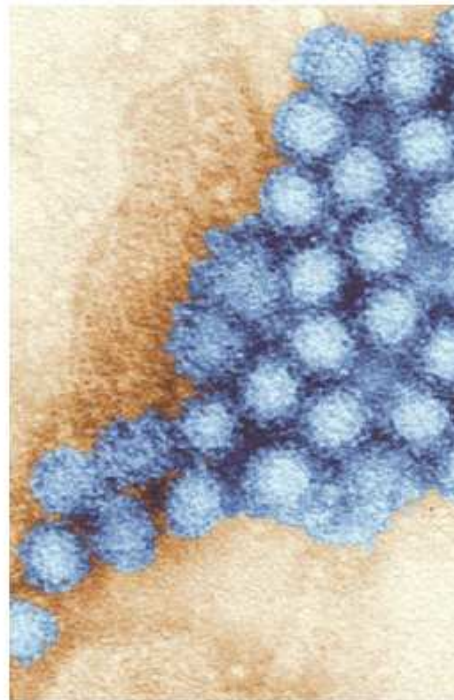




## Norovirus Toolkit

A set of resources for staff in care homes



# Introduction

Norovirus, also called 'winter vomiting disease' because it usually occurs during the winter months, is the most frequent cause of infectious gastroenteritis in England and Wales and affects 600,000 to one million people in the United Kingdom every year.

Cases usually start to appear during the autumn, peaking during January. The symptoms usually last from 12 to 60 hours and will start with the sudden onset of nausea followed by projectile vomiting and diarrhoea.

This toolkit has been developed to help you prevent and control future outbreaks of Norovirus in your care home. You should use the toolkit in conjunction with current Department of Health infection control guidance.

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Thanks to Health Protection Agency West Midlands – this document was developed by them and has been adapted for local use.

# Norovirus - frequently asked questions

## **What are noroviruses?**

Noroviruses are a group of viruses that are the most common cause of gastroenteritis (stomach bugs) 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 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 1-2 days, however some people (usually the very young or elderly) may become very 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.

\* A 48 hour exclusion period is advised in current clinical guidance; however, preference may be to practice a 72 hour exclusion period.

### **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 institutions such as hospitals, schools, residential and nursing homes and hotels. Anywhere that large numbers of people congregate for periods of several days provides an ideal environment for the spread of the disease. Healthcare settings tend to be particularly affected by outbreaks of norovirus. A recent study done by the Agency shows that outbreaks are shortened when control measures at healthcare settings are implemented quickly, such as closing wards to new admissions within 4 days of the beginning of the outbreak and implementing strict hygiene measures.

### **How common is Norovirus?**

The Health Protection Agency only receives reports of outbreaks and we see anywhere between 130 and 250 outbreaks each year. It is estimated that Norovirus affects between 600,000 and a million people in the UK each year.

### **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 areas, and the isolation of those infected for 48 hours\* after their symptoms have ceased.

\* A 48 hour exclusion period is advised in current clinical guidance; however, preference may be to practice a 72 hour exclusion period.

# Norovirus guidance for care homes

Norovirus also known as the winter vomiting disease is mainly found in the community. It causes diarrhoea and vomiting. Norovirus is a relatively mild illness. The elderly population are one of the most vulnerable, along with health care workers.

## **What is the norovirus?**

Noroviruses are a group of viruses that cause stomach bugs. The incubation period is between 12-48 hours, with the illness lasting between 1-3 days.

## **What are the signs and symptoms?**

Signs and symptoms include vomiting, diarrhoea, nausea, headache, pyrexia, myalgia (muscle pain), and abdominal pain.

## **How is the norovirus treated?**

There is no specific treatment for the norovirus apart from letting it run its course and drinking plenty of fluids.

## **How is it spread?**

The virus is easily transmitted from one person to another. It can be transmitted by contact with another infected person, or by eating contaminated food or water.

## **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:

- report it to the local HPU for support and infection control advice
- clean and disinfect contaminated areas frequently
- institute good hygiene measures including hand washing
- provide advice on food handling. Those affected should not handle any food until 72 hours after their last symptom.

## **Are there any long-term effects?**

No, there are no long-term effects from norovirus; however the elderly population are at risk from dehydration.

### **How should residents with norovirus be cared for?**

Those who have been infected should be isolated for up to 48 hours after their symptoms have ceased. Residents should be encouraged or helped to drink plenty of fluids to prevent dehydration.

Stool samples need to be obtained from residents or staff with the illness. Gloves and aprons should be worn when dealing with any bodily fluids and a good hand washing technique should be used when dealing with patients or contaminated areas.

### **Laundry and cleaning**

Water-soluble bags should be used for infected laundry and these items should be washed separate to other items, at the hottest temperature possible for the materials. Frequent cleaning of touch points with a hypochlorite solution (1000 ppm) should be undertaken.

### **What if staff are infected?**

All infected staff should be excluded from work immediately, until 48 hours after their last symptom.

