

Norovirus Recognition and Management

Symptoms present for less than 72hrs, symptoms not associated with underlying medical condition or existing illness.

Not associated with prescribed drugs or treatment such as laxatives or enemas.

PRESENTING SYMPTOMS:
 Sudden onset of –
 Diarrhoea which is watery and not blood stained (type 7)
AND/OR
 Projectile vomiting
PLUS ONE OF THE FOLLOWING:

1. Abdominal pain/cramps
2. Low grade fever
3. Headache
4. Myalgia

Yes

- **Restrict resident to their own room with dedicated toilet or commode.**
- Restrict staff contact to the minimum (designated staff).
- Inform all staff of infection risk.
- **Increase cleaning** of contact surfaces and ensure hand washing with soap and water
- Send **stool sample** and Commence **stool and fluid chart**.
- **Encourage drinking** (a minimum of 30mls of fluid hourly during daytime (and if awake at night) strictly monitor fluid intake and urine output

Check for early signs of dehydration
 Not drinking, dry mouth, reduced urine output, confusion (not related to condition), headache, dry skin – pinch test

Yes

Increased episodes of diarrhoea and/or vomiting
 Patient not tolerating diet/fluids
 Early signs of dehydration reported
 Contact GP

No

Resident tolerating fluids/diet
 Not confused – related to dehydration
 Continue fluids and monitoring till normal dietary activity resumed.

Unconscious or Unroutable residents must be taken to hospital immediately
999

2 or more cases in staff or residents = an outbreak
 Contact the PHE Tel: 0300 303 8537.
 Carry out outbreak control measures in line with PHE advice.
 Restrict visitors and contact relatives



Norovirus–Infection Control Advice for Care Homes

(adapted from the HPA advice sheet 2009)

Norovirus(winter vomiting) can spread from person to person via the faecal-oral route or vomiting into the environment. The latter results in widespread aerosol dissemination of virus particles as they are widely dispersed by air currents, such as those due to open windows or air conditioning, with subsequent indirect person-to-person spread via environmental contamination.

It is therefore necessary to assume all people with symptoms of diarrhoea and/or vomiting as potentially infectious.

General hygiene

- Ensure facilities for **hand-washing with soap and water** are available for all visitors and staff.
- Paper towels are known to be the most effective method of drying hands and should therefore be supplied.
- Ensure hand washing facilities are used: residents and staff must wash their hands after using the toilet and before meals.
- Visitors should wash their hands on entry to and on leaving the home.
- **Alcohol hand gel is not effective against the virus so the use of alcohol solutions during an outbreak is not recommended.**
- If an **air conditioning** facility is in situ, this should be switched off in affected areas - professional advice should be sought on decontamination of the system before it is restarted.

Staff

- All staff, including food handlers, with symptoms of diarrhoea and vomiting **should not attend work.**
- Ensure staff cases do not return to work until **48** hours after the last episode of diarrhoea or vomiting.
- Staff exclusion applies to their work in **any** care setting, not just the affected home.
- **Personal protective clothing (PPE):**
 - Disposable gloves should be supplied and used for direct contact with body fluids/blood.
 - A plastic apron should be worn to protect clothing when providing personal care to a resident.
 - Face protection is recommended if splashing of body fluids/blood is expected.
- PPE should be changed between every resident contact and different procedures.
- **Hands must be washed following removal of gloves.**



Resident care

- Residents should **remain in their rooms if symptomatic** and use either their en-suite facilities or a named commode.
- Wherever possible **toilet facilities** must be segregated for infected and non-infected residents.
- Urine and faeces in bedpans/urinals must be disposed of, if possible, down a lavatory attached to the room of the affected resident.
- **Equipment such as hoist slings must be allocated to individual residents and not shared.**
- **Use of disposable hoist slings may be necessary in an outbreak situation**

