



## Human pathogen information sheet – hygiene keeps you safe!

### What are noroviruses?

Noroviruses occur around the world and usually cause gastrointestinal problems. The pathogens are excreted in high numbers in the faeces and vomit of patients and are highly contagious. Therefore, there often are bigger breakouts of diarrhoea and vomiting in community facilities, such as nurseries, schools, seniors' residences or hospitals. Most cases of the disease occur between October and March.

### How do noroviruses spread?

#### *Person-to-person*

Noroviruses are usually spread by contact infection from person to person. The pathogens are passed on in minute traces of faecal matter or vomit from patients on the hands. From the hand, the viruses will easily enter the mouth. Tiny virus-containing droplets in the air that occur during vomiting are highly contagious as well.

#### *Via contaminated objects*

The pathogens may adhere to objects such as door handles, hand rails or fittings and can easily reach the mouth via the hands.

#### *Via foodstuffs*

Raw foods, such as salads, fruit (including frozen berries, for example), crab or shellfish may be contaminated with noroviruses and cause contagion, as well as contaminated water and other beverages.

### What symptoms do the patients show?

The disease onset is typically sudden, with severe diarrhoea, nausea and waves of vomiting. Additionally, there is a strong feeling of sickness with stomach and muscle ache, sometimes accompanied by slight fever and headache. The severe vomiting and diarrhoea may quickly cause a lack of fluids in the body, which may become evident by severe weakness or vertigo. The symptoms usually disappear completely after 1 to 2 days.

### What's the incubation period – and how long are you contagious?

After infection, disease onset is usually rapid, occurring in a 6- to 48-hour time frame. The patients are highly contagious after they fall ill. Up to about 48 hours after the end of the symptoms, a comparatively large amount of pathogens is excreted in the stool. Patients may excrete viruses and be contagious even for as long as 2 weeks and in exceptional cases even longer, even after vomiting and diarrhoea have ended.

### Who is most at risk?

Generally, anyone may catch noroviruses. Children under five and people older than 70 years are affected particularly frequently. They also react particularly sensitively to loss of fluids, which may happen from vomiting and diarrhoea.

### What to do in case of illness?

- ▶ Patients should avoid physical strain and limit contact with others where possible.
- ▶ It is important to drink a lot in case of diarrhoea and vomiting.
- ▶ To balance out the loss of salts, it may be sensible to take electrolyte replacement solutions from the pharmacy.
- ▶ Eat easy-to-digest food with a sufficient salt content.
- ▶ Specifically, young children, pregnant women and old or weakened persons should be treated by a doctor, especially if the diarrhoea occurs often and/or continues for more than 2 or 3 days and if fever or vomiting occurs as well.
- ▶ Only the symptoms of the disease can be treated. Antibiotics do not work against noroviruses.
- ▶ If possible, use your own toilet for up to 2 days after symptoms resolve. In the 2 weeks following your recovery, take especial care to wash your hands thoroughly with soap and water and to keep the toilet clean.
- ▶ Always remove residues of vomit or stool very quickly, since they are highly contagious. Observe thorough hand hygiene!
- ▶ Do not prepare food for others while sick. Dishes can be cleaned as usual.



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### What to do in case of illness?

- ▶ In case of illness, change your body and bed linen, washcloths and towels frequently and wash them with a heavy-duty detergent at a temperature of at least 60 °C
- ▶ Do not visit seniors' residences or hospitals for at least two days after the end of the symptoms to avoid spreading the virus there.
- ▶ Pay close attention to careful hand and sanitary hygiene afterwards as well. If the virus occurs in the hospital, the staff will take special hygiene measures.
- ▶ Norovirus is subject to the rules of the German Prevention of Infection Act. Children younger than 6 years who have been diagnosed with infectious vomiting and/or diarrhoea or where this is suspected, must not attend community facilities such as schools or nurseries. Parents must inform the community facility of the child's illness. The facility usually must not be attended again until at least 2 days after the symptoms have disappeared. The precise time is determined by the relevant health office. A written medical certificate is not required.
- ▶ If you work with certain foods in your job, you must not go to work if you are suffering from contagious vomiting and/or diarrhoea until at least 2 days after the end of the symptoms. The same applies to suspected cases.

### How can I protect myself?

#### *Hand hygiene*

Always wash your hands carefully with soap and water, especially after going to the toilet and before preparing any food or eating. Then dry your hands carefully using a clean cloth. This prevents pathogens in the intestine from entering the mouth via contaminated hands.

#### *Other hygiene procedures*

- ▶ If possible, avoid direct contact with patients until 2 days after the symptoms have ended.
- ▶ Do not share hygiene articles and flannels: always use your own.
- ▶ Clean areas around the patient, such as sinks, door handles and floors, at regular intervals, if possible with disposable cloths, and then dispose of these in the household waste. The same applies to visibly contaminated areas such as toilets. Wearing disposable gloves may offer additional protection from infection.
- ▶ Cleaning with water and common cleaning agents is usually sufficient.
- ▶ Use of a special disinfectant may be required if recommended by the health authority or your doctor.

#### *Correct handling of food*

To avoid a possible infection from food contaminated with noroviruses, meals containing seafood in particular should be properly cooked through.

No vaccination against noroviruses has been developed to date.

### Where can I find out more?

Your local health authority can provide you with further advice. Since contagious diarrhoea is subject to the rules of the German Prevention of Infection Act, they will also have the latest information and be very experienced in dealing with the disease.

More (specialist) information is also available online from the Robert Koch Institute ([www.rki.de/noroviren](http://www.rki.de/noroviren)).

For more information on how hygiene can guard against infection, please visit the Federal Centre for Health Education website ([www.infektionsschutz.de](http://www.infektionsschutz.de)).



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