



Diarrhoea and Vomiting Outbreak procedure for care homes

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Target Audience	All staff
Approving Committee	Three boroughs Public health infection control group.
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Applicable Statutory, Legal or National Best Practice Requirements	Health and Social Care Act 2008 Code of practice PHE-Guidelines for the management of norovirus outbreaks in acute and community health and social care settings (2012)
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Version Control Sheet

Version	Date	Reviewed By	Comment
0.1	Sept 2016	Sandra Holt	New document

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1 Introduction

Each year diarrhoea and vomiting affects the health and social care systems to a greater or lesser degree. This may vary from outbreaks within schools and communities to single or multiple ward closures in acute hospitals.

All services registered under the Health and Social Care Act 2008 are expected to have a policy for the control of outbreaks of communicable infections

Organisations must develop business continuity plans for use in outbreak situations. The plan should include actions for safe environments, staffing, information, surveillance, communications and leadership..

The content of this outbreak plan has been designed to be used for health and social care workers, managers, house keepers, kitchen and domestic staff to enable them to fulfil their roles when an outbreak occurs.

2. Scope

This procedure applies to all members of health and social care staff.

3. Definition of an outbreak

If you identify or suspect you have a gastrointestinal outbreak i.e. two or more cases of vomiting and/ or diarrhoea, it is essential you escalate this to the Community Infection Prevention and Control nurses on the following number:

Community Infection control specialist nurses Telephone: 01925 867707

3.1 Norovirus

Noroviruses are viruses which can cause diarrhoea and/or vomiting in adults and children and often can cause outbreaks. These infections are sometimes called winter vomiting disease.

The symptoms caused by noroviruses are usually a sudden onset of non-bloody, watery diarrhoea and /or vomiting which can be projectile.

Also present may be:

- Abdominal cramps
- muscle aches
- headache
- feeling of weakness; and
- a slightly raised temperature.

It can happen that residents can become symptom free then relapse with more symptoms a few days later.

Norovirus infection can occur throughout the year but is most common from mid-October to April.

3.2 Routes of spread

Norovirus is spread through three routes:

By direct contact transmission (touching someone)

The virus is passed directly from an infected person to another person who transfers the virus to their mouth e.g. by not washing their hands after contact with faeces.

By indirect contact transmission (touching something)

This takes place when a person has contact with a contaminated object, such as a commode, furniture or equipment which is in the environment on an infected person. Again the person then transfers the virus from the object of their mouth.

Eating food contaminated with norovirus can also cause infection. Norovirus can be present in either cooked or uncooked food, but the food will not look or smell bad.

By droplet transmission (spreading in the air)

Residents/children with excessive vomiting can spread large quantities of virus in droplets which can contaminate surfaces. These droplets can remain in the air, travel over a distance and still be infectious. Spread of norovirus can then occur when others inhale and then swallow these droplets.

NB 30mls of vomit may contain up to 30,000,000 virus particles. Diarrhoea can also be spread over a wide area.

3.3 Incubation period

The time from coming into contact with the virus to becoming ill is usually between 12 – 48 hours.

3.4 Period of infectivity

People with infection caused by norovirus usually stop having symptoms within 2 – 3 days, but 40% of people can still have symptoms at 4 days. Residents and staff are considered infectious while they have symptoms and until 48hrs **after** their bowel habit has returned to what is normal for them.

4. Infection Control Guidance

It is important to put the correct infection control outbreak measures in place and to keep in regular contact with the community infection control nurses during an outbreak. The guidance below should be followed:

