

Outbreak Management 2015

Learning Outcomes

For staff to be able to

- Define an outbreak
- To recognise an outbreak
- Identify the actions to be taken when an outbreak occurs
- Implement specific actions to be taken during a Norovirus/Influenza outbreak and to manage these patients
- Recognise the actions to be taken when an outbreak is declared over

Definitions for Outbreaks

Two or more linked cases with the same infectious agent associated with the same clinical setting, **or**
A higher than expected number of cases in a given clinical area over a specified time period, **or**
A single case of a serious illness with major public health implications where action is necessary to investigate and prevent ongoing exposure to a hazardous agent.

Common organisms that may cause outbreaks

- Norovirus
- Influenza

Outbreak of Norovirus/Rotavirus

Definition of an Outbreak for Ward Closure:

Two or more possible Norovirus infection cases in a single ward, unit or department within 24 hours.

Case definition:

A patient who within a 24-hour period has had 2 or more episodes of non-bloody diarrhoea and/or 2 or more episodes of vomiting without having any other obvious cause for symptoms.








Is it loose stools?

BOWEL MOVEMENT RECORD

Name:

CHI:

Date Commenced:/...../.....

Date	Time	Comments i.e. volume, blood, mucous S – small M – medium L – large	Type 1 Separate hard lumps like nuts (hard to pass) 	Type 2 Sausage shaped but lumpy 	Type 3 Like a sausage but with cracks on surface 	Type 4 Like a sausage or snake, smooth and soft 	Type 5 Soft blobs with clear- cut edges (passed easily) 	Type 6 Fluffy pieces with ragged edges, a mushy stool 	Type 7 Watery, no solid pieces (entirely liquid) 	Staff Initials

Review your patient

- Aperients
- Antibiotics
- Food
- Other medical conditions
- Symptoms and frequency
- Any foreign travel

Contact Infection Prevention & Control Team

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On suspicion of outbreak of viral gastroenteritis

Actions by Nurses/Medical staff

- Transmission Based Precautions/SICPs
- Isolation
- Commence Loose Stools Care Plan
- Commence Bristol Stool Chart
- Symptom recording chart
- Specimen collection

Actions by Infection Control Nurse/Doctor

- Assess the situation.
- 100% single side rooms with en-suite ward *
- Advise on initial measures e.g. isolation, closing to admissions/transfers following discussion with medical staff.
- Advise on increased cleaning/use of disinfectants.
- If required contact Public Health/ other relevant agencies.
- Press statement may be prepared/released.
- Advise staff on appropriate documentation.

Appendix 3 - Norovirus Outbreak Data Record Ward

Possible Norovirus Infection: A person (patient or staff) who, within a 24 hour period has, 2 or more episodes of non-bloody diarrhoea*, and/or, 2 or more episodes of vomiting, without having any other obvious cause or symptoms.

Confirmed Norovirus Infection: A person (patient or staff) who, within a 24 hour period has, 2 or more episodes of non-bloody diarrhoea*, and/or, 2 or more episodes of vomiting, without having any other obvious cause for symptoms **AND** who has tested positive for Norovirus in RT-PCR.

Tick if symptoms present (Antibiotics is abbreviated as [Abx])

Date(s) and Day

Names/numbers of all symptomatic patients (diarrhoea and/or vomiting)	D=Diarrhoea V=Vomiting	Abx Y or N	Laxatives/ Enemas Y or N	Specimen date	Possible or Confirmed*	Other Info						

*Does the patient meet the definition of a Possible or Confirmed case?

Date (agree a time of day to be done)																					Comment
No. of patients symptomatic																					
No. of patients <48 hrs symptomatic free																					
No. of empty beds																					
No. of new HCWs off duty with symptoms																					

Specimen Collection

- Prompt Collection - loose Stools and/or Vomit
- Legible labelling
- Clear instructions for Test/ Investigation required
- Send Separate Samples for Microbiology and Virology
- Current Antibiotic Therapy
- Recent Travel

If the ward is closed this means

- Closed to all new admissions, transfers in and out.
- Patients may be discharged to their own home if well enough.
- Non essential investigations/therapies have been curtailed.
- Ward cleaning increased to twice daily.
- Restrict staff movement where possible .
- Staff have been informed that should any of them have symptoms, they should remain off duty until 48 hours after their last symptoms
- The ward will be assessed daily by the nurse-in-charge and IPCT.

Management of Influenza Patients

Influenza is a respiratory illness characterised by fever, cough, headache, sore throat, aching muscles and joints. There is a wide spectrum of illness ranging from minor symptoms through to pneumonia and death. The most common complications of influenza are bronchitis and secondary bacterial pneumonia.

Routes of Transmission

- Droplet Transmission
- Contact
 - Direct
 - Indirect
- Airborne Route

Review your patient

- New onset of respiratory symptoms
- Exacerbation of underlying chronic conditions
- History of contacts with influenza

On suspicion of Influenza Actions by Nurse/Medical Staff

- Transmission Based Precautions/SICPs
- Isolation
- Specimen collection
- Commence care plan

Specimen Collection

Patients > 2 years – Throat & nose swab or gargle

Ventilated patients – Endo Tracheal aspirate

Repeat testing to confirm clearance of influenza is not required.

PPE

PPE	Close patient contact (< 1 metre)	Aerosol Generating Procedures (AGPs)
Hand Hygiene	✓	✓
Gloves	✓	✓
Plastic Aprons	✓	✓
Surgical Mask	✓	x
FFP3 Respirator	x	✓
Eye Protection	Risk Assessment	✓

Visitors should be offered a surgical mask and plastic apron on entry to the room.

Advise that they remove PPE before leaving room and dispose in clinical waste.

Hand hygiene should be carried out following removal.

Aerosol Generating Procedures

- Intubation, extubation & related procedures
- Cardiopulmonary resuscitation
- Bronchoscopy
- Surgery & post mortem procedures in which high-speed devices are used.
- High Frequency Oscillatory Ventilation (HFOV).
- Induction of sputum.

Patient Movement

Influenza patients who are still infectious must not leave the area unless there is an urgent clinical need.

If required the procedure is

- Dept must be informed in advance
- The patient must wear a **surgical mask** until they return to the isolation room / cohort area.
- HCW's do not wear a mask for transfer

Review/Reopening by IPCT

Norovirus – 48hrs after last new case

Influenza – each ward reviewed on an individual basis by IPCT and ICD

Patients should be considered infectious until 48hrs after coryzal symptoms have resolved / previous health state

Re-opening the ward

- Nurse in charge ensures that Nursing staff are aware of their cleaning responsibilities and that there are enough staff on duty.
- Nurse in charge liaises with Domestic Supervisor regarding clean start time and gives any special instructions.
- Domestic & Nursing staff co-ordinate

**STANDARD OPERATING PROCEDURE (SOP) - TERMINAL
CLEAN OF WARD**

Summary

- Outbreaks can be caused by various microorganisms.
- By applying SICPs at all times the majority of outbreaks could be prevented.
- Once it has occurred an outbreak can be controlled by good team work between all healthcare workers and infection control staff in liaison with management.
- It is important that Nursing and Domestic staff work together to ensure an effective clean when reopening the ward

Infection Prevention & Control

- There is an Infection Prevention and Control Team available for specialist Infection Control advice within NHSGGC
- Contact details of local Infection Prevention & Control Teams can be found via your local switchboard or website;

www.nhsggc.org.uk/infectioncontrol



ANY QUESTIONS

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