

Influenza (or 'the flu') is a viral illness that mainly affects the respiratory system. Influenza is caused by influenza viruses and influenza A and B subtypes cause the majority of disease in humans.

Influenza is an important cause of illness and mortality. Illness occurs seasonally, generally in the winter months. The number of affected people varies considerably from year to year, depending on the characteristics of the circulating virus strain/s and the level of immunity in the population. The very young and the elderly are usually more seriously affected by influenza infections.

## Signs and Symptoms

Influenza symptoms usually have a sudden onset. Infection may result in a range of symptoms, including:

- no or minimal symptoms
- respiratory illness (e.g. cough, sore throat) with systemic symptoms (e.g. fever, muscle ache)

### The most common symptoms are:

- fever
- dry cough
- nasal congestion
- headache
- sore throat
- muscle aches
- feeling generally unwell
- fatigue

In the elderly, symptoms such as confusion and feeling generally unwell are more frequent, and the risk of complications is higher.

Serious complications from influenza occur in a small proportion of those with infection. Complications include: pneumonia, myocarditis and neurologic complications, which can lead to hospitalisation and death.

People at highest risk of complications from influenza include those with pre-existing medical conditions.

## How can influenza be prevented?

### 1. Influenza vaccination for adults

Annual influenza vaccination is recommended for all adults aged  $\geq 65$  years and those with a medical condition that increases the risk of influenza complications.

Although protection provided by influenza vaccine is generally expected to last for the whole season, optimal protection occurs within the first 3 to 4 months after vaccination. While influenza continues to circulate, it is never too late to vaccinate.

### 2. Infection prevention and control measures

Influenza is spread through dissemination of large particle droplets produced by sneezing and coughing. Droplets containing the influenza virus also settle onto surfaces, and can then pass from hands to the nose, mouth or eyes. People with influenza can be infectious from 24 hours before symptoms begin until one week after the start of symptoms. In previously healthy individuals, symptoms typically subside within 5–8 days. The following measures reduce the risk of transmission:

- Strict hand hygiene practices by staff
- 'Cough etiquette', including blowing your nose or coughing into a disposable tissue, coughing/sneezing into your upper arm or sleeve, and turning away from other people when coughing/sneezing
- Environmental cleaning
- Droplet transmission based precautions are required:
  - Gown, gloves, surgical face mask to be used by staff
  - Affected residents to be cared for in a single room
  - Avoidance of mingling in group settings

# Prevention and control of influenza in aged care homes

## Diagnosis of influenza

Influenza is usually diagnosed on the basis of medical review and examination. Laboratory tests may be required to confirm an influenza infection. The virus can be detected in a nose or throat swab by rapid antigen-based tests, or more commonly by molecular methods, such as polymerase chain reaction for virus DNA (PCR).

## Management of influenza

- Anti-viral medication, which requires a prescription, can help reduce the severity and duration of symptoms of influenza. Medication must be administered within 48 hours of symptom onset for best effect
- Pain relief
- Drinking more fluids
- Admission to hospital for severe acute cases

### Further reading:

1. National Health and Medical Research Council (NHMRC) 2013, Australian Immunisation Handbook
2. National Centre for Immunisation Research & Surveillance (NCIRS) 2018, Influenza vaccines for Australians <http://www.ncirs.org.au/sites/default/files/2018-12/Influenza-fact-sheet.pdf>
3. Victorian Department of Health and Human Services <https://www2.health.vic.gov.au/public-health/infectious-diseases/disease-information-advice/influenza>

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