Pandemic and avian flu - symptoms, treatment and prevention

Influenza, commonly known as the flu, is an infection of the nose, throat and lungs caused by the Influenza A or B (or rarely C) viruses. It is highly infectious.

Pandemic (H1N1) 2009 influenza

In 2009 a new influenza virus called pandemic (H1N1) 2009 or ‘swine flu’ was identified. During 2009 and 2010 this virus spread worldwide from person-to-person resulting in the first influenza pandemic since the Hong Kong flu (1968 – 1970). In Australia, pandemic (H1N1) 2009 infection was notified most commonly in school aged children and young adults. Although the pandemic (H1N1) 2009 virus appeared to be mild in most cases, it caused severe illness in some people. The pandemic ended in August 2010, after which the swine flu virus continued to circulate, being responsible for some cases of seasonal flu.

Avian influenza in humans (‘bird flu’)

Influenza viruses can infect birds, and occasionally human infections may occur through close contact with infected poultry or poultry products. Small numbers of H5N1 avian influenza infection in humans have been reported globally since 1997. Avian influenza viruses (bird flu) are not naturally transmitted from person-to-person. However, there have been global pandemics of influenza in the past caused by avian influenza viruses that have changed genetically and gained the ability to be transmitted from person-to-person.

How influenza is spread

Influenza virus is spread when someone with influenza coughs or sneezes, producing airborne droplets that come into contact with the mucous membrane (the thin moist lining of many parts of the body such as the nose, mouth, throat and genitals) lining the nose, throat and mouth of another person. Droplets can be spread through the air. Infection may also be spread by contact with hands, tissues and other articles soiled by infected nose and throat discharges.

Signs and symptoms

Symptoms include:

- rapid onset of fever
- headache
- muscle aches
- fatigue
- sneezing
- running nose
- sore throat
- a cough.

Most people recover within a week, although the cough and fatigue may last longer. Influenza is much more serious than the common cold. It can lead to pneumonia (lung infection or inflammation) and other complications, and even death, particularly in:

- people aged 65 years and over
- pregnant women
- young children
- people with chronic conditions like heart disease, diabetes and lung disease.

**Influenza and pregnancy**

Immunity to infection is reduced during pregnancy, which may lead to an increased risk of catching the flu. Pregnant women also have an increased risk of complications from any type of flu, especially in the second and third trimesters. While the flu viruses do not cross the placenta and infect the baby while in the uterus, the high fever and any chest complications caused by flu can be potentially harmful to the baby. Because of these risks, a doctor may recommend antiviral medication for pregnant women with the flu.

There is no evidence that the antiviral medications used in Australia to treat flu are associated with adverse effects in pregnancy. Similarly, women may continue to breastfeed while taking antiviral medication. The best protection for the mother and baby is for the pregnant mother to have the flu vaccine, which is safe at any stage of pregnancy.

**Diagnosis**

Not all people with symptoms need to be tested for flu. The diagnosis may be suspected on clinical symptoms and examination (especially during the flu season) and is best confirmed by laboratory testing of mucus from the back of the nose or throat.

**Incubation period**

*(time between becoming infected and developing symptoms)*

Average of 2 days (range 1 to 4 days) for pandemic and avian influenza.

**Infectious period**

*(time during which an infected person can infect others)*
Usually from 1 day before onset of symptoms until 7 days after the onset of symptoms. After 5 days the level of infectiousness is probably very low, however some people, especially children and people with weakened immune systems, might be able to infect others for a longer time.

**Treatment**

Most people recover with rest, drinking plenty of fluids and use of paracetamol for the relief of pain and fever.

People with moderate or severe illness, pregnant women, Aboriginal and Torres Strait Islander Australians and those with chronic medical conditions may benefit from specific antiviral medication. This can reduce symptoms by about 1 day and prevent some of the more serious complications of flu, but is only effective if commenced within 48 hours of illness onset.

Antiviral therapy may sometimes be used to prevent infection in close contacts of people with influenza, such as vulnerable household contacts and residents of institutions such as aged care facilities. A contact is any person who has been close enough to an infected person to be at risk of having acquired the infection from that person.

Aspirin should not be given to children under 12 years of age unless specifically recommended by a doctor.

**When to seek medical advice**

Seek medical advice if:

- you are concerned about the symptoms
- symptoms are getting worse
- shortness of breath
- difficulty breathing
- confusion
- inability to keep liquids down because of vomiting
- symptoms of dehydration (such as being dizzy when standing or passing much less urine than normal).

**Prevention**

- Exclude from childcare, preschool, school or work until there has been no fever for 24 hours (without using a fever reducing medicine such as paracetamol)
- wash hands as soon as possible after sneezing or coughing and after contact with nose and throat discharges or articles soiled by these. Use soap and water or an alcohol based hand rub
- wipe down all frequently touched surfaces regularly with a cleaning cloth dampened with detergent, or a large alcohol wipe
- cover a cough or sneeze with a tissue or your arm, not with your hand. Drop used tissues immediately into a rubbish bin, then wash your hands
- **flu vaccines** reduce the risk of getting severe influenza. Influenza vaccination is required every year as the influenza virus is constantly changing and each year the influenza vaccines are altered to provide protection against the strains that are circulating
- annual vaccination is recommended, see the **flu vaccine** page to see if it is recommend you receive the flu vaccine.

**Useful links**

- Exclusion from childcare, preschool and school
- Flu (seasonal)
- Hand hygiene
- Immunisation
- When you have a notifiable disease
- Immunise Australia Program
- Preparing for Pandemic Influenza
- Wash, wipe, cover...don't infect another

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