

# Respiratory illness in residential and aged care facilities

Guidelines and information

April 2018

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Where the term 'Aboriginal' is used it refers to both Aboriginal and Torres Strait Islander people. Indigenous is retained when it is part of the title of a report, program or quotation.

Available at: [Respiratory illness management in aged care facilities](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities)

<<https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities>>

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# Acronyms and Abbreviations

AACQA	Australian Aged Care Quality Agency
ABHR	alcohol based hand rub
CDPC	Communicable Disease Prevention and Control
CDNA	Communicable Disease Network Australia
the department	Department of Health and Human Services
EPA	Environment Protection Authority
GP	general practitioner
HCW	health care worker
ILI	influenza-like-illness
OMT	Outbreak management team
PHO	public health officer
PPE	personal protective equipment
RACF	residential aged care facilities
RCF	residential care facilities
RICPRAC	rural infection control practice group
RSV	respiratory syncytial virus
TGA	Therapeutics Goods Administration
VIDRL	Victorian Infectious Disease Reference Laboratory

# 1 Introduction

These guidelines apply to all residential care facilities (RCFs) in Victoria. This refers to any public or private aged care, disability services or other congruent accommodation setting in Victoria where residents are provided with personal care or health care by facility staff. However, given individuals over the age of 65 are more susceptible to influenza and are more likely to develop complications, the guidelines have a strong focus on residential aged care facilities (RACFs).

Older people living in RACFs are susceptible to outbreaks of respiratory illness. Respiratory illnesses are commonly caused by influenza particularly in winter; however other viruses such as parainfluenza, respiratory syncytial virus (RSV), adenoviruses, and rhinoviruses can also cause outbreaks of respiratory illness. In Australia, respiratory outbreaks commonly occur during the months of April through to October.

Managing a respiratory outbreak (suspected or confirmed) effectively requires a number of required actions. These guidelines are designed to assist RCFs plan, prepare, detect and respond to respiratory outbreaks (particularly due to influenza) in their facility.

## 1.1 Influenza outbreaks

It can be difficult to tell the difference between a respiratory illness caused by influenza and a respiratory illness caused by other viruses based on symptoms alone. Suspected influenza cases are referred to as 'influenza-like-illness' (ILI) until a causative pathogen is identified through diagnostic testing (for example, nose and throat swab collection). If the influenza virus is detected during an outbreak this is referred to as an influenza outbreak.

While all respiratory viruses can cause outbreaks and significant morbidity and mortality, influenza is acknowledged as a major health risk particularly for the elderly, pregnant women and individuals with low immunity. These guidelines will assist RCFs to manage all types of respiratory outbreaks, but the focus is predominantly on influenza.

## 1.2 Legal Framework

It is the responsibility of RCFs to identify and comply with relevant state and territory legislation and regulations.

Specifically, RCFs should fulfil their legal responsibilities in relation to infection control by adopting standard and transmission-based precautions as directed in the [Australian Guidelines for the Prevention and Control of Infection in Healthcare \(2010\)](https://www.nhmrc.gov.au/guidelines-publications/cd33) <<https://www.nhmrc.gov.au/guidelines-publications/cd33>> and by state/territory public health authorities. RACFs are also required to operate under the *Aged Care Act 1997* to be accredited and be eligible for funding. Accreditation requires adherence to infection control standards.

Notifying respiratory **outbreaks** is currently not a legislative requirement in Victoria however treating medical practitioners and /or laboratories are legally required to notify positive **cases** of influenza to the Victorian Department of Health and Human Services (the department).

## 1.3 Roles and responsibilities

### 1.3.1 Residential and Aged Care Facility

The primary responsibility of managing respiratory and influenza outbreaks lies with the RCF, within their responsibilities for resident care and infection control. All RCFs should have in-house or access to infection control expertise and outbreak management plans in place. RCFs are expected to:

- detect and notify outbreaks to the department.

- self-manage outbreaks in accordance with the Victorian *Respiratory illness in residential and aged care facilities: Guidelines and information* (2018) kit and the *Australian Guidelines for the Prevention and Control of Infection in Healthcare* (2010).

### **1.3.2 The Victorian Department of Health and Human Services (the department)**

Communicable Disease Prevention and Control (CDPC) is a unit within the department that acts in an advisory role to assist RCFs to detect, characterise and manage influenza outbreaks. This includes:

- Assist facilities in confirming outbreaks by applying the case definition correctly and providing advice on obtaining swabs.
- Provide guidance on outbreak management.
- Monitor for severity of illness (record deaths and hospitalisations).
- Inform relevant stakeholders of outbreaks.
- Monitor the number of influenza outbreaks occurring as the season progresses.
- Contribute to national surveillance.

### **1.3.3 Australian Aged Care Quality Agency and the Aged Care Complaints Commissioner**

The Australian Aged Care Quality Agency (AACQA) is a Commonwealth Government body responsible for accreditation of RACFs. They perform site visits and assessments against expected infection control outcomes.

- On notification of an outbreak in a RACF, CDPC notifies AACQA and the Aged Care Complaints Commissioner (ACCC) of outbreaks via an email distribution list.
- RACFs with poor outbreak management or any concerns at time of notification may be referred to AACQA and/or the ACCC. Concerns may include:
  - Significant delay in notification
  - Significant outbreak size, hospitalisations or number of deaths
  - Significant staff illness
- There is currently no legal requirement for RACFs to report outbreaks to AACQA.

## 2 Understanding respiratory illnesses

### 2.1 Recognising influenza and other respiratory illnesses

Influenza (often referred to as “the flu”) is a highly contagious viral infection that can cause severe illness and potentially life-threatening complications, including pneumonia. Influenza is spread by contact with respiratory secretions.