	Action	Rationale
1.	<p>Isolate all symptomatic patients in their rooms until they are symptom free for 48 hours, i.e. they have no further vomiting and/or diarrhoea.</p> <p>Residents on EMI units who cannot be isolated should be looked after in a separate lounge area.</p>	<p>To reduce airborne transfer of the virus and provide a safe environment for those patients unaffected by the infection.</p> <p>The decision to isolate will be influenced by the availability of facilities.</p> <p>The safety and psychological wellbeing of the resident must be considered.</p>
2.	<p>Ensure appropriate notices are in place including informing staff of good hand wash technique with soap and water and not alcohol gel.</p>	<p>To ensure staff and relatives have safe practice.</p> <p>Alcohol gel is unsuitable and will not clean hands or surfaces that have organic matter contamination.</p>
3.	<p>Staff should wear gloves and plastic aprons when dealing with infected patients or contaminated areas</p>	<p>To reduce cross infection.</p>
4.	<p>Inform GP of ill residents.</p>	<p>To monitor their condition.</p>
5.	<p>Complete a list of affected patients and staff (appendix 1) and update daily, with details of new cases and when existing cases become asymptomatic.</p>	<p>It is important to have accurate records in order to monitor the outbreak.</p>

	Action	Rationale
6.	<p>Advise all symptomatic staff that they must stay off work until they are symptom free for 48 hours.</p>	<p>Staff will continue to excrete the virus for 48 hours after symptoms have stopped.</p>
7.	<p>Close the care home temporarily to admissions as advised by the infection control nurses. The home will usually be able to open again when they have been clear of all symptoms for 48hrs and have carried out a deep clean. The infection, prevention and control team will advise on this.</p>	<p>The care home must be assured that they have taken steps to reduce the risk of infection to new or planned admissions and visitors who may be susceptible to infection.</p>

8.	<p>Post a notice in the reception area informing visitors of the current situation and ask anyone who is concerned to speak to the nurse/manager in charge (appendix 3).</p> <p>It is generally advisable to suggest that young children, pregnant women and anyone who is immuno-compromised do not visit until the outbreak has resolved.</p> <p>Consideration should also be given to restricting visitors until the outbreak is over.</p> <p>Visitors should be made aware of the outbreak and requested to wash their hands on entry and exit from the hospital (appendix 3).</p>	<p>Protect the most vulnerable in society and allows others to make an informed decision whether or not to visit (e.g. visitors with small children or who are employed in the catering industry etc.)</p> <p>To reduce the risk of cross infection to others.</p>
9.	<p>Postpone hospital/dental/podiatry/hairdresser and other appointments until the outbreak is over.</p>	<p>To reduce spread of infection.</p>
10.	<p>Any agency staff should care for asymptomatic residents only.</p>	<p>To reduce cross infection as may work in different care homes.</p>

	Action	Rationale
11.	<p>If any patients require emergency admission to hospital, inform the admitting hospital and infection control nurses so that appropriate precautions can be taken.</p>	<p>To ensure necessary precautions are instigated immediately upon the resident's admission to hospital.</p>
12.	<p>Collect samples of diarrhoea from symptomatic patients and staff as soon as possible after the onset of symptoms. Do not submit formed stool specimens.</p>	<p>To identify virus / bacteria of the outbreak from the information provided.</p>
13.	<p>Every laboratory form submitted must have an I-log reference number on it along with patient's full details on form and specimen. The infection control nurses will give you this number. There must be 3 identifying details on pot and form</p>	<p>To identify the specimens, the laboratory will not process specimens that are incomplete or incorrect.</p>

14.	Record details of all samples submitted on the outbreak forms (appendix 1).	It is important to have accurate records in order to monitor the outbreak.
15.	Are all rooms en-suite? If not where possible ensure that there are dedicated commodes or toilets for affected residents.	To prevent the spread of infection.
16.	All open food and confectionary to be removed i.e. fruit bowls and open boxes sweets and chocolate	The prevent contamination of foods that can be contaminated.
17.	Stop the movements of staff and residents between floors/units.	To prevent infection spreading to other units/floors.
18.	Residents in hospital can return to the care home when they have been clear of symptoms for 48hrs and medically fit. Must be discussed with the community infection control nurses.	To ensure resident is safe to return to the care home.
19.	Do not discharge patients who may be incubating infection to other care homes.	To prevent cross infection.
20.	Notification that the outbreak is over should be noted and appropriate staff and agencies informed, i.e. Infection, Prevention and Control Team, local hospitals.	To ensure that transfers can commence and the hospitals return to normal practice as soon as possible.

