

# Viral Gastroenteritis: infection control implications for hospitals and aged care facilities

*Most outbreaks of gastroenteritis in institutions are caused by norovirus, and the following control guidelines apply to viral gastro outbreaks (including norovirus, rotavirus and sapovirus). However, it is also important to consider toxigenic pathogens (C. perfringens and C. difficile), and bacterial pathogens (Salmonella and Campylobacter), as possible causes of gastroenteritis outbreaks in hospitals and aged care facilities.*

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In the event of a gastroenteritis outbreak there are a number of precautions that will prevent the spread of infection and control the outbreak.

## Planning and management

Form an outbreak team to enable decisions, communication and development of strategies to manage the outbreak.

## Hand hygiene

- Hand hygiene is the most effective way of controlling gastroenteritis pathogens. Hand hygiene must be performed before and after all patient contact. Hand hygiene should occur following contact with the affected patient's immediate environment and following all specimen contact, regardless of whether hands are visibly soiled. If visibly soiled hand washing with soap and water is recommended.
- Hands should always be washed after personal toileting, before preparing or eating food, and after removing gloves or other personal protective equipment (PPE).
- Hands should be washed vigorously with liquid soap and water for a minimum of 15 seconds rubbing all surfaces of the hands and wrists.
- Nails should be kept short. False fingernails, nail extenders, nail polish and jewellery can restrict adequate cleaning of hands and harbour microorganisms including the virus and are therefore not recommended.
- Refer to the NSW health website for information on hand hygiene [https://www1.health.nsw.gov.au/pds/Pages/doc.aspx?dn=PD2017\\_013](https://www1.health.nsw.gov.au/pds/Pages/doc.aspx?dn=PD2017_013) and to the NSW Infection Prevention and Control Practice Handbook [http://www.cec.health.nsw.gov.au/\\_data/assets/pdf\\_file/0010/383239/Infection-Prevention-and-ControlPractice-Handbook-V2-Updated-1-Sep-2017.pdf](http://www.cec.health.nsw.gov.au/_data/assets/pdf_file/0010/383239/Infection-Prevention-and-ControlPractice-Handbook-V2-Updated-1-Sep-2017.pdf)
- Patients must be educated on the importance of hand hygiene and given access to hand hygiene facilities.

## Standard and additional (transmission-based) precautions

- Standard precautions should be used for **ALL** patients.

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- Additional precautions (outlined below) should be used for any patient suspected or confirmed to be infected.

### Contact and droplet precautions

- Contact precautions includes wearing gloves and a plastic apron or impervious gown when having contact with the patient or the patient's environment, especially when attending to patient toileting and hygiene.
- Protective eyewear and mask must be worn when there is the potential of vomit or faecal splashing.
- A mask should also be worn when there is the potential for aerosol dissemination. This may occur when attending a vomiting patient, toileting an affected patient, changing and handling soiled linen or any faecal soiled waste, attending a patient's personal hygiene care, disposing of faeces, or cleaning an affected patient's room or environment.
- If the toilet has a lid, the lid of the toilet should be closed before flushing to stop faecal aerosols being generated.
- PPE should be removed before leaving the affected patient's room. Hands should be washed after removing PPE in the room and after leaving the room, following the sequence for removing from the Infection Prevention and Control Practice Handbook [http://www.cec.health.nsw.gov.au/\\_data/assets/pdf\\_file/0010/383239/Infection-Prevention-and-ControlPractice-Handbook-V2-Updated-1-Sep-2017.pdf](http://www.cec.health.nsw.gov.au/_data/assets/pdf_file/0010/383239/Infection-Prevention-and-ControlPractice-Handbook-V2-Updated-1-Sep-2017.pdf).

### Personal Protective Equipment (PPE)

- It is important that staff are competent in the correct wearing and removal of PPE to avoid inadvertently contaminating themselves.
- PPE should be donned before entering the affected isolation area. Note that cloth gowns should not be worn as they are not impervious or fluid resistant.
- PPE must be removed in a way that does not allow transmission of gastroenteritis virus to the wearer. Gloves are likely to be heavily contaminated and should be removed first.
- The steps in removing personal protective equipment are:
  1. Remove gloves by rolling back from the wrist. Do not touch skin.
  2. Wash hands.
  3. Remove mask by touching the tapes only, avoiding contact with the front of the mask, and discard in the waste bin.
  4. Remove goggles/visor/shield.
  5. Remove gown and fold carefully with contaminated side in and place in the waste bin.
  6. Immediately decontaminate hands well using an antimicrobial skin cleanser and water. If not immediately available, use an alcohol hand gel or rub, and wash hands as soon as possible.

