Management of an Outbreak of Infection Guide
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The purpose of this guide is to assist in the implementation of optimum Infection Prevention and Control standards. It is not intended to be used and should not be used for the purpose of indicating compliance or otherwise with any rules, regulations, guidelines or policies of any Authority.

This guide reflects the current state of knowledge about Infection Control and pandemic influenza. Every effort has been taken to ensure the information it contains is accurate and up to date. However, you should be aware that current knowledge of Infection Control could be modified in the future to reflect changes in knowledge about methods of transmission. It is the responsibility of each organisation, however, to keep abreast of current legislation and standards and guidelines relevant to infection control.

While our advice, opinion and information are professionally sourced and provided in good faith and whilst we have taken all care in the preparation of this guide, we do not accept legal liability or responsibility related to this guide and the information it contains.

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1. Aim

Containment of an outbreak of infection and minimization of the risk of cross infection.

2. Objective

To develop and implement management strategies which will contain an outbreak of infection and prevent healthcare associated transmission to residents, staff or visitors.

3. Expected Outcome

Effectiveness of the precautions instituted will be demonstrated by no further transmission of disease.

4. Introduction

An outbreak may be described as an epidemic or an increase in the normal or expected level of healthcare associated infection within a facility. The goal of managing an outbreak is to prevent further infection to other residents or staff of the facility and to identify factors which may have contributed to the outbreak. This allows for the development and implementation of measures to prevent further outbreaks. The most common outbreaks to occur in an aged care facility will be viral gastroenteritis, respiratory infection outbreak or scabies.

When an outbreak occurs it is imperative that immediate action is taken to prevent further transmission to residents and staff.

The action required to contain and manage an outbreak is dependent on the nature and severity of the infection. There are 10 key steps that must be followed.

Step 1 - Recognise the outbreak and prepare to investigate

Determine the existence of an outbreak. The background occurrence of the infectious disease must be known to judge whether this new information is a normal variation in rates or is the onset of an outbreak.

Determine the need for immediate control measures and notify and communicate to all the healthcare workers, management and the local Public Health Unit if necessary.

At this time, it will be important to mobilise the outbreak management team.

Step 2 - Verify the diagnosis and confirm that an outbreak exists

Once the background rate of infection has been determined, comparison can be made with the current infection rate to decide if an outbreak has occurred or is occurring.

Review each case and ensure there are no discrepancies between diagnosis and laboratory findings. Confirm cases and identify the infectious agent when possible.
Step 3 - Establish a case definition and find cases

Establish a set of standard criteria to decide whether or not a person has the disease of concern.

In the case of gastroenteritis or food borne illness, two or more cases of vomiting and diarrhoea (not related to disease process or medication) among residents and staff in an institution constitute an outbreak in a 24-hour period.

Influenza like illness is defined when both criteria 1 and 2 is met:

1. Fever
2. At least 3 of the following influenza like illness subcriteria
   a) Chills
   b) New headache or eye pain
   c) Myalgia's or loss of appetite
   d) Sore throat
   e) New or increased dry cough.

An outbreak of influenza may be defined by three cases of acute respiratory tract illness in the facility during a period of 72 hours with at least one of these laboratory confirmed as a pathogen i.e. influenza.

Once a case definition is developed it is important to review all residents and staff to find cases which meet this definition, then list (line list) all the cases and update the list with new cases as they are identified.

Step 4 - Characterise the outbreak by person, place and time

Documentation must be compiled by a designated staff member regarding all affected residents, staff and visitors. The following information is required:

- person’s name
- date of birth
- date of admission
- location of resident in facility
- date and time of onset of symptoms
- presenting symptoms
- date of resolution of symptoms (if available)
- specimens sent for pathology analysis and results if available Plot the information to recognise any trends.

Examination of the data regarding person, place and time provides information about the agent, the source or reservoir, the means of transmission and host factors. From this information, a tentative hypothesis or explanation for this particular disease transmission and its probable source can be identified.
Step 5 - Determine who is at risk

Identify the risk groups and the number of people ill or who may become ill and initiate precautionary measures such as:

- Use of standard precautions and appropriate transmission based precautions
- Increase frequency and efficiency of environmental cleaning using appropriate products
- Prophylactic treatment/immunisation
- Antibiotic restrictions
- Exclusion of cases from high risk activities
- Isolation and/or cohorting of residents
- Restricting movement of residents, staff and visitors. See Appendix A for signage example.
- Screening of patients with isolation of residents and cohorting of contacts
- Provision of health information and advice to all residents, staff and visitors

Step 6 - Develop a hypothesis of how and why this may have occurred

Develop hypotheses from the information gathered on the potential source of infection, the vector, the pathogen and/or the route of transmission.

