
GASTRO PACK FOR HOSPITALS AND AGED CARE FACILITIES

What is the purpose of this information pack?

This package has been produced to assist hospitals and aged care facilities in the event of a suspected or confirmed outbreak of gastroenteritis and provides information on its early identification, prevention and control.

Who needs to read it and be familiar with it?

All health care workers of your hospital, but in particular infection control professionals, nurse unit managers and aged care facility managers, should have access to and read the information provided in this pack. This will help to ensure early identification and response to gastroenteritis outbreaks and can mean fewer people (patients and staff) with gastroenteritis in your hospital or aged care facility.

When will you need to use it?

The pack will be of use in the event of a gastroenteritis outbreak in your hospital or aged care facility. NSW Health defines a suspected outbreak as two or more people with sudden onset of vomiting or diarrhoea at the one time in any institution. "At one time" means that at least one person within an institution develops vomiting or diarrhoea within an incubation period of when at least one other person at the institution was infectious with vomiting or diarrhoea. This includes situations where patients are received from another facility/agent.

How can I plan for an outbreak of gastroenteritis?

Hospitals and aged care facilities should have a documented outbreak plan that includes: recognising an outbreak, what is your response, infection prevention and control, escalation, cleaning, education and communication.

Who should I contact?

Gastroenteritis in an institution among people of any age and food borne illness suspected in two or more related cases should be notified to your local public health unit (NSW Department of Health. *Notification of Diseases under the Public Health Act 2010*, Information Bulletin IB2013_010, available at:

https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/IB2013_010.pdf. Notifying NSW Health of such an outbreak is obligatory for Chief Executive Officers (or their delegates) of hospitals and nursing homes and medical practitioners, and is recommended for hostels. A list of NSW public health units is provided over the page.

How can the public health unit (PHU) help, and what is their role?

Your local PHU can assist by providing advice and support in the management and control of an outbreak of gastroenteritis in a hospital or aged care facility. PHU staff can also provide advice on the most likely cause of the outbreak. PHU staff have expertise in managing infectious disease outbreaks.

What is in this pack?

- Section 1. Recognising and managing an outbreak of gastroenteritis on your ward
- Section 2. Viral Gastroenteritis: Infection Control Implications for hospitals and aged care
- Section 3. Collection of specimens in a gastroenteritis outbreak
- Section 4. Signage: Staff and visitors posters
- Section 5. Line listing for cases
- Section 6. Viral gastroenteritis fact sheet

Public Health Unit Contacts

In NSW calling **1300 066 055** will direct you to your local public health unit.

NSW Local Health District	Public Health Units	Contact Phone Number
Central Coast	Gosford Office	02 4349 9730
Hunter New England	Newcastle Office	02 4924 6477
	Tamworth Office	02 6764 8000
Illawarra Shoalhaven	Wollongong Office	02 4221 6700
Mid North Coast / Northern NSW	Port Macquarie Office	02 6588 2750
	Lismore Office	02 6620 7585
Murrumbidgee / Southern NSW	Goulburn Office	02 4824 1837
	Albury Office	02 6080 8900
Nepean Blue Mountains	Penrith Office	02 4734 2022
Northern Sydney	Hornsby Office	02 9477 9400
Sydney	Camperdown Office	02 9515 9420
South Western Sydney	Liverpool Office	02 8778 0855
South Eastern Sydney	Randwick Office	02 9382 8333
Western NSW	Broken Hill Office	08 8080 1499
	Dubbo Office	02 6809 8979
	Bathurst Office	02 6330 5880
Western Sydney	Parramatta Office	02 9840 3603

NSW HEALTH HOSPITAL GASTRO PACK SECTION 1

RECOGNISING AND MANAGING AN OUTBREAK OF GASTROENTERITIS ON YOUR WARD

Gastro Pack Resources

Two or more people with diarrhoea and/or vomiting in your facility at one time



Refer to section 6: Fact sheet: Viral gastroenteritis

Steps to be taken within 24 hours of recognition of the outbreak



Institute infection control measures and cleaning



Refer to section 2: Infection Control Implications for hospitals

Inform the infection control practitioner & the facility management



Infection Control Officer:
Phone number:

