care workers) may be given the antivirals for longer periods of time. When the pandemic vaccine is available, preventative antivirals will not be

necessary, except to cover the period until the vaccine produces immunity, or for people who are unable to receive the vaccine because of the allergies mentioned above. If you or a member of your household is prescribed these drugs, **it is very important to take them exactly as advised.** This will ensure you receive maximum benefit from your treatment and reduce the chances of the virus becoming resistant. Antiviral resistance will limit the future effectiveness of these important medications.

## Plan ahead

Think about what you would need if you got the flu. **Do you own and know how to use or read a thermometer correctly?** If not, ask someone to show you. Your local pharmacist or the nurse at your general practice should be able to give you instructions.

## Have a plan

Having a plan for if you or your family have to stay at home for a week or so during a pandemic is a very good idea, particularly if you live alone, are a single parent of young children, or are the only person caring for a frail or disabled person.

Your plan could include/identify:

- Someone you could call upon for help if you become ill with the flu or are unable to leave the home. Make sure you discuss this with the person first.
- Someone you could call upon to care for your children if their school or day care centre was closed because of the pandemic, and you were required to work.
- Someone who could help you with food and supplies if you and your family are ill.
- A telephone network for you and the people who live close by.

- The phone number of your family doctor and health information line in a prominent place.

- Supplies you might need in a pandemic.

Talk to your family and friends about this.

## Supplies you might need in a pandemic

It is a good idea to have supplies of the following on hand:

- fluids (such as bottled water, juices, soups) and food to last you and your family a week
- basic household items (for example, tissues) to last a week
- plastic bags—used supermarket bags are good—to put used tissues in
- paracetamol and a thermometer in your medicine cabinet.

## When unwell

### Is it the flu?

The most prominent characteristics of the flu are sudden appearance of a high fever (38 degrees Celsius or more), a dry cough and body aches, especially in the head and lower back and legs. Usually the person feels extremely weak and tired and doesn't want to get out of bed. Other symptoms can be chills, aching behind the eyes, loss of appetite, a sore throat and a runny, stuffy nose. Having the flu is even more likely if you have been in contact with someone who already has it, or have had some other type of exposure such as overseas travel to areas where flu outbreaks are occurring.

### What can you do for yourself?

- **Influenza antiviral medications**—As there will be limited supply of influenza antiviral medications during a pandemic, they may not be available to treat every person who has contracted influenza. The Australian Government will communicate information about the availability of these medications at the

time. **When they are available for treatment, because they are only effective if commenced within the first 24–48 hours of illness, it will be important to seek medical attention early so that the antivirals can be commenced immediately.** Therefore, you should contact your doctor immediately.

- **Rest**—You will probably feel very weak and tired until your temperature returns to normal (about three days), and resting will provide comfort and allow your body to use its energy to fight the infection.
- **Stay at home**—You should stay away from work/school and avoid contact with others as much as possible while the infection is contagious. The contagious or infectious period for people over 12 years of age is approximately seven days from when the first symptom appears. For children see below.
- **Drink plenty of fluids**—Extra fluids are needed to replace those lost because of the fever (through sweating). If your urine is dark, you need to drink more. Try to drink a glass of water or juice or an equal amount of some other fluid every hour while you are awake.
- **Take simple analgesics such as paracetamol or ibuprofen** as directed on the packet, to ease muscle pain and bring down your fever (unless your doctor says otherwise). Children under 18 years of age should not take any medications that contain aspirin. The combination of influenza and aspirin in children has been known to cause Reye syndrome, a very serious condition affecting the nervous system and liver.
- **Antibiotics** are not effective against influenza because influenza is a virus and antibiotics fight bacteria. However, your doctor may prescribe them if you develop secondary bacterial infections.