General Cleaning Advice

	Action	Rationale
1.	Use only liquid soap in non-refillable containers for hand washing and paper towels from a dispenser for staff use.	Facilities for hand washing within the infected areas are essential for the containment of the outbreak.

	Action	Rationale
2.	Ensure the correct colour coded disposable cloths are available	Prevent contamination of areas when cleaning.
3.	General environmental cleaning especially toilet areas – frequency to be increased to four times a 24 hour period for objects that are frequently handled e.g. Flush handles – Toilet door handles – Taps – bath rails – Commodes – Toilet and commode seats and under the seat, bed pan holders, etc. (Use appropriate disinfectants Hypochlorite solution at 1,000 ppm strength or Milton).	To minimise the risk of infection being spread from these surfaces as these areas may become re-contaminated rapidly after clearing.

4.	Increase the cleaning regime in the care home with extra sessions using a solution of 1000ppm hypochlorite.	Minimise the risk of cross infection.
5.	<p>Cleaning soiled contaminated hard surfaces:</p> <ul style="list-style-type: none"> ➤ It is vital that any physical evidence of illness is promptly and thoroughly cleaned up (appendix 4). ➤ Always wear protective clothing e.g. disposable gloves and aprons. ➤ Vomit should be covered immediately with paper towels and cleaned up as quickly as possible. ➤ Use paper wipes or vomit spill kits to absorb/remove visible soiling, must be disposed of as clinical waste ➤ Surfaces must be washed using a detergent solution and dried with paper wipe before disinfection. ➤ Disinfect the area using a diluted disinfectant solution e.g. Hypochlorite solution at 1,000 ppm strength ➤ Dispose of gloves, apron and cloths into clinical waste bag. ➤ Wash hands thoroughly. ➤ Ventilate the area by opening a window(s) 	<p>Prevent spread of infection.</p> <p>Prevent the release of airborne viral particles.</p> <p>Disinfectants cannot completely penetrate organic matter.</p> <p>Disinfectant solutions may damage fabrics and some plastics, please refer to manufacturer's instructions.</p> <p>To eliminate airborne transfer of the virus within the hospital.</p>

	Action	Rationale
6.	<p>Soiled contaminated fabrics/soft surfaces should:</p> <p>If removable should be bagged and sent for laundering as for linen.</p> <p>If fixed, wipe with a disposable wipe and wash area with a hot water and detergent solution or steam clean then allow to dry.</p>	<p>To remove viral particles and prevent cross infection.</p>

7.	<p>Clothing should be washed on hottest possible wash cycle the fabric will allow.</p> <p>For soiled bed linen the following is preferable if the material will tolerate the temperature. Wash at 65°C for 10 minutes or 71°C or above for 3 minutes.</p>	<p>These temperatures are needed to achieve thermal disinfection.</p>
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Deep cleaning following at the end of an outbreak.

	Action	Rationale
1.	<p>After the outbreak, a programme of deep cleaning must be undertaken.</p>	<p>To minimise the risk of infection being spread from contaminated surfaces. Movement of equipment that has been previously contaminated can increase the risk of cross infection.</p>
2.	<p>Particular attention must be given to the following being washed down and then using a solution of 1000ppm hypochlorite.</p> <ul style="list-style-type: none"> ➤ All flat surfaces and patient equipment must be washed and disinfected ➤ All beds must be washed down and both the frame and the mattress ➤ All furniture including the day room and dining room must be washed and disinfected ➤ Use a steam cleaner where appropriate ➤ All privacy and shower curtains must be changed and sent to the laundry as infected linen 	<p>To remove the possibility of transferring the virus within the hospital and enable the hospital to open to new admissions</p>

3.	<p>Soiled contaminated fabrics/soft surfaces should:</p> <ul style="list-style-type: none"> ➤ If removable should be red bagged and sent for laundering as for linen. ➤ If fixed, wipe with a disposable wipe and wash area with a hot water and detergent solution or steam clean and allow to dry. 	To remove viral particles and prevent cross infection.
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Appendix 2 shows outbreak infection control measures for care homes poster you can use

5. Communication

The community infection control nurses will contact the care home each day for an update on the situation and any advice required. A visit will be made by them for care homes that require this.