Inform the medical team, collect faecal specimens and send to laboratory for testing



Refer to section 3: Specimen Collection Information sheet

Post signage and alcohol-based hand rubs at entrance to affected ward or facility



Refer to section 4: Attention visitors and staff signs

Contact your local public health unit & inform them of outbreak



Refer to section 5: Line listing for cases
PHU name:
Phone number:

Distribute health information to staff, patients and visitors



Refer to section 2: Infection Control Implications for Hospitals
Refer to section 6: Fact sheet: Viral Gastroenteritis

NSW HEALTH HOSPITAL GASTRO PACK SECTION 2

NSW Health Factsheet

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.

Last updated: 19 Nov 2018

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 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-Control-Practice-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.
- 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-Control-Practice-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.

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.

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- 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.

CLOSURE / REOPENING 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 be accessed at the following website:
https://www1.health.nsw.gov.au/pds/Pages/doc.aspx?dn=PD2017_013

NSW HEALTH HOSPITAL GASTRO PACK SECTION 3

COLLECTION OF SPECIMENS IN A GASTROENTERITIS OUTBREAK

The information below is provided to assist facility staff and treating doctors in managing the collection of specimens in the event of a gastroenteritis outbreak in your institution. Please consult your local public health unit (PHU) and nominated laboratory in the collection and transportation of these specimens. Your local PHU may be able to assist and/or offer advice on issues such as: how many samples should be collected; what pathogens to test for; communication with laboratories; transportation and storage of specimens; and where to source specimen jars if needed.

Specimen Collection

- Stool specimens should be collected as soon as possible after symptoms begin, whilst the stools are still liquid or semi-solid.
- A minimum of one specimen each from six ill persons within the institution should be collected if possible.
- Staff should wear personal protective equipment when collecting specimens. For more information refer to 'Viral gastroenteritis: Infection Control Implications for Hospitals' (section 2 of the Gastro Pack).
- Stool specimens should be collected in sterile specimen jars and should fill approximately half of the jar (10-20ml). Some methods of specimen collection include: placing a disposable plastic container inside the toilet before use by the patient; or using a disposable spoon/spatula to collect faecal matter from incontinence pads.

Specimen Storage and Transportation

- Where possible, give your nominated laboratory prior notice of the gastroenteritis outbreak in your facility. Liaise with the laboratory manager about: the number of stool specimens that you will be submitting and the estimated time frame for results. There may also be specific requirements for the collection of certain specimens.
- Stool specimens should be kept refrigerated at 4°C. Arrange transportation to your nominated laboratory as soon as possible after collection. The specimens should be bagged, sealed and kept on ice or in a refrigerated container whilst transporting. Do not freeze specimens.

- Ensure each specimen jar is clearly labelled and the pathology request form is complete with patient details, including their Medicare number, the address of your institution, the tests requested, and the requesting practitioner details and signature. It is also worthwhile to include an outbreak name on the form to streamline testing

Specimen Testing

- All stool specimens should undergo testing for enteric bacterial and viral pathogens, guided by the symptom profile of patients and other epidemiological information. Bacterial testing should include microscopy culture and sensitivity (MC&S) in addition to PCR (if performed). However it is recommended you consult with your facility's infectious diseases physician or clinical microbiologist, or your local PHU regarding the tests to request.
- Stool specimens from symptomatic hospital patients should be tested for *Clostridium difficile* as soon as practicable as virulent strains of *C. difficile* have emerged worldwide and have caused extensive outbreaks in hospitals and the community with significant mortality, especially in the elderly. A factsheet "Clostridium difficile - Information for healthcare professionals" is available at: http://www.cec.health.nsw.gov.au/_data/assets/pdf_file/0007/258640/clostridium_difficile_cli.pdf
- If viral pathogens are considered the likely cause of the gastroenteritis, both viral and bacterial testing should be requested and marked as 'urgent'. Viral testing should be done as soon as possible, before bacterial cultures are finalised.
- Vomitus samples should only be collected after consultation with your nominated laboratory or local PHU. Stool specimens are preferred; however recommendations for the collection and storage of vomitus specimens are the same as those for stool specimens.