Environmental cleaning and laundry

- It is very important to respond quickly to any vomiting or other environmental soiling (e.g. faeces) as these incidents can give rise to other cases.
- Following such incidents all surrounding surfaces, including food surfaces, must be thoroughly cleaned (with appropriate concentration of a chlorine releasing agent) and dried and where possible, and the area evacuated during this period. Fresh vomit or faeces should be covered with paper towels immediately. Whilst clearing away, staff should wear personal protective clothing to limit the risk of cross infection.
- Ensure **all** surfaces in **toilet areas/commodos** are cleaned regularly and after any incident and all surfaces wiped with a hypochlorite solution.
- Cleaning of **communal toilet facilities** should be increased during an outbreak with particular attention paid to lavatory seats, flush handles, basin taps, door handles and push-plates. **Detergent and hot water** should be used first followed by 0.1% solution of a chlorine releasing agent such as Sodium Hypochlorite. **Household bleach** (diluted 1:10 for soiled surfaces and 1:100 for other hard surfaces) is highly effective.
- **Public and communal areas** need additional daily cleaning during an outbreak. Thorough cleaning of hard surfaces with a hypochlorite solution and deep steam cleaning of the infected persons soft furnishings, e.g. curtains and carpets and armchairs should be undertaken. After cleaning, ensure that rooms are well ventilated.
- **Laundry:** Foul laundry should be placed directly into a plastic water-soluble bag and then into a laundry bag. The plastic bag should then be placed directly into a washing machine and washed using a sluice cycle first. Under no circumstances should foul laundry ever be hand sluiced or soaked in buckets etc. This will greatly increase the risk to staff of getting the infection.
- **Cleaning after the outbreak:** Once the outbreak is over it is recommended that all areas are cleaned thoroughly. Carpets and upholstery should be steam cleaned. Mattress and pillow covers should be cleaned with detergent and hot water followed by 0.1% hypochlorite. Any torn or damaged mattresses or covers should be disposed of and replaced.

Kitchens and food preparation

- If anyone should vomit in an area where there is uncovered food or drink then it must be discarded since there is a risk that it has been contaminated with the virus.
- Food such as fruit bowls left out for residents to help themselves should be put away into the kitchen during outbreaks as they could easily become contaminated with the virus
- Ensure good hygiene practice in kitchens
- No movement of soiled items (e.g. bedding) through kitchens.
- No staff involved in patient care should prepare any food.

Preventing transfer into and out of home

- Restrict all **non-essential movement** of residents unless medically necessary. If a resident requires transfer, staff at the intended destination must be informed of the outbreak situation.
- Residents should not be moved whilst they have symptoms. Visits outside the home should only be considered if essential. If an asymptomatic resident is due to be transferred to another home or hospital then that establishment should be told of the situation in order that they can make an informed decision about accepting the transfer.

If the outbreak is not controlled (i.e. the daily number of new cases is steady or rising) then:

- **Consider restricting any new admissions or transfers.**
- **Consider withdrawal from use of certain communal areas.**

Please inform PHE of the outbreak on 0300 303 8537 and they will advise on outbreak management.

Further information can be obtained from:

Infection Prevention and Control at BCCG – 01525 864430 xt 5875

Useful infection control web based documents:

http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317131639453

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214929/Care-home-resource-18-February-2013.pdf

Norovirus - Frequently asked Questions(adapted from HPA 2009)

What are norovirus?

Norovirus is a group of viruses that are the most common cause of gastroenteritis (stomach bugs) in England and Wales. In the past, norovirus has also been commonly known as 'winter vomiting virus'.

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. The infectious dose is very low, swallowing as few as 10 - 100 virus particles may be enough to cause illness.

What are the symptoms?

The most common symptoms are nausea, vomiting and diarrhoea. Symptoms often start with the sudden onset of nausea followed by projectile vomiting and watery diarrhoea. However, not all of those infected will experience all of the symptoms. Some people may also have a raised temperature, headaches and aching limbs. Symptoms usually begin around 12 to 48 hours after becoming infected. The illness is self-limiting and the symptoms will last for 12 to 60 hours. 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. There are many different strains of norovirus, immunity is short-lived and infection with one strain does not protect against infection with another strain. Outbreaks commonly occur in semi-closed environments such as hospitals, nursing homes, schools and on cruise ships, where people are in close contact with one another for long periods.

How can these outbreaks be stopped?

Outbreaks can be difficult to control because norovirus is very easily transmitted from one person to another, its low infectious dose and because the virus can survive in the environment for long periods.



The most effective way to respond to an outbreak is to institute good hygiene measures such as strict adherence to hand-washing especially when handling food, after contact with infected people, and after using the toilet; disinfecting contaminated areas promptly; not allowing infected people to prepare food until 48 hours after symptoms have stopped and isolating ill people for up to 48 hours after their symptoms have finished.

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 after using the toilet. 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 anywhere that large numbers of people congregate for periods of several days. This provides an ideal environment for the spread of the disease. Healthcare settings tend to be particularly affected by outbreaks of norovirus. A recent study 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 vast majority of people who are infected with norovirus will not have any contact with medical services. This makes formal identification of cases difficult. The HPA does obtain information on outbreaks of norovirus from hospitals and from [foodborne outbreaks](#). The number of outbreaks varies each year.

[Recent research](#) suggest that around two million cases of norovirus occur in the community 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, 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.