In general, influenza is more serious than the common cold; symptoms such as fever, body aches, extreme tiredness, and dry cough are more common and severe.

Influenza seasons can be unpredictable and severity can vary from one season to the next depending on many factors (for example, the circulating strains and level of vaccine coverage for a given population).

Severity of symptoms of a respiratory illness in any given individual can range from mild to severe. If a person has influenza it is different from a cold and onset can be sudden. People infected with influenza or ILI often experience some or all of the following:

- sudden appearance of a fever (38°C or more) although often absent in elderly
- a dry cough, shortness of breath or wheeze
- body aches (especially headaches, lower back and legs)
- feeling extremely weak and tired (and not wanting to/able to get out of bed).

Other symptoms can include:

- chills
- aching behind the eyes
- loss of appetite
- sore throat
- runny or stuffy nose.

Older people may also have the following symptoms:

- increased confusion
- worsening chronic conditions of the lungs
- loss of appetite.

Elderly patients often have non-classic respiratory symptoms; consider testing any resident with any **new** respiratory symptom or symptom which is unusual for that individual.

### 2.2 Incubation period

The incubation period (time from exposure to onset of symptoms) will vary depending on which pathogen is causing the respiratory illness. For example, the incubation period for:

- influenza is, on average, two days (a range of one to four days)
- respiratory illnesses caused by viruses such as parainfluenza, respiratory syncytial virus (RSV), adenoviruses and rhinoviruses can range from one to ten days.

### 2.3 Infectious period

In general people with a respiratory illness are often infectious one to two days before signs and symptoms commence and for up to five to seven days after symptoms develop.

In some people, such as those who are severely immunocompromised, the period of communicability may be longer (up to seven to ten days).

## 2.4 Transmission

Respiratory illnesses are mainly spread by droplet transmission. Large droplets are produced when people cough and sneeze. When a person with a respiratory illness coughs or sneezes respiratory droplets can be transmitted to someone else's mouth, nose or eyes, or possibly inhaled into the lungs, of a person who is nearby. Using nebulisers and taking swabs can also cause transmission.

Respiratory illnesses can also be transmitted from surfaces or objects that are contaminated with respiratory droplets spread from coughing and sneezing or when people touch them with contaminated hands.

For these reasons, respiratory hygiene and cough etiquette, hand hygiene and regular cleaning of surfaces are paramount to preventing the transmission of respiratory illness (particularly influenza).

## 2.5 People at increased risk of complications from influenza

People at increased risk of complications from influenza include:

- people 65 years of age and over (the human immune defences become weaker with advancing age)
- all Aboriginal and Torres Strait Islander people
- people with chronic or other medical conditions including
  - asthma, a lung disease that is caused by chronic inflammation of the airways
  - neurological and neurodevelopmental conditions including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy (seizure disorders), stroke, intellectual disability, moderate to severe developmental delay, muscular dystrophy, or spinal cord injury
  - chronic lung disease (such as chronic obstructive pulmonary disease)
  - heart disease (such as congestive heart failure and coronary artery disease)
  - blood disorders (such as sickle cell disease)
  - endocrine disorders (such as diabetes mellitus)
  - kidney disorders
  - liver disorders
  - weakened immune system due to diseases (such as HIV and cancer) or medications such as chemotherapy, long term steroids or immune based therapy for conditions such as rheumatoid arthritis)
  - morbid obesity.

## 2.6 Complications of influenza

Most people will recover in a few days to within two weeks, but some people can develop complications (such as pneumonia) and this may be life-threatening and can result in death.

Complications include:

- secondary bacterial infections such as pneumonia and bronchitis
- sinus and ear infections
- worsening of chronic health problems such as congestive heart failure, asthma and diabetes

## 3 Prevention and preparedness

Facilities must ensure they are prepared for respiratory outbreaks **prior** to the start of the influenza season (March / April).

### 3.1 Prepare an outbreak management plan for your facility

Preparing an outbreak management plan will help staff identify, respond and manage a potential influenza outbreak, protect the health of staff and residents and reduce the severity and duration of outbreaks if they occur. At a minimum, facilities must identify a dedicated staff member to plan, coordinate and manage logistics in an outbreak setting as well as communicate and liaise with CDPC.

The prevention strategies discussed in this section should be included in the facility's outbreak management plan. A useful [checklist](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) <<https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities>> to assist in outbreak preparedness can be found on the department's residential and aged care facility guidance page.

### 3.2 Vaccination

One of the most effective ways to prevent influenza in the residential care setting is for residents and staff to be vaccinated every year. Vaccination of people in high risk categories, such as those aged over 65 years is especially important to decrease their risk of a severe influenza illness. There are no vaccines currently available to prevent respiratory illnesses caused by non-influenza viruses.

In Australia the seasonal influenza vaccination program commences in March of each year. Facilities should aim to ensure at least 95% of staff and residents are vaccinated to enable adequate coverage to achieve herd immunity within the facility. This can be facilitated through implementing clear internal vaccination policies<sup>1</sup>.

Vaccination of health care workers (HCWs) and other staff who have contact with people in residential aged care settings (for example, administrative, cleaning, laundry and kitchen staff and volunteers) is important to prevent the spread of influenza to residents and reduce staff absenteeism through illness. The Commonwealth Government announced on 22 April 2018 that it is now mandatory for aged care providers to offer and provide influenza vaccination programs to all staff in residential aged care facilities. Strategies to assist effective vaccination uptake for staff and residents include:

1. A plan for residents to be vaccinated before each year's influenza season (ideally March/April).
  - Discuss vaccination with residents, their families and General Practitioners (GPs) early to encourage uptake and ensure effective and timely administration.
2. Organise a regular staff vaccination program before each year's influenza season.
  - Consider recognition, rewards and incentives for vaccinated staff.
3. Maintain an annual register of residents and staff (including casual staff) who are vaccinated including the date and type of vaccine given. This will help your facility easily identify vaccinated staff that can care for unwell residents in an outbreak. In addition, it is important that the immunisation provider report each administration of seasonal influenza vaccine to the Australian Immunisation Register record for each recipient (resident or staff).