The type of outbreak should be identified as:

- Common source outbreak: exposure to a common or harmful substance e.g. food borne illness.
- Propagated outbreak: direct or indirect transmission of an infection from an infected person to a susceptible person e.g. person to person transmission by a vector such as mosquitoes. These cases usually occur over a longer period than in common source outbreaks. Determine if the hypothesis explains the situation for the majority of cases.

Based on the hypotheses, plans should be developed for the care of the sick, control of transmission and prevention of illness.

Step 7 - Test the hypothesis with the established facts

Analyse the data and compare risk factors among ill (cases) and those not ill and identify the attack rates. Determine if the hypothesis explains the situation for the majority of cases.

Step 8 - Carry out further studies if necessary

This may involve testing faecal specimens, sputum specimens, environmental samples, food samples or environmental screening in some situations (e.g. Legionella, or Pseudomonas outbreaks)

Step 9 - Implement ongoing infection prevention and control measures

Standard precautions and appropriate transmission based precautions will need to be implemented to prevent further illness:

- Restrict spread from the case
• interrupt chain of infection
• interrupt transmission or reduce exposure
• reduce susceptibility to infection
• assessment of policy, regulations, standards

5. Notification

Notification of an outbreak must be **prompt** and initially be made to the person in charge of the facility. It is the responsibility of the person in charge to notify the Manager, Nurse Manager or designate who will assess the situation and advise the following.

- Outbreak Coordinator
- Medical Officer in charge of the resident’s care
- Chief Executive Officer
- Consulting Microbiologist (as required)
- Local Public Health Unit

Early notification will enable determination of isolation requirements and institution of an outbreak management plan.
## Notifiable Infectious Diseases Under the Health Act 1956

### Section A – Infectious Diseases Notifiable to a Medical Officer of Health and Local Authority

<table>
<thead>
<tr>
<th>Disease</th>
<th>Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute gastroenteritis **</td>
<td>Campylobacteriosis</td>
</tr>
<tr>
<td>Cholera</td>
<td>Cryptosporidiosis</td>
</tr>
<tr>
<td>Giardiasis</td>
<td>Hepatitis A</td>
</tr>
<tr>
<td>Legionellosis</td>
<td>Listeriosis</td>
</tr>
<tr>
<td>Meningoencephalitis – primary amoebic</td>
<td>Salmonellosis</td>
</tr>
<tr>
<td>Shigellosis</td>
<td>Typhoid and paratyphoid fever</td>
</tr>
<tr>
<td>Yersiniosis</td>
<td></td>
</tr>
</tbody>
</table>

**Not every case of acute gastroenteritis is necessarily notifiable, only those where there is a suspected common source or from a person in a high risk category (for example, a food handler, an early childhood service worker) or single cases of chemical, bacterial, or toxic food poisoning such as botulism, toxic shellfish poisoning (any type) and disease caused by verotoxin or Shiga toxin-producing *Escherichia coli*.**

### Section B – Infectious Diseases Notifiable to Medical Officer of Health

<table>
<thead>
<tr>
<th>Disease</th>
<th>Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthrax</td>
<td>Arboviral diseases</td>
</tr>
<tr>
<td>Brucellosis</td>
<td>Creutzfeldt-Jakob disease (CJD) and other</td>
</tr>
<tr>
<td><em>Cronobacter</em> species</td>
<td>spongiform encephalopathies</td>
</tr>
<tr>
<td>Haemophilus influenzae b</td>
<td>Diphtheria</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>Hepatitis B</td>
</tr>
<tr>
<td>Hydatid disease</td>
<td>Hepatitis (viral) not otherwise specified</td>
</tr>
<tr>
<td>Invasive pneumococcal disease</td>
<td>Highly Pathogenic Avian Influenza (including</td>
</tr>
<tr>
<td>Leptospirosis</td>
<td>HPAI subtype H5N1)</td>
</tr>
<tr>
<td>Measles</td>
<td>Leprosy</td>
</tr>
<tr>
<td>Mumps</td>
<td>Malaria</td>
</tr>
<tr>
<td>Non-seasonal influenza (capable of being</td>
<td>Middle East Respiratory Syndrome (MERS)</td>
</tr>
<tr>
<td>transmitted between human beings)</td>
<td>Neisseria meningitidis invasive disease</td>
</tr>
<tr>
<td>Plague</td>
<td>Pertussis</td>
</tr>
<tr>
<td>Q fever</td>
<td>Poliomyelitis</td>
</tr>
<tr>
<td>Rheumatic fever</td>
<td>Rabies and other lyssaviruses</td>
</tr>
<tr>
<td>Rubella</td>
<td>Rickettsial diseases</td>
</tr>
<tr>
<td>Tetanus</td>
<td>Severe Acute Respiratory Syndrome (SARS)</td>
</tr>
<tr>
<td>Verotoxin-producing or Shiga toxin-producing</td>
<td>Tuberculosis (all forms)</td>
</tr>
<tr>
<td><em>Escherichia coli</em> Viral haemorrhagic fevers</td>
<td>Yellow fever</td>
</tr>
</tbody>
</table>