- **Gargle** with a glass of warm water to ease a sore throat. Sugarless lollies or lozenges also help. Some medications, such as benzocaine, work by numbing the throat. They usually come in the form of a lozenge or throat spray. Others, containing substances like honey or herbs, work by coating the throat.
- A **hot water bottle** or heating pad may also relieve muscle pain. A warm bath may be soothing.
- **Use saline nose drops or spray** to help soothe or clear a stuffed nose. Decongestants help shrink swollen blood vessels in the nose. There are two kinds—pills and nose drops/sprays. Nose drops/sprays act in minutes. They work better and have fewer side effects than pills. However, they only work for two to three days and then they may make matters worse. If your nose is still stuffy after three days, you may want to switch to the pills. The pills take half an hour to work. They may cause a dry mouth, sleep disturbances and other side effects. Pseudoephedrine is a decongestant in pill form, but you should talk to your doctor or pharmacist about whether it is OK to take this medication.
- **Do not smoke**—This is very irritating to your damaged airways.
- A **cough** can be helpful if it gets rid of mucous.
- **Try warm moist air inhalation**—Boil a kettle and put the water in a bowl on a table. Put your head over the bowl with a towel over your head and inhale the warm air for up to 20 minutes. Don't put anything in the water.
- If you buy **medicine** at the pharmacy to treat your symptoms ('over-the-counter' medications), check with the pharmacist to see if it is the best one for you. Mention if you have a chronic illness or are taking any other medicine. Remember:
  - it is better to buy a remedy that treats only one symptom; this way you are not taking in substances that you do not need, or that may trigger an adverse reaction
  - read the label to be sure that the ingredient treats your symptoms
  - long acting medications tend to have more side effects than short acting medications
  - read the label and note any possible side effects or interactions with other drugs or health conditions
  - if you have a chronic condition and are taking prescription medications, ask the pharmacist to suggest a medication that would be safe for you to take, if you have not already discussed this with your doctor
  - **older people** are much more sensitive to medications in general and may experience more side effects, especially to the nervous system (such as confusion)
  - if you have any questions at all about medications, talk to your doctor or pharmacist.
- **Ask for help**—If you live alone, are a single parent, or are responsible for the care of someone who is frail or disabled, you may need to call someone to help you until you are feeling better.

## What to expect with the flu

**Day 1–3:** Sudden appearance of fever, headache, muscle pain and weakness, dry cough, sore throat and sometimes stuffed nose.

**Day 4:** Fever and muscle aches decrease. Hoarse, dry or sore throat, cough and possible mild chest discomfort become more noticeable. May feel tired, depressed or flat.

**Day 8:** Symptoms decrease. Cough, tiredness and mild depression may last 1–2 weeks or more.

## When to seek medical attention

### Early phases

In the early phases of the pandemic, before it is widespread in the community, it will be important to **seek medical attention as soon as you suspect you may have symptoms of pandemic influenza**. This will allow health authorities to take measures to try to contain the spread of the pandemic.

If appropriate, you may be treated with influenza antiviral medications and your family members and work colleagues may be given preventative antivirals. The influenza antiviral medications are only effective for treatment if started in the first 48 hours of illness (the earlier the better).

If you want to know where to access medical care in your local area, contact the Department of Human Services on 1300 651 160.

If you are experiencing the flu, avoid public places and contact with other people, especially those 'at risk' of severe influenza. When you seek medical care, if possible, ring the practice beforehand in case there are special arrangements for pandemic influenza patients (for example,

assessment in the home). When you attend the practice, alert the receptionist to your symptoms so that you can be seated away from others. You may be asked to wait in a separate area and you may be given a surgical mask to wear.

Before you are given a surgical mask, or if they are not available, remember to turn away from other people and cover your mouth and nose with tissues when you cough or sneeze. Wash your hands after disposal of the tissues in the rubbish.

If the decision is made for you to be cared for in the home, you should seek medical attention again in the situations outlined below.

### Later phases

In the later phases, when it is not possible to contain the spread of the pandemic, antiviral medications may not be available for treatment. Provided you are a normal healthy person, you may only need to seek medical attention if your symptoms worsen or are not improving.

If you are a normally healthy person and have developed the flu, you should seek medical care if:

- you become short of breath while resting or doing very little
- breathing is difficult or painful
- you are coughing up increased or bloody sputum
- you are wheezing
- you have had a fever for three to four days and are not getting better or 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 disorientated or confused
- you have extreme pain in your ear.

Seek medical care as soon as possible to prevent your condition worsening. Bacteria may have invaded your damaged tissues. At this point your doctor may consider giving you antibiotics.