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<sup>1</sup> Communicable Diseases Network Australia 2017, *Guidelines for the prevention, control and public health management of influenza outbreaks in residential care facilities in Australia*, Australian Government, Canberra.

### 3.3 Staff, resident and family education

Education for staff, residents and their families is vital every year before the influenza season to inform their behaviour and help manage the potential occurrence for ongoing transmission in an outbreak setting. The department recommends the provision of prompt and clear information for residents and families regarding the outbreak including respiratory hygiene and cough etiquette, hand hygiene and restricting visitation if they have any symptoms of ILI.

A [sample letter](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) <<https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities>> outlining the preventative steps families can take to reduce the risk of bringing respiratory illnesses into the facility can be found on the department's residential and aged care facility guidance page.

Staff should be encouraged to stay away from work when they have any kind of infectious illness and to notify the facility if they suspect they were working during their infectious period, particularly for respiratory illness. Staff exclusion and caring for residents during an outbreak is discussed further in [section 5.2.6](#).

The principle underlying staff and visitors staying away from the facility if they are unwell applies to all types of infectious illness all year around. Facilities may wish to consider permanent signage reinforcing this message at all entry points to the facility.

### 3.4 Replacement of unwell staff

Facilities should have a staff contingency plan in the event of an outbreak where unwell staffs need to be excluded from work for 5 to 7 days. This plan should be able to cover a 20-30% staff absentee rate<sup>2</sup>. Contact lists of casual staff members or external nursing agencies may be helpful to arrange prior to the start of the influenza season to activate should an outbreak occur. Leave planning should also consider the peak period of the influenza season and current outbreaks.

### 3.5 Staff education and training

It is the responsibility of every RCF to ensure their staff are adequately trained and competent in all aspects of outbreak management prior to the start of the influenza season.

Staff should know the signs and symptoms of ILI in order to identify and respond quickly to a potential outbreak. Additionally, all staff (including casual, domestic, hospitality and volunteer workers) need to understand the infection control guidelines and be competent in implementing these measures during an outbreak.

The department recommends that facilities run one or more staff education sessions prior to the influenza season to train staff in the prevention, recognition and management of ILI and respiratory outbreaks.

Resources for staff education and training purposes can be found on the department's respiratory illness [web page](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) <<https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities>>.

### 3.6 Adequate stock levels

Facilities should acquire adequate stock levels of disposable materials required during an outbreak, including:

- personal protective equipment (gloves, gowns, masks, eyewear)
- hand hygiene products (liquid soap, alcohol based hand rub, hand towel)

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<sup>2</sup> Communicable Diseases Network Australia 2017, *Guidelines for the prevention, control and public health management of influenza outbreaks in residential care facilities in Australia*, Australian Government, Canberra.

- diagnostic materials (dry sterile flocced / viral culture swabs)
- cleaning supplies (detergent and disinfectant products)
- antiviral medication (if applicable).

Facilities should have an effective policy in place to obtain additional stock from suppliers as needed. Examples of effective monitoring of stock levels could incorporate:

- regular stocktake (counting stock)
- use of an outbreak kit / box.

### 3.7 Antiviral medication

There is good evidence that the timely administration of antiviral medication, as treatment and/or prophylaxis (prevention), can reduce the duration of an influenza outbreak and the number of residents who are affected. As per the Communicable Disease Network Australia (CDNA) [Guidelines for the Prevention, Control and Public Health Management of Influenza Outbreaks in Residential Care Facilities in Australia](http://www.health.gov.au/internet/main/publishing.nsf/Content/cdna-flu-guidelines.htm) (2017) <<http://www.health.gov.au/internet/main/publishing.nsf/Content/cdna-flu-guidelines.htm>>, the department recommends the use of antiviral medications in symptomatic residents during laboratory confirmed influenza outbreaks, and the consideration of prophylaxis for asymptomatic residents (regardless of vaccination status) and unvaccinated staff<sup>3</sup>.

The department recommends that facilities have clear internal policies in place regarding the use of antiviral medication as prophylaxis and/or treatment of influenza during outbreaks. It is strongly recommended that clinical staff liaise with residents' families and GPs / clinicians regarding this aspect of the outbreak management plan prior to an outbreak occurring. Where possible, a decision should be made prior to the influenza season regarding the intention to use antiviral medication in an outbreak setting for each resident which should be documented in the resident's file and/or the facility's outbreak management plan.

The responsibility and decision to prescribe antiviral medication ultimately remains with residents' GPs. Should GPs decide to use antiviral medication as treatment and/or prophylaxis appropriate clinical assessment needs to be completed prior to administration (for example, renal function testing), and financial consent obtained from residents or their families for the purchase of antivirals.

Early administration of antiviral medication in an outbreak is vital in order for the medication to be an effective outbreak management tool. If facilities plan to use antiviral medication for prophylaxis or treatment it is advisable to develop processes with residents' GPs for standing orders or antiviral prescriptions prior to the influenza season. This will ensure timeliness of administration on a widespread scale (for residents and unvaccinated staff in the facility), an essential requirement for effective antiviral prophylaxis.

