Healthier Communities, Outstanding Care

NHS
Sherwood Forest Hospitals
NHS Foundation Trust

NOROVIRUS POLICY

	POLICY		
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1.0 INTRODUCTION

The Sherwood Forest Hospital NHS Foundation Trust (Trust) is committed to reducing and managing risk, ensuring effective and safe practice. This policy provides guidance on preventative actions to take relating to the infection viral gastroenteritis that may cause outbreaks.

This policy has been developed to provide a practical document to equip all healthcare professionals at the Trust with the necessary information on the recognition, management and treatment of an outbreak of viral gastroenteritis, it describes the accountability framework for implementation of the protocols that are recommended within the Trust for the prevention and control of viral gastroenteritis.

2.0 POLICY STATEMENT

- To minimise the risk of transmission of viral gastroenteritis
- To ensure that each patient with viral gastroenteritis is cared for effectively and appropriately
- To outline the roles and responsibilities of staff involved in the care of patients with viral gastroenteritis

This clinical policy applies to:

Staff group(s):
- this policy is intended for use by all staff groups both clinical and non-clinical staff

Clinical areas(s):
- this policy is intended for use in all clinical areas within King's Mill Hospital, Newark Hospital and Mansfield Community Hospital

Patient group(s):
- this policy is intended for use for all patient groups – adult, maternity and paediatrics

Exclusions
- none

3.0 DEFINITIONS/ ABBREVIATIONS

Trust:	Sherwood Forest Hospitals NHS Foundation Trust
Staff:	All employers of the Trust including those managed by a third party on behalf of the Trust
HCAI(s):	Healthcare Associated Infection(s)
HPA:	Health Protection Agency (pre 2012)
UKHSA:	UK Health Security Agency
HPU:	Health Protection Unit
IPCC:	Infection Prevention and Control Committee
IPCT:	Infection Prevention and Control Team
IPCN:	Infection Prevention and Control Nurse
MRSA:	Methicillin resistant *Staphylococcus aureus*
MSSA:	Methicillin sensitive *Staphylococcus aureus*
ORG:	Outbreak Response Group
SHA:	Strategic Health Authority
TB:	Tuberculosis
VRE:	Vancomycin resistant Enterococci
R.A.G.Clean:	Red or Amber or Green Clean

4.0 ROLES AND RESPONSIBILITIES

Each individual has a clinical and ethical responsibility to carry out effective infection prevention procedures and to act in a way, which minimises the risk to the patient.

4.1 Divisional Management Teams

The Divisional Management team are responsible for ensuring that infection prevention and control policies, procedures and guidance are applied consistently across their clinical teams and that they act as a good role model for infection prevention and control. They will actively support all infection prevention and control measures and will have an active role in measuring outcomes and developing action plans for improvement. They will ensure medical teams are allocated appropriately.

4.2 Matrons

Matrons are responsible for ensuring that infection prevention and control policies, procedures and guidance are applied consistently across the clinical team and that they act as a good role model for infection prevention and control. They are also responsible for ensuring that resources are available for all healthcare professionals to undertake effective standard and isolation precautions. They will also be responsible for reporting to the Outbreak Response Group (ORG) progress on actions requested by the ORG, and any difficulties experienced or barriers to control measures being implemented. They will actively support all infection prevention and control measures and will have an active role in measuring outcomes and developing action plans for improvement. They will ensure nursing teams are allocated appropriately.

4.3 Departmental Manager / Ward Sister (Nurse in Charge)

Departmental/Ward Manager (Nurse in Charge), in the absence of the Departmental Manager/Ward Sister |(Nurse in Charge) is responsible for ensuring that infection prevention and control policies, procedures and guidance are applied consistently across the clinical team and that they act as a good role model for infection prevention and control. They are also responsible for ensuring that all members of staff under their management control are

appropriately trained, have access to appropriate personal protective equipment and adherence to safe practices. To keep clear and contemporaneous records of the outbreak, actions agreed and resource implications. To report to their Matron the progress they have made on the actions requested by the ORG, and of any difficulties experienced or barriers to control measures being implemented.

4.4 Clinical Staff
Clinical staff are responsible for complying with the requirements of the Trust Infection Prevention and Control policies, attend appropriate training and use appropriate personal protective equipment. To maintain clear and contemporaneous records of the outbreak, to report to their Department/Ward Manager the progress they have made on the actions requested by the ORG, and of any difficulties experienced or barriers to control measures being implemented.

4.5 Non-clinical staff
Non-clinical staff are responsible for complying with the requirements of the Trust Infection Prevention and Control policies, attend appropriate training and use appropriate personal protective equipment. To report to their supervisor of the progress they have made on the actions requested by the ORG, and of any difficulties experienced or barriers to control measures being implemented.

4.6 Occupational Health
Occupational Health is required to be aware of this policy, and their attendance at the ORG meeting, and to complete actions as delegated at the ORG meeting. Occupational Health is responsible for ensuring that there is appropriate written advice for staff, making clear arrangements for staff to contact occupational health department. Ensuring that there is a process in place to monitor staff sickness associated with the outbreak.

4.7 Infection Prevention and Control Committee
The Infection Prevention and Control Committee (IPCC) is responsible for providing input into this policy through the consultation process and to approve this policy prior to the ratification process. In the event of an outbreak the IPCC will receive outbreak reports from the Chair of the ORG. Will review reports of Serious Incidents (SI) submitted in line with this policy, in order to both identify learning opportunities for improving patient safety, and to ensure that the Trust have robust arrangements in place to investigate incidents and prevent them re-occurring where practicable. Will review audit reports and monitor progress against related action plans.

4.8 The Infection Prevention and Control Team
The Infection Prevention and Control Team (IPCT) are responsible for:

- Providing support and advice on the implementation of this policy
- Alerting staff to the need to implement additional actions to prevent/contain an outbreak or SI
- In conjugation with the ORG co-ordinating the management of the outbreak/SI and associated actions
- Responsible for ensuring that the appropriate level of communication is released in line with the escalation procedure
- Maintain clear and contemporaneous records of the outbreak
- To report to the ORG of any difficulties experienced or barriers to control measures being implemented
- Providing administrative support to facilitate the outbreak meeting
- Provision of accurate outbreak surveillance data at the ORG meeting

- Visit/contact affected ward/department daily or more often if required to collect information of the number of patients/staff affected
- Cascade information in relation to the outbreak to relevant stakeholders

4.9 Nominated Infection Prevention and Control Link Representatives and associates

Nominated infection prevention and control link representatives and associates are responsible for disseminating all relevant infection prevention and control information to staff within their own work environment, supporting the IPCT in monitoring the outbreak within their own ward/ department.

4.10 Outbreak Response Group

The purpose of this committee is to provide immediate response and action to an outbreak as outlined in Appendix D: Outbreak Response Group (ORG) Terms of Reference and Appendix E: Standard agenda for outbreak meetings.

5.0 APPROVAL

This Policy (v4.0) has been approved by the Infection Prevention and Control Committee

6.0 DOCUMENT REQUIREMENTS

Norovirus is a major cause of acute gastroenteritis and diarrhoea in children and adults. The disease is often termed 'Winter Vomiting Disease' because of the increased prevalence in the winter months; however it can be detected throughout the year.

Norovirus is the most common cause of outbreaks of gastroenteritis in hospitals and can also cause outbreaks in other settings including schools, care homes and cruise ships. Norovirus outbreaks frequently affect hospitals when they are at their busiest, when there is an increase in emergency admission and consequently reduced bed availability as well as fewer suitable locations. The decision of whether to close a bed bay or a ward and further reduce the number of beds available during these times of difficulty is not taken lightly; evidence shows that early closure is the best decision for patient safety and service continuation

Early closure can reduce the number of patients and healthcare workers affected and the duration of closure. There is now evidence to suggest that full ward closure is not always necessary, and a bay closure at the first sign of an outbreak can sometimes prevent a full ward closure. The bay closure option **must** only be used with prior IPCT risk assessment.

