



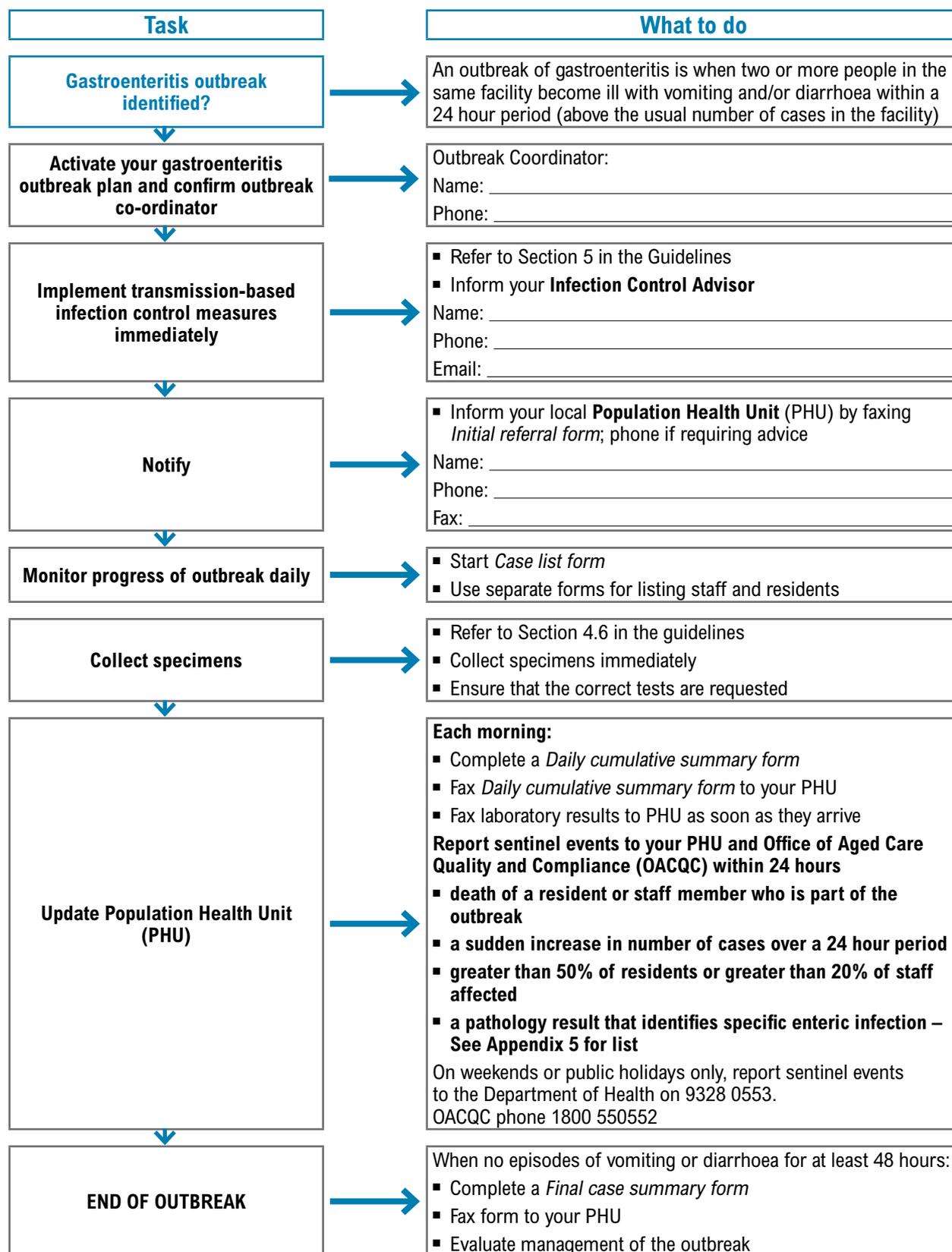
Government of **Western Australia**  
Department of **Health**

# Guidelines for the prevention and management of gastroenteritis outbreaks in residential care facilities

Second edition



## Recognising and managing a gastroenteritis outbreak flow chart



For more information refer to the Guidelines for the management of gastroenteritis outbreaks in residential care facilities (2nd edition), Western Australian Department of Health, 2013, [www.public.health.wa.gov.au](http://www.public.health.wa.gov.au)

# Guidelines for the prevention and management of gastroenteritis outbreaks in residential care facilities

Second edition

### **Notification requirements in Western Australia for gastroenteritis outbreaks in aged care facilities**

In Western Australia, outbreaks of gastroenteritis in aged care facilities should be notified to Public Health Units in the Department of Health, Western Australia (see Appendix 6 for contact details).

It is not required to notify outbreaks to the Office of Aged Care Quality and Compliance in the Commonwealth Department of Health and Ageing, as WA Health will pass on notification information to this Commonwealth office.

However, if **sentinel events** occur during an outbreak in an aged care facility, these should be notified within 24 hours to both the Department of Health Western Australia (through the Public Health Units) and the Office of Aged Care Quality and Compliance (by telephoning 1800 550552).

**Sentinel events** are those which alert WA Health to a potential need for further public health intervention. See Appendix 5 for list of sentinel events.

## Acknowledgements

The Department of Health thanks those who contributed to the development of the first edition of these guidelines, and those who assisted with the review and production of the second edition.

## Abbreviations

ABHR	Alcohol-based hand rub
M, C & S	Microscopy, Culture and Sensitivity
OACQC	Office of Aged Care Quality and Compliance (Commonwealth)
PHU	Population Health Unit (part of WA Health)
PPE	Personal Protective Equipment
RCF	Residential Care Facility
TGA	Therapeutic Goods Administration
WA Health	Department of Health, Western Australia

Copies of these Guidelines are available at [www.public.health.wa.gov.au](http://www.public.health.wa.gov.au) or by emailing [ozfoodnetwa@health.wa.gov.au](mailto:ozfoodnetwa@health.wa.gov.au).

## Table of Contents

Recognising and managing a gastroenteritis outbreak flow chart	inside cover
<b>Acknowledgements</b>	<b>ii</b>
<b>Abbreviations</b>	<b>ii</b>
<b>1. Introduction</b>	<b>1</b>
1.1 What is the purpose of these guidelines?	1
1.2 Introduction to the second edition	1
1.3 The role of WA Health	1
<b>2. Preventing a gastroenteritis outbreak</b>	<b>3</b>
2.1 Person-to-person outbreaks	3
2.2 Food-borne outbreaks	4
<b>3. Preparing for a gastroenteritis outbreak</b>	<b>5</b>
<b>4. Recognising and managing a gastroenteritis outbreak</b>	<b>6</b>
4.1 Monitor gastroenteritis case numbers	6
4.2 Confirm who is the outbreak co-ordinator	6
4.3 Implement transmission-based infection control precautions	7
4.4 Notify and communicate to appropriate people	7
4.5 Record each case of gastroenteritis	7
4.6 Collect specimens	8
4.7 Update your PHU daily	8
4.8 Ask for advice	8
4.9 When an outbreak is over	9
4.10 Complete a final report	9
4.11 Retain all outbreak records at the facility	9
4.12 Evaluate your facility's response to, and management of, the outbreak	9
<b>5. Infection prevention and control during a gastroenteritis outbreak</b>	<b>10</b>
5.1 Hand hygiene	10
5.2 Notices for staff, residents and visitors	11
5.3 Personal protective equipment (PPE)	11
5.4 Management of residents	12
5.5 Management of staff	13
5.6 Food handling	13
5.7 Managing the environment	14
5.8 Managing visitors	16
<b>6. Collecting specimens in a gastroenteritis outbreak</b>	<b>17</b>
6.1 When collecting specimens	17
6.2 Which specimen to collect	17
6.3 Specimen storage and transport	17
6.4 Specimen test requests	18
6.5 Specimen test results	18

<b>7. References and bibliography</b>	<b>19</b>
<b>Appendices</b>	<b>20</b>
Appendix 1: Forms	21
Appendix 2: Gastroenteritis alert notices	28
Appendix 3: Posters	32
Appendix 4: Checklists	37
Appendix 5: Sentinel events	44
Appendix 6: Notification of outbreaks	45

# 1. Introduction

## 1.1 What is the purpose of these guidelines?

These guidelines provide practical information to assist staff working in residential care facilities (RCFs) to prepare for, recognise, and respond promptly to gastroenteritis incidents and outbreaks in those facilities. They include advice for:

- preparing for an outbreak
- responding to single cases of gastroenteritis
- identifying an outbreak
- implementing outbreak infection prevention and control measures
- consulting an infection prevention and control advisor
- reporting to WA Health
- collecting faecal specimens to identify the cause of the outbreak
- monitoring the progress of the outbreak
- seeking further advice and support in managing the outbreak
- reporting when the outbreak is over
- evaluating the outbreak response.