### Section C – Infectious Diseases Notifiable to Medical Officer of Health without Identifying Information of Patient or Deceased Person

<table>
<thead>
<tr>
<th>Disease</th>
<th>Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquired Immunodeficiency Syndrome (AIDS)</td>
<td></td>
</tr>
<tr>
<td>Gonorrhoeal infection</td>
<td></td>
</tr>
<tr>
<td>Human Immunodeficiency Virus (HIV) infection</td>
<td></td>
</tr>
<tr>
<td>Syphilis</td>
<td></td>
</tr>
</tbody>
</table>

### Diseases Notifiable to Medical Officer of Health (Other than Notifiable Infectious Diseases)

<table>
<thead>
<tr>
<th>Disease</th>
<th>Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cysticercosis</td>
<td></td>
</tr>
<tr>
<td>Decompression sickness</td>
<td></td>
</tr>
<tr>
<td>Lead absorption equal to or in excess of</td>
<td></td>
</tr>
<tr>
<td>0.48µ mol/l (10µg/dl)***</td>
<td></td>
</tr>
<tr>
<td>Poisoning arising from chemical contamination of the environment</td>
<td></td>
</tr>
<tr>
<td>Taeniasis</td>
<td></td>
</tr>
<tr>
<td>Trichinosis</td>
<td></td>
</tr>
</tbody>
</table>

*†During times of increased incidence health practitioners may be requested to report, with informed consent, to their local medical officer of health cases of communicable diseases not on this list.

*Not every case of acute gastroenteritis is necessarily notifiable, only those where there is a suspected common source or from a person in a high risk category (for example, a food handler, an early childhood service worker) or single cases of chemical, bacterial, or toxic food poisoning such as botulism, toxic shellfish poisoning (any type) and disease caused by verotoxin or Shiga toxin-producing *Escherichia coli*.**

***Where occupational exposure is suspected, please also notify the agency responsible for workplace health and safety through the notifiable occupational diseases system.
Australian Guidance re Notification

The Public Health Act 1991 requires doctors and hospital chief executive officers (or general managers) to notify the following diseases:

By phone as soon as possible:

- Avian Influenza
- Botulism
- Cholera
- Creutzfeldt-Jacob Disease (CJD)
- Diphtheria
- Foodborne illness (≥ 2 linked cases)
- Gastroenteritis (in an institution)
- Haemolytic uraemic syndrome
- Haemophilus influenzae type B invasive infections
- Hendra Virus
- Hepatitis A
- Legionella infection
- Lyssavirus infection
- Measles
- Meningococcal disease
- Pertussis
- Plague
- Rabies
- Severe Acute Respiratory Syndrome (SARS)
- Smallpox
- Typhoid
- Typhus (epidemic)
- Verotoxin-producing Escherichia coli infections
- Viral haemorrhagic fevers
- Yellow fever

By phone or mail:

- AIDS
- Adverse event following immunisation
- Anthrax
- Arboviral infection
- Brucellosis
- Chancroid
- Chlamydia
- Cryptosporidiosis
- Dengue
- Donovanosis
- Food-borne illness
- Giardiasis
- Gonorrhoea
- Hepatitis B
- Hepatitis C
- Hepatitis D (Delta)
- Hepatitis E
- HIV
- Influenza
- Invasive pneumococcal infection
- Leprosy
- Leptospirosis
- Listeriosis
- Lymphogranuloma venereum (LGV)
- Malaria
- Mumps
- Paratyphoid
- Poliomyelitis
- Psittacosis
- Q Fever
- Rotavirus
- Rubella
- Salmonellosis
- Shigellosis
- Syphilis
- Tetanus
- Tuberculosis
Infectious Diseases notification should be directed to the local Area Public Health Unit and should be initiated within 24 hours of diagnosis. To maintain confidentiality, notification must not be made by facsimile. Public Health Units are contactable by phone 24 hours a day.

For details of your nearest Public Health Unit phone 1300 066 055


In other states or areas: enter “Public Health Units” into your favoured search engine for location details and contact numbers.
6. Management of an Outbreak of Gastroenteritis

Gastroenteritis means inflammation of the stomach and small and large intestines. Many different viruses can cause gastroenteritis, including Rotavirus, Adenovirus, Calicivirus,Astrovirus, and Norovirus. Gastroenteritis can also be caused by bacteria such as Clostridium difficile. Outbreaks of viral gastroenteritis in long term care facilities are often caused by Norovirus. Norovirus is spread when material contaminated by faeces and vomitus from an infected person is ingested. Norovirus is extremely infectious so it only takes a few particles of virus to cause illness. In a healthcare facility, the virus is primarily spread through contamination of the hands of persons who are ill. It can also be spread by consuming contaminated food or drinks, touching contaminated surfaces and putting your fingers in your mouth and through the air (when vomiting sends tiny particles into the air). The outbreak may then spread by person to person transmission among residents, staff and visitors.

