What is Norovirus infection?

Norovirus infection causes gastroenteritis (disease of the stomach and intestines). Norovirus infections are highly contagious and are a leading cause of gastroenteritis in Australia and worldwide. Outbreaks occur in residential care facilities, hospitals, schools and child care centres. Outbreaks can occur at any time of the year but are much more common during winter.

What are the symptoms?

Gastroenteritis caused by norovirus usually starts suddenly and causes vomiting and watery diarrhoea. Vomiting can be frequent and is more common among children. People may also have nausea, fever, stomach pains, headache and muscle aches. People, particularly young children and the elderly, can become dehydrated. Symptoms usually begin between 24 and 48 hours after exposure to the virus and can last for one or two days.

How is it spread?

Noroviruses are highly infectious and are spread from the vomit or stool (faeces) of an infected person through:

- direct contact with vomit or stool of an infected person
- person-to-person contact, for example shaking hands with someone who has been sick and has the virus on their hands
- contaminated objects
- contaminated food or drink -oysters and other shellfish can sometimes become contaminated with norovirus from dirty water
- airborne particles when people vomit.

People are usually infectious from the start of their symptoms until at least two days after the symptoms stop, but some people may remain infectious for up to two weeks after they have recovered. Good hygiene standards, including frequent hand washing, are very important during this period.

Who is at risk?

Anyone can become infected with norovirus. The illness is usually mild, but can be more severe in older people or people with underlying medical conditions. Because there are many different strains of norovirus and because immunity lasts only a few months, individuals are likely to be repeatedly infected throughout their lifetimes.

How is it prevented?

Practice good hand hygiene by washing hands thoroughly using soap and running water for at least 10 seconds and drying with a clean towel, particularly after using the toilet, after assisting someone with diarrhoea and/or vomiting and before preparing food. Alternatively use alcohol hand gel if your hands are not visibly soiled and soap and water are not available.

Wash fruits and vegetables thoroughly before eating.

It is particularly important for people who have had gastroenteritis to be careful about practicing good hand hygiene as described above even when symptoms have subsided because some people remain infectious.
even after they have recovered.

**If you or someone you care for is sick:**

- Immediately and thoroughly clean surfaces contaminated by an episode of vomiting or diarrhoea with hot, soapy water and then disinfect the area using a household disinfectant.
- Immediately remove and wash clothing or linen that may be contaminated with stool or vomit (use hot water and detergent).
- Flush or discard any vomit and/or stool in the toilet and make sure that the surrounding area is kept clean.

Anyone with vomiting or diarrhoea should rest at home and not attend work, school or child-care or visit a residential care facility until vomiting and diarrhoea have stopped for 48 hours. During this time they should not prepare food for others, or care for patients, children or the elderly.

**How is it diagnosed?**

Diagnosis is based on the patient's symptoms and testing is not usually required. In outbreaks, it may be important to confirm the diagnosis to help direct control measures.

**How is it treated?**

People with norovirus infection should rest and ensure an adequate fluid intake. There is no specific treatment and most people will recover without complications. However, norovirus can be serious for those who may have difficulty replacing fluids and salts lost through vomiting and diarrhoea.

Oral rehydration solutions (available from chemist) are specially formulated to replace lost fluid rapidly. Clear fluids such as juice, soft drink or cordial may be used with caution if an oral rehydration fluid is not available but they must be diluted if they are high in sugar otherwise they may make diarrhoea worse. Juice and soft drink should be diluted 1 part in 4 parts, e.g., 20 mL of juice or soft drink with 80 mL of water. Cordial should be diluted 1 part in 20 parts, e.g., 5mL of cordial with 100mL of water.

**What is the public health response?**

Outbreaks of norovirus increase in winter and are common within families and group settings including residential care facilities, hospitals, childcare centres, and schools. Under the Public Health Act outbreaks in these settings should be notified to the local public health unit.

Public health units are able to:

- advise on how to identify an outbreak
- advise on how to control the outbreak
- help investigate outbreaks to determine the source and mode of transmission
- advise on the exclusion of people with viral gastroenteritis from work, school or other public gatherings.

**For more information**

- [How to look after children with gastroenteritis](https://www.health.nsw.gov.au)
- [Hospital Gastro Pack](https://www.health.nsw.gov.au)
- [Gastro Info Kit for Aged Care Facilities](https://www.health.nsw.gov.au)
- [Controlling gastroenteritis outbreaks](https://www.health.nsw.gov.au)

For further information please call your local public health unit on **1300 066 055** or visit the New South Wales Health website [www.health.nsw.gov.au](http://www.health.nsw.gov.au)