NSW HEALTH HOSPITAL GASTRO PACK SECTION 4 SIGNAGE

The following signage is included on the next four pages:

- Attention visitors to hospitals (page 11)
- Attention staff of hospitals (page 12)
- Attention visitors to aged care facilities (page 13)
- Attention staff of aged care facilities (page 14)



Attention Visitors

This facility currently has patients who are experiencing **gastroenteritis** (diarrhoea and vomiting)

You may wish to reconsider visiting at this time
If it is necessary that you visit please wash your hands thoroughly with soap and water or alcohol-based hand rub before visiting and before leaving.
If you have any questions please discuss with the nurse in charge



Attention Staff

Our hospital currently has patients &/or staff who are experiencing **gastroenteritis**

If you are sick with diarrhoea or vomiting please let your manager know and exclude yourself from work until at least 48 hours after your last episode of diarrhoea or vomiting.



Attention Visitors

This facility currently has residents who are experiencing **gastroenteritis** (diarrhoea and vomiting)

You may wish to reconsider visiting at this time. If it is necessary that you visit please wash your hands thoroughly with soap and water or alcohol-based hand rub before visiting and before leaving. If you have any questions please discuss with the nurse in charge.



Attention Staff

Our facility currently has residents &/or staff who are experiencing **gastroenteritis**

If you are sick with diarrhoea or vomiting please let your manager know and exclude yourself from work until at least 48 hours after your last episode of diarrhoea or vomiting.

NSW HEALTH HOSPITAL GASTRO PACK SECTION 5

LINE LISTING FOR A GASTROENTERITIS OUTBREAK IN A HOSPITAL

This line listing is a table in which important information is recorded on each person who is ill with gastroenteritis in an outbreak. This information will assist you in keeping track of sick residents and staff, enabling you to implement control measures to stop the outbreak spreading. The information is collated by your local public health unit (PHU) and enables staff to determine the nature of the outbreak and likely mode of transmission and to assist in controlling the outbreak.

You can either print out and fill in the line listing below, or, access an electronic line listing at: <https://www.health.nsw.gov.au/Infectious/gastroenteritis/Documents/gastro-outbreak-line-listing.xls>

The advantage of the electronic line listing is that it automatically creates epidemiological curves that can aid in the identification of the mode of transmission of the pathogen.

Instructions for use

- Please notify your local PHU of an outbreak of gastroenteritis in your institution (two or more people with sudden onset of vomiting or diarrhoea at the one time) and for assistance in the use and completion of this form (see list of NSW PHUs below)
- Please complete the Line Listing Form including: facility name, facility type (e.g. nursing home and/or hostel), contact person and title, total number of staff and residents at the facility, date of first case and the date reported to the PHU.
- Please record details for each person in the facility with gastroenteritis illness. Please use the same line listing to record details of the new cases throughout the duration of the outbreak (do not restart the list each day).
- **In the event of an outbreak this line listing should be faxed or emailed daily to your local PHU.** Please ensure all details are completed for each case. If you have any questions please telephone your local PHU.

NSW Health Hospital Gastro Pack Section 5: Line Listing for Gastroenteritis in a Hospital (page 1)

Name of Hospital: _____ Name of ward/s or unit/s: _____ No patients on ward/unit: _____ No. of staff: _____
 Contact Person: _____ Position Title: _____ Telephone No: _____ Fax No: _____ Email: _____
 PHU Notified (tick) Date Reported to PHU: _____ Date First Case: _____ Unique name/number for outbreak (PHU to fill in): _____

CASE DETAILS						DESCRIPTION OF ILLNESS				SPECIMEN			OUTCOME
Case No.	Full name & MRN	DOB & Age (yrs)	Gender	Staff (S) or Patient (P)	Current Ward/ Bed	Date of Onset	Time of Onset	Length of Illness (hrs)	Symptoms (see key)	Specimen Collected (Y/N) If Yes, specify type	Date Specimen Collected	Result (specify name of bacteria, virus, parasite or toxin)	Recovered (R) Died (D) Transferred (T)

Symptoms Key: V=Vomiting D=Diarrhoea BD=Bloody Diarrhoea F=Fever>38.5C AC=Abdominal Cramps N=Nausea

Please use the same line listing for new cases – do not start a new one each day

Please arrange stool samples (specimens) from affected persons

NSW HEALTH HOSPITAL GASTRO PACK SECTION 6

Communicable Diseases Factsheet

Viral Gastroenteritis

Gastroenteritis is commonly caused by viral infections resulting in vomiting and diarrhoea. The viruses are easily spread from person to person. Thorough washing of hands with soap and running water are vital to prevent spread.