Failure to observe and comply with infection prevention guidelines/policy can lead to further spread of infection and a delay in the hospital returning to normal activity. Outbreaks can affect both patients and staff, sometimes with attack rates in excess of 50%. This can lead to staff shortages, which can be severe, particularly if several wards are involved at the same time. It is therefore essential that cases are detected early and isolated appropriately to prevent spread and a major outbreak.

Norovirus is highly contagious, it is estimated that around 30 million viral particles are released during one vomiting incident. It only takes around 100 of these particles to cause illness. Noroviruses are transmitted primarily through the faecal-oral route either by person-to-person or via contaminated food or water. In addition norovirus can be spread via aerosol dissemination of infected particles following vomiting. Transmission can also occur through hand transfer of the virus to the oral mucosa following contact with environmental surfaces,

fomites and equipment which have been contaminated with either faeces or vomit. The virus can survive for up to **12 days** on some surfaces.

6.1 Definition related to norovirus

Small round structured viruses (SRSVs) such as norovirus (*Appendix A: What is norovirus*) is the most common cause of infectious gastroenteritis (diarrhoea and vomiting) in England and Wales (HPA 2010). Infections can occur at any age because immunity is not long lasting, while it is usually a mild and self-limiting disease it is highly contagious. It is the main cause of outbreaks in hospital, schools, nurseries and other semi closed institutions.

Outbreaks can start abruptly and spread quickly, to minimise the impact on patients and the Trust, the outbreak must be recognised, reported and controlled swiftly (*Appendix B: Is it a norovirus outbreak? And Appendix C: HCAI outbreaks/incidents risk matrix*). Many outbreaks are caused by increased inpatients attending the Trust through emergency portals (HPA 2010). It has been shown that through asking a standard set of questions at the first contact with the Trust, patients with possible norovirus can be isolated or deferred to GP/Community Services to prevent spread within the Trust

6.2 Case definition

Suspected cases of norovirus: either a, b or c below (HPA 2010)

a. Vomiting: two or more episodes of vomiting of suspected infectious cause* occurring in a 24 hour period
b. Diarrhoea: two or more loose stools (non-bloody) in a 24 hour period*
c. Diarrhoea and vomiting: one or more episodes of both symptoms occurring within a 24 hour period*

* not associated with prescribed drugs or treatments and not associated with reaction to anaesthetic or an underlying medical condition or existing illness.

A confirmed case of norovirus: a, b or c above with microbiological confirmation.

6.3 Outbreak definition

This is when there are two or more cases with the same symptoms, which are related in time and place over a defined period, which is based on the onset of the first case. Appendix B provides a flow chart to enable decision making.

Suspected outbreak: two or more cases, as defined in the case definition above, occurring in a functional care unit within the Trust without laboratory confirmation
Confirmed outbreak: two or more cases, as defined in the case definition above, occurring in a functional care unit within the Trust with laboratory confirmation

In the absence of laboratory confirmation, the following criteria can be used as a rough indicator of a norovirus outbreak:

- Average duration of illness of 12 – 60 hours
- Average incubation period of 24 – 48 hours
- More than 50% of people present with vomiting
- No bacterial agent found

If an outbreak caused by norovirus is suspected, but it does not strictly meet these criteria, it must still be reported. Report each affected ward/department separately. The outbreak is considered over when there have been no new cases for seven days after the last case was considered to be symptom free (HPA 2010).

6.4 Exposed asymptomatic patients

Patients who have been exposed to a symptomatic suspected or confirmed norovirus case by being the same room as suspected or confirmed cases and who last exposure was with the last 72 hours

6.5 Non-exposed patients

Patients who, within the past 72 hours, have not been cared for, or been in the same room as a suspected or confirmed norovirus case in hospital or a care home.

6.6 Precautions in Emergency Department and Admission to Wards

Precautions must be taken as soon as possible to prevent spread. Therefore:

- Patients presenting to Emergency Department (ED) with **acute vomiting and/or diarrhoea** should be triaged and moved straight into an isolation room. During a norovirus outbreak, a specific room may be designated for suspected cases, they should be moved to that room without delay
- They should be assessed as rapidly as possible by the medical team, and where possible sent home if clinically appropriate, not every case of norovirus infections requires admission to hospital
- All staff dealing with diarrhoea and/vomiting patients must observe strict source isolation precautions

- If the patient requires admission, and the diagnosis is presumptive norovirus infection, the patient must be referred to the Infection Prevention and Control Team
- Patients being admitted should go into a single room in the first instance, with strict source isolation
- The following priority order must be observed when allocating patients to side rooms for isolation:

Highest priority: TB (confirmed/suspected), Covid 19, Influenza, Measles, Chickenpox

Norovirus (confirmed/suspected), *Clostridium difficile*

MRSA/MSSA, VRE, Resistant coliforms

Lowest priority: Non-infectious patients

6.7 What to do if you suspect you have an outbreak:

If you have two or more cases of unexplained diarrhoea and/or vomiting on your ward, whether staff or patients, you may be at the start of an outbreak. It is the responsibility of the Nurse in Charge to contact the Infection Prevention and Control Team (IPCT) Monday – Friday 08.00 – 17.00hrs on extension 3525 or via vocera for further advice. Out of hours and during the weekend the Nurse in Charge must discuss this with the on-call Consultant Microbiologist via switchboard. Also inform the on-call Manager / Site co-ordinator via vocera/ switchboard. During times of high incidence of norovirus an on-call IPCN will be available.

6.8 Concurrent outbreak of norovirus and *Clostridium difficile* infection

Interaction between *Clostridium difficile* and norovirus have not been fully investigated and it is unknown whether *Clostridium difficile* infection may augment the pathogenesis of norovirus infections or vice versa (HPS 2011). In this situation both events must be investigated and managed as separate but concurrent events.

6.9 Patient care

There is no effective treatment for norovirus; it is a self-limiting illness which will cease within a few days. Commence all symptomatic patients on a stool and fluid balance chart to monitor for possible dehydration. It is important to ensure prompt fluid replacement to prevent dehydration and its complications, report to medical staff if any patient's condition suggests rehydration may be necessary. Anti-emetics, laxatives or anti-motility agents **must not** be prescribed or administered.

6.10 Patient and relatives

Ensure all patients and relatives are aware of the situation regarding the outbreak and what they can do to prevent additional personal risk, and provide them with written information

- Norovirus (patient information leaflet)
- Norovirus discharge information

6.11 Documentation

- Once an outbreak is suspected the IPCT will request ward staff to complete a patient assessment form as well as a daily record sheet for all symptomatic patients by 10.00hrs (*Norovirus Outbreak Monitoring Sheet (patients)*, Norovirus outbreak monitoring sheet (Staff), *IPCT assessment form (Appendix G)* – *which are located in the norovirus toolkit*)

Accurate documentation on all symptomatic patients and staff is vital in order for the IPCT to make an accurate assessment of the infection and plan the correct course of action. It is the responsibility of the Departmental Manger/Ward Sister/Nurse in Charge to ensure that accurate documentation is maintained on all symptomatic patients throughout the duration of the outbreak.

- The toolkit checklist of actions (*Appendix F*) and the Norovirus checklist (*which are located in the norovirus toolkit*), are intended for use by hospital staff treating a suspected or confirmed case of gastrointestinal infection that may be attributed to norovirus. This checklist combines two aspects of management:

  1. Clinical assessment of possible cases
  2. Infection control measures to limit the spread of cases thus reducing the duration of the outbreak

The checklist is not a comprehensive tool but follows the approach of WHO Patient Safety Checklists in highlighting actions to be taken at critical points in the patient's care pathway. They are produced in a format that can be referred to readily and repeatedly by staff to ensure that all essential actions are performed. They are not comprehensive protocols and do not replace routine care. **This checklist does not replace clinical guidance or clinical judgement.**

6.12 Samples

Diagnosis of norovirus infection can often be made on clinical grounds from their characteristic features. However a stool sample (not vomit) from affected patients must be sent for norovirus testing with clinical details of gastroenteritis. The sample must be obtained within 24 hours of onset of symptoms.
Patients with confirmed norovirus infection can shed virus in their faeces for a prolonged period; please DO NOT send repeat samples for those patients with laboratory confirmed norovirus without discussing first with the IPCT.