The department has developed a letter, planning tool and further information regarding the decision to use antiviral medication for facilities to send to their visiting GPs to encourage early discussion before an outbreak occurs. These resources can be found on the department's residential and aged care facility [guidance page](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) <<https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities>>.

#### 3.7.1 Supply

The department does not supply antiviral medication to residential care facilities. It is recommended that facilities liaise with their pharmacy to ensure that a supply of the preferred antiviral medication(s) can be made available at short notice.

<sup>3</sup> Communicable Diseases Network Australia 2017, *Guidelines for the prevention, control and public health management of influenza outbreaks in residential care facilities in Australia*, Australian Government, Canberra.

Facilities may wish to consider stocking antivirals in their imprest supply to enable minimal delay for the first dose in a confirmed outbreak.

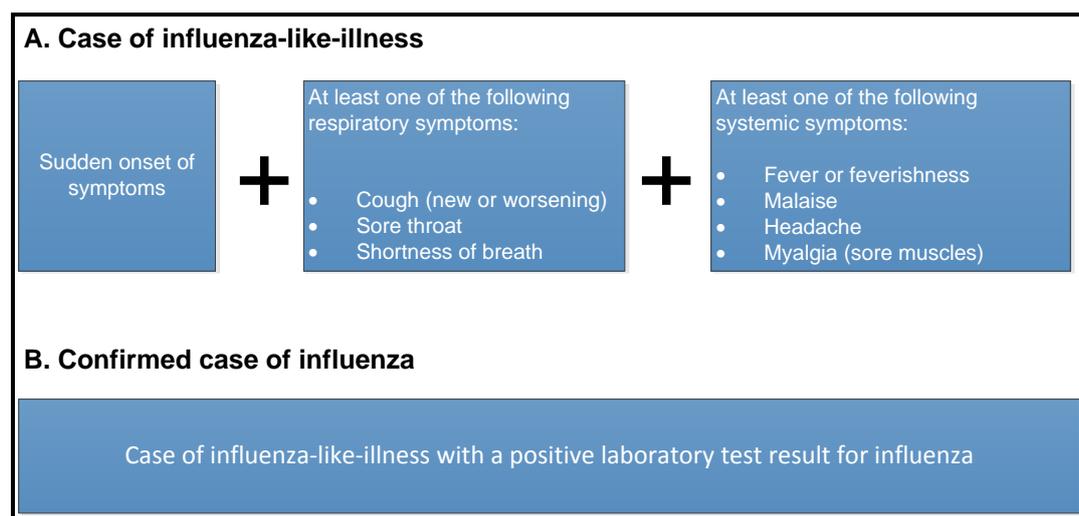
## 4 Identifying respiratory outbreaks

### 4.1 Identifying an outbreak

In order to detect respiratory outbreaks early, a case definition for ILI is applied to each ill resident or staff member. **An outbreak should be notified and declared when there are three or more cases of ILI with an onset of symptoms within a 72 hour period** that are within the facility. These people may have been in the same ward/unit/room or an area where they had contact with one another and there was an opportunity for the spread of infection. There is no need to wait for a swab or blood result before notifying of an outbreak.

### 4.2 Case definition

Figure 1. Case definitions for influenza-like illness (updated March 2017)



### 4.3 Collecting nose and throat swabs

Nose and throat swabs should be collected from ill residents / staff **within the first 48 hours** after onset of respiratory symptoms to identify the cause of the infection. Arrange collection of nose and throat swabs as outlined on the department's [webpage](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) <https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities>.

If possible collect respiratory specimens using nasopharyngeal swabs from **four to six** of the most recent cases and report these results to CDPC and the residents' GPs as soon as they are available (both positive and negative results).

### 4.4 Notifying the Department of Health and Human Services

If an outbreak is suspected, notify CDPC at the department via telephone **1300 651 160** as soon as possible. A public health officer (PHO) will assist with advice and guidance on how to proceed.

At the time of notification, the PHO will request the following information:

- total number of residents and/or staff with respiratory symptoms

- date of onset of illness of each person
- symptoms of each person
- number of people admitted to hospital with influenza-like symptoms
- number of people with influenza-like symptoms who have died
- total number of staff that work in the facility and in the affected area
- total number of residents in the facility and in the affected area
- whether respiratory specimens (nose and throat swabs) have been collected.

The PHO will advise and assist with the following:

- confirming the presence of an outbreak
- identifying the control measures that need to be in place
- testing of the initial respiratory specimens either at the Victorian Infectious Diseases Reference Laboratory (VIDRL) if necessary or your primary laboratory.

The department will provide your facility with a preferred case list (also called a 'line list') template to use via email when an outbreak is notified. If any **deaths** occur during an outbreak, CDPC must be notified **within 24 hours** (9.00am – 5.00pm daily). Hospitalisation of residents may be noted on the case list and sent to CDPC twice weekly ([section 5.5.1](#)).

## 4.5 Notifying resident and facility General Practitioners

Unwell residents require medical review by their GP regardless of whether an outbreak is present or not. If a respiratory outbreak is present, **all** visiting GPs should be informed at the start of the outbreak. CDPC can provide the facility with a [letter](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) to be sent to the relevant visiting GPs on notification of an outbreak. This will facilitate swabs being obtained, early treatment for symptomatic residents and consideration of provision of prophylaxis. It is important to speak with CDPC to confirm the presence of an outbreak before issuing the outbreak letter to visiting GPs.

# 5 Outbreak management

This section provides detailed information on the required actions to be implemented once an outbreak has been identified. Facilities should refer to the outbreak management [checklist](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) <<https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities>> as a useful for quick reference for staff.

The department recommends facilities engage an infection control consultant or make contact with the residential in-reach service at their local health service should they require additional support in an outbreak.