The main symptoms of gastroenteritis are watery diarrhoea and vomiting. The affected person may also have headache, fever and abdominal cramps. Symptoms generally appear 24 to 48 hours after initial infection with a virus and may last from one to ten days, depending on the virus which causes the illness.

Following notification to the local Public Health Unit, a thorough assessment of the situation is required and prompt institution of infection control measures. The primary goals of outbreak management are to control and prevent further disease and to identify factors that contribute to the outbreak, in order to develop and implement measures to prevent similar outbreaks in the future.

**Standard and additional contact precautions will need to be implemented.** Standard precautions are the basic level for the control of infection and include good hygiene practices, particularly hand hygiene. Emphasis of the importance of thorough hand hygiene before and after direct resident care, together with the use of protective apparel, must be made to all staff. It is necessary to carry out all of the following measures, when working with residents who require contact precautions:

- perform hand hygiene
- put on gloves and long sleeved gown upon entry to the care area
- ensure clothing and skin do not contact potentially contaminated environmental surfaces
- remove gown and gloves and perform hand hygiene on leaving the care area
- use dedicated equipment or single-use resident use equipment (e.g. blood pressure cuffs)
- if common use of equipment for multiple patients is unavoidable, clean the equipment and allow it to dry before use on another resident

During an outbreak of gastroenteritis:

- An alcohol based hand rub should be located within the room of each affected resident to ensure staff clean their hands as the last task carried out before moving to another task.

**Points to remember:**

Use of alcohol based hand rubs alone may not be sufficient to reduce transmission of

*Clostridium difficile.* (ASCQHC 2010)

- Staff entering the room must wear personal protective apparel of medical examination gloves and impervious gown or apron. Fluid repellent masks must available and be worn when cleaning areas grossly contaminated by faeces or vomitus as spattering or aerosols of infectious material may be involved in the transmission of viral gastroenteritis.
• Isolation or cohorting of infected residents is essential to contain the further spread of the outbreak. Isolation for gastrointestinal illness must remain in force until the resident has been symptom free for at least 48 hours. Note: staff need to be aware that although the resident is now symptom free, the virus can still be shed in the stool for up to two weeks; therefore, continuing strict hand hygiene practices must be maintained.

• If several residents have the same symptoms, then cohort (grouped) nursing may be appropriate. Cohort nursing involves one carer or group of carers who exclusively look after the infected group of residents whilst other carers look after the uninfected residents.

• Restriction of allied health personnel, non-essential staff and visitors entering the ward/unit may be necessary to confine and contain the outbreak.

• Relatives and visitors should be advised not to offer any nursing assistance to their relative or to other residents in the same facility. Small children and babies should not visit during the gastrointestinal outbreak and visitors should be advised to wash hands before leaving the area.

• Staff working within the facility should not be relocated to other areas until the outbreak has ceased.

• Where appropriate, pathology specimens from all affected persons (both residents and staff), must be taken for culture and identification of organisms.

• The manager should monitor staff pathology results and liaise with the infection control consultant or consultant microbiologist.

• Facility closure to further admissions may be necessary during an acute outbreak where there is a risk of severe illness or even death. In the case of gastroenteritis, new residents should not be admitted to the facility until all cases have been free of symptoms for 48 hours.

• Determination of facility closure will be made by the manager or delegate in liaison with the residents’ Medical Officer and other members of staff already notified.

• Where closures and isolation restrictions are implemented, residents, relatives and staff must be informed of reasons and procedures for isolation.

• In the case of gastrointestinal outbreaks and other viral and bacterial outbreaks, the frequency of cleaning may need to be increased. In an isolation room, surfaces that are soiled with blood or body fluids or the presence of MROs (including C. difficile) or other infectious agents requiring transmission based precautions, should be physically cleaned with a detergent solution, followed or combined with a TGA-registered disinfectant with label claims specifying its effectiveness against specific infectious organisms. The cleaning process must involve either:
  o Physical cleaning using detergent followed by a chemical disinfectant (2-step clean) i.e. clean with detergent, then clean with a disinfectant
  o Physical cleaning using a detergent and chemical disinfectant (2-in-1 clean) i.e. a combined detergent/disinfectant wipe or solution could be used if this process involves mechanical/manual cleaning (NHMRC 2010)

• Rooms of non-affected residents should be cleaned first. Particular attention must be paid to the cleaning of bathrooms, toilets, door handles, handrails, commode chairs and other areas frequently touched by affected residents.

• Rooms of residents in isolation should be cleaned with yellow colour coded cleaning equipment.

• Ideally staff assigned to cleaning duties should not have access to the kitchen during an outbreak of gastroenteritis.

• The Outbreak Coordinator must report to the manger on a daily basis during the period of outbreak of infection.