These guidelines also aim to assist with training, and with developing site-specific outbreak investigation and management policies and procedures.

## 1.2 Introduction to the second edition

The first edition of these guidelines was produced in January 2008, with a stakeholder consultation and review conducted in 2011. Following this review, new sections on preventing and preparing for gastroenteritis outbreaks have been included in this edition. The guidelines have also been amended to ensure consistency with the terminology and recommendations of the *Australian Guidelines for the Prevention and Control of Infection in Healthcare*.

In this second edition, the described infection prevention and control measures are based on the assumption that gastroenteritis outbreaks in RCFs are likely to be caused by viruses such as norovirus. If it is established that an outbreak is caused by another infectious agent, infection prevention and control measures can be adjusted accordingly.

## 1.3 The role of WA Health

Outbreak information is collected by WA Health to:

- monitor the occurrence of gastroenteritis outbreaks in any residential setting
- assess the cases promptly to determine the likelihood of bacterial or viral infection and offer management advice accordingly
- determine if an environmental health investigation is required to identify the source, contain the outbreak and prevent further transmission, for example, in the case of a suspected food-borne source

- advise RCFs of the recommended strategies to manage and control the outbreak
- assist with the development of future public health policy.

WA Health reports outbreak information to the Office of Aged Care Quality and Compliance (OACQC) in the Commonwealth Department of Health and Ageing.

## 2. Preventing a gastroenteritis outbreak

The most effective strategy for managing gastroenteritis outbreaks is to prevent them from occurring by educating staff and visitors to RCFs.

### 2.1 Person-to-person outbreaks

Most outbreaks in RCFs are caused by person-to-person transmission of norovirus (a virus that causes intestinal infection). These viruses are highly infectious and may cause outbreaks in settings such as residential care and schools.

#### Staff and visitors

Most outbreaks start from a staff member or visitor attending the facility while they are infected with a virus. It is therefore very important that staff and visitors who are infectious or unwell with respiratory or gastric infections are made aware that they should not visit the RCF until they have recovered (not had any symptoms for at least 48 hours). Staff working at an RCF that is experiencing a gastroenteritis outbreak should monitor their health for symptoms of illness and report to their managers if they become symptomatic. They should preferably not work at another RCF for the duration of the outbreak. At all times it is recommended that RCFs:

- place notices at the entrance to the facility advising people not to visit if they have had any vomiting or diarrhoea in the past 48 hours
- advise staff, including volunteers and visiting tradespeople, that they must leave work immediately if they have any episodes of vomiting or diarrhoea, and must not return to work until 48 hours after their last episode of vomiting or diarrhoea
- advise businesses that provide agency staff of these restrictions.

#### Residents

It is recommended that any resident with vomiting or diarrhoea of unknown cause (i.e. not related to aperient use or non-infectious disease) is treated as potentially infectious.

- The resident should, where possible, be in a single room with their own bathroom facilities and should for the duration of their symptoms be given their meals in their room and be restricted from going into communal areas.
- If a resident shares a room with an infected resident, strategies need to be implemented to protect the other resident. These include observing for symptoms of illness, maintaining hand hygiene, and cleaning surfaces to minimise the transmission to resident via touching contaminated surfaces. Alternatively if the non-infected resident is ambulant they should be kept out of the room during the day as much as possible.
- Staff must use contact precautions (see Section 5.3 and Appendix 3), and if the resident is vomiting, use eye protection and masks.

#### Hand hygiene

The use of regular hand hygiene practices, for example, after direct hands-on care or after having contact in a resident's room when cleaning, is the single most effective strategy for preventing further transmission of norovirus infection within an RCF.

- Visitors should be alerted to perform hand hygiene on arriving and when leaving the facility.
- High standards of hand hygiene should be maintained by staff at all times, as described in Section 5.1.

The RCF manager has a role in monitoring both staff and residents for early detection of diarrhoea or vomiting, and in promptly instituting steps to contain the transmission of infection.

## 2.2 Food-borne outbreaks

The most common cause of food-borne outbreaks in RCFs is the growth of toxin-producing bacteria. Good food-handling practices can prevent outbreaks.

- All food handling practices by staff must comply with WA food safety legislation, specifically the requirements of the Australia New Zealand Food Standards Code (see References, Section 7).
- Particular care should be taken with adequate cooking and temperature control of food to prevent bacterial growth. Food should be kept cold (below 5°C) or hot (above 60°C). Cooked food should not be stored at room temperature for longer than two hours.

### 3. Preparing for a gastroenteritis outbreak

RCFs should have routine basic preventative measures in place at all times to enable early detection and response. Outbreak planning and preparation can enable a rapid and effective response to an outbreak, with the likelihood that outbreaks will be more rapidly controlled and result in a lower number of residents and staff being affected. All RCFs should have an outbreak plan detailing the steps that will be taken to prepare for and respond to an outbreak. An outbreak plan checklist is provided in Appendix 4.

Important aspects of preparation are:

- **Appoint a designated outbreak co-ordinator.** A person or position should be designated with responsibility for managing gastroenteritis outbreaks and to oversee implementation of the facility's outbreak management policy across all shifts. They should also ensure that personal protective equipment (PPE) resources are made available to staff to reduce the risk of transmission.
- In the event of an outbreak, designated staff should be nominated to oversee each shift and section, and they must clearly understand the processes to be followed when a resident has vomiting or diarrhoea.
- **Recognise an outbreak. Establish daily routine reporting practices.** For example, shift handover to report if there are any residents with suspected gastroenteritis, to enable early recognition of an outbreak.
- **Educate staff.** All staff should be trained in infection control practices, and be familiar with and routinely use standard and contact transmission-based precautions. Other staff, such as cleaning and laundry staff, should also be familiar with the extra precautions needed during a gastroenteritis outbreak. In addition, all staff should be familiar with the gastroenteritis outbreak plan and when to use these guidelines.
- **Maintain readily accessible, up-to-date supplies and contact information:**
  - **PPE** All PPE as described in Appendix 4 should be immediately available.
  - **Cleaning and laundry equipment** All essential cleaning and laundry equipment and products as described in Appendix 4 should be immediately available.
  - **Specimen collection kits** Specimen collection kits and pathology request forms should be on hand.
  - **Outbreak contact details** Contact details for the local PHU and Infection Control Advisor should be on hand.
  - **Notification forms** *Initial notification* and *Case list forms* should be easily accessed. If in doubt, contact your local public health nurse.

## 4. Recognising and managing a gastroenteritis outbreak

### 4.1 Monitor gastroenteritis case numbers

**Definition: An outbreak of gastroenteritis is when two or more people in the same facility become ill with vomiting and/or diarrhoea within a 24 hour period (over and above the usual number of cases in the facility).**

Managers should advise staff to report to them immediately all episodes of diarrhoea and/or vomiting (resident or staff, including volunteers) so that measures can be implemented rapidly and the number of cases monitored. In this way, an outbreak can be identified as early as possible. Information that needs to be collected includes:

- the number of residents and staff who have experienced symptoms of gastroenteritis (vomiting and/or diarrhoea) over the last 24 hours
- cases that may have a non-infectious cause (e.g. a bowel condition or aperient effect)
- the symptoms and duration of illness of residents and staff, to assist in identifying the mode of transmission (use *Case list form*, see Appendix 1).

