

Norovirus