They should be encouraged to use good hand washing technique and drink plenty of fluids.

### **Who do we tell?**

Posters should be placed around the home warning people of the outbreak to encourage hand washing and to reduce unnecessary visits.

When two or more cases of diarrhoea have been confirmed then it is important to contact the Health Protection Agency.

If a patient is admitted to hospital, the hospital should be informed of an outbreak of diarrhoea and vomiting within the home.

# Action to be taken during an outbreak of diarrhoea and/or vomiting in a care home

1. The most common cause of gastrointestinal infection in care homes is Norovirus, also known as winter vomiting disease. It is passed between people via airborne route, faecal oral route and contaminated environment. Cases of diarrhoea and vomiting are regarded as infectious until 48 hours after the symptoms cease.
2. If there are two or more symptomatic residents in a short period of time, notify Environmental Health Services, Health Protection Unit and Care Quality Commission. Also tell your own or the PCT infection control nurse.
3. Their general practitioner should see residents. Persons affected are nursed in their own rooms. If there is shared accommodation in your home, seek advice from the Health Protection Unit about grouping.
4. Hand washing is the single most important measure in preventing further infection. Carers must wash their hands after handling residents, blood, body fluids, secretions, excretions, their bedding, clothing or equipment.
5. Remind staff and visitors to wash their hands before leaving the room.
6. Provide facilities for residents to wash their hands after using the toilet and before eating.
7. Carers should wear gloves and disposable plastic aprons to toilet or clean up residents who have soiled themselves, when disposing of excreta, or when handling soiled linen and clothes: wash hands after removing gloves.
8. Stool samples must be obtained from a resident with diarrhoea. Request for norovirus testing MUST be specified on the specimen form.
9. Restrict staff movements between floors and wings. Advise that they do not work in other homes during an outbreak.
10. If staff members become symptomatic they must be sent off duty and specimens should be obtained. They do not return to work until they have been without symptoms for 48 hours.
11. Stop all bowel medicines (e.g. laxatives and anti-diarrhoeal drugs), unless instructed NOT to do so by GP.
12. Ensure infected person(s) have separate toilet facilities e.g. toilet or commode with access to hand washing facilities.

13. Dispose of excreta into the toilet or bedpan washer: process commode pots in a bedpan washer. Where this facility is not available, care must be taken when cleaning commode pots. Carry out this process in a designated area with a deep sink using detergent and hot water then dry with disposable towels and wipe over with hypochlorite. See point 7. Staff must wear appropriate protective clothing for this.
14. Clean and dry commode chairs. The seat, back, arms and frame need attention.
15. Place linen contaminated with faeces or vomit in a water-soluble bag and transport to the laundry (without delay). Do not manually sluice or hand wash linen (programme the washing machine to the pre-wash/sluice cycle). Follow this by a hot wash.
16. Deal with spillages immediately. A high standard of cleaning is essential, particularly in toilet and bathroom area.
17. Regularly clean and (at least 3 times per day) “touch” points such as toilet flush and door handles, grab-rails and taps at washbasins.
18. Serve hot cooked food during outbreaks. Remove exposed food from communal areas, e.g. fruit.
19. Arrangements should be in place to deep clean the environment once outbreak has been declared over. This declaration must be agreed between the home owner/manager and Health Protection Unit.
20. Admissions and transfers should be stopped (following liaison with Health Protection staff) until no symptoms in staff / residents for 48 hours.
21. **Resident movement should be avoided unless medically urgent. If transferring to another area or hospital please inform them of the outbreak even if the resident is symptom free so that they can take the necessary precautions.**





# Wet



# Soap



# Wash



# Rinse



# Dry

Stop germs spreading.  
The power is in your hands.

Have you washed your germs away? Wash your hands.

# Local Health Protection Unit contacts

North East and North Central London Health Protection Unit  
Health Protection Agency  
2<sup>nd</sup> Floor, 151 Buckingham Palace Road  
London  
SW1W 9SZ

Tel 020 7811 7100 Mon – Fri 9 -5  
Fax 020 7811 7756

Email: [necl.team@hpa.org.uk](mailto:necl.team@hpa.org.uk)

Out of hours (Sat/Sun/BH for URGENT CALLS only) call 07623 541417 – this is a pager service, you will be asked to leave a short message for the on-call member of staff.