**When an outbreak is identified, activate your gastroenteritis outbreak plan.**

### 4.2 Confirm who is the outbreak co-ordinator

Confirm which staff member will co-ordinate management of the outbreak and develop a staff shift plan to ensure that for each shift a staff member will have responsibility to:

- oversee and monitor the outbreak
- monitor the residents for deterioration in health status
- ensure that any sick resident's symptoms are recorded on the *Case list form*
- collect specimens and forward to the laboratory
- ensure that transmission-based infection prevention and control procedures are implemented and adhered to, and that there is sufficient PPE, cleaning and sanitising equipment
- notify the relevant PHU
- alert the PHU and OACQC to 'sentinel' events within 24 hours (see Section 4.7)
- identify when the outbreak is over and advise the PHU
- collate outbreak records for archiving
- co-ordinate evaluation of outbreak response.

### 4.3 Implement transmission-based infection control precautions

Early implementation of additional contact transmission-based precautions will help to limit the spread of infection, which minimises secondary cases, reduces staff absenteeism and reduces other costs to the RCF.

**See Section 5 for full details of infection prevention and control recommendations**

### 4.4 Notify and communicate to appropriate people

Communicating with all people involved is essential for successfully managing an outbreak.

- Notify all staff of the outbreak immediately.
- Notify family and visitors of affected residents.
- Display gastroenteritis alert notices (Appendix 2) at the entrance to the RCF, at other access points, staff areas, doors leading to food preparation areas and on room doors of affected residents.
- Notify agencies that supply contract staff and scheduled external contractors.
- Notify the designated PHU within 24 hours of the outbreak occurring by completing the *Initial notification form* (Appendix 1) and sending via fax or email.
- Notify the relevant Infection Control Advisor within 24 hours of the outbreak occurring.

If your RCF does not have an Infection Control Advisor and you require information not found in these guidelines, contact your PHU staff. To find your local PHU and contact details, refer to Appendix 6.

**Your facility must inform your PHU within 24 hours of the start of the gastroenteritis outbreak (see Appendix 6 for who to notify).**

### 4.5 Record each case of gastroenteritis

Record all cases of gastroenteritis (residents and staff). This information helps to determine the nature of the outbreak and to monitor the effectiveness of control measures.

- Use the *Case list form* (Appendix 1) to record the details of each ill resident or staff member with gastroenteritis symptoms.
- Use separate forms for residents and staff.
- Add each case promptly as it occurs.
- List each case ONCE only. If symptoms resolve and then recur after a few days, do not re-enter that case, but amend the 'duration of illness' column only.
- Make sure that all details are completed for each case.

## 4.6 Collect specimens

Immediate collection of stool specimens is essential for early identification of the causative organism and assists in determining its mode of transmission.

- Collect between three to six specimens, as soon as possible.
- Complete a pathology request form (example in Appendix 1), ensuring that the correct pathology tests are ordered, including virus testing.
- Store specimens as advised in Section 6.
- Alert laboratory to potential outbreak to ensure prompt processing of specimens.
- As soon as pathology results are received, fax to PHU and attach copies to *Case list form*.

**See Section 6 for full details on specimen collection and Appendix 1 for sample pathology request form.**

## 4.7 Update your PHU daily

Update the WA Health PHU each day on the progress of the outbreak by:

- completing a *Daily cumulative case summary form*, using information from your *Case list forms*
- faxing or emailing this summary to your PHU daily, including weekends.

**Note:** Do not send the *Case list forms* to the PHU unless they ask for them.

This information helps to determine the nature of the outbreak and to monitor the effectiveness of control measures.

**Report the following sentinel events<sup>1</sup> to your PHU<sup>2</sup> and OACQC<sup>3</sup> within 24 hours:**

- **the death of a resident or staff member who is part of the outbreak**
- **any sudden increase in number of cases over a 24-hour period**
- **escalation of the number affected to more than 50% of residents or 20% of staff**
- **a pathology result that identifies specific enteric infections (see Appendix 5)**

<sup>1</sup> Sentinel events are those which alert WA Health to a potential need for further public health intervention.

<sup>2</sup> Unless any of these events occur on a weekend or a public holiday (only), in which case, contact the WA Health on-call duty officer on 9328 0553.

<sup>3</sup> Office of Aged Care Quality and Compliance, telephone 1800 550552.

## 4.8 Ask for advice

Infection Control Advisors and PHU staff have expertise in managing infectious disease outbreaks. Contact your Infection Control Advisor or PHU if you have any concerns.

## 4.9 When an outbreak is over

A gastroenteritis outbreak is over when there have been no episodes of vomiting or diarrhoea in the facility for at least 48 hours. The following actions can then be taken:

- Advise all residents, families and staff that the outbreak is now over.
- Remove staff and public notices.
- Stand down additional transmission-based precautions.
- Maintain standard precautions for all residents at all times.
- Continue to monitor residents and staff for vomiting and diarrhoea for at least another week, as infection may recur.

## 4.10 Complete a final report

- Obtain the total case numbers and details from the *Case list forms*.
- Complete a *Final case summary form* (Appendix 1) and fax or email it to the PHU.
- Collect and send all outstanding specimen results to PHU until complete.

## 4.11 Retain all outbreak records at the facility

Evidence of outbreak response and management may be required at an accreditation audit or support visit.

- Collate all relevant documents and records in a named and dated file and place in the facility archive.

## 4.12 Evaluate your facility's response to and management of the outbreak

- Use the Evaluation Example Checklist (Appendix 4) to develop an evaluation suitable for your facility.
- Identify actions that were done well, and those that require improvement.
- Identify any additional measures to reduce future risk of gastroenteritis outbreaks.
- Note successful strategies that helped to control the outbreak.
- Communicate findings to all relevant staff and management.
- Modify the outbreak plan as required.
- Place the evaluation form in the outbreak file.

## 5. Infection prevention and control during a gastroenteritis outbreak

**When a gastroenteritis outbreak occurs in an RCF, it is essential to implement transmission-based precautions immediately in order to limit the spread of infection.**

Staff should assume that the outbreak is caused by a virus, unless test results indicate otherwise. Viral gastroenteritis is highly transmissible and can be readily transmitted by:

- direct contact from person-to-person (faecal–oral route)
- contact with contaminated surfaces and items in the resident’s environment
- aerosol spray (from vomit or diarrhoea), when droplets enter the mouth and are swallowed
- food contaminated by infected food handlers.

In the case of viral gastroenteritis, large quantities of virus are shed by infected people but infection can be caused by contact with only a very small, invisible amount of virus.

Standard infection prevention and control precautions are required at all times when providing care to residents. Contact transmission–based precautions are required during a gastroenteritis outbreak.

### 5.1 Hand hygiene

- All staff should receive education and training on the correct methods to perform hand hygiene, including the use of soap and water and alcohol-based hand rub (ABHR).
- Visitors are to be instructed to perform hand hygiene on arrival and when leaving the facility.
- All residents should wash their hands, or be assisted with hand hygiene, before and after each meal, after toileting and after any episodes of vomiting and diarrhoea.
- Posters detailing the correct methods should be posted around the facility at points visible to both residents and visitors (Appendix 3).

#### Staff hand hygiene

- Hand hygiene should be performed with soap and water wherever possible as ABHR is not completely effective against norovirus. However, ABHR can be used if hands are not visibly soiled with vomit, faeces or other body fluids.
- Staff should perform hand hygiene according to the ‘5 Moments for Hand Hygiene’, that is:
  - before touching a resident
  - before a procedure
  - after touching a patient
  - after a procedure or body fluid exposure risk
  - after touching a patient’s surroundings.

- Staff should also perform hand hygiene:
  - after removing gloves
  - before starting/leaving work
  - before and after eating/handling food/drinks (whether own or resident's)
  - before and after using a computer keyboard
  - after hands become visibly soiled
  - after visiting the toilet
  - after handling laundry/equipment/waste
  - after blowing/wiping/touching nose or mouth.

### To perform hand hygiene

**Hand wash** Wash hands thoroughly with liquid soap and tepid running water, rubbing surfaces of the hands and wrists for a minimum of 15 seconds. Rinse and dry with clean paper towel. Use the paper towel to turn off the tap. This procedure will take from 40 to 60 seconds (see Handwash poster, Appendix 3).