The rural infection control practice group (RICPRAC) is a collaborative network of rural infection control consultants who may be able to offer advice in relation to infection control issues in an outbreak. Further information and contact details for RICPRAC can be [found here](https://www2.health.vic.gov.au/hospitals-and-health-services/quality-safety-service/infection-prevention/rural-infection-centres) <<https://www2.health.vic.gov.au/hospitals-and-health-services/quality-safety-service/infection-prevention/rural-infection-centres>>

Residential in-reach services are run by Victorian public hospitals and provide tertiary care. They may be available to assist residential care services to avoid the transfer of residents to hospital where possible. Details about the services and contact details for Residential In-Reach services in Victoria can be [found here](https://www2.health.vic.gov.au/hospitals-and-health-services/patient-care/rehabilitation-complex-care/health-independence-program/specialist-hip-clinics) <<https://www2.health.vic.gov.au/hospitals-and-health-services/patient-care/rehabilitation-complex-care/health-independence-program/specialist-hip-clinics>>.

## 5.1 Establishing an outbreak management team

It is the facility's responsibility to self-manage the outbreak. If possible, an internal outbreak management team (OMT) should be established to direct, monitor and oversee the outbreak, confirm roles and responsibilities and liaise with CDPC. In reality, a small number of staff often perform multiple roles in an OMT. For detailed information on implementing an OMT refer to the instructions on the department's [webpage](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) <<https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities>>

## 5.2 Implementing infection prevention and control measures

### 5.2.1 Standard precautions

Standard precautions refer to the work practices required to achieve a basic level of infection prevention and control. They apply to all residents, regardless of suspected or confirmed infection status, in all health care and long-term residential care settings. Standard precautions include (but are not limited to):

- hand hygiene
- use of personal protective equipment
- respiratory hygiene/cough etiquette
- routine environment cleaning
- cleaning of shared equipment.

Consistent application of the precautions noted above will reduce the risk of transmission of respiratory infections.

#### 5.2.1.1 Hand hygiene

Hand hygiene is one of the most effective infection control measures for preventing the spread of infectious pathogens. Emphasis should be placed on the importance of hand hygiene for all staff, residents and visitors.

Hand hygiene is a general term that refers to any action of hand cleansing, such as hand washing with soap and water or hand rubbing with an alcohol based hand rub (ABHR). Using an ABHR is the preferred method for hand cleansing when hands are not visibly soiled. Hands must be washed with plain liquid soap and water when visibly soiled and after direct contact with blood or body fluids.

There must be adequate access for staff, residents and visitors to hand hygiene stations (, providing access to ABHR and hand basins with liquid soap, water and paper towel) that should be adequately stocked and maintained. Hand basins for staff should, wherever possible, be hands-free (for example, elbow operated) to facilitate appropriate hand hygiene practices and prevent recontamination of hands when turning off taps. Staff should be made aware of the proper hand hygiene technique and rationale; when, where and how, known as the “5 moments of hand hygiene”.

Hand hygiene for residents is another important measure to prevent the transmission of infectious organisms. Residents should wash their hands after toileting, after blowing their nose, before eating and when leaving their room. If the resident’s cognitive state is impaired, staff caring for them must be responsible for helping residents with this activity. Staff should assist residents to perform hand hygiene whenever they leave their room, after going to the toilet or blowing their nose, prior to communal activities and before eating food.

Remind visitors that they should perform hand hygiene before and after visiting any resident.

The use of gloves should never be considered an alternative to hand hygiene. Hand hygiene is required **before** putting on gloves and immediately **after** they have been removed.

Further information and resources about hand hygiene can be found at:

- [Hand Hygiene Australia](http://www.hha.org.au/home.aspx) < http://www.hha.org.au/home.aspx>
- The [department’s website](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) <https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities>.

#### **5.2.1.2 Use of Personal Protective Equipment (PPE)**

Staff must wear appropriate PPE when it is anticipated that there may be contact with a resident’s blood or body fluids, mucous membranes, non-intact skin or other potentially infectious material or equipment. Gloves, mask and eye protection should be used whenever any aerosol producing procedures are undertaken such as when obtaining a respiratory specimen from a resident.

PPE should be removed in a manner that prevents contamination of the HCW’s clothing, hands and the environment. PPE should be immediately discarded into appropriate waste bins.

Always perform hand hygiene before putting on PPE and immediately after removal of PPE.

Staff should be trained and deemed proficient in donning and doffing PPE before an outbreak occurs. The following resources are highly recommended showing the correct technique for donning and doffing PPE. [Tasmanian Infection Prevention and Control Unit’s videos](http://www.dhhs.tas.gov.au/publichealth/tasmanian_infection_prevention_and_control_unit/healthcare_worker_education/proper_use_of_personal_protective_equipment) <http://www.dhhs.tas.gov.au/publichealth/tasmanian\_infection\_prevention\_and\_control\_unit/healthcare\_worker\_education/proper\_use\_of\_personal\_protective\_equipment> as a resource for correct PPE use.

For further information about PPE requirements when caring for residents with a respiratory illness see PPE requirements for transmission-based precautions in [section 5.2.2](#).

##### **5.2.1.2.1 Eye protection**

When there is the risk of splash or splattering of blood or body fluids, secretions or excretions, eye protection should be worn. Personal eye glasses are not adequate eye protection. Eye protection includes safety glasses, goggles or face shields.

It is preferable that eye protection is single use and disposed of after each use. Where reusable protective eyewear is used it must be cleaned and disinfected after each use. Protective eyewear should be individual use only.

