



INFORMATION SHEET (V1, October 2010) GASTROENTERITIS



What is Gastroenteritis?

- Gastroenteritis is a common illness and outbreaks are often encountered in healthcare facilities where patients/residents are in close contact.
- It tends to be more common in the winter months.
- Immunocompromised patients/residents including the elderly are particularly susceptible to the more severe complications of gastroenteritis. These patients/residents may also have symptoms that can mimic gastroenteritis which are due to chronic bowel disease, or illnesses or certain medications but are not the result of an infection.

Types of Gastroenteritis

1. **Viral Gastroenteritis:** including noroviruses and rotaviruses. Noroviruses is the most common cause of outbreaks and can be identified as of those affected 50% of persons symptoms include vomiting, illness usually only last 2 days, and staff become affected. Main focus on Infection Control measures - Contact precautions.
2. **Bacterial Gastroenteritis:** including Salmonella, Campylobacter and Shiga Toxin producing Ecoli (STEC). Bacterial gastroenteritis is more severe and maybe caused by contaminated food being served. Of those affected 10-50% of person symptoms include vomiting and illness lasts longer than 2 days and may last up to 2 weeks. Some persons experience blood in faeces. Main focus should be on search for potential food sources.
3. **Toxin producing Bacteria:** including Clostridium perfringens or Staphylococcus Aureus. Usually of short duration and maybe caused by contaminated food. Of those affected, most persons have diarrhea and less than 15% have vomiting, and illness usually lasts less than 24 hrs. Main focus should be on search for potential food sources.
4. **Antibiotic – associated Diarrhea:** Antibiotics can alter bacteria normally found in the gut and allow bacteria such as Clostridium Difficile, to grow and produce toxin. Those affected will have a history of antibiotic therapy, profuse diarrhea, the illness usually lasts longer than two days and the outbreak may last for up to 2 weeks. Infection is spread from contaminated environments or staff.

Gastroenteritis Outbreak

- An outbreak of gastroenteritis is where 2 or more persons in a healthcare facility become ill with vomiting or diarrhea within 24 hours of each other.
- Outbreaks of gastroenteritis are notifiable in most States and Territories. Refer to your local Health Department guidelines for reporting and management procedures
- **All facilities should have a Gastroenteritis Outbreak Management Plan/Toolkit and a stock pile of PPE/stores e.g. cleaning products.**

Transmission & Diagnosis

The most common modes of transmission are:

- ❖ Person to person spread by the faecal oral route
- ❖ Possible person to person spread from vomiting (aerosol dissemination of virus particles).
- ❖ Environmental contamination and subsequent indirect person to person spread.
- ❖ Contaminated food or water (usually faecally contaminated).
- ❖ Secondary food borne spread (food handled by an infected or contaminated food handler)

How is Gastroenteritis Diagnosed?

- ❖ A diagnosis of gastroenteritis is usually based in a person's symptoms.
- ❖ Laboratory confirmation is important during outbreaks, and involves testing samples of faeces. Laboratory requests should include microscopy, culture and sensitivity and viral testing including norovirus.
- ❖ Specimens should be collected from as many ill patient/resident/staff members as possible during an outbreak.
- ❖ Observe Standard precautions when collecting specimens.

Signs & Symptoms

- Diarrhoea- bloody stools in some cases.
- Nausea and vomiting
- Abdominal pain
- Loss of appetite
- Fever
- Headaches
- General weakness, body aches.

NB. Patients/residents/staff may not experience all the above signs and symptoms.

Treatment/Prevention

- ✓ There is no specific treatment for most gastroenteritis, consult GP/Doctor for advice/treatment.
- ✓ There are currently no vaccines that protect against most of the organisms found in Australia. Rotavirus vaccine is suitable for babies under 6 months of age.
- ✓ Rest can reduce symptoms. Adequate fluid intake and gastrolyte can prevent dehydration and replace salt.
- ✓ Avoid anti-vomiting/anti diarrhoeal medications unless prescribed or recommended by a Dr.
- ✓ Be alert to a possible gastroenteritis outbreak- staff to report all cases of vomiting or diarrhea so that cases can be monitored and an outbreak monitored as early as possible.
- ✓ Staff with Gastroenteritis should not go to work for at least 48 hr after symptoms have ceased.
- ✓ **The most important key to prevention is hand hygiene and good general hygiene e.g. cleaning of equipment between patients/residents.**
- ✓ Foodborne infection is prevented by careful food hygiene and preparation including use of thickeners, sanitising communal food areas. Food Safety Standards should be maintained at all times.

Management

- ✚ **Infection control measures are focused on minimizing the spread of the virus within and between wards/departments/staff /community as these organisms can be very infectious.**
- ✚ Standard Precautions should be used at all times – Reinforce Hand Hygiene as per HHA 5 moments for staff/patients/residents/visitors.
- ✚ Contact precautions (i.e. single room, long sleeved disposable gown, gloves) should be employed for suspected cases until the diagnosis is confirmed, and 48 hours after last symptom has ceased. Masks should be used if patient/resident vomiting and during cleaning procedures.
- ✚ Isolation of infected, symptomatic patients/residents and contacts if applicable. (Cohort if same organism).
- ✚ **Gowns and gloves are to be single use only e.g. procedure/patient specific.**
- ✚ Gowns and gloves should be removed prior to leaving the room – a bin should be available at patient/resident door for disposal of same.
- ✚ Perform hand hygiene immediately after removing gloves and gown and leaving the room.
- ✚ Dedicate staffing where possible/practicable and minimize staff between affected and unaffected patients/residents.
- ✚ All equipment is to be disinfected with chlorine based cleaner as per state guidelines before removal from the room including lifter slings/commododes.
- ✚ Affected Staff to go off work immediately, remain off work for at least 48 hr after last symptom.
- ✚ Clean patient/resident environment and associated areas thoroughly with a neutral detergent and chlorine as per manufacturer and State guidelines. Increase frequency of cleaning with attention to bathrooms, toilets and high touch surfaces e.g. light switches, door handles. Terminal chlorine clean on cessation of symptoms/isolation and/or discharge.
- ✚ **If an outbreak is identified-**Minimise/cease communal gatherings of unaffected patient/residents- eg. all to receive meals in own room etc. Restrict Visitors (especially children) and exclude all non essential staff.
- ✚ Signage- Place restriction notices at entrance to facility, isolation rooms, kitchen and in staff areas
- ✚ Staff assigned to cleaning duties should not have access to kitchen. Kitchen staff should not deliver food to affected patients/resident.
- ✚ PPE should be used on handling/transporting waste or linen. Linen/waste chutes should not be used due to potential aerosolisation.

REFERENCES

1. Communicable Disease Directorate: Department of Health, Western Australia. www.public.health.wa.gov.au
2. Blue Book: Guidelines for the Control of Infectious Diseases: Viral Gastroenteritis. <http://www.health.vic.gov.au/ideas/bluebook>
3. The Commonwealth Department of Health and Ageing: Guidelines regarding the management and prevention of Gastroenteritis. Gastro-Info Gastroenteritis Kit for Aged Care: Resources to assist residential aged care homes in preventing, identifying and managing outbreaks of gastroenteritis. www.health.gov.au/internet/publishing.nsf/Content/ageing-publicat-gastro-kit.htm
4. NHMRC Australian Guidelines for the Prevention and Control in Healthcare. www.nhmrc.gov.au/node/30290