• See Appendix B for Outbreak Checklist
7. Management of an Outbreak of Influenza

Influenza and other viral respiratory illnesses occur throughout the year but are more common from autumn to spring. Aged care facilities are considered to be high risk environments due to advancing age of residents, the presence of chronic medical conditions and the close proximity of living conditions.

Influenza is spread by droplets from coughs or sneezes. Initial symptoms may be similar to those of other respiratory infections with symptoms developing rapidly, 1-3 days after infection. Symptoms include fever, chills, cough, muscle or joint pain, stuffy runny nose, headache and sore throat. The elderly may also experience confusion, shortness of breath, loss of appetite or increase in symptoms of chronic obstructive airways disease. Individuals may be infectious for 3-4 days after infection and may be infectious 1-2 days before symptoms appear.

If an outbreak of influenza is suspected, it is important to liaise closely with the local Public Health Unit. A thorough assessment of the situation is required and prompt institution of infection control measures. The primary goals of influenza outbreak management are to control and prevent further disease and to identify factors that contribute to the outbreak in order to develop and implement measures to prevent similar outbreaks in the future.

**Standard and droplet precautions will need to be implemented.** Standard precautions are the basic level for the control of infection and include good hygiene practices particularly hand hygiene. Emphasis of the importance of thorough hand hygiene before and after direct resident care, together with the use of protective apparel, must be made to all staff.

When working with residents who require droplet precautions:

- When entering the care environment, put on a surgical mask.
- Place patients who require droplet precautions in a single room if available.

During an outbreak of influenza:

- An alcohol based hand rub should be located within the room of each affected resident to ensure staff clean their hands as the last task carried out before moving to another task.
- Staff entering the room must wear personal protective apparel of medical examination gloves, fluid repellent surgical masks and impervious gown or apron.
- Isolation or cohorting (grouping) of infected residents may be essential to contain the further spread of disease (see Section B, Isolation Precautions, for further information). Isolation for influenza must remain in force until the resident is symptom free.
- If several residents have the same infection or are known to be carriers of an outbreak organism, then cohort nursing may be appropriate. Cohort nursing involves one carer or group of carers who exclusively look after the infected group of residents whilst other carers look after the uninfected residents.
- Restriction of allied health personnel and visitors entering the ward/unit may be necessary to confine and contain the outbreak.
- Relatives and visitors should be advised not to offer any nursing assistance to their relative or to other residents in the same facility. Small children and babies should not visit during the outbreak and visitors should be advised to wash hands before leaving the area.
- Staff working within the facility should not be relocated to other areas until the outbreak has ceased.
- Where appropriate, pathology specimens from all affected persons (both residents and staff), must be taken for culture and identification of organisms.
- The manager should monitor staff pathology results and liaise with the infection control consultant and public health unit.
- Closure of the facility to further admissions may be necessary during an acute outbreak where there is a risk of severe illness or evendeth.
- Determination of facility closure will be made by the manager or delegate in liaison with the residents’ Medical Officer, other members of staff already notified and the public health unit.
- Where facility closures and isolation restrictions are implemented, residents, relatives and staff must be informed of reasons and procedures for isolation.
- During an influenza outbreak, the frequency of cleaning may need to be increased. In an isolation room, surfaces that are soiled with blood or body fluids or other infectious agents requiring transmission based precautions, should be physically cleaned with a detergent solution, followed or combined with a TGA-registered disinfectant with label claims specifying its effectiveness against specific infectious organisms. The cleaning process must involve either:
  - Physical cleaning using detergent followed by a chemical disinfectant (2-step clean) i.e. clean with detergent, then clean with a disinfectant
  - Physical cleaning using a detergent and chemical disinfectant (2-in-1 clean) i.e. a combined detergent/disinfectant wipe or solution could be used if this process involves mechanical/manual cleaning (NHMRC 2010)
- Rooms of non-affected residents should be cleaned first.
- Particular attention must be paid to the cleaning of bathrooms, handrails, commode chairs and other community areas.
- Rooms of residents in isolation should be cleaned with yellow colour coded cleaning equipment.
- The person in charge of the facility must report to the manager on a daily basis during the period of outbreak of infection.
- See Appendix C, D and E for outbreak tools.

8. Management of an Outbreak of Scabies

Scabies is an intensely itching rash caused by a mite named sarcoptes scabiei. Scabies in an aged care facility is a difficult problem. The residents may be disabled, immobile or otherwise compromised and often have high mite counts. As a result, they can be infectious. Nursing staff and residents in the surrounding areas will often become infected. Scabies may become long standing despite treatment.

Scabies is highly contagious and is spread predominantly by direct contact with skin. Transfer from clothes and bedding occurs rarely and only if contaminated by infested residents. The pregnant female mite burrows into the skin and lays eggs. After two or three days the larvae emerge and dig new burrows. They mature, mate and repeat this cycle every two weeks.