#### **5.2.1.2.2 Single use face masks**

Single use face masks (also called surgical face masks) should be worn when exposure to respiratory droplets is likely. They are generally loose fitting without a tight air seal and should be fluid resistant. Masks must comply with the Australian Standard AS/NZS 4381:2015 *Single-use face masks for use in health care*.

The following are points to remember when using a mask.

- Hand hygiene should be performed before putting on a mask, and before and after taking off a mask.
- The mask should be put on prior to entering the room.
- Remove the mask immediately after leaving the room handling only by the tapes/elastics and place in an appropriate waste bin.
- Never reuse masks. Masks must never be partially removed (for example top ties only undone) and allowed to hang around the neck to be reused at a later time.
- If a mask is being worn as an infection control measure for non-vaccinated staff members, the mask must, at a minimum, be changed between providing close personal care to residents. It is not recommended that masks be worn for long periods but rather when in close proximity to residents (that is, when within approximately one metre).

#### **5.2.1.3 Respiratory hygiene / cough etiquette**

Respiratory hygiene and cough etiquette should be applied as a standard infection control precaution at all times. Covering coughs and sneezes prevents respiratory secretions from dispersing into the air and contaminating environmental surfaces.

Respiratory hygiene / cough etiquette includes the following actions.

- Cover the nose/mouth with disposable single-use tissues when coughing, sneezing, wiping and blowing noses.
- Use tissues to contain respiratory secretions.
- Dispose of tissues immediately into the nearest waste container.
- If no tissues are available, cough or sneeze into the inner elbow rather than the hand.
- Attend to hand hygiene immediately after contact with respiratory secretions and contaminated objects/materials.
- Keep contaminated hands away from mucous membranes of the eyes and nose.

Residents may require assistance with attending to their respiratory hygiene. Hand hygiene facilities should be provided for residents, particularly when they are immobile.

#### **5.2.1.4 Cleaning shared equipment**

Ensure that shared equipment (for example, lifting machine, commode, thermometer) is not used for another resident until it has been appropriately cleaned (and disinfected or reprocessed if required).

Items such as slings should be dedicated to one resident's use and must be laundered before use on another resident.

Anything labelled as single-use must be discarded after use and not reprocessed or used on another resident.

#### **5.2.1.5 Routine environmental cleaning**

Regular scheduled cleaning of the environment is essential to prevent the spread of infectious organisms. The influenza virus can survive on surfaces for up to 24 hours, thereby leading to contamination of hands. Frequently touched surfaces, such as door handles, over bed tables, mobility aids and light switches require more frequent cleaning compared to other surfaces.

## 5.2.2 Transmission-based precautions (droplet precautions)

Transmission based precautions are infection control precautions used in **addition** to standard precautions to prevent the spread of certain infectious pathogens. **Droplet precautions** are the additional infection control precautions required when caring for residents suspected or confirmed as having influenza or other respiratory illness.

Droplet precautions (in **addition** to the standard precautions listed above) include the procedures described below.

### 5.2.2.1 Resident placement

It is preferable that all residents with a respiratory illness be cared for in a single room with their own ensuite facilities. The resident should be restricted to their room for five days after symptom onset.

If single rooms are not available, use the following principles to guide resident placement.

- Give highest priority to single room placement to residents with excessive cough and sputum production.
- Place residents together in the same room (cohort) with similar signs and symptoms or infected with the same pathogen (if known) and assessed as being suitable roommates.
- When a single room is not available, and cohorting of ill residents is not possible, a resident with a respiratory illness may be cared for in a room with a roommate(s) who does not have a respiratory illness. This is the least favourable option. In this case
  - residents' beds should be separated by at least one metre
  - the curtain should be kept drawn between residents' beds
  - the roommate must be vaccinated against influenza with the current season's vaccine prior to that year's season starting or at least two weeks prior to being in the same room as the ill resident.
- In shared rooms (both cohorted with like illness and residents with and without illness), staff must ensure they change their PPE and perform hand hygiene when moving between residents.

### 5.2.2.2 Resident movement

- Where possible, residents in droplet precautions should be restricted to their room for five days after symptom onset. Residents may attend necessary medical or procedural appointments.
- Residents with a respiratory illness who must leave their room should wear a mask if tolerated.
- Consider placing all residents at least one metre apart in communal areas such as dining, lounge and other areas, where possible, during a respiratory outbreak.
- Communicate the respiratory illness status of the resident to other healthcare facilities and services before transfer so that appropriate infection prevention and control precautions can be implemented at the accepting facility.

### 5.2.2.3 Signage

A droplet precaution sign must be placed outside symptomatic residents' rooms to alert staff and visitors to the requirement for transmission-based precautions.

Droplet precautions posters/ signage are available at:

- The [Australian Commission for Safety and Quality in Health Care website](https://www.safetyandquality.gov.au/our-work/healthcare-associated-infection/national-infection-control-guidelines/) <https://www.safetyandquality.gov.au/our-work/healthcare-associated-infection/national-infection-control-guidelines/>
- [The department's webpage](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) <https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities>.

#### **5.2.2.4 Personal protective equipment**

All staff and visitors entering the room of a person with a respiratory illness should wear a single use face mask for close contact, generally within one metre. For further information regarding mask use [see section 5.2.1.2.2 Single use face masks](#).

Gowns, gloves and protective eyewear need only be worn as per standard precautions, that is, if contact or splash with blood or body fluids is anticipated.

#### **5.2.2.5 Equipment and instruments/devices**

Use disposable equipment where possible (for example, blood pressure cuffs) or dedicate use of non-disposable equipment to any residents with a respiratory illness. If equipment must be shared (for example, lifting machine) for multiple residents, ensure the equipment has been cleaned and disinfected before use on another resident.