More information is available on the HPA website  
[www.hpa.org.uk](http://www.hpa.org.uk)

Inform the following other agencies of outbreaks as well –

Local Environmental Health Department  
Care Quality Commission  
Infection Control Nurse (PCT or care home)

## Checklist of actions to be taken in a single case of diarrhoea and vomiting

1. Isolate resident in a single room
2. Is the resident sharing with another? Provide separate toilet facilities.
3. Provide liquid hand wash/paper towels/fresh towels daily
4. Staff hand hygiene facilities must include liquid soap from a pump dispenser, hot running water and disposable paper towels. Hands must be washed after every contact with a symptomatic resident. Alcohol hand gel is not sufficient for this purpose
5. Staff to encourage residents to wash hands
  - After going to toilet
  - Before eating/drinking
6. Advise staff of need to increase their handwashing
7. Record date and time of first symptoms; keep a stool chart
8. Inform the GP.
9. Stop all laxatives/anti-diarrhoeal drugs
10. Get a stool specimen
11. Increase cleaning and disinfection of the toilet/commode (i.e after EVERY use)
12. Place soiled linen in a red alginate bag and wash at the hottest temperature suitable for the fabric
13. Clean resident room every day. Door knobs, toilet handles and other wipeable surfaces should be cleaned and disinfected at least once EVERY SHIFT.
14. Place all clinical waste such as incontinence pads, gloves, aprons, hand towels, in yellow bags.
15. Resident is considered clear after 48 hours of being symptom free.
16. Deep clean residents bedroom, cleaning all carpets, mattresses both sides, bed frames, curtains etc. (steam cleaning is advised for carpets and soft furnishings. Hard surfaces cleaned and disinfected).

## Checklist of actions to be taken in 2 or more cases of diarrhoea and vomiting

1. Resident to be isolated in own room wherever possible
2. Cohort nurse those in shared rooms
3. Wherever possible have separate toilet facilities for residents affected – either their own commode/toilet or keep a communal toilet only for their use during the outbreak.
4. Provide liquid hand wash/paper towels/fresh towels daily
5. Staff hand hygiene facilities must include liquid soap from a pump dispenser, hot running water and disposable paper towels. Hands must be washed after every contact with a symptomatic resident. Alcohol hand gel is not sufficient for this purpose.
6. Encourage residents to wash hands
  - After going to toilet
  - Before eating/drinking
7. Keep a record of all symptomatic residents (see page 13)
8. Inform the following:
  - GP
  - Infection Control nurse for PCT
  - Health Protection Unit
  - CQC
  - Environmental Health Service
9. Stop all laxatives/anti-diarrhoeal drugs
10. Obtain stool specimens from all symptomatic residents/staff
11. Increase cleaning and disinfection of the toilet/commode (i.e after EVERY use)
12. Increase cleaning of environment to at least once per shift, paying particular attention to toilet handles, door knobs and all surfaces which may have become contaminated
13. Place soiled linen in a red alginate bag and wash at the highest temperature the fabric will endure.
14. Clean resident room every day. Door knobs, toilet handles and other wipeable surfaces should be cleaned and disinfected at least once EVERY SHIFT.
15. All clinical waste to be disposed of in yellow bags
16. Once all residents have been symptom free for 48 hours inform the HPU. Once the outbreak is declared over, the entire home should be deep cleaned.

Name of resident	Date of Birth	Date of Onset	Symptoms D,V, SC, N	Resident on Antibiotics or laxatives?	Date Specimen sent	Date symptoms ended	Results	Resident outcome eg hospitalised, recovered etc

SC – stomach cramps

D - diarrhoea

V – vomiting

Nausea

# Cleaning and Disinfection

## Definitions

**Cleaning** is a process which physically removes materials which are not part of the item being cleaned, for example, dust from surfaces, blood from wounds, faeces from a toilet/commode. Cleaning is a prerequisite for disinfection. General purpose detergent or detergent wipes are sufficient.

**Disinfection** is the process which reduces the number of microorganisms present on an item, so that the potential of an item to cause infection is reduced. Such a process may not necessarily eliminate all microorganisms but can reduce them to a level where they are no longer able to initiate infection. The main way of disinfecting is using either heat or chemicals.

### **Where disinfection is required:**

#### **Disinfection of hard surfaces after cleaning (chlorine releasing agent)**

1. Liquid bleach products diluted to manufacturers instructions. For disinfection of surfaces during an outbreak of gastrointestinal illness 1000 parts per million is equivalent to a solution of 1 part bleach to 50 parts water. **Note: liquid bleach is unstable and is prone to deterioration once opened, sufficient dilution cannot be assured. Solutions should be freshly prepared.**
2. Chlorine-releasing agent in tablet or granule form. Follow manufacturers' advice regarding how many tablets or measures of granules to be mixed with the recommended amount of water to obtain the appropriate strength of solution. Manufacturers include Ecolab (Actichlor tablets) and Guest Medical (Haz-tab, Presept). **Chlorine-releasing tablets are more stable than liquid bleach and more likely to provide the correct disinfection dilution.**

#### **Combined cleaning and disinfection of hard surfaces**

1. Detergent-based product for cleaning of hard surfaces plus chlorine releasing agent in one product remove the need to clean and disinfect separately. Manufacturers include Ecolab (Actichlor plus) and Guest Medical (Chlor-clean).

**The tablet and granule forms are used in the NHS. You can call the local HPU for further advice on cleaning and disinfection.**

**Please note that there may also be other manufacturers of similar products and the Health Protection Agency does not endorse any particular product. It is important to check with the suppliers that the product is suitable for your requirements and that instructions for use are followed carefully.**