**Handrub** Apply enough rub to cover all skin surfaces. Rub hands together so that solution comes into contact with all surfaces of the hand, including palms, between fingers, back of hands, up to the wrist. Continue rubbing until hands are dry. This procedure should take from 20 to 30 seconds (see Handrub poster, Appendix 3).

- Provide a reminder brief to staff at shift changes to reinforce the importance of hand hygiene.

## 5.2 Notices for staff, residents and visitors

- Place gastroenteritis alert notices (Appendix 2) at the entrance to the facility, other access points, on the room door of affected residents and in staff areas.
- Ensure all staff are aware of work restrictions (see Section 2.1) should they become unwell.

## 5.3 Personal protective equipment (PPE)

**RCFs must ensure that supplies of PPE (masks, eyewear, gowns and gloves) are available and accessible to staff at all times.**

- During an outbreak, staff are required to:
  - wear a gown and gloves (contact precautions) prior to entering a room of a symptomatic resident if contact with the resident or their environment is anticipated, i.e. surfaces or any items in the room including a bed, chair, lamp, call bells, rails, phone, toilet and commodes; and
  - wear eye protection and a fluid repellent mask if there is potential for exposure to body fluids or aerosol spray (from vomiting or toileting).
- Disposable fluid resistant gowns or aprons are preferred. If not available, use cloth gowns with the addition of a plastic apron.
- All gowns/aprons are for single use only and are not to be left hanging in the resident's room for use on subsequent occasions.

- When gloves are worn, avoid touching and potentially contaminating environmental surfaces e.g. light switches, door handles.
- Remove gloves on leaving the room.
- PPE should be donned in the sequence described in Appendix 3.

### **Removal of PPE**

- Prior to leaving the patient's room, PPE is to be removed in the correct sequence and hand hygiene performed as described in Appendix 3.
- PPE is to be discarded directly into a waste container within the room.
- PPE must be changed between each resident contact.

## **5.4 Management of residents**

### **Separate residents**

- Manage each ill resident in a single room with designated toilet/bathroom facilities when possible.
- Ill residents should have their meals in their rooms until at least 48 hours after their last episode of vomiting or diarrhoea.
- Allocate separate toilet facilities for infected residents and non-infected residents when shared facilities are being used.

### **Movement of residents within the facility and use of common areas**

- Restrict contact between infected and unaffected residents until at least 48 hours after the infected resident's last episode of vomiting or diarrhoea.
- Restrict movement of affected residents around the facility until at least 48 hours after resolution of symptoms, e.g. visits to the hairdresser, podiatrist, other health services.
- Minimise communal gatherings of residents, e.g. shared lounges and meal areas.

### **Transfer of residents to hospital or another facility**

- Telephone the receiving institution to advise them of the outbreak in the facility, and whether resident currently has or has had gastroenteritis, or has been in close contact with an affected resident.
- Advise ambulance or other transport officers of the gastroenteritis outbreak and the transferring resident's illness.
- Complete the *Resident transfer form* (Appendix 1) and send this with the resident.

## 5.5 Management of staff

### Education

- Advise staff of the gastroenteritis outbreak and explain their responsibility for implementing and adhering to infection prevention and control measures.
- Emphasise the need for meticulous hand hygiene and instruct on the correct use and removal of PPE.

### Staff who have symptoms of gastroenteritis

- Staff who develop symptoms at work are to go home **immediately** and not return to work until at least 48 hours after their last episode of vomiting or diarrhoea.
- Instruct staff not to work at any other facility until at least 48 hours after their last symptoms.
- Advise recuperating staff that they may continue to shed the infectious organism for several weeks after their symptoms have resolved. They must continue to observe meticulous personal hygiene and hand hygiene.
- Food-handling staff also need to comply with the Australia New Zealand Food Standards Code.

### Staff movement

- Dedicate staff to care for infected residents and minimise movement of staff between affected and unaffected areas as much as possible and practicable.
- All non-essential staff should avoid any contact with residents for the duration of the outbreak.

## 5.6 Food handling

- **Staff who care for infected residents or who clean the environment of infected residents should not prepare food or feed unaffected residents.**
- Only catering staff should enter the kitchen for the duration of the outbreak.
- Catering staff should restrict themselves to the food preparation area only.
- If catering staff do become ill, immediately discard any food prepared by the staff member if that food is not heated prior to serving (e.g. salads, sandwiches). Also review staff movements to help prevent further catering staff illness.
- Staff should not consume food within immediate areas where care of infected residents occurs.

## 5.7 Managing the environment

Viruses that cause gastroenteritis (such as norovirus) can contaminate the environment, and can survive on inanimate surfaces for prolonged periods. Environmental contamination is associated with an increased risk of spread of gastroenteritis, especially from hands that come in contact with contaminated surfaces and items.

**The persistence of environmental reservoirs of microorganisms during outbreaks is often related to a failure to follow recommended cleaning procedures. For effective environmental disinfection, thorough physical cleaning with detergent and application of the disinfectant allowing adequate contact time with the surfaces is required.**

**Cleaners should wear PPE** when cleaning the rooms of infected residents and remove it before leaving the room (see Appendix 3). Wear a fluid-resistant surgical mask when cleaning areas visibly contaminated with faeces or vomit.

### Recommended disinfectants

- Disinfection of hard surfaces should be carried out using sodium hypochlorite (bleach) at a concentration of 1000 ppm (0.1%), or a TGA-registered hospital grade disinfectant with label claims against norovirus, unless another organism has been identified as the cause of the outbreak, in which case an appropriate alternative disinfectant could be used.
- If using diluted sodium hypochlorite, make fresh solutions each day, preferably in squeeze bottles, and discard solution after 24 hours.

### Cleaning up body fluid spills (vomit or faeces)

- Clean up body fluid spills immediately.
- Soak up excess body fluids with absorbent granules or paper towels and place into a leak proof plastic bag.
- Clean the spill area and surrounds with detergent and warm water using a disposable or launderable cloth or mop head, then apply a recommended disinfectant.
- If a resident vomits in a communal area, ask residents in the area to immediately move back to their rooms and close off the communal area until the area (entire surroundings) is cleaned.
- Discard cloths and mop heads after use or launder in hot water with detergent.
- Clean soiled carpets with detergent and water, and then steam clean.
- Clean soft furnishings with detergent and water, and then steam clean or wash in hot water and detergent.

### Cleaning in areas accommodating infected residents

- Meticulous, physical cleaning is the most important step in the cleaning process.
- Clean from unaffected to affected areas, and from least contaminated (e.g. furniture surfaces) to most highly contaminated (e.g. toilets) within affected areas.

- Use two-step cleaning, using a neutral detergent followed by a recommended disinfectant, or a one-step clean using a 2-in-1 product that contains detergent and a recommended disinfectant.
- Increase cleaning of affected areas to twice daily.
- Items such as bath, commode, shower, sink, and toilet should be cleaned after every use.
- Pay particular attention to toilets and bathrooms, and to frequently touched areas, e.g. door handles, taps, safety rails, toilet roll dispenser, flush buttons, shower chairs and light switches, regardless of whether they are visibly soiled or not.
- Use separate cleaning cloths and mop heads for cleaning toilet, bathroom areas or soiled areas, and for cleaning other areas.
- Discard cloths and mop heads after use or launder in hot water with detergent.

### **Equipment used by residents**

- Dedicate items and equipment solely for use by infected residents where possible e.g. commodes, hoists.
- Clean and disinfect shared equipment thoroughly using recommended disinfectant before re-use by another resident.

### **Handling linen**

- Place used linen from infected residents directly into a linen container then tie at the point of use. Do not agitate linen as this causes aerosol spread of the infectious microorganisms.
- Place soiled linen immediately into leak proof bags at the site where soiling occurs.
- Ensure laundering of linen complies with Australian New Zealand Standards (see Section 7).

### **Washing eating utensils**

- Clean vomit from eating utensils, using gloves and paper towels as described above in 'Cleaning up body fluid spills (vomit or faeces)'.  
■ Wash crockery, cutlery and food trays in the normal manner using dishwasher or hot water and detergent. Ensure the dishwasher is using the hottest water setting. No additional requirements are necessary.