If you have heart or lung disease or any other chronic condition that requires regular medical attention, if you are frail, or if you have an illness or are on treatments or medications that affect your immune system, or you are pregnant 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 provide you with extra help in treating the flu and preventing complications.

### When a child is unwell

Older children and teens have the same symptoms of the flu as adults. Very young children and infants probably have similar symptoms, but may not know how to tell people they have sore muscles or a headache. These children may be irritable and eat poorly. They sometimes develop a hoarse cry and barking cough (like croup). Younger children, especially those under six months of age may also have diarrhoea, vomiting and stomach pain.

Some of the things you can do for your child are:

- Give paracetamol or ibuprofen for the fever in the dose recommended on the packet (unless your doctor says otherwise). Do not give aspirin-containing medications. Your pharmacist can provide advice on appropriate 'over-the-counter' medications for treating fever.
- Do not expect to be prescribed antibiotics for uncomplicated influenza, as they will have no benefit.
- Antibiotics may be prescribed for complications of influenza such as pneumonia or ear infections.

- Dress the child in lightweight clothing and keep the room temperature at about 20 degrees Celsius if possible.
- Offer cool fluids frequently when the child is awake.
- Avoid cold baths.
- Allow the child to rest and stay at home until no longer infectious, so the virus isn't spread to other children (currently the infectious period for primary school aged children is about 14 days and for preschool aged children is about 21 days).

Throw away tissues as soon as you have wiped your child's nose. Teach the child to cover their mouth and nose when they cough or sneeze and then throw the tissue away. Wash your hands often and teach your child to do so after wiping their nose.

**In the early phases**, you should seek medical attention as soon as symptoms develop, as influenza antiviral medications may be available for treatment.

When you seek medical care, if possible, ring the practice beforehand in case there are special arrangements for pandemic influenza patients (such as assessment in the home).

When you attend the practice, alert the receptionist to your child's symptoms so that you can be seated away from others. You may be asked to wait in a separate area and your child may be given a surgical mask to wear. Before you are given a surgical mask, or if they are not available, remember to encourage your child to turn away from other people and cover their mouth and nose with tissues when they cough or sneeze.

**In the later phases**, antiviral medications may not be available. You should take your child to a doctor if your child:

- has heart or lung disease or any chronic illness requiring regular medical care; has a disease or is taking drugs or treatment that affect the immune system or takes aspirin regularly for a medical condition
- has trouble breathing
- is younger than six months old and has a temperature greater than 38.5 degrees Celsius
- is constantly irritable and will not calm down
- is listless and not interested in playing with toys
- has a fever that lasts more than five days
- drinks so little fluid that they are not urinating at least every six hours when awake
- has vomiting for more than four hours or has severe diarrhoea.

Note: green or yellow nasal discharge does not necessarily mean a child has a bacterial infection and needs antibiotics.

**Call your doctor or 000 or take your child to the hospital emergency department if your child:**

- has severe trouble breathing not caused by a stuffy nose
- has blue lips
- is limp or unable to move
- is hard to wake up, unusually quiet or unresponsive
- has a stiff neck
- seems confused
- has a seizure (convulsion/fit)
- has not had a wet nappy in 12 hours.

## Useful numbers

Australian Government Department of Health and Ageing Public Information  
Hotline: 1800 004 599

Victorian Department of Human Services:  
1300 651 160

## Further information

Information is also available on the web:

- Department of Human Services:  
<http://www.health.vic.gov.au/pandemicinfluenza/>
- Australian Government Department of Health and Ageing:  
[www.health.gov.au/internet/wcms/publishing.nsf/Content/Pandemic+Influenza-1](http://www.health.gov.au/internet/wcms/publishing.nsf/Content/Pandemic+Influenza-1)
- Department of Foreign Affairs and Trade:  
<http://www.dfat.gov.au/>
- World Health Organization:  
[http://www.who.int/csr/disease/avian\\_influenza/en/index.html](http://www.who.int/csr/disease/avian_influenza/en/index.html)
- Centres for Disease Control and Prevention (USA):  
<http://www.cdc.gov/flu/>