6.13 Ward closure

Evidence shows that early closure is the best decision for patient safety and service continuation (HPS 2011). Early closure can reduce the number of patients and healthcare workers affected and the duration of closure. There is now evidence to suggest that full ward closure is not always necessary, and a bay closure at the first sign of an outbreak can sometimes prevent a full ward closure. The bay closure option **must** only be used with prior IPCT risk assessment, if the outbreak has been identified early and is confined to a single bay or manageable area. The IPCT will continuously monitor, if there is any evidence that a bay close option is prolonging the outbreak then the ward will be closed.

A bay closure option should be used to cohort norovirus symptomatic patients together, whilst minimising the risk of exposing others. Exposed asymptomatic patients can remain in a bay with the symptomatic cases if that is where they have been exposed. A bay closed option should not be used to cohort exposed asymptomatic patients, with non-exposed patients.

The IPCT will undertake a risk assessment (*using the IPCT assessment form, Appendix G*) of a suspected norovirus outbreak and determine whether there should be a complete or partial restriction of admissions/transfers. Any proposed closure will be made known to the ward staff, bed management and general management.

Following a clinical risk assessment, the bay doors to all bays should be closed, and where possible fans removed to further reduce airborne dissemination of the virus. Patient and staff should be cohorted i.e. staff should be allocated to care for cases that are exposed or non-exposed.

A bay closure option should be used to cohort norovirus symptomatic cases whilst minimising the risk of exposing others. Bay sharing of categories of patients should be as follows (HPS 2011):

Patients categories in the bay	Possible sharing options
Bay contains a mixture of: - Symptomatic suspected cases - Confirmed cases - Exposed asymptomatic patients	- If sufficient single rooms available, isolate case(s) in a single room(s) leaving exposed asymptomatic patients in the closed bay - Do not move out exposed asymptomatic patients to share a bay with non-exposed patients - If exposed asymptomatic patients have been discharged or are in alternative accommodation (but not with non-exposed patients), other suspected or confirmed cases could be moved in to share the bay
Bay contains exposed asymptomatic patients	- Do not move in symptomatic suspected or confirmed cases - Can share accommodation with non-exposed patients if it is >72 hours since the exposed asymptomatic patients' last exposure to a suspected or confirmed case
Bay contains non-exposed patients	- Can share accommodation with other non-exposed patients - Can share accommodation with exposed asymptomatic patients if > 72 hours since their last exposure to suspected or confirmed case

Exemption: in exceptional situations the risk to an individual patient of norovirus acquisition will be less that the risk of non-admission. In such exceptional events, when alternative possible accommodation for the patient has been excluded, the patient can be admitted to a closed ward, but the patient and/or relative must be informed of their personal norovirus risk. Such events must be recorded on the Trust Risk Register as a risk to the patient.

When more than 1 bay is affected, the ward must be closed. This decision will be made following discussion with the IPCT and the ORG.

6.14 Reporting of outbreaks

The IPCT will report the ward/bay closure to the Health Protection Unit (HPU) and to the Primary Care Trust, and the Strategic Health Authority (SHA) via the completion of the Datix reporting system. An outbreak is a clinical incident and will be reported, if the ward is closed it will be reported as a Serious Incident (SI).

6.15 Isolation

- Any patient admitted with symptoms suggestive of norovirus must be admitted directly into a single room and ensure enteric precautions signage is used
- The IPCT informed (out of hours the Consultant Microbiologist via switchboard)
- The allocation of a single room will generally take precedence over all other 'alert' organisms **with the exception of** suspected/confirmed:
    - Tuberculosis
    - Covid 19
    - *Clostridium difficile*
    - Bacterial meningitis (for the first 24 hours of antibiotic therapy)
    - Chicken pox (during infectious phase)
    - Measles
    - Typhoid
- If staff are unsure as to whether a patient already in a single room can be de-isolated, the IPCT must be contacted (out of hours the Consultant Microbiologist via switchboard)
- The priority is to ensure that patient care is not compromised and at the same time prevent the spread of the virus to other susceptible patients and prevent a major hospital outbreak
- Doors to bays/rooms **must** remain closed, risk assessment to be completed
- Symptomatic patients must have dedicated equipment e.g. monitoring equipment. Patient equipment must be cleaned and disinfected with a Peracetic acid based product (sanicol/Clinell sporicidal)or chlorine based disinfectant 1000ppm between each patient use
- A poster (*located in the norovirus toolkit*) must be displayed at the entrance of the ward advising that there is an outbreak of diarrhoea and vomiting
- A banner poster (*located in the norovirus toolkit*) must be displayed at the entrance to the bay/ward advising that the bay/ward is closed

6.16 Personal protective equipment

- Personal protective equipment (PPE) gloves/yellow aprons must be used appropriately and for each episode of care/treatment/examination on all patients by all staff
- Gloves and aprons must be removed before leaving the single room and disposed of in the orange infectious waste bags according to the Trust Waste Management Policy
- There is currently no evidence to support the wearing of face masks for either patients or staff

6.17 Hand hygiene

- Hands of healthcare staff can provide the vehicle for the transmission of this infection. It is essential that all staff wash their hands when required using the correct washing technique to help reduce the risk of transmission
- Alcohol based hand rub is **not** effective against viral gastroenteritis
- Gloves **do not** obviate the need for hand decontamination
- Patients must be provided with the opportunity to wash their hands or use hand wipes after each toileting episode and also before each meal
- Adherence to bare below the elbow principles

6.18 Linen management

- All hospital linen **must** be placed in a red alginate bag and then a red plastic bag according to the Policy/ Procedure Regarding Safe Linen Disposal (ICP10)
- Patients own clothing which is soiled should be double bagged using clearly labelled patient's property/ patients clothing bags and removed from the patient area as soon as possible. Patients own clothing should be washed at the highest temperature recommended by the clothing manufacturer label. If the relatives of the patient are doing their laundry they **must** be advised to wash clothing separately to clothing of any other family members

6.19 Waste management

All waste from patients with symptoms must be disposed of in orange infectious waste bags according to the Trust Waste Management Policy.

6.20 Decontamination of medical equipment

- Medical equipment must where possible be dedicated to the patient and decontaminated appropriately when the patient is discharged
- If equipment needs to be shared it must then be appropriately decontaminated between each patient
- Decontamination must be undertaken according to manufacturer's instructions and in consultation with the Trusts Disinfection Processes

If equipment requires repair during an outbreak it must be reported via the Helpdesk (3005) in the normal way however they also need to be informed that the ward is closed. Equipment awaiting repair **must** be thoroughly cleaned and a Decontamination Certificate completed,

6.21 Decontamination of spillages

All spillages of blood and body fluids must be cleaned, by nursing staff, as soon as possible. Refer to the Trusts Safe Handling of Blood and Body Fluids Policy ICP4.