## 5.8 Managing visitors

In an outbreak, the duty of care for residents and visitors needs to be balanced with the rights and needs of residents to have visitors. There may be compelling reasons for allowing visitors, such as when a patient is terminally ill, or when visitors have travelled a long distance, or when visitors have in other ways been significantly inconvenienced.

- Exclude visitors who have symptoms of vomiting and diarrhoea until at least 48 hours after their last episode.
- Non essential visitors should be discouraged from visiting.
- Discourage visiting by children and immunocompromised individuals.
- Instruct visitors to perform hand hygiene before and after each visit.
- Place outbreak notices at entrances and other visitor areas.
- Explain the restrictions and infection control requirements to residents and visitors.

## 6. Collecting specimens in a gastroenteritis outbreak

The following information is provided to assist facility staff and treating doctors to collect appropriate specimens during a gastroenteritis outbreak. Remember to phone your pathology laboratory to inform them of the outbreak in your facility and advise that you will be sending specimens.

### 6.1 When collecting specimens

- Observe standard precautions and wear PPE.
- Collect stool specimens as soon as possible after symptoms begin, while stools are still liquid or semi-solid.
- Collect one specimen from three to six ill residents or staff.
- Collect faecal specimens in clean specimen jars. Fill approximately half of the jar (10-20mL).
- Do not allow disinfectant to come into contact with the specimen.
- To collect faecal specimens:
  - Place a disposable container inside the toilet before use by the resident. Use a disposable spoon or spatula to transfer the faeces to the specimen jar.
  - Use a disposable spoon or spatula to collect faeces from linen, incontinence pads or bedpans.

### 6.2 Which specimen to collect

Collect faecal specimens whenever possible as they are best for identifying pathogens.

### 6.3 Specimen storage and transport

- Store specimens in the refrigerator at 4°C. Do not freeze specimens. Do NOT place specimens in a food fridge.
- Check that each specimen jar is clearly labelled with the resident's name, date of birth and time of collection, and that the pathology request form is complete with:
  - resident's name and date of birth
  - Medicare number
  - resident's signature
  - facility name
  - address of the facility
  - correct tests requested
  - requesting practitioner details and signature.
- Note on the form that the specimen is from a gastroenteritis outbreak in a residential care facility.

## 6.4 Specimen test requests

- Request the following tests on the pathology form for all gastroenteritis specimens:
  - microscopy, culture and sensitivity (M,C&S)
  - norovirus, rotavirus and adenovirus.
- See sample pathology request form, Appendix 1.

## 6.5 Specimen test results

- Fax a copy of each result to your PHU as soon as you receive it. Occasionally result forms may include previously faxed results for the same resident; fax these forms to the PHU regardless of any duplication.
- Attach all results to the *Case list form*.

## 7. References and bibliography

Australian Government Department of Health and Ageing (2010), *Guidelines for the Public Health Management of Gastroenteritis Outbreaks Due to Norovirus or Suspected Viral Agents in Australia*, [http://www.health.gov.au/internet/main/publishing.nsf/content/F2A4C351C705B6C6CA257783000C24CA/\\$File/norovirus-guidelines.pdf](http://www.health.gov.au/internet/main/publishing.nsf/content/F2A4C351C705B6C6CA257783000C24CA/$File/norovirus-guidelines.pdf)

Australian Government Department of Health and Ageing (2011), *Gastro-Info Outbreak Coordinator's Handbook*, <http://www.health.gov.au/internet/main/publishing.nsf/content/ageing-publicat-gastro-kit-handbook.htm>

Food Standards Australia New Zealand (2012), *Australia New Zealand Food Standards Code*, <http://www.foodstandards.gov.au/foodstandards/foodstandardscodeold/>

Hall AJ, Vinjé J, Lopman B, Park GW, Yen C, Gregoricus N and Parashar U (2010), 'Updated norovirus outbreak management and disease prevention guidelines', *Morbidity and Mortality Weekly Report*, 60 (3), 1-15.

MacCannell T, Umscheid CA, Agarwal RK, Lee I, Kuntz G, Stevenson KB, and the Healthcare Infection Control Practices Advisory Committee (HICPAC) (2011), *Guideline for the Prevention and Control of Norovirus Gastroenteritis Outbreaks in Healthcare Settings*, Centers for Disease Control and Prevention, Atlanta, [http://www.cdc.gov/hicpac/norovirus/002\\_norovirus-toc.html](http://www.cdc.gov/hicpac/norovirus/002_norovirus-toc.html)

National Health and Medical Research Council (2010), *Australian Guidelines for the Prevention and Control of Infection in Healthcare*, <http://www.nhmrc.gov.au/node/30290>

Norovirus Working Party (2012), *Guidelines for the Management of Norovirus Outbreaks in Acute and Community Health and Social Care Settings*, [http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb\\_C/1317131647275](http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1317131647275)

World Health Organization (2012), *Save Lives: Clean Your Hands*, <http://www.who.int/gpsc/5may/en/>

Australian Standards for PPE items [www.standards.org.au/](http://www.standards.org.au/)

Standards Australia/Standards New Zealand. AS/NZS 4011:1997/Amdt 1:1998. *Single use examination gloves – Specification*. Sydney: Standards Australia International Ltd.

Australia/New Zealand Standards, 2002, AS/NZS 4381: *Single use facemasks for use in healthcare*.

Australia/New Zealand Standards 3789.2 and Australia/New Zealand Standards 3789.3. AS/NZS4146-2000 *Laundry practice*.

## Appendices

Appendix 1: Forms

Appendix 2: Gastroenteritis alert notices

Appendix 3: Posters

Appendix 4: Check lists

Appendix 5: Sentinel events

Appendix 6: Notification of outbreaks

## Appendix 1: Forms

- Initial notification form
- Case list form
- Daily cumulative case summary form
- Final case summary form
- Sample pathology request form including essential tests
- Resident transfer form



## Gastroenteritis outbreak in a residential care facility

### Initial notification form

Do not leave any fields blank

Date of referral:		Population Health Unit fax no.:	
Name and position of staff member reporting:			
Email address:			
<b>Section 1: Facility details</b>			
Facility name:			
Facility address:			
Suburb/town:		Postcode:	
Phone:	Fax:	Mobile:	
Name of parent organisation:			
Does the facility have an Infection Control Advisor?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, Name:		IC Advisor's telephone:	
Has the Infection Control Advisor been informed?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Section 2: Illness characteristics</b>			
Total number of residents at facility:		Number of ill residents:	
Total number of staff at facility:		Number of ill staff:	
Date of onset of first case:		Date of onset of last case:	
Symptoms: <input type="checkbox"/> vomiting <input type="checkbox"/> diarrhoea <input type="checkbox"/> bloody diarrhoea <input type="checkbox"/> fever <input type="checkbox"/> abdominal pain			
Occupation of ill staff: <input type="checkbox"/> nursing <input type="checkbox"/> cleaning <input type="checkbox"/> kitchen <input type="checkbox"/> maintenance <input type="checkbox"/> other – specify			
Staff with gastro excluded from facility until 48 hours after symptoms ceased? <input type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Section 3: Catering arrangements</b>			
Food prepared on premises?		<input type="checkbox"/> Yes – Name of catering manager:	
		<input type="checkbox"/> No – Name of food supplier:	
<b>Section 4: Living arrangements</b>			
Residential settings:		Single rooms: <input type="checkbox"/> Yes <input type="checkbox"/> No	
		Shared rooms: <input type="checkbox"/> Yes <input type="checkbox"/> No	
		Shared bathroom/toilet: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Residential dining setting:		<input type="checkbox"/> Single, large communal dining area <input type="checkbox"/> Small satellite dining areas <input type="checkbox"/> Other, specify:	
<b>Section 5: Specimen testing</b>			
Specimens sent to laboratory:		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> To be arranged	
If yes, name of laboratory:		<input type="checkbox"/> PathWest <input type="checkbox"/> Other:	
Number of specimens sent:			
Norovirus, rotavirus, adenovirus requested:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Microscopy, culture & sensitivities (M,C&S) requested		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Section 6: Hospitalisations and/or deaths</b>			
Any related hospitalisations:		<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, number:
Any related deaths:		<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, number:





Date: \_\_\_\_\_

## Gastroenteritis outbreak in a residential care facility

# Daily cumulative case summary form

- Fill in and fax this form to PHU each day of the outbreak.
- Each day fill in the total numbers in this outbreak, not just new cases.
- Use your Case list forms to gather the numbers. Check that each case is entered only once on the *Case list form*.