Scabies can be difficult to detect. The main symptoms of scabies are a result of the host immune reaction to the burrowed mites. Scabies presents within two to six weeks after the initial infection but reinfestation can cause symptoms within 48 hours. Presenting symptoms are commonly papules, vesicles, pustules or nodules with common sites of infestation on the hands and feet, particularly in finger web spaces, on the wrists and forearms and genital areas. Signs are often missed if the skin has been scratched, has become secondarily infected or if eczema is present.
If an outbreak of scabies is suspected, it is important act quickly and to liaise closely with the local Public Health Unit. A thorough assessment of the situation is required and prompt institution of infection control measures. The primary goals of scabies outbreak management are to control and prevent further infestation to residents and staff and to identify factors that contribute to the outbreak in order to develop and implement measures to prevent similar outbreaks in the future.

**Standard and Contact Precautions will need to be implemented.** Standard Precautions are the basic level for the control of infection and include good hygiene practices particularly hand hygiene. Contact precautions will involve the wearing of a long sleeved apron or gown and gloves when touching a resident’s skin.

- During an outbreak of scabies alcohol based hand rub should be located within the room of each affected resident to ensure staff clean their hands as the last task carried out before moving to another task.
- Staff entering the room must wear personal protective apparel of medical examination gloves and impervious long sleeved gown or apron
- Isolation or cohorting of infected residents may be essential to contain the further spread of the infestation.
- If several residents have the same infection or are known to be carriers of scabies, then cohort (grouped) nursing may be appropriate. Cohort nursing involves one carer or group of carers who exclusively look after the infested group of residents whilst other carers look after the un-infested residents.
- Restriction of allied health personnel and visitors entering the ward/unit may be necessary to confine and contain the outbreak.
- Relatives and visitors should be advised not to offer any nursing assistance to their relative or to other residents in the same facility. Small children and babies should not visit during the outbreak and visitors should be advised to perform hand hygiene before leaving the area.
- Staff working within the facility should not be relocated to other areas until the outbreak has ceased.
- Where appropriate, pathology specimens (skin scrapings) must be taken for culture and identification of mites, from all affected persons both residents and staff.
- The Director of Nursing or Outbreak Manager should monitor staff pathology results and liaise with the infection control consultant and public health unit.
- During a scabies outbreak the frequency of cleaning may need to be increased. Detergent is recommended for all general cleaning. After the initial clean with neutral detergent, disinfectant may occasionally be recommended where symptoms of infection persist. (AGDHA 2004)
- Rooms of well residents should be cleaned first.
- Rooms of residents in isolation should be cleaned with yellow colour coded cleaning equipment
- Person in charge of the facility must report to the Director of Nursing or Outbreak Manager on a daily basis during the period of outbreak of infection.

**Protocol for the Treatment and Management of Scabies**

The initial strategy for the management of scabies is to kill the mite. Once this is achieved then treatment for the itch and dermatitis can begin.

- Confirm the diagnosis preferably by identifying a typical burrow or positive skin scrapings.
- Coordinated treatment is essential if residents are under the care of different medical practitioners.
- Staff involved in treatment must practice contact precautions (wear protective gloves and aprons)
• Traffic between different wards or floors is to be limited.
• All visitors must comply with infection control guidelines (hand hygiene) and are advised to seek medical advice if symptoms develop.

Day 1
• Exclude visitors until at least 24 hours after treatment has commenced
• Treat all residents and staff members on the same day. Spot treatment is not successful.
• Apply scabicide preparation to dry skin from the neck down emphasizing treatment of all sites e.g. under nails, soles of feet. Because, on rare occasions, a resident may have an allergic reaction to the scabicide, ensure the medication has been ordered by the resident’s medical practitioner and documented on their medication chart.
• Any areas that are washed within the 12-24-hour period (for example due to incontinence) should have a reapplication of scabicide.
• Keep finger nails short.
• Keep residents cool.
• Any fabric covered chairs used by the infected resident should be removed from use or covered with a sheet for 4 days (96 hours.). Any mites will have died within this timeframe
• Other furniture used by the resident should be thoroughly cleaned with a neutral detergent.

Day 2
• Bathe to remove the treatment
• All resident clothing and linen should be machine washed in hot water and dried thoroughly in a dryer. Items of resident clothing and linen that cannot be laundered should be removed from body contact for at least 4 days (96 hours). Fumigation of living areas is unnecessary.
• All clothes and bed linen to be changed daily.
• Advise residents that ‘mite killing’ cream will not immediately resolve the itch or rash.

Follow Up

Pruritus (itching) may persist for several weeks. Repeat treatment after 1 week for residents who are still symptomatic. Residents who do not respond to the initial treatment should be retreated with an alternative regimen.