6.22 Patient movement

- Any patient admitted from a Care Home or other care organisation identified as having a suspected or confirmed outbreak of viral gastroenteritis must be isolated for the first 72 hours of admission to the Trust. Precautions must only be discontinued if the patient does not have diarrhoea and/or vomiting during the 72 hour period
- There must be no transfer of patients to other departments/wards/hospitals from affected bay/ward unless there is an **urgent clinical need** in which case the receiving department must be informed. In this situation, the patient must be seen immediately on arrival to the department and preferably at the end of a list. Minimal number of staff should attend the patient

- Aprons and gloves must be worn. All equipment that the patient has come into contact with must be cleaned with a chlorine based disinfectant. The patient must return directly to the ward and **must not** wait in a waiting area with others
- In the event of the patient requiring surgery, theatre staff must be informed that the patient is from an affected bay/ward. The patient must be placed last on the list. The patient must go directly to the anaesthetic room and must be recovered in theatre. The patient **must not** be recovered in the recovery area with other patients. Minimal number of staff should be in the theatre. The theatre, all equipment and anaesthetic room must be cleaned thoroughly using a combined detergent and chlorine based disinfectant 1000ppm (or a peracetic acid based product, after the patient has left the theatre
- The movement of affected patients from one ward to another for cohort management is **not** recommended
- Symptomatic patients **must not** be discharged to Care Home facilities until they have been clear of symptoms for 72 hours. If their discharge is planned within this period it is the responsibility of the nurse in charge or the discharge liaison team, to discuss and re- schedule
- Contact patients must not be discharged to Care Home facilities until the bay/ward is reopened
- Patients can however be discharged to their own home, if medically fit for discharge. This should be a clinical decision and clear advice must be given to the patient, relative and carer if symptoms continue on discharge
- It may be acceptable for patients to be discharged to their own home whilst still symptomatic (e.g. children). This should be a clinical decision and clear advice must be given to the patient, relatives and care advice must be given to the patient, relative and carer if symptoms continue on discharge
- If a patient needs to be transferred to another care facility it must be discussed with the IPCT and the receiving area made aware of the patients status

6.23 Preparation of the isolation room/area

- Furniture and equipment must be kept to a minimum. All equipment must be single use or be able to be decontaminated. Separate personal equipment must be provided e.g. stethoscope
- Red soluble and red outer bag must be provided for the disposal of used/soiled linen
- Disposable personal protective equipment i.e. gloves and plastic aprons must be readily available for use outside the room/cohorted area in order to implement enteric precautions effectively

6.24 Staff

- Staff who become symptomatic on duty with diarrhoea and/or vomiting **must** leave the area immediately and not return to work until they are 48 hours clear of symptoms. A faeces (not vomit) sample is required to assist with outbreak investigation, the sample must be obtained within 24 hours of onset of symptoms
- Staff that become symptomatic while at home with diarrhoea and/or vomiting must inform their line manager and Occupational Health. They must not return to work until they have been symptom free for 48 hours. A faeces (not vomit) sample is required to assist with outbreak investigation, the sample must be obtained with 24 hours of onset of symptoms
- Non-essential staff must not visit the affected bay/ward
- Wherever practicable procedures i.e. venepuncture should be undertaken by ward staff
- Where bays only are closed, a team of dedicated staff should be allocated to these bays

- Staff who are working on affected wards **must** not be moved to work in other areas of the Trust, this is applicable to both clinical and non-clinical staff
- Bank staff and medical staff who are working on affected wards must not be moved to work in other areas of the Trust
- Bank or agency staff must only work on the affected or non-affected ward, **not on both**. If more than one ward is affected bank and agency staff must only work on one affected ward, they cannot be moved between the wards. Where staff have worked on an affected ward they must be asymptomatic for 72 hours after working on that ward before working on a non-affected ward
- Visiting staff may still visit a ward affected by viral gastroenteritis, however due consideration should be given to when the visit takes place, Where possible Allied Health Professionals (AHP's) should allocate a nominated individual to affected wards. If this is not possible, the affected wards must be visited last. Where emergency treatment has to be delivered by AHP's it is preferable that they shower and change uniform prior to attending other areas
- Wherever possible, medical staff should be allocated to the affected wards. If this is not possible, the affected wards must be visited last.
- Where emergency treatment has to be delivered it is preferable that they shower and change clothing prior to attending other areas
- Staff must not sit on the bed, but use the chairs provided
- Notes, x-rays and other equipment must not be placed on the bed at any time

6.25 Ward staff responsibilities

- A Norovirus outbreak monitoring sheet for symptomatic Patients patients and Norovirus outbreak monitoring sheet for Staff must be maintained by the ward team. This will be reviewed Monday – Friday between 09.00 – 11.00hrs by a member of the IPCT
- The Bristol Stool and fluid balance chart must be maintained on all symptomatic patients
- Ward staff must inform Medirest via the helpdesk (3005) of the situation and advice the use of a peracetic acid based product or a combined detergent and chlorine based disinfectant 1000ppm
- Water jugs must be kept covered to prevent the water from becoming contaminated. Washed thoroughly each day in a dishwasher. The water should be changed frequently
- Bowls of fruit and open packets of food i.e. biscuits, must be removed as they may become contaminated as a result of aerosol contamination
- Ward rounds that take place on more than one ward should visit the affected ward last

6.26 Ward cleaning

- Whilst a bay/ward is closed during an outbreak, the area must be cleaned daily using a peracetic acid based product (Sanicol) or a combined detergent and chlorine based disinfectant 1000ppm
- Frequently used areas such as toilet areas must be cleaned three times a day, and more frequently should the need arise
- Soiling with vomit should ideally be cleaned to a radius of 2 meters and people taken out of the area until cleaning has been completed
- It is the responsibility of the Nurse in Charge to inform the domestic and housekeeping staff of the cleaning requirements for their ward
- Nursing staff will use sporicidal wipes for cleaning of nursing equipment
- The IPCT will declare when an outbreak is over so that a full ward clean can take place. This will be 72 hours after the onset of the last case and all remaining symptomatic patients are isolated (Chadwick et al 2000). This is vital to prevent further transmission. Clinical areas **must not** accept new admissions until this cleaning process has been completed

- Cleaning using a peracetic acid based product or a combined detergent and chlorine based disinfectant 1000 followed by hydrogen peroxide vapour decontamination. Request a RED clean for full ward from Helpdesk.

6.27 Ward reopening

The decision to reopen the bay/ward will be made by the IPCT after liaising with the Departmental Manger/Ward Sister/Nurse in Charge. The ward can be reopened:

- 72 hours after the last symptomatic episode

or

- If symptomatic cases are in single rooms – there have been no further new symptomatic patients for 72 hours

Before reopening, isolation clean must be undertaken, which involves cleaning all surfaces with a peracetic acid based product or a combined detergent and chlorine based disinfectant 1000ppm paying particular attention to frequently touched objects such as door handles, taps and toilets, followed by steam clean or hydrogen peroxide vapour decontamination as advised by the IPCT. All curtains must be changed as part of the isolation clean process. A RED post outbreak isolation clean must be monitored by the Departmental Manger/Ward Sister/Nurse in Charge, and the ward must not be re-opened until approved by the Departmental Manager/Ward Sister/Nurse in Charge

6.28 Visiting

- Ward staff must inform visiting staff of the situation and the infection control special precautions required
- Friends and family must be informed that the bay/ward is currently closed because of diarrhoea and vomiting
- They should be asked to postpone their visit, or if essential for personal reasons to make the visit as short as possible and stopped from bringing in food
- Visitors should be asked to decontaminate their hands prior to entry to the ward and before leaving
- Visitors should be restricted to close family member. Children should be advised not to visit
- In some circumstances the ward may be completely closed to visitors. There may be exceptions at the discretion of the Nurse in Charge
- Visitors must not visit other inpatient areas within the Trust after visiting a closed area

6.29 EAU escalation procedure

All patients admitted with symptoms of diarrhoea and/or vomiting should be admitted into a single room and presumed to have infectious diarrhoea until proven otherwise.

6.30 Trust wide escalation procedure

When more than two wards are suspected/confirmed as having norovirus and cases are not confined to single rooms, an outbreak meeting must be convened in accordance with the outbreak policy and escalation procedure for management of suspected/confirmed norovirus outbreak (*Appendix I*).

Level	Status
Level 1	Normal working. Known outbreaks in the community, but no cases within the Trust. Potential for cases to be admitted via the emergency portals i.e. ED, EAU
Level 2	2 suspected cases on 1 or 2 wards or cases confined to single bays
Level 3	Suspected cases on 1 or 2 wards, not confined to single bay
Level 4	3-5 wards closed. > 5 wards closed

6.31 Norovirus toolkit

Each ward will be issued with a norovirus toolkit which will contain the following:

- Norovirus policy*
- Emergency portal escalation trigger (only to relevant areas)*
- Outbreak surveillance form for patients
- Outbreak surveillance form for staff
- Toolkit checklist of actions*
- Patients information leaflets*
- Is it a norovirus outbreak*
- Emergency portal screening (only to relevant areas)*
- Frequently asked questions*
- Bay/ward closed poster

Further supplies of the documents marked *, which are located in the toolkit can be printed from the appendices of this policy/ IPCT intranet site.