### Patient movement/single room or cohort

- Affected (suspected or confirmed) patients should be nursed in isolation with designated toilet/bathroom facilities, or cohorted with other affected patients. Caution is required when cohorting patients because gastroenteritis may be caused by different infectious agents.
- Suspected or confirmed patients with gastro must not attend shared areas such as eating areas, gymnasiums or social areas.
- Avoid transfer of affected patients to unaffected areas to prevent spread of the infection.
- If a non-symptomatic patient in a non-closed ward of a hospital or aged care facility in the midst of a gastroenteritis outbreak is to be transferred from the facility, a transfer letter should accompany the patient advising the new hospital or aged care facility of the outbreak at the old facility. The ambulance or transport services should also be notified before transferring patients. The new facility can then monitor the patient

and implement the gastro pack immediately on any development of gastro symptoms without waiting for an additional case to occur.

- Hospital wards or aged care facilities with an outbreak that have transferred patient to acute facilities (such as hospital or intensive care) should have strategies in place to receive patients back even if outbreak persists.

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## Cleaning

- Any shared patient care or mobile equipment must either be designated to the affected patient or cleaned prior to using on another patient.
- PPE, including mask, should be worn by people cleaning areas contaminated with faeces or vomitus.
- Once an outbreak has been identified, the cleaning of the affected area should be increased to twice daily. Particular attention should be given to environmental surfaces frequently touched such as door handles, taps.
- When cleaning toilet and bathroom areas, special attention should be given to cleaning all potentially contaminated areas, including toilet roll dispenser, toilet seats and lid, flushing handle or flushing mechanism, safety handles, shower chair, light switches, regardless of whether they are visibly soiled or not.
- Soiling due to vomiting and diarrhoea should be cleaned immediately with water and neutral detergent. It is then recommended that a clean environmental disinfection of the area be performed, e.g. freshly prepared bleach solution which provides a concentration of 1000ppm of available chlorine. Note that some hypochlorites are corrosive and may bleach furnishings and fabrics. Contaminated carpets should be cleaned with neutral detergent and hot water, then steam cleaned.
- Those responsible for decontamination and cleaning should not be food handlers.
- Isolation areas should be cleaned using yellow colour coded equipment designated for the affected area. The detergent and disinfectant used must be effective against gastroenteritis viruses.

## Linen

- PPE should be worn when handling used linen from an infected patient.
- Used linen, whether visibly soiled or not, should not be agitated to cause the spread of the virus through aerosols.
- Linen should be bagged and tied at the point of generation.
- Linen soiled with vomitus or faeces should be bagged, transported and stored in leak proof bags.
- The laundering of linen must be consistent with Australian Standard AS/NZS 4146: *Laundry Practice*.

## Staff movements

- Minimise as much as possible the circulation of staff between affected and unaffected areas. Where possible designated staff should care for affected patients.

## Affected staff

- Staff with gastrointestinal symptoms should leave work immediately and not return to work until 48 hours after their last episode of vomiting or diarrhoea.
- Food handlers should be excluded from food preparation until at least 48 hours after their last episode of vomiting or diarrhoea.
- During the course of an outbreak, staff who develop symptoms prior to commencing work should inform their manager.
- Recuperating staff may shed the virus for a number of weeks after their symptoms have disappeared, therefore the importance of hand hygiene and personal hygiene on returning to work should be reinforced.

## Visitors

- Visiting should be minimised and patients informed of the required precautions.
- Children and immunocompromised individuals should be discouraged, where possible, from visiting during an outbreak.
- Visitors should be instructed on the application and removal of PPE, hand hygiene and about appropriate intimate contact such as kissing.

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## Closure/re-opening of a ward

- Temporary closure of an affected facility or ward may be necessary to allow for adequate cleaning and disinfection after the last affected patient has recovered.
- A closed facility or ward may be reopened 48 hours after the last episode of vomiting and diarrhoea of the last affected patient.

## Eating utensils

- Eating utensils, such as crockery, cutlery and food trays, should be washed and cleaned in the normal manner using hot water and detergent. No special requirements are necessary. Staff delivering or collecting food trays should wash their hands with liquid soap and running water or use alcohol based rub on leaving the patient area.

These guidelines should be read in conjunction with

- the NSW Health **Infection Prevention and Control Policy, PD2017\_013**, which can be accessed at the following website: [https://www1.health.nsw.gov.au/pds/Pages/doc.aspx?dn=PD2017\\_013](https://www1.health.nsw.gov.au/pds/Pages/doc.aspx?dn=PD2017_013)
- The **NSW Health Gastro Pack for Hospitals and Aged Care Facilities**, which can be accessed at the following website: <https://www.health.nsw.gov.au/Infectious/gastroenteritis/Documents/hospital-gastropack.pdf>

For further information please call your local Public Health Unit on **1300 066 055** or visit the New South Wales Health website [www.health.nsw.gov.au](http://www.health.nsw.gov.au) .