Contacts must be followed up at 4-6 weeks. Ensure that staff, relatives and contacts are fully aware of the implications of scabies and are warned to be suspicious of persistent or recurrent itchy rashes for the next few months.
References


Additional Information

**Influenza**

We recommend you source at least 2 copies of the Australian Department of Health and Ageing *Influenza Home Care Handbook.*

This pack is free and can be obtained from https://agedcare.health.gov.au

Additional copies of the *Recognising and Managing Influenza* poster are available from National Mail and Marketing at: nmm@nationalmailing.com.au

**Gastroenteritis**

We also recommend that you source copies of the *Gastro-Info Gastroenteritis kit* for aged care by the Australian Government Department of Health and Ageing.

This kit is free and can be obtained from: https://agedcare.health.gov.au/

Additional copies of the *Recognising and Managing Gastroenteritis* poster are available from: nmm@nationalmailing.com.au
ATTENTION ALL VISITORS

There have been a number of cases of [insert type] at this facility recently. We are trying to prevent this illness from spreading.

Visitors are advised that there is a risk of acquiring this [insert type] by visiting this facility at this time.

If you have recently been ill, and have symptoms of any [insert type] illness now (insert relevant symptoms), or have been in contact with someone who is ill, we strongly advise you not to enter this facility.

If you choose to visit at this time, please visit only the resident you have come to see, wash your hands with soap and water before and after the visit and then leave as soon as possible.

Thank you for your co-operation.

Sincerely

Manager or Nurse Manager
APPENDIX B – Gastroenteritis Outbreak Checklist

The Outbreak Coordinator should ensure the following steps are initiated as soon as possible and completed. The order in which the tasks are undertaken may vary slightly.

1. **Do we have an outbreak?**
   - 2 or more people ill with vomiting and/or diarrhoea within 24 hours of each other
   - Activate Gastro Management Plan by following the steps listed below
   - Inform Senior Nursing Staff on duty
   - Access outbreak kit stores

2. **Inform staff, residents & visitors**
   - Inform all staff that a possible outbreak is occurring
   - Advise need for increased hygiene measures
   - Inform residents and visitors — notices on doors; provide information on gastro

3. **Implement additional infection control measures**
   - Increase hygiene measures taken by all staff — standard hygiene plus additional measures
   - Ensure supplies of liquid soap, paper towels and alcohol-based gel or hand rub
   - Ensure supplies of personal protective equipment (PPE) masks, gloves, gowns
   - Contact residents’ GPs
   - Isolate residents — separate infected & uninfected residents where possible
   - Place home in lock down if necessary

4. **Restrict staff and resident movement**
   - Allocate care staff for residents ill with gastro
   - Allocate staff for cleaning of affected areas
   - Suspend group activities until outbreak resolved
   - Exclude staff with symptoms of gastro for at least 48 hours after last symptoms

**Restrict Contact**

- Notify residents’ relatives or representative, all visiting GPs, allied health workers, laundry contractors, volunteers, or anyone in contact with your facility
- Restrict visitors, particularly young children and people with compromised immune systems, for example, people with HIV, major illness and those taking
immunosuppressant drugs such as steroids E Restrict movement of visitors within the home

☐ Ensure visitors practice hand hygiene
☐ Exclude visitors with symptoms of gastro for at least 48 hours after last symptoms

5. **Ensure Safe Food Handling**
   - Ensure catering staff are separate from cleaning and care staff
   - Ensure food areas and equipment thoroughly cleaned (for example blenders)

6. **Document the Outbreak**
   - List cases — up-date daily
   - Details of residents & staff with symptoms
   - Onset date of gastro symptoms for each

7. **Notify Authorities**
   - Your State/Territory or Public Health Dept.
   - Your State/Territory office of Commonwealth Department of Health and Ageing

8. **Collect Specimens**
   - Observe standard infection control practices & wear personal protective equipment, for example: gloves, gown, mask
   - Collect faecal or vomit specimens in specimen jars (faecal specimens preferable)
   - Label specimen, complete pathology request form
   - Store specimen in refrigerator — not in a food fridge! — until collected by pathology lab.

   - Review plans regularly particularly for at risk and vulnerable residents

10. **Update Gastro Outbreak Plan**
    - Revisit Outbreak Plan following resolution of current outbreak — modify as needed
APPENDIX C – INVESTIGATION AND MANAGEMENT OF INFLUENZA OUTBREAKS IN RESIDENTIAL SETTINGS

Influenza Outbreak Control Measures

Staff
- Exclude symptomatic staff until 5 days from onset of symptoms
- Staff to wear appropriate PPE when in contact with symptomatic residents
- Vaccinate any staff member not already vaccinated

Admissions
- Readmit returning resident from hospital where admitted for influenza
- New admit or hospitalized prior to outbreak
- If outbreak over then admit
- Outbreak management in place defer admission

Visitors
- Place signage informing visitors of outbreak
- Where visitor is ill request do NOT visit facility
- Where not ill request only visit friend/relative in residents room and perform hand hygiene on leaving