Updated: 27 July 2018

What is viral gastroenteritis?

Viral gastroenteritis is a common infection of the stomach and intestines that results in vomiting and diarrhoea. It can be caused by a number of different viruses, such as rotavirus and norovirus (previously known as Norwalk-like virus). There are many other causes of gastroenteritis including bacteria, toxins, parasites, and some non-infectious diseases.

What are the symptoms?

The main symptoms of viral gastroenteritis are vomiting and watery diarrhoea. Other symptoms may include nausea, fever, abdominal pain, headache, and muscle aches. Dehydration can follow. Symptoms can take between one and three days to develop, and often have rapid onset. Symptoms usually last between one and two days, sometimes longer.

How is it spread?

Viral gastroenteritis is highly infectious and is spread by the vomit or faeces of an infected person through:

- person-to-person contact, for example shaking hands with someone who has been sick and has the virus on their hands
- contaminated objects
- contaminated food or drink
- aerosolised particles when people vomit.

In most cases, spread occurs from a person who has symptoms. Some people can pass on the infection without symptoms, particularly in the first 48 hours after recovery.

Who is at risk?

Viral gastroenteritis can affect people of all ages.

How is it prevented?

After using the toilet, changing nappies, and before eating or preparing food, wash your hands thoroughly with soap and running water for at least 10 seconds and dry them with a clean towel.

How is it diagnosed?

A diagnosis of viral gastroenteritis is usually based on the person's symptoms. Laboratory confirmation is important during outbreaks, and involves testing samples of stool (faeces).

How is it treated?

There is no specific treatment for viral gastroenteritis except rest and drinking plenty of fluids. Most people will recover without complications. However, viral gastroenteritis can be serious for those who may have difficulty replacing fluids and salts lost through vomiting and diarrhoea.

People with vomiting or diarrhoea should:

- rest at home and not attend work. Infants and children attending childcare or school should be excluded from attending for 48 hours after the resolution of symptoms.

- not prepare food for others or care for patients, children, or the elderly. These precautions should continue until 48 hours after diarrhoea or vomiting ceases. This includes people who prepare food in the home or work in the food industry.
- wash hands thoroughly with soap and running water for 10 seconds after using the toilet
- drink plenty of clear fluids, for example juice or soft drink diluted 1 part to 4 parts water, to prevent dehydration. Avoid undiluted fruit juice and soft drinks as they may increase dehydration and diarrhoea. Rehydration drinks that replace fluids lost are available from chemists. Intravenous fluids may be needed in severe cases of dehydration.

People caring for those with gastroenteritis should wash hands thoroughly with soap and running water after any contact with the sick person. Cleaning soiled surfaces and clothing reduces further spread of the virus.

When cleaning up vomit or faeces:

- wear gloves
- wash hands after gloves are removed and disposed
- use disposable paper towels or rags to remove any solid material and seal them in a plastic bag before placing in the rubbish bin
- clean any soiled object or surface with hot water and detergent and allow to dry thoroughly
- a mask should be worn if there is a risk of splashing

What is the public health response?

Outbreaks of viral gastroenteritis increase in winter and are common within families and group settings including nursing homes, hospitals, child care centres, and schools. Doctors and hospitals are required to notify their local public health unit whenever there are at least two cases of gastroenteritis that are linked.

Public health units are able to:

- advise on how to identify an outbreak
- advise on how to control the outbreak
- help investigate outbreaks to determine the source and mode of transmission
- advise on the exclusion of people with viral gastroenteritis from work, school or other public gatherings.