**Name of facility:** \_\_\_\_\_

Contact number/s: \_\_\_\_\_ Onset date of first case: \_\_\_\_/\_\_\_\_/20 \_\_\_\_

	Residents	Staff
Total number of gastroenteritis cases (from day 1 up until today)		
Total number of residents and staff in the facility		
Number of cases with:		
vomiting		
diarrhoea		
bloody diarrhoea		
fever		
abdominal pain		
Number of specimens collected		
Number of specimen results received and faxed to PHU		
<b>Number of specimens positive for:</b>		
<b>Viral pathogens</b>		
norovirus		
rotavirus		
adenovirus		
<b>Foodborne pathogens</b>		
<i>Salmonella</i> *		
<i>Campylobacter</i> *		
<i>Clostridium perfringens</i> *		
<i>Shiga-/Vero-toxin-producing E. coli (STEC, VTEC)</i> *		
<i>Listeria</i> *		
<i>Staphylococcus aureus</i> *		
<i>Bacillus cereus</i> *		
Number of food handlers who have had gastroenteritis		
Number of hospitalisations in cases who had gastroenteritis		
Number of deaths in cases who had gastroenteritis*		
Has there been a sudden increase in number of cases over the last 24-hour period?*	Yes/No	

\* Sentinel events: Report to the PHU and OACQC within 24 hours of occurrence. On weekends and public holidays ONLY contact the Department of Health on-call duty officer on 9328 0553.



Government of **Western Australia**  
Department of **Health**

**Population Health Unit**

Fax to: \_\_\_\_\_

Date: \_\_\_\_\_

## Gastroenteritis outbreak in a residential care facility Final case summary form

- Please enter the information below when the outbreak is over.
- Use your Case list forms to gather the numbers. Check that each case is entered only once on the *Case list form*.
- Fill in the date when **the outbreak is over (when there have been no episodes of vomiting or diarrhoea for 48 hours)**.

**Name of facility:** \_\_\_\_\_ **Contact number/s:** \_\_\_\_\_  
**Onset date of first case:** \_\_\_\_/\_\_\_\_/20 \_\_\_\_ **Onset date for last case:** \_\_\_\_/\_\_\_\_/20 \_\_\_\_  
**Date when outbreak over:** \_\_\_\_/\_\_\_\_/20 \_\_\_\_

	Residents	Staff
Total number of gastroenteritis cases (over the whole outbreak)		
Total number of residents and staff in the facility		
Number of cases with:		
vomiting		
diarrhoea		
bloody diarrhoea		
fever		
abdominal pain		
Number of specimens collected		
Number of specimen results faxed to PHU*		
<b>Number of specimens positive for:</b>		
<b>Viral pathogens</b>		
norovirus		
rotavirus		
adenovirus		
<b>Foodborne pathogens</b>		
<i>Salmonella</i>		
<i>Campylobacter</i>		
<i>Clostridium perfringens</i>		
<i>Shiga-/Vero-toxin-producing E. coli (STEC, VTEC)</i>		
<i>Listeria</i>		
<i>Staphylococcus aureus</i>		
<i>Bacillus cereus</i>		
Number of food handlers who had gastroenteritis		
Number of hospitalisations in cases who had gastroenteritis		
Number of deaths in cases who had gastroenteritis		

\*Continue to fax results to PHU until all results are have been sent.

# Sample pathology request form



Hospital Avenue, Nedlands  
Western Australia 6009  
ABN 13 993 250 709

RESULTS & ENQUIRIES  
Metropolitan Health Service APA

## PATHOLOGY REQUEST

AN197

<b>PATIENT</b> Last Name _____ Address _____ Given Name (including middle initial) _____ Date of Birth _____ Sex _____ Your Reference _____ Is Patient of Aboriginal Descent? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Unit no. _____ Telephone _____ Source / Hospital _____ Ward _____ Date of Collection _____ Time of Collection _____	
<b>TESTS REQUESTED</b> <b>M, C &amp; S</b> norovirus, rotavirus, adenovirus <h1 style="text-align: center; color: blue;">SAMPLE ONLY</h1>	
<b>CLINICAL NOTES</b> gastroenteritis outbreak in residential care facility	
Fasting: Yes <input type="checkbox"/> No <input type="checkbox"/> Rule 3 Exemption: Yes <input type="checkbox"/> No <input type="checkbox"/> Self Determine <input type="checkbox"/>	
Doctor's Signature and Request Date _____ Requesting Doctor (surname and initials, provider number, address) _____	
Bill to: _____ Copy Reports to: _____	
Medicare Assignment: _____ Medicare Number _____ Practitioner's Use Only _____ (Reason patient cannot sign) _____ Veterans Affairs? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Cervical Pathology: _____ Pregnant / Postpartum _____ Postmenopausal _____ Vaginal Discharge _____ Abnormal Bleeding _____ Abnormal Cervix _____ LMP: _____ Previous Smear: _____ Contraception or Hormones: _____ Ancillary Test: ThinPrep <input type="checkbox"/> PAPNET <input type="checkbox"/> Patient's Signature for Ancillary Test: _____ Patient status at time of service or when specimens collected: 1. A private patient in a private hospital or approved day hospital facility <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> 2. A private patient in a recognised hospital <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> 3. A public patient in a recognised hospital <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> 4. An outpatient of a recognised hospital <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NATA <input type="checkbox"/> RCPA <input type="checkbox"/>	



Government of **Western Australia**  
Department of **Health**

## Gastroenteritis outbreak in a residential care facility – **Gastroenteritis Alert** Resident transfer form

Date of transfer: \_\_\_\_\_

Resident's name: \_\_\_\_\_

Date of birth: \_\_\_\_\_

Resident transferring from: \_\_\_\_\_

Resident transferring to: \_\_\_\_\_

This resident is transferring from a facility currently managing a **gastroenteritis outbreak**.

Specimens collected in this outbreak have been positive for \_\_\_\_\_

OR

There are no positive specimen results.

**Tick either Box 1 (and complete details) or Box 2**

**Box 1**

**This resident has (or has had) gastroenteritis**

Since \_\_\_\_\_ am/pm on \_\_\_\_\_ (date) and has had the following symptoms:

Signs and symptoms	Tick	Signs and symptoms	Tick	Signs and symptoms	Tick
Nausea		Diarrhoea		Abdominal pain	
Vomiting		Bloody diarrhoea		Muscle and joint pain	
Fever		Dehydration		Headache	

Last episode of:  vomiting  diarrhoea was at \_\_\_\_\_ am/pm on \_\_\_\_\_ (date)

**Please isolate this resident IMMEDIATELY** in a single room under contact precautions and consult your Infection Control Nurse (or Nurse Manager after hours) for advice.

**Box 2**

**This resident has had no signs or symptoms of gastroenteritis**

**Action** Observe the resident over the next 48 hours for symptoms of gastroenteritis.

If any symptoms occur, it is recommended that the resident is **isolated** in a single room on contact precautions and your Infection Control Nurse contacted **IMMEDIATELY** during office hours (or Nurse Manager after hours) for advice on management of room contacts in accordance with your facility's infection control guidelines/policies.