6.32 Key performance indicators

The IPCT will prepare a preliminary report, ideally within 48 hours, on the definition, extent and proposed control of the outbreak. They will prepare interim reports, if required, for the IPCC and Trust Board as well as a final report following a RCA investigation at the conclusion of the outbreak

7.0 MONITORING COMPLIANCE AND EFFECTIVENESS

Minimum Requirement to be Monitored **(WHAT – element of compliance or effectiveness within the document will be monitored)**	**Responsible Individual** **(WHO – is going to monitor this element)**	**Process for Monitoring e.g. Audit** **(HOW – will this element be monitored (method used))**	**Frequency of Monitoring** **(WHEN – will this element be monitored (frequency/ how often))**	**Responsible Individual or Committee/ Group for Review of Results** **(WHERE – Which individual/ committee or group will this be reported to, in what format (eg verbal, formal report etc) and by who)**
Use of personal protective equipment	IPCT	Audit	Monthly	IPCC
Hand hygiene compliance	IPCT	Audit	Monthly	IPCC
Cleanliness reviews	IPCT/SPCD	Joint Monitoring Audits	Monthly	IPCC
Review of all practices during an outbreak	IPCT	Audit/Ward reviews	As outbreaks occur	Report for governance and IPCC

8.0 TRAINING AND IMPLEMENTATION

All Trust staff will be aware of the Infection Prevention and Control Policies and Guidelines for the Trust. All new staff will attend the Trust orientation study day. Healthcare workers will attend the Trust annual mandatory training and any formal infection prevention and control sessions identified by their Department Manager/Ward Sister (Nurse in Charge). Non-clinical staff will attend any formal infection prevention and control sessions identified by their Department Manager/Ward Sister (Nurse in Charge). All training sessions are outlined in the Trusts Training, Education and Development Opportunities Resource web page. Infection prevention and control training is basic on the principles that it is part of the Trust wide mandatory training for all staff and is monitored via attendance records.

9.0 IMPACT ASSESSMENTS

- This document has been subject to an Equality Impact Assessment, see completed form at Appendix J
- This document is not subject to an Environment Impact Assessment.

10.0 EVIDENCE BASE (Relevant Legislation/ National Guidance) AND RELATED SFHFT DOCUMENTS

Evidence Base:

- Norovirus Working Party: (2012)Guidelines for the management of norovirus outbreaks in acute and community health and social care settings https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/322943/Guidance_for_managing_norovirus_outbreaks_in_healthcare_settings.pdf

- Health Protection Scotland (HPS). 2011. *Norovirus outbreak: preparedness, control measures and practical considerations for optimal patient safety and service continuation in hospitals 2011.* www.documents.hps.scot.nhs.net

- Department of Health (2015). The Health and Social Care Act 2008. Code of Practice on the prevention and control of healthcare associated infections and related guidance. Department of Health. London

- NHS Nottingham City. G Health NHS Nottingham. 2010. Policy for the Prevention and Control of Viral Gastroenteritis

- HPA. 2010. Norovirus Prevention and Control. A toolkit for planning and providing high quality services in the West Midlands

- Scottish Executive Health Department. (2002). A Review of the Outbreak of Salmonella at the Victoria Infirmary, Glasgow. The Watt Report Group. http://www.scotland.gov.uk/Resource/Doc/46997/0013951.pdf

- Barker J, V. pond 1B and Bloomfield SF (2004). Effects of cleaning and disinfection in reducing the spread of Norovirus Contamination on environmental surfaces. Journal of Hospital Infection, 58pp 42 – 49.

- Chadwick PR, Beards G, Brown et al (2000) Management of hospital outbreaks of Gastroenteritis due to small round structured viruses. Report of the Public Health Laboratory Service Viral Gastroenteritis Working Group. Journal of Hospital Infection, 45pp 1- 10.

Related SFHFT Documents:

- Infection Prevention and Control Operating Policy (ICP1)
- Blood and body fluids spillage policy (ICP4)
- Personal Protective Equipment (PPE) Policy (ICP9)
- Safe Linen Management Policy (ICP10)
- Hand Hygiene Policy (ICP17)
- Infectious Outbreak/Incident Policy including Major outbreak (ICP27)
- Isolation precautions for patients with confirmed or suspected infectious illness policy (ICP31)
- Decontamination and Disinfection of Healthcare Equipment in the Hospital Setting Policy (ICP40)
- Waste policy (estates and facilities)
- Dress code and uniform policy (human resources)

11.0 KEYWORDS

Viral gastroenteritis; Vomiting and diarrhoea; Winter vomiting disease; Norwalk virus; Stomach flu; Outbreaks

12.0 APPENDICES

- Please see contents page

Appendix A

What is Norovirus? (staff information)

Introduction:
Norovirus is a major cause of acute gastroenteritis and diarrhoea in children and adults. The disease is often termed Winter Vomiting Disease because of the increased prevalence in the winter months; however it can be detected throughout the year.

Norovirus is the most common cause of outbreaks of gastroenteritis in hospitals and can also cause outbreaks in other settings including schools, nursing homes and cruise ships. Hospital outbreaks often cause major disruption in hospital activity resulting in ward closures, cancelled admissions and delayed discharges which can significantly reduce clinical activity for the duration of the outbreak.

Failure to observe and comply with infection prevention guidelines/policy can lead to further spread of infection and a delay in the hospital returning to normal activity. Outbreaks can affect both patients and staff, sometimes with attack rates in excess of 50%. This can lead to staff shortages, which can be severe, particularly if several wards are involved at the same time. It is therefore essential that cases are detected early and isolated appropriately to prevent spread and a major outbreak.

Incubation period: usually 24 to 48 hours

Common clinical features: the disease is characterised by a sudden acute onset of:
- Vomiting is the predominant symptom, often projectile, and is seen in 50% of cases. However clusters can occur where vomiting is infrequent or absent
- Watery diarrhoea and abdominal cramps
- Nausea
- In addition, some people may have a raised temperature, headaches, myalgia and malaise
- Symptoms last between 1 to 3 days; and recovery is usually rapid
- Dehydration is the most common complication, especially for the very young and elderly

Reservoir: human gastrointestinal tract.

Transmission: norovirus is highly contagious, it is estimated that around 30 million viral particles are released during one vomiting incident. It only takes around 100 of these particles to cause illness. Noroviruses are transmitted primarily through the faecal-oral route either by person to person or via contaminated food or water. In addition norovirus can be spread via aerosols dissemination of infected particles following vomiting. Transmission can also occur through hand transfer of the virus to the oral mucosa following contact with environmental surfaces, fomites and equipment which have been contaminated with either faeces or vomit. The virus can survive for up to **12 days** on some surfaces.
Infectivity: infectivity lasts for 48 hours after resolution of symptoms. The infective dose is extremely low.

Water borne: although waterborne outbreaks are far less common than food borne outbreaks, norovirus gastroenteritis outbreaks have been associated with sources of contaminated water, including municipal water, well water, steam water, commercial ice, lake water and swimming pool water. Prevention methods should focus on reducing human waste contamination of water supplies. Preventive measures should be taken to reduce the

risk of contamination, including adequate chlorination of the water and supervision of the chlorination system, the frequent replacement of the water, especially after hot days with heavy use, and the presence of adequate, clean sanitary facilities.

Food borne: any food item can potentially transmit if handled by an infected or contaminated food handler (secondary food borne spread). Because of the low infectious dose of norovirus and the high concentration of virus in the stool, even a limited contamination can results in substantial outbreak. Ready to eat foods that require handling but no subsequent cooking e.g. salads and deli sandwiches pose greater risk. Food handlers should be excluded for 72 hours.

Diagnosis: norovirus may be suspected clinically in patients and staff with a history of vomiting of sudden onset followed by diarrhoea. During an outbreak several people are commonly affected over a short space of time and cases with typical features may be ascribed to norovirus infection without further testing. Confirmation of norovirus infection depends on a PCR test performed on faecal samples, which is useful in confirming the nature of an outbreak early on, identifying atypical or outlying cases and in determining whether norovirus shedding is occurring in cases of persistent diarrhoea.

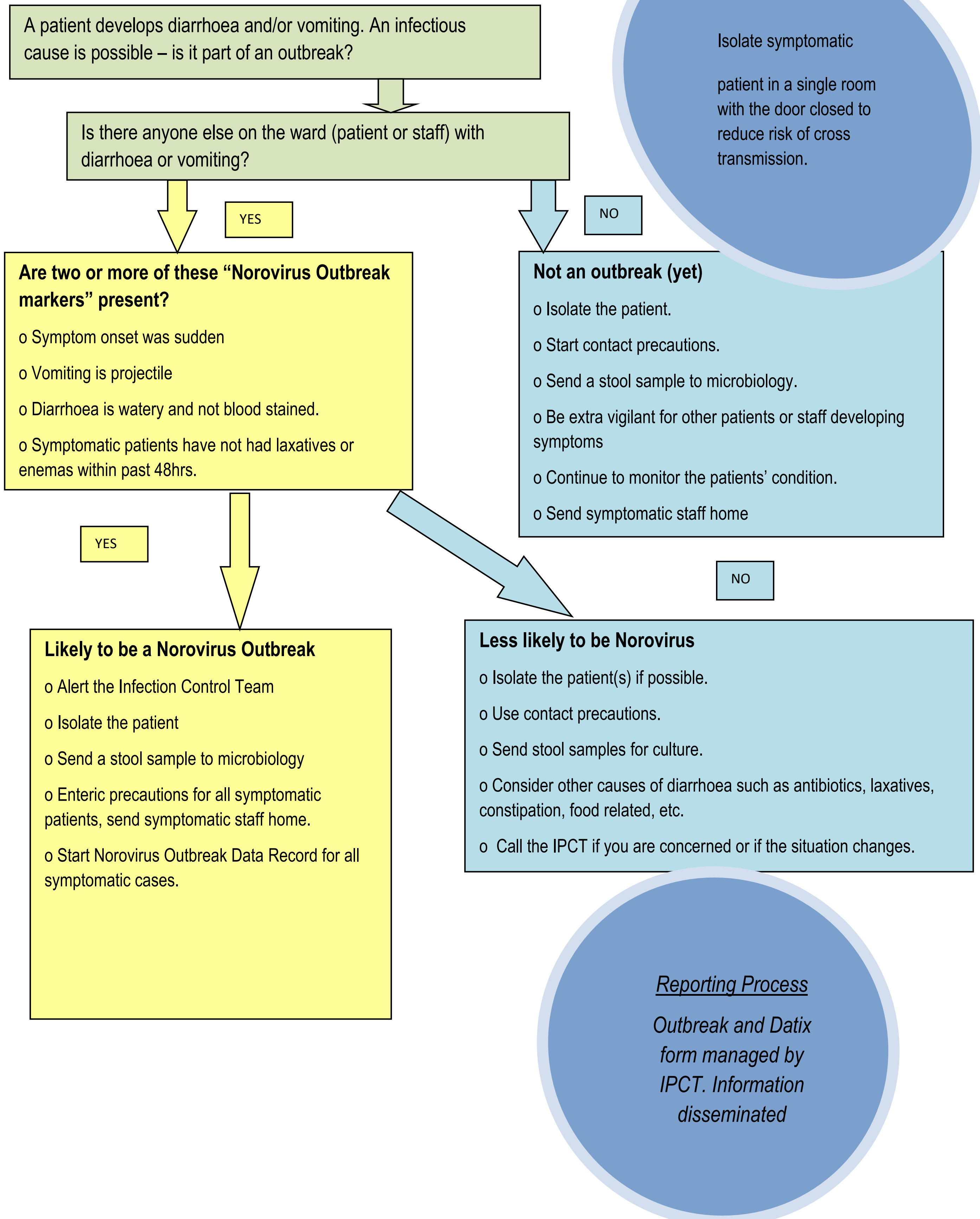
Sampling: when an outbreak is suspected, it is imperative to institute infection control measures immediately **without** waiting for virological confirmation from stool testing. Unformed faecal specimens (not formed stools) should be collected from symptomatic individuals within 3 days of the onset of symptoms. Stool samples obtained at the acute phase of illness (48 to 72 hours) are preferred and serial stool samples can increase the chance of detecting the virus.

Clinical care implications: there is no specific treatment for norovirus apart from letting the illness run its course. It is important to drink plenty of fluids to prevent dehydration especially in the very young or elderly to prevent further complicating those individuals. Non-specific symptoms including thirst, anorexia, lethargy and vertigo could persist for up to 19 days in the elderly. The persistence of these non-specific symptoms raises issues of delayed recovery in the elderly, and could have other adverse consequences such as a risk of falls for those suffering vertigo.

Risk factors: location, increased risk for general medical units, care of the elderly and orthopaedic wards. Increased risk for acute hospitals compared to community hospitals. Having a previous outbreak is associated with an increased risk. Risk can be elevated in the month after a hospital unit recovers from an outbreak compared to other areas.

Appendix B: Is it a Norovirus Outbreak? A Decision Tool (flow chart) for clinical staff

Outbreaks can start suddenly and spread rapidly – to reduce the impact on patients staff and the hospital they must be promptly identified and managed effectively.
The flow chart below aims to guide the decision making process.



Appendix C:

HCAI outbreaks/incidents risk matrix

Criteria	Quantification Criteria	Risk Category	Action Required
3 or more met	1. Death and/or serious illness 2. Major implications for public health 3. Exceptional or unusual infection episode 4. Major disruption of health and/or public services 5. Major public anxiety and concern	High risk	Implement Trust major outbreak plan Full communications e.g. Trust, HPA, PCT, SHA and other as appropriate
1 or 2 met	1. Death and/or serious illness 2. Major implications for public health 3. Exceptional infection episode 4. Major disruption of health and/or public services 5. Major public anxiety and concern	Moderate risk	Implement Divisional/Area Outbreak plan Full outbreak committee Full communications e.g. Trust, HPA, PCT, SHA and other as appropriate
3 or more met	1. Serious illness and/or moderate infection episode and/or cases 2. Moderate impact on public health 3. Short-term disruption of health and/or public services 4. Moderate public anxiety and concern	Low risk	Implement Divisional/Area outbreak plan IPT Communication e.g. Trust, HPA, PCT
All 4 met	1. Minimal infection episode and/or case 2. Minimal impact on public health 3. Minimal disruption of health and/or public services 4. Minimal public anxiety and concern	Very low risk	Implementation IPT investigation Trust communication

(Watt Group Report 2002)

Appendix D

Sherwood Forest Hospitals
NHS Foundation Trust

Outbreak Response Group
Terms of Reference

Purpose:
The purpose of this committee is to provide immediate response and action to an outbreak as defined in the policy. To provide ongoing monitoring and review of the action plan until the outbreak is resolved. Initiate the SUI / Major Incident policy as required.

Functions:
The committee will:

1. Facilitate the optimal clinical care of patients
2. Investigate the source and cause of the outbreak
3. Review the adequacy of financial, staff and other resources in order to control the outbreak and prevent any such occurrences where possible
4. Implement the measures required to control the outbreak
5. Act as a focus for communication during the outbreak
6. Provide clean guidelines for communications with patients/visitors/public
7. Monitor the effectiveness of control measures
8. Evaluate the overall experience of the outbreak including the need for any de-brief sessions
9. Ensure that the outbreak is reported in line with national and local recommendations
10. Escalate the outbreak to SUI/Major incident as required
11. Review the need for the Consultant of Communicable Diseases Control (CCDC), Director of Public Health and the PCT IPT involvement at each meeting
12. Receive concerns on matters preventing the control of the outbreak and facilitate their resolve

Membership:
The committee will be made up of the following members:

Director of Infection Prevention and Control (Chair)
Infection Control Doctor (Deputy Chair)
Nurse Consultant Infection Prevention and Control
Head of Nursing
Ward Sister
Medirest
Admin support

Procedure of meeting:

- IPT will explain the nature of the outbreak and direct management of the outbreak
- The Chair will remind the representatives of each discipline that they are now personally responsible for the work of that discipline in the management of the outbreak, dissemination of information
- Formal consideration will be given to the need to seek outside assistance e.g. Health Protection Agency
- At the close of the meeting the Chair will determine the date, time of the next meeting
- IPT to confirm venue for next meeting

Appendix E:

Sherwood Forest Hospitals
NHS Foundation Trust

Agenda for Outbreak Meeting

Sherwood Forest Hospital NHS Foundation Trust

Time:
Venue:
Date:
Hospital site of outbreak:

1. Attendance
2. Apologies
3. Agreement of previous minutes/notes (if applicable)
4. Background
5. Current situation
6. Actions to date
7. Recommended control measures
8. Implications of control measures
9. Action plan
10. Individual responsibilities
11. Communication plan
12. Onwards reporting (SUI Incident Form)
13. Any other business (AOB)
14. Date and time of next meeting

Appendix F – Toolkit checklist of actions

Checklist of actions for a single case of diarrhoea and vomiting:

- Isolate the patient in a single room
- Provide separate toilet facilities
- Record date and time of symptoms, using the Bristol Stool Chart record each stool movement
- Inform medical staff and IPCT
- Provided liquid soap and paper towels for hand washing
- Provided appropriate alcohol based hand rub for staff
- Encourage patient to wash their hands after going to the toilet, prior to eating or drinking
- Advise staff of need to increase their hand washing
- **Stop** all laxatives and anti-diarrhoeal medication
- Obtain a stool sample
- Increase cleaning of toilet/commode to three times a day, using concentrated disinfectant (hypochlorite solution 1000 ppm) Chlor-Clean®
- Place soiled linen in a red alginate bag
- Clean patient bed space every day, wipe down all wipe-able surfaces especially door handles, toilet handles etc with concentrated disinfectant
- Place all clinical waste such as incontinent pads, gloves, aprons and hand towels in a yellow clinical waste bag
- Patient are considered clear after 72 hours symptoms free
- Terminally clean the bed space, include change of curtains

Checklist of actions for two or more cases of diarrhoea and vomiting:

- Isolate the patient in a single room where possible
- Cohort nurse if single rooms are not available
- Provide separate toilet facilities, where possible dedicate a commode per patient
- Record date and time of symptoms, using the Bristol Stool Chart record each stool movement
- Inform medical staff and IPCT
- Provided liquid soap and paper towels for hand washing
- Provide appropriate alcohol based hand rub for staff
- Encourage patient to wash their hands after going to the toilet, prior to eating or drinking
- Advise staff of need to increase their hand washing
- **Stop** all laxatives and anti-diarrhoeal medication
- Obtain a stool sample from all symptomatic patients
- Increase cleaning of toilet/commode to three times a day, using concentrated disinfectant (hypochlorite solution 1000 ppm) (paracetic acid based)
- Place soiled linen in a red alginate bag
- Clean patient bed space every day, wipe down all wipe able surfaces especially door handles, toilet handles etc with concentrated disinfectant
- Place all clinical waste such as incontinent pads, gloves, aprons and hand towels in a yellow clinical waste bag
- Patient are considered clear after 72 hours symptoms free
- Terminally clean the bed space, include change of curtains

Appendix G:

Sherwood Forest Hospitals
NHS Foundation Trust

Name ______________________________

Date of birth ______________________________

Address ______________________________

____

____

District or NHS Number ________________

IPCT assessment form

1	Date and time of onset of symptoms	
2	Diarrhoea – explosive, offensive, no warning, Bristol Stool type?	
3	Vomiting – more than one episode, continued retching	
4	Has the patient had antibiotics? If so please list	
5	Has the patient had aperients (i.e. senna)?	
6	Does the patient have a pre-existing medical condition which might predispose them to loose stools?	
7	Is this the patient's normal bowel habit?	
8	Is the patient feverish, pyrexial? If so what is their temperature	
9	Has a specimen been obtained? If so date sent?	
10	Has the patient ben exposed to symptomatic relatives/ patients/staff?	
11	Which bed is the patient occupying?	
12	Are any family members affected?	
13	Has the patient been reviewed by the medical team to exclude any other clinical cause?	
14	Is the patient receiving naso-gastric fee/TPN	
15	Is the patient constipated and could this be overflow?	
16	Is the patient on any medications which may predispose them to loose stools? If so please list	

Completed form retained by Infection Prevention and Control Team

Appendix H:

Norovirus – Frequently Asked Questions (HPA 2010)

What are Noroviruses?
Noroviruses are a group of viruses that are the most common cause of gastroenteritis in England and Wales. In the past, noroviruses have also been called ‘winter vomiting viruses’, ‘small round structured viruses’ or ‘Norwalk-like viruses’.

How does norovirus spread?
The virus is easily transmitted from one person to another. It can be transmitted by contact with an infected person; by consuming contaminated food or water, or by contact with contaminated surfaces and/or objects.

What are the symptoms?
The symptoms of norovirus infection will begin around 12 to 48 hours after becoming infected. The illness is self-limiting and the symptoms will last for 12 to 60 hours. They will start with the sudden onset of nausea followed by projectile vomiting, and watery diarrhoea. Some people may have a raised temperature, headaches and aching limbs. Most people make a full recovery within 1 to 2 days, however some people, usually the very young or elderly, may become dehydrated and require hospital treatment.

Why does norovirus often cause outbreaks?
Norovirus often causes outbreaks because it is easily spread from one person to another and the virus is able to survive in the environment for many days. Because there are many different strains of norovirus, and immunity is short-lived, outbreaks tend to affect more than 50% of susceptible people. Outbreaks usually tend to affect people who are in semi-closed environments such as hospitals, nursing homes, schools and on cruise ships.

How can these outbreaks be stopped?
Outbreaks can be difficult to control and long lasting because norovirus is easily transmitted from one person to another and the virus can survive in the environment. The most effective way to respond to an outbreak is to disinfect contaminated areas, to establish good hygiene, including hand washing and to provide advice on food handling. Those who have been infected should be isolated for up to 48 hours after their symptoms have ceased.

How is norovirus treated?
There is no specific treatment for norovirus apart from letting the illness run its course. It is important to drink plenty of fluids to prevent dehydration.

If I’m suffering from norovirus, how can I prevent others from becoming infected?
Good hygiene is important in preventing others from becoming infected; this includes thorough hand washing before and after contact. Food preparation should also be avoided until 48 hours after the symptoms have subsided.

Who is at risk of getting norovirus?
There is no one specific group who are at risk of contracting norovirus; it affects people of all ages. The very young and elderly should take extra care if infected, as dehydration is more common in these age groups.

Outbreaks, of norovirus are reported frequently in semi-closed establishments such as health and social care establishments, schools, and hotels. In fact, anywhere where there is a possibility for large number of people to congregate for periods of several days.

Healthcare settings tend to be particularly affected by outbreaks of norovirus. A recent study done by the Health Protection Agency (HPA) showed that outbreaks are shortened when control measures in healthcare settings are implemented quickly, such as closing wards to new admission within 4 days of the beginning of the outbreak and implementing strict hygiene measures.

How common is norovirus?
Norovirus is not a notifiable disease, it is estimated that norovirus affects between 600, 000 and 1,000,000 people per year in the UK.

Are there any long-term effects?
No, there are no long-term effects from norovirus.

What can be done to prevent infection?
It is impossible to prevent infection; however taking good hygiene measures, such as frequent hand washing around someone who is infected is important. Certain measures can be taken in the event of an outbreak, including the implementation of basic hygiene and food handling measures and prompt disinfection of contaminated area, and the isolation of those infected for 48 hours after they symptoms have ceased.