Consider cohorting equipment to use for patients in droplet precautions, or to a wing or unit under isolation. If equipment is cohorted, it must still be cleaned and disinfected between each patient use.

#### **5.2.2.6 Linen and laundry items**

Handle, transport, and process used linen or items requiring laundering (for example, clothing) in a manner that avoids contamination of air, surfaces and persons. If linen or resident clothing is laundered onsite compliance with the Australian Standard *AS/NZS 4146:2000 Laundry Practice* is required.

No additional precautions are required for the management of linen for residents with influenza or other respiratory infections. Linen and clothing items from residents with a respiratory illness do not need to be segregated or laundered separately.

#### **5.2.2.7 Eating utensils**

Crockery and cutlery should be washed in a dishwasher or if not available by hand using hot water and detergent, rinsed in hot water and dried. The use of disposable cutlery or separation of cutlery and crockery during an outbreak is not required.

#### **5.2.2.8 Waste management**

Ensure waste is appropriately segregated into the different waste streams, for example, general, recyclable, or clinical and related waste. Storage and handling of all waste must meet the Environment Protection Authority (EPA) Victoria legislative requirements. For more information refer to EPA Victoria's [Clinical and Related Waste – Operational Guidance](http://www.epa.vic.gov.au/business-and-industry/guidelines/waste-guidance/clinical-waste-guidance) <[www.epa.vic.gov.au/business-and-industry/guidelines/waste-guidance/clinical-waste-guidance](http://www.epa.vic.gov.au/business-and-industry/guidelines/waste-guidance/clinical-waste-guidance)>.

All gloves, masks, protective eyewear or gowns used whilst caring for a resident with influenza should be disposed of into clinical waste (yellow bin or bag).

#### **5.2.2.9 Ceasing droplet precautions**

Generally, people with influenza are considered infectious for five days. Droplet precautions should therefore **continue for at least five days after symptom onset**.

### **5.2.3 Environmental cleaning and disinfection**

Influenza viruses are able to survive on environmental surfaces, particularly hard surfaces, for periods of one to two days. Infection can occur through contact with contaminated surfaces then infecting oneself or others by touching eyes, nose or mouth with contaminated hands. As such, regular cleaning and disinfection of surfaces should be undertaken during a suspected or confirmed outbreak to minimise the spread of influenza and other respiratory viruses.

The frequency of environmental cleaning and disinfection during an outbreak should be increased to at **least twice daily**, particularly of frequently touched surfaces such as bedside rails, over bed tables and door handles.

There are a number of disinfectants that are effective against influenza and other respiratory viruses. These include bleach or chlorine-based disinfectants, quaternary ammonia compounds, hydrogen peroxide and alcohol.

According to the *Australian guidelines for the prevention and control of infection in health care settings, 2010* (p93, B2.1.3):

“In acute-care areas where the presence of infectious agents requiring transmission-based precautions is suspected or known, surfaces should be physically cleaned with a detergent solution. A TGA-registered hospital-grade disinfectant should then be used (e.g. 2-step clean or 2-in-1 clean) as outlined in Section B1.4.2. In office-based practice and non-acute-care areas (e.g. long-term care facilities), the risk of contamination, mode of transmission and risk to others should be used to determine whether disinfectants are required.”

When selecting a disinfectant to use during an outbreak consider the following.

- Select a disinfectant or combined cleaning and disinfecting agent that is either “listed” or “registered” with the Therapeutics Goods Administration (TGA). Products can be checked to see if they are on the Australian Register of Therapeutic Goods (ARTG) here < <https://tga-search.clients.funnelback.com/s/search.html?query=&collection=tga-artg>>.
- Select a disinfectant that is effective against the vast majority of organisms that cause health care associated infections. The need to use different disinfectants for different organisms could lead to mistakes in dilution and usage of products.
- For practical purposes, the disinfectant should have a fast kill time (or contact time). This will enable killing of organisms before the solution can dry, be removed or before residents or staff are likely to touch the surface.

Always follow the manufacturer’s instructions for use (and dilution) of detergent and disinfectant.

If facilities use an alternative method for cleaning and disinfection, the method must be validated to be equivalent to the above. If using a non-touch method of surface disinfection (for example, ultraviolet [UV-C] or hydrogen peroxide vapour) prior cleaning is required.

A ‘terminal clean and disinfection’ should be conducted when droplet precautions have been ceased for a resident and/or when the outbreak for a unit has been declared over.

## 5.2.4 Signage

During an outbreak, signage must be posted at all external entrances to the facility to alert visitors to the outbreak. Signage should also be strategically posted to remind visitors to:

- not visit if unwell
- visit only one resident during their visit
- follow signs for the use of PPE as indicated
- perform hand hygiene and respiratory/cough etiquette.

Example signage is provided on [the department’s webpage](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) at <<https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities>>.

### 5.2.5 Visitors and communal activities

During an outbreak, where possible, minimise the movement of visitors into and within the facility. Facilities should consider implementing the following strategies.

- Suspend all group activities, particularly those that involve visitors (for example, musicians).
- Postpone visits from non-essential external providers (for example, hairdressers).
- Inform regular visitors and families of residents of the respiratory outbreak and request that they only undertake essential visits.
- Ask visitors who do visit an ill resident to
  - visit only the ill resident
  - wear PPE as directed by staff
  - enter and leave the facility directly without spending time in communal areas
  - perform hand hygiene before entering and after leaving the resident's room.

### 5.2.6 Staff

For suspected or confirmed cases of respiratory illness in residents caused by influenza it is preferable that only staff who have been vaccinated for influenza provide care for these residents.