## Appendix 2: Gastroenteritis alert notices

- Notice: Attention staff – for all staff areas
- Notice: Attention visitors – for facility entrance, foyer, toilets
- Notice: Attention visitors – for resident's room



# **Attention Staff**

**Some of our residents currently have gastroenteritis.**

**If you have diarrhoea or vomiting you must let your manager know immediately.**

**You must stay away from work until at least 48 hours after your last episode of diarrhoea or vomiting.**



# Attention Visitors

**Some residents of our facility currently have gastroenteritis (diarrhoea and vomiting).**

**Check with reception or with the nurse in charge for advice to visitors.**

**Please wash your hands before visiting and when leaving.**



# Attention Visitors

**Please speak to  
a member of the nursing staff  
before entering this room.**

**Thank you**

## Appendix 3: Posters

- Hand wash poster (from the World Health Organization)
- Handrub poster (from the World Health Organization)
- Sequence for putting on and removing PPE  
(from *Australian Guidelines for the Prevention and Control of Infection in Healthcare*)

# How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

**⌚** Duration of the entire procedure: 40-60 seconds



Wet hands with water;



Apply enough soap to cover all hand surfaces;



Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



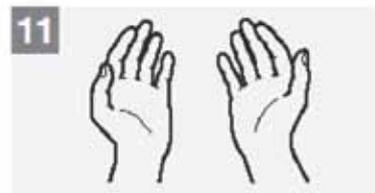
Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.



World Health Organization

Patient Safety

A World Alliance for Better Health Care

SAVE LIVES  
Clean Your Hands

All recorded procedures have been tested by the World Health Organization to verify the information contained in this document. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. It is no event that the World Health Organization be liable for damages arising from its use. WHO acknowledges the Hospital Infection in Geriatric (HIG) in particular the members of the Infective Control Programme, for their active participation in developing this material.

May 2009

# How to Handrub?

**RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED**

 **Duration of the entire procedure: 20-30 seconds**



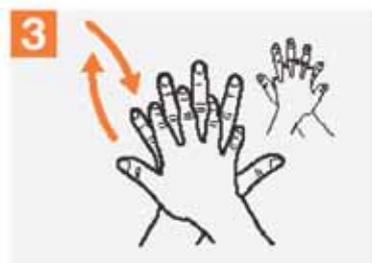
**1a** Apply a palmful of the product in a cupped hand, covering all surfaces;



**1b** Rub hands palm to palm;



**2** Rub hands palm to palm;



**3** Right palm over left dorsum with interlaced fingers and vice versa;



**4** Palm to palm with fingers interlaced;



**5** Backs of fingers to opposing palms with fingers interlocked;



**6** Rotational rubbing of left thumb clasped in right palm and vice versa;



**7** Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



**8** Once dry, your hands are safe.

 **World Health Organization** | **Patient Safety**  
A World Alliance for Better Health Care | **SAVE LIVES**  
Clean Your Hands

All recorded procedures have been taken by the World Health Organization to verify the information contained in this document. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. WHO acknowledges the Hôpital (Instituts) de Genève (HUG), in particular the members of the Infectious Control Programme, for their active participation in developing this material.

May 2009

## Sequence for putting on and removing PPE

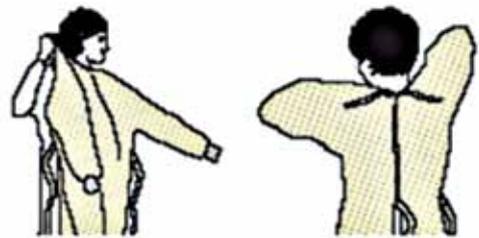
To reduce the risk of transmission of infectious agents, PPE must be used appropriately. The following tables are copied from the *Australian Guidelines for the Prevention and Control of Infection in Healthcare* (2010).

**Hand hygiene must be performed before putting on PPE and after removing PPE.**

### Sequence for putting on PPE

#### Gown

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back.
- Fasten at the back of neck and waist.



#### Mask

- Secure ties or elastic bands at middle of head and neck.



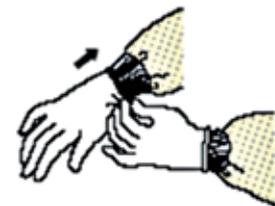
#### Protective eyewear or face shield

- Place over face and eyes and adjust to fit.



#### Gloves

- Extend to cover wrist of isolation gown.



**Hand hygiene must be performed before putting on PPE and after removing PPE.**

### Sequence for removing PPE

Remove PPE at doorway or in anteroom

#### Gloves

- Remember, outside of gloves is contaminated!
- Grasp outside of glove with opposite gloved hand; peel off.
- Hold removed glove in gloved hand.
- Slide fingers of ungloved hand under remaining glove at wrist.
- Peel glove off over first glove.
- Discard gloves in waste container.



### Perform hand hygiene

#### Protective eyewear or face shield

- Remember, outside of eye protection or face shield is contaminated!
- To remove, handle by head band or ear pieces.
- Place in designated receptacle for reprocessing or in waste container.



#### Gown

- Remember, gown is contaminated!
- Unfasten ties.
- Pull away from neck and shoulders, touching inside of gown only.
- Turn gown inside out.
- Fold or roll into a bundle and discard.



#### Mask

- Remember, front of mask is contaminated – DO NOT TOUCH!
- Grasp bottom, then top ties or elastics and remove.
- Discard in waste container.



**Perform hand hygiene immediately after removing all PPE**

## Appendix 4: Checklists

- Checklist – Outbreak plan
- Checklist – PPE and cleaning and laundry
- Checklist – Infection prevention and control measures
- Checklist – Evaluation example checklist

## **Gastroenteritis outbreak in a residential care facility**

# Outbreak Plan

### **Checklist**

An outbreak plan should contain at least the following items:

### **Preparedness**

#### **Outbreak manager**

- Details of staff member designated as outbreak manager

#### **Recognising an outbreak**

- Details of how gastroenteritis case numbers will be monitored

#### **Staff education**

- Details of how staff will be made familiar with the plan and guidelines
- Details of how staff will be trained in use of PPE
- Details of how cleaning staff will be trained in the extra cleaning requirements required in an outbreak
- Details of how staff will be trained in the use of extra precautions for handling linen

#### **PPE**

- Plan for how PPE needs will be met in an outbreak (see separate PPE checklist)

#### **Cleaning and laundry**

- Plan for how disinfectant and cleaning equipment needs will be met in an outbreak, e.g. how much stored on-site, where it will be stored (see separate cleaning checklist)
- Plan for how extra laundry requirements will be met, e.g. adequate numbers of linen containers and leak proof bags are available

#### **Specimen kits**

- Details of where specimen collection kits and pathology request forms will be kept on-site

#### **Contact details**

- Contact details for Infection Control Advisor
- PHU contact details

#### **Notification forms**

- Location of notification and case list forms

**Outbreak Plan checklist continued:**

**Response**

- The outbreak plan should detail how the following steps will be carried out:
- Outbreak coordinator is appointed (if different from manager)
- Transmission-based infection control precautions are implemented
- Infection Control Advisor is informed of outbreak
- Local PHU is informed
- Case list form is started
- Specimens are collected
- PHU is up-dated daily
- If a patient needs to be transferred, transfer form is used
- Final summary form is sent to PHU when outbreak is over
- Evaluation is conducted

## Gastroenteritis outbreak in a residential care facility

### PPE and cleaning and laundry

#### Checklist

##### PPE

- Gowns:** disposable; impermeable or fluid-resistant  
or  
**Aprons:** disposable plastic
- Gloves:** disposable examination gloves, range of sizes, use plastic or vinyl gloves only for food handling
- Masks:** fluid resistant medical/surgical
- Eye wear:**
  - goggles or
  - visors or
  - face shields

Examination gloves, masks and eye wear should comply with Australian Standards (see Section 7).

##### Cleaning and laundry

##### Spill cleaning:

- absorbent granules or paper towels
- leak proof plastic bags
- Neutral detergent
- Sodium hypochlorite (0.1%)  
or
- TGA registered disinfectant with label claims against norovirus
- Cleaning cloths (disposable or washable in hot water)
- Mop heads (disposable or washable in hot water)
- Leak proof laundry bags

## Gastroenteritis outbreak in a residential care facility

### Infection prevention and control measures

#### Checklist

- Inform staff, residents and visitors of the outbreak.
- Post/Affix gastroenteritis advisory notices in recommended sites around the facility.
- Emphasise the importance of meticulous and frequent hand hygiene for staff, residents and visitors (residents may need supervision or assistance).
- Provide adequate hand hygiene supplies: liquid soap, paper towels and alcohol-based hand rub.
- Inform staff of additional precautions, and advise of their responsibility for compliance.
- Provide an easily accessible supply of PPE.
- If bathrooms are shared, allocate separate bathrooms for those with gastroenteritis symptoms.
- Minimise visitors, especially children and people who are immunocompromised
- Restrict movement of residents and visitors within the facility.