Residents
- Symptomatic resident – collect naso-pharyngeal swab. Isolate in room for 5 days after onset of symptoms or symptoms resolve
- Use antiviral therapy for treatment or prophylaxis under instruction of physician
- Restrict symptomatic and exposed residents activities e.g. non-urgent appointments and social activities
APPENDIX D – Investigation and Management of Influenza Outbreaks Summary

Flow Chart

- **Outbreak definition**
  - Three or more cases of newly acquired respiratory illness in staff and/or residents in the facility within a period of 7 days

- **Assessment of the situation**
  - Establish/Confirm Influenza outbreak
  - First case onset date
  - Numbers affected (residents and staff)
  - Symptoms
  - Results of initial pathology tests

- **Influenza established**

  - **YES**
    - Form an Outbreak Investigation & Management team (OIMT) and start investigation
      - Designate roles and responsibilities
      - Formulate working case definition
      - Define population at risk
      - Active case finding (staff and resident line listing)
      - Immunisation status of staff and residents
      - Discuss further specimen collection and tests
      - Clarify communications between PHU and Facility
      - Decide on who needs to be notified
      - Discuss management strategies including vaccination, antiviral therapy and infection control measures
      - Discuss need for media release

  - **NO**
    - Level of support from PHU
    - Recommend general respiratory outbreak measures

- **Outbreak management**
  - Site visit (decision of individual PHUs)
  - Sample collection and transport
  - Implement appropriate control measures
  - Recommendations for antiviral therapy & vaccination
  - Send appropriate documents to facility

See next page
Monitoring outbreak
- Continuing surveillance for new cases
- Update line listing
- Are control measures working?
- Are any further control measures necessary?
- Review pathology results and communicate results to facility
- Need for further lab testing
- Evaluate effectiveness of control measures
- Review communication with facility and other agencies
- Review need for media, ministerial briefing
- Have criteria to declare outbreak over been confirmed?
- Movement of staff and residents between facilities?

Once outbreak declared over,
- Has relevant information been given to the facility?
- Have other relevant agencies been notified?
- Have restrictions at the facility been lifted?
- Has outbreak report been compiled?
- Has a date been set for review?

Declare outbreak over/Debrief
- No new cases for 8 days from onset of symptoms of last resident case (one incubation period, one period of communicability)
- If staff member is the last case, time until outbreak is declared over can be shortened, as the person would be at home during period of communicability.
- Notify facility and communicate relevant details of the outbreak
- Notify other relevant individuals/agencies
- Discuss need for ongoing surveillance
- Formulate outbreak report
- Review management of outbreak
APPENDIX E – INFLUENZA OUTBREAK AND MANAGEMENT IN RESIDENTIAL SETTINGS

1. **Isolate residents who are ill if not already isolated**
   - In individual rooms, multi-bed rooms†, unit or wing
   - Dedicated staffing where possible/practicable
   - Dedicated equipment
   - Appropriate signage
   - Transfer to hospital if condition warrants. If an appropriate single room is not available, room sharing by residents with the same infection is acceptable.

2. **Restrict Contact**
   - Infected staff excluded from work for the period during which they are infectious, as determined by a medical practitioner
   - Staff movement into restricted area/s limited
   - Visitors kept to minimum, short duration, warned of risk factors
   - Curtail social contacts/group activities for non-infected residents
   - Restrict new/re-admissions

3. **Increase personal protective measures**
   - Maintain existing hand hygiene before and after contact with each resident
   - Wear gloves if contact with respiratory secretions or potentially contaminated surfaces is likely
   - Change gloves and wash hands after contact with each resident
   - Wear masks appropriate for respiratory infection on entering room or working within one metre of the resident. Remove mask when leaving each room and dispose of correctly
   - Do not reuse masks
   - Wear gowns if soiling of clothes with respiratory secretions is likely. Do not reuse gowns

4. **Environment**
   - Enhance cleaning measures, especially of frequently touched surfaces, with neutral detergent
   - Appropriate disposal units for tissues, etc.
   - Appropriate cleaning processes for reusable items
5. **Medical Management**

- Antiviral medication as prescribed by GP/s
- Immunisation for those without current vaccination
- Transfer to hospital if condition warrants

6. **Seek specialist advice**

**Isolation room checklist**

- Hand-wash basin in room (hands-free operation if possible). *
- Single-use towelling.
- Door on room with door self-closer (if possible).
- Minimum 1 metre separation between beds in multi-bed rooms. †
- Suitable container/s for safe disposal of tissues, gloves, masks, single-use towelling etc.
- Room restriction signs.
- Independent air conditioner/filter system if available.

* If hand washing facilities are not readily available, provide alcohol-based hand wash.

† If an appropriate single room is not available, room sharing by residents with the same infection is acceptable.

**Wash and dry hands before and after contact with affected residents**

**Reference:**

*Australian Guidelines for the Prevention and Control of Infection in Healthcare (2010)*

www.health.gov.au