During a confirmed influenza outbreak unvaccinated staff are recommended to attend work only if they are asymptomatic and wear a single use face mask, or are asymptomatic and taking appropriate antiviral prophylaxis.

All staff members (vaccinated and unvaccinated) should self-monitor for signs and symptoms of respiratory illness and self-exclude if unwell. Staff with respiratory illnesses should be excluded from work for the period during which they are infectious (generally five days after the onset of the acute illness or until symptoms have ceased).

During an outbreak, wherever possible, HCWs should not move between wings or units of the facility to provide care for other residents. This is particularly important if not all wings/units are affected by the outbreak. It is preferable to cohort staff to areas (in isolation or not in isolation) for the duration of the outbreak.

Unvaccinated staff who have been working in the outbreak affected area should not be moved as they may be incubating infection. They should be offered immediate influenza vaccination. Please note that vaccination may not prevent illness if already incubating. A protective immune response takes approximately two weeks to develop.

### 5.2.7 Admissions and transfers

#### 5.2.7.1 New admissions

An ongoing outbreak does not mean the facility has to go into complete “lock down”. It is preferable that admission of **new** residents to an affected unit during an outbreak does not take place. Where new admissions are unavoidable, new residents and their families must be informed about the current outbreak and adequate outbreak control measures must be in place for these new residents. Families may wish to make alternative arrangements until the outbreak is over.

#### 5.2.7.2 Re-admission of cases

The re-admission of residents who met the case definition and have been hospitalised for their illness is permitted, provided appropriate accommodation and infection prevention and control requirements can be met.

### 5.2.7.3 Re-admission of non-cases

The re-admission of residents that have not been on the respiratory outbreak case lists (that is, are not a known case) should be avoided during the outbreak period if possible. If non-cases are re-admitted, the resident and their family must be informed about the current outbreak and adequate outbreak control measures must be in place. Families may wish to make alternative arrangements until the outbreak is over.

### 5.2.7.4 Transfers

If transfer to hospital is required, the ambulance service and receiving hospital must be notified of the outbreak/suspected outbreak verbally and through using a resident transfer advice form. An [example form](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) <https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities> is provided on the department's webpage.

### 5.2.7.5 Non-infected residents

In some circumstances, it may be feasible to transfer residents who are not symptomatic, to other settings (for example, family care) for the duration of the outbreak. The family or receiving facility should be made aware that the resident may have been exposed and is at risk of developing disease.

## 5.3 Arrange antiviral treatment & prophylaxis with residents' GPs

Prescribing antiviral medications and treating the residents in a confirmed influenza outbreak is the responsibility of the GP. The department assists by providing a letter for GPs recommending treatment of confirmed influenza cases and prophylaxis (where appropriate) once an outbreak has been notified. It is important to send a [copy of this letter](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) <https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities> to **all** facility GPs at the start of a respiratory outbreak.

The department does not provide or cover the cost of antiviral medications (for example, Tamiflu). These costs are to be covered by the resident and /or their families. Facilities should liaise with their local pharmacy to ensure there is adequate availability of antiviral medications if they are to be used during an outbreak. The department can assist with pharmacy liaison if facilities are having difficulty sourcing medications.

## 5.4 Offer vaccination

During an influenza outbreak it is important to review the vaccination records of all residents and staff and offer or recommend vaccination for all well (asymptomatic) staff, residents and visitors. Even though it takes around two weeks to develop a protective immune response, the department recommends facilities to encourage vaccine uptake even if an outbreak has started.

## 5.5 Monitor outbreak progress

Increased and active observation of all residents for ILI is essential in outbreak management to identify ongoing transmission and potential gaps in infection control measures. Facilities should have the capacity to monitor or count residents and staff displaying signs and symptoms of ILI daily to ensure swift infection control measures are implemented or strengthened to reduce transmission and the duration of the outbreak.

### 5.5.1 Update case lists

Once you have notified the department of an outbreak [email](mailto:CDI&R@dhhs.vic.gov.au) <CDI&R@dhhs.vic.gov.au> or fax (1300 651 170) an initial case list of ill residents immediately (the same day as notification). Update the list with additional cases **daily** at the facility and send a copy to CDPC **twice weekly** only. It is important to ensure all details are completed on the case list including the symptom onset date for each ill staff member and resident. The department [case list template](https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities) <https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/respiratory-illness-management-in-aged-care-facilities> can be found on the department's webpage and is also available in hard copy from CDPC

### 5.5.2 If Influenza is NOT detected in residents or staff

If nose and throat swab results are found to be negative for influenza ('not detected') **or** if a different respiratory virus has been detected (for example RSV) contact CDPC to inform and seek advice. Generally, CDPC will encourage the facility to manage the remainder of the outbreak themselves (in accordance with these guidelines) and will not continue to actively follow up or request for ongoing case lists for other respiratory pathogens.

## 5.6 Declaring the outbreak over

Respiratory outbreaks including those caused by influenza can be declared over if no new cases have occurred within **eight days from the onset of symptoms of the last resident case**. Contact CDPC for final approval when this time frame has occurred to ensure the outbreak can be declared over.

## 5.7 Review outbreak management

After the outbreak is declared over, it is important to reflect on strengths and weaknesses of the outbreak response and investigation process within your facility. This can occur through formal or informal debriefs with the aim to improve processes for future outbreaks.

If your facility has any feedback on these guidelines or suggestions to improve their usefulness in managing respiratory outbreaks, please [email the department](mailto:infectious.diseases@dhhs.vic.gov.au) <infectious.diseases@dhhs.vic.gov.au>.

If your facility requires any online resources referred to in this document in hard copy please call **1300 651 160** and speak to a PHO.