#### Restrict staff movement within the facility:

- allocate dedicated staff to care for infected residents only
- allocate dedicated staff to clean affected areas
- do not allocate food handling staff to care for infected residents or to clean in affected areas.
- Exclude staff with gastroenteritis until at least 48 hours after resolution of symptoms.
- Instruct cleaners to use PPE when required, and apply increased cleaning requirements.
- Instruct staff on precautions for handling linen.
- Ensure adequate numbers of linen containers and leak proof bags.
- If resident needs to be transferred, fill out the *Resident transfer form* and hand to the transport officer.

## Gastroenteritis outbreak in a residential care facility

### Evaluation

#### Example Checklist

Evaluate your facility's management of the outbreak – use this checklist to develop your own evaluation process.

#### Preparedness

- Staff knew the definition of a gastroenteritis outbreak.
- Staff had read and understood the *Guidelines for management of gastroenteritis outbreaks in residential care facilities*.
- Staff knew their roles and responsibilities in the event of a gastroenteritis outbreak.
- Cleaning supplies and supplies of PPE were available.
- Forms for reporting and recording, along with gastroenteritis alert notices, were printed and available.
- Staff were aware of the WA Health's reporting requirements.
- Staff knew who to contact for advice, e.g. PHU, Infection Control Advisor.

#### Response

- The outbreak was recognised early and staff and residents were advised.
- Staff reported and recorded episodes of diarrhoea or vomiting promptly.
- An outbreak co-ordinator was nominated.
- The PHU was notified within 24 hours of the start of the outbreak.

#### Transmission-based infection control precautions were implemented promptly

- Staff were informed about and understood the purpose of transmission-based precautions.
- PPE supplies were provided, were easily available, and supplies were maintained.
- The Infection Control Advisor was informed of the outbreak promptly.
- The Infection Control Advisor was consulted by the manager when additional infection control advice was required, and in a timely manner.
- Compliance with transmission-based precautions was monitored and breaches of infection control were identified and addressed.

#### Case recording

- All cases of gastroenteritis were recorded on a *Case list form*.
- Staff and residents were recorded separately.
- Entries were checked to eliminate duplication.

**Evaluation checklist (example) continued:****Specimen collection**

- Specimens were collected as soon as possible.
- 3–6 specimens were collected.
- Correct tests were requested.
- Specimens were stored correctly.
- Specimens were transported correctly.
- All test results were attached to *Case list forms* on receipt from the laboratory.

**Daily updating to the Department of Health**

- A *Daily cumulative case summary form* was sent to the PHU each day.
- ‘Sentinel events’, if any, were notified to the PHU (or Department of Health Duty Officer, if after hours) and OACQC.

**Resident transfer**

- A *Resident transfer form* was completed (if a resident was transferred out of the facility).
- A *Resident transfer form* was sent with the resident.
- The ambulance drivers or transport officers were informed of the gastroenteritis outbreak or the resident’s history of infection.

**Asking for advice**

- Staff contacted their Infection Control Advisor or PHU for advice when appropriate.
- Advice was sought in a timely manner.

**At the end of the outbreak**

- A *Final case summary form* and all pathology results were sent to the PHU.
- All records relevant to the outbreak were collated in a labelled and dated file and archived.
- Staff, residents and families were informed that the outbreak was over.
- An evaluation ‘debrief’ session was held with all staff.

**What did we do well?****Where can we improve?****Further notes**

## Appendix 5: Sentinel events

Inform your PHU (see Appendix 6 for contact details) and OACQC (phone 1800 550 552) within 24 hours of:

- the death of a resident or staff member who is part of the outbreak
- any sudden increase in number of cases over a 24-hour period
- when greater than 50 per cent of residents or 20 per cent of staff are affected
- a pathology result that identifies the following specific enteric infections:
  - *Salmonella*
  - *Campylobacter*
  - *Clostridium perfringens*
  - Shiga toxin-producing *E. coli*
  - *Listeria*
  - *Staphylococcus aureus*
  - *Bacillus cereus*.

On weekends or public holidays **only**, report sentinel events to the Department of Health on 9328 0553.

## Appendix 6: Notification of outbreaks

- Contact details for PHUs
- Find your local PHU boundaries by postcode

## Gastroenteritis outbreak in a residential care facility

### Contact details for PHUs

If a gastroenteritis outbreak occurs, notify your local PHU within 24 hours. To find your PHU, see the list of PHU areas by postcode on the following page.

#### Outside the Perth metropolitan area

Population Health Unit	Phone	Fax
Coastal and Wheatbelt (Northam)	9622 4320	9622 4342
Goldfields (Kalgoorlie)	9080 8200	9080 8201
Great Southern (Albany)	9842 7525	9842 7534
Kimberley (Broome)	9194 1630	9194 1631
Midwest (Geraldton)	9956 1985	9956 1991
Pilbara (South Hedland)	9158 9222	9158 9253
South West (Bunbury)	9781 2355 9781 2359	9781 2382

#### In the Perth metropolitan area

Population Health Unit	Phone	Fax
North Metropolitan	9222 8588	9222 8599
South Metropolitan	9431 0200	9431 0223

For after-hours emergency assistance phone the Duty Officer on 9328 0553.

For an up-dated list of contact details go to

[http://www.public.health.wa.gov.au/3/280/2/contact\\_details\\_for\\_regional\\_population\\_public\\_he.pm](http://www.public.health.wa.gov.au/3/280/2/contact_details_for_regional_population_public_he.pm)

## Department of Health Population Health Unit area boundaries by postcode

Metropolitan Population Health Units				
<b>North Metropolitan</b>	6000	<b>South Metropolitan</b>	6100-6112	
	6003-6012		6121-6126	
	6014-6037		6147-6176	
	6053-6074		6180-6181	
	6076		6207-6211	
	6081-6084		6213-6215	
	6090		6953-6971	
	6556		6988-6992	
	6558			
Regional Population Health Units				
<b>Great Southern</b>	6316-6318	<b>Midwest</b>	6514-6515	6623
	6320-6324		6517-6519	6625
	6326-6328		6522	6627-6628
	6330-6333		6525	6630-6632
	6335-6338		6528	6635
	6341		6530-6532	6638-6640
	6343		6535-6537	6642
	6346		6614	6701
	6348		6616	6705
	6373		6620	6707
	6394-6397			
<b>Kimberley</b>	6725-6726	<b>Goldfields</b>	6872	
	6728		6429-6438	
	6731		6440	
	6733		6442-6448	
	6740		6450	
	6743		6452	
	6765		6646	
	6770			
6798-6799				

Regional Population Health Units (cont.)					
<b>Southwest</b>	6218			6041-6044	6417-6428
	6220			6302	6460-6463
	6221-6233			6304	6465-6468
	6236-6237			6306	6470
	6239-6240			6308-6309	6472-6473
	6243-6244			6311-6313	6475-6477
	6251-6256			6315	6479-6480
	6258			6350-6353	6484-6485
	6260			6355-6359	6487-6490
	6262			6361	6501-6507
	6271			6363	6509-6513
	6275			6365	6516
	6280-6282			6367-6370	6521
	6284-6286			6372	6560
	6288			6375	6562
	6290			6380	6564
6398			6383-6386	6566-6569	
			6390-6393	6571-6572	
			6401	6574-6575	
			6403	6603	
			6405	6605-6606	
			6407	6608-6609	
			6409-6415	6612-6613	
<b>Midwest</b>	6514-	6623		6710-6714	
	6620-6515	6625		6716	
	6517-6519	6627-6628		6718	
	6522	6630-6632		6720-6723	
	6525	6635		6751	
	6528	6638-6640	<b>Pilbara</b>	6753-6754	
	6530-6532	6642		6758	
	653	6701		6760-6762	
	6616	6705			
	6620	6707			



This document can be made available  
in alternative formats on request for  
a person with a disability.

Produced by Communicable Disease Control Directorate  
© Department of Health 2013

HP10479B AUG'13