The community infection control nurses will send out a daily e-mail to local hospitals, district nurses, social workers, public health, environmental health and CCGs to keep them updated on the situation within the care home.

The nurses will liaise with the care home when the outbreak is over to ensure it is safe to reopen. An e-mail will be sent to all agencies above to advise them.

6. Reopening

The care home can be re-opened to admissions following:

- No diarrhoea or vomiting in residents or staff for 48hrs.
- A deep clean has been carried out.
- The community infection control nurses have advised it is safe to open.

7 References

Department of Health (2008) The Health and Social Care Act, 'Code of Practice on the prevention and control of infections and related guidance'
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216227/dh_123923.pdf

Department of Health (2004) The NHS Healthcare Cleaning Manual
http://www.whnt.nhs.uk/document_uploads/Intranet-HotelServices/WuthCleaningManual.pdf

The Norovirus Working Party (2012) Guidelines for the management of norovirus outbreaks in acute and community health and social care setting
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/322943/Guidance_for_managing_norovirus_outbreaks_in_healthcare_setting_s.pdf

Health protection Scotland (2015) General information and infection prevention and control precautions to prepare for and manage norovirus in care homes.

<http://www.documents.hps.scot.nhs.uk/hai/infection-control/norovirus/norovirus-guidance-carehomes-2015-09.pdf>

Appendix 1

Outbreak Reporting Form

(Definition: Two or more persons with the same disease or symptoms who are linked through common exposure, personal characteristics, time or location. This applies to patients and /or staff and will usually be characterised by short incubation i.e.15-48 hours, Illness duration of 12 – 60 hours)

RECORD TO BE COMPLETED

DATE & TIME OF CALL:						
NAME OF CALLER:			Name of Manager :			
ORGANISATION NAME: ADDRESS: POST CODE: Contact Number: Type of Home – care only, care with nursing, other ...Residential Type of resident – Adult >65 <ul style="list-style-type: none"> <li style="width: 50%;">- Dementia <li style="width: 50%;">- Mental Health restricted rights <li style="width: 50%;">- Learning Disabilities <li style="width: 50%;">- Eating disorders <li style="width: 50%;">- Physical Disabilities <li style="width: 50%;">- Sensory Impairment <li style="width: 50%;">- Mental Health <li style="width: 50%;">- Substance Misuse <li style="width: 50%;">- Children 0-18 <li style="width: 50%;">- Adult < 65 						
Number of residents in Home: on floor			Number of staff:			
Number of residents						
Number of babies/children in Nursery:						
Number of residents			Number of staff with symptoms:			
Main symptoms:						
			Date of Last case on premises:			
Date of First Case:			/Date home re-opened:			
How many days was the home closed?			Were samples collected? YES/NO			
Incident Log No (Ilog)/Lab Reference No. (if known):						
	No. affected	No. tested	No. positive	Organism	Hospitalised	Died
Staff:						
Residents:						

CONTROL MEASURES/FURTHER ACTIONS THAT HOME/SCHOOL/WARD/NURSERY SHOULD IMPLEMENT – CHECKLIST FOR DISCUSSION WITH MANAGER

Control Measure/Further Action	Yes/No	Comments
Isolate residents/pupils/patients or, if not feasible, segregate ill people from asymptomatic people.	yes	
Inform local CCDC and EHO	yes	
Inform GP(s) of ill patients	yes	
Clean toilet areas, including taps and door handles, frequently	yes	
Disposable paper towels and liquid soap with dispenser should be in hand-washing areas	yes	
Staff should wear gloves and plastic aprons when dealing with infected patients or contaminated areas	yes	
Contaminated areas should be immediately cleaned and disinfected with 1000 p.p.m. hypochlorite	yes	
Exclude any staff who are ill for 48 hours after symptoms have resolved	yes	
Advise visitors that they may be exposed to infection, advise not to visit if feeling unwell	yes	
Do not discharge patients who may be incubating infection to other institutions	yes	
Allocate agency staff to care for asymptomatic residents	yes	
Do not admit any new residents until CCDC or ICN says it is okay to do so	yes	
Postpone hospital/dental/chiroprody/ hairdresser/other appointments until outbreak is over	yes	
Home should be advised that fresh faecal samples should be taken and an I-Log number obtained from the Infection Control Nurse/	yes	
Home should keep record of staff and patients who are ill (form attached)	yes	
Managing risk during the outbreak		
Are all rooms en-suite? if not where possible ensure that there are dedicated commodes or toilets for affected residents	yes	
Can staff be allocated to one unit/floor so that they are not caring for both affected and unaffected residents? If not ensure staff adhere to all standard precautions.	yes	
Control Measure/Further Action	Yes/No	Comments

Cheshire & Merseyside Health Protection Team
RECORD FORM FOR SUSPECTED GASTROENTERITIS TO BE COMPLETED BY HOME
FOR STAFF AND RESIDENTS WHO BECOME ILL

Date:	Manager:
Address:	Telephone:

Name	DoB	Date of onset of symptoms	Symptoms* D/V/F/A	Faecal specimen (Y/N)	GP	Staff or Resident	If a resident: room name/ number	Staff Absent? Y/N

*Key for symptoms: D = Diarrhoea F = Fever V = Vomiting A = Abdominal pain

Appendix 2

Box 1: Outbreak Control Measures for Care homes. (text based on Health Protection Scotland guidelines)(19)

Care Home

- Close affected unit to admissions and transfers
- Isolate residents in their own rooms if possible.
- Keep doors to single-occupancy room(s) closed
- Place signage on the door(s) informing all visitors of the closed status and restricting visits to essential staff and essential social visitors only
- Use a separate lounge if unable to keep EMI residents in their room.
- Prepare for reopening by planning the earliest date for a terminal clean

Healthcare Workers (HCWs)

- Ensure all staff are aware of the norovirus situation and how norovirus is transmitted
- Ensure all staff are aware of the work exclusion policy and the need to go off duty at first symptoms
- Allocate staff to duties in either affected or non-affected areas of the ward but not both unless unavoidable (e.g therapists)

Patient and Relative information

- Provide all affected patients and visitors with information on the outbreak and the control measures they should adopt
- Advise visitors of the personal risk and how they might reduce this risk

Continuous monitoring and communications

- Maintain an up to date record of all patients and staff with symptoms
- Monitor all affected patients for signs of dehydration and correct as necessary
- Daily update to the community infection control nurses.

Personal Protective Equipment (PPE)

- Use gloves and apron to prevent personal contamination with faeces or vomit.
- Consider use of face protection with a mask only if there is a risk of droplets or aerosols.

Hand hygiene

- Use liquid soap and warm water as per WHO 5 moments (20) • Encourage and assist patients with hand hygiene.

Environment

- Remove exposed foods, e.g. fruit bowls, and prohibit eating and drinking by staff within clinical areas
- Intensify cleaning ensuring affected areas are cleaned and disinfected. Toilets used by affected patients must be included
- Decontaminate frequently-touched surfaces with detergent and disinfectant containing 1000ppm available chlorine*

Equipment

- Use single-patient use equipment wherever possible
- Decontaminate all other equipment immediately after use

Linen

- Whilst clinical area is closed, discard linen from the closed area in a water soluble (alginate) bag and then a secondary bag.

Spillages

- Wearing PPE, decontaminate all faecal and vomit spillages
- Remove spillages with paper towels, and then decontaminate the area with an agent containing 1000 ppm available chlorine e.g Milton. Discard all waste as healthcare waste. Remove PPE and wash hands with liquid soap and warm water

We are presently experiencing an outbreak of diarrhoea and vomiting within the care home. After seeking specialist advice it is recommended that visitors should refrain from entering at present unless absolutely necessary.

In particular we would advise that children and those particularly vulnerable to infection do not visit at the present time.

As soon as this problem is deemed to be over, visiting will return to normal.

Management and staff appreciate your cooperation.

Appendix 4

Bridgewater Community Healthcare **NHS**
NHS Trust