(HPA 2010)

Appendix I:
Trust-wide escalation procedure for the management of suspected/ confirmed norovirus outbreak

Level 1

Level 1 Alert– Normal working

- Known outbreaks in the community
- No outbreaks within the Trust
- Potential for cases to be admitted via the emergency portals i.e. A+E, EAU

Response

- Clinical site team/Matron/On-call manager via daily bed meeting
- Cascade information to admission areas
- All patients that present a risk of norovirus e.g. present with symptoms of diarrhoea and/or vomiting or a have been in contact with others with diarrhoea and vomiting within the previous 72 hours, are admitted directly to a single side room and isolated
- Inform communication team
- Placement of posters at entrances to hospital/wards
- All wards informed that responsible visiting is in place
- If patients admitted with symptoms are contained and there is no spread to existing in patients, status remains at **GREEN**

Actions

- Raise awareness that norovirus is present in the community to ensure all patients admitted with diarrhoea and/or vomiting or who have had contact with anyone with diarrhoea and/or vomiting in preceding 72 hours
- Initiate responsible visiting, visitors asked not to visit if they have had symptoms or contact with someone with symptoms within the last 72 hours

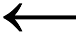
By whom

- IPCT
- Matrons
- Nurse in Charge and ward staff

Level 2

Level 2 Alert- Trust experiencing some pressure

- 2 suspected cases on 1 or 2 wards
- Cases confined to single bays



Response

- Inform relevant operational staff i.e. Matron, Ward Sister/Departmental Manager, Divisional Matron DIPC, Medirest, Divisional Manager, Divisional Director, Director of Nursing and Midwifery
- Inform partner organisations according to county escalation plan i.e. HPA, SHA
- Assessment of risk and liaison with Community IPT
- Medirest to be mobilised to instigate enhances cleaning
- If cases contained and resolve without spread return to **GREEN**
- If cases spread out of bays to rest of the ward move to **AMBER**

Actions

- As per level 1 as well as the following:
  - Affected bay closed to admission, admit to rest of ward
  - No transfer, except for urgent clinical needs
  - Discuss with IPCT transfer to Care Homes Enhanced cleaning in affected bay as per norovirus outbreak policy
- Instigate outbreak monitoring

Whom

- IPCT
- Medirest
- Matrons
- Nurse in Charge and ward staff
- Capacity Team

Level 3

Level 3 Alert - Trust experiencing prolonged pressure, maintaining business continuity

- Suspected cases on 1 or 2 wards
- Not confined to single bay

Response

- Liaise with Chair of ORG, HPU, SHA, Divisional Nurse managers and community IPCT
- Assess ward(s) affected and likely duration of outbreak
- Assess current Trust wide bed state. Liaise with community bed status. All relevant personnel to provided feedback to the ORG with outcomes of identified actions as per the Trust Bed Management Escalation plan. Initiate alert emails to internal teams, PCT teams, secondary care providers
- Include information on Trust public website regarding wards closed
- Daily update on ward closed on intranet
- Send email to peripatetic clinical staff regarding precautions needed at beginning of outbreak and as closure change
- Daily update via all user email re ward closed
- Daily bleep message to on-call medical / surgical teams informing them which wards are closed
- Cascade letters to GP's to facilitate admission avoidance where clinically appropriate
- If wards are resolved without further spread return to **GREEN**
- If spread to further wards move to **RED**

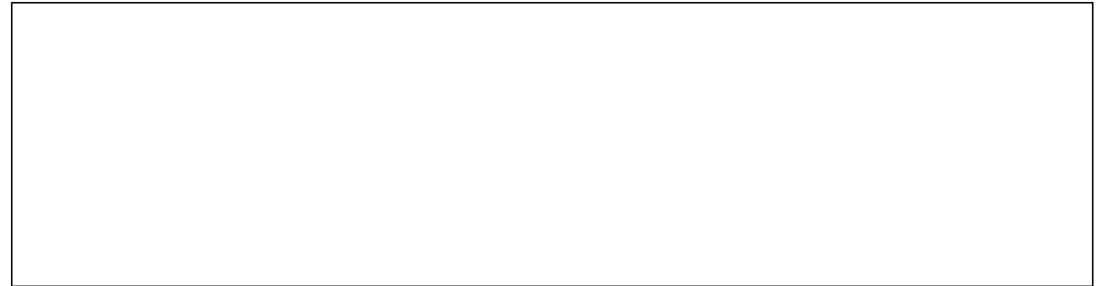
Actions

- As per level 1 and 2, as well as the following:
- Close ward(s) and instigate outbreak policy
- Convene outbreak meeting and establish actions to reduce impact on bed capacity
- Provided information on current situation
- IPCT: details of closed ward(s)
- Capacity: Trust wide and community bed state
- If bed capacity is at Amber or Red initiate appropriate section of Trust bed management escalation plan
- Information on ward closures cascaded to wider health economy

By whom

- IPCT
- DIPC
- Matrons
- Ward Staff
- Capacity Team
- Communication Team
- Switchboard
- HPU
- On-call managers

- Raise public awareness of the outbreak to reduce unnecessary visitors to the Trust
- Information on ward closures cascaded across the Trust
- Admissions to the Trust retained for patients who need acute care for whom use of other healthcare facilities or admission avoidance is clinically inappropriate



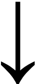
Level 4

Level 4 Alert

- 3 to 5 wards closed
- > 5 wards closed

Response

- Invite UKHSA/CCG to ORG for escalation.
- IPCT to review closed wards daily, including weekends, assess if they are at a similar stage of the outbreak
- All relevant personnel to provided feedback with outcomes of identified actions as per Trust bed management escalation plan
- Placement of restricted visiting posters at entrances to hospital and wards
- Public announcement via local radio and press
- Update public website with information
- Categorise patients on closed wards into: a) confirmed norovirus and resolved, b) currently symptomatic, c) never had symptoms and incubating
- Assess clinical risk of current shortfall in bed capacity
- If ward resolve without spread to any further wards return to **GREEN**
- Initiate RCA investigation



Action

- As for level 1, 2, and 3, as well as the following:
- Convene daily outbreak meetings and establish actions to address/reduce bed capacity
- Provided information on current situation, daily assessment of closed wards
- IPCT to provided details of and ongoing advice to closed wards including at weekends
- Current number of empty beds on each closed ward, number of non-movers e.g. nursing home patients
- Initiate bed escalation plan according to shortfall
- Consider cohorting of closed wards
- Restricted visiting to be initiated
- No visitors on closed wards without prior agreement with Nurse in Charge
- Complete SI

By whom

- IPCT
- Capacity Team
- Communication Team
- On-call Managers
- Matrons
- Ward Staff

APPENDIX J – EQUALITY IMPACT ASSESSMENT FORM (EQIA)

Name of service/policy/procedure being reviewed: Norovirus policy			
New or existing service/policy/procedure: Existing			
Date of Assessment: 12/10/2021			
For the service/policy/procedure and its implementation answer the questions a – c below against each characteristic (if relevant consider breaking the policy or implementation down into areas)			
Protected Characteristic	a) Using data and supporting information, what issues, needs or barriers could the protected characteristic groups' experience? For example, are there any known health inequality or access issues to consider?	b) What is already in place in the policy or its implementation to address any inequalities or barriers to access including under representation at clinics, screening?	c) Please state any barriers that still need to be addressed and any proposed actions to eliminate inequality
The area of policy or its implementation being assessed:			
Race and Ethnicity	None	None	None
Gender	None	None	None
Age	None	None	None
Religion	None	None	None
Disability	None	None	None
Sexuality	None	None	None
Pregnancy and Maternity	None	None	None
Gender Reassignment	None	None	None
Marriage and Civil Partnership	None	None	None

Socio-Economic Factors (i.e. living in a poorer neighbourhood / social deprivation)	None	None	None

What consultation with protected characteristic groups including patient groups have you carried out?
- **NA**

What data or information did you use in support of this EqIA?
- **NA**

As far as you are aware are there any Human Rights issues be taken into account such as arising from surveys, questionnaires, comments, concerns, complaints or compliments?
- **Nil**

Level of impact

From the information provided above and following EQIA guidance document Guidance on how to complete an EIA (click here), please indicate the perceived level of impact:

Level of Impact

For high or medium levels of impact, please forward a copy of this form to the HR Secretaries for inclusion at the next Diversity and Inclusivity meeting.

Name of Responsible Person undertaking this assessment:
Sally Palmer

Signature:

Date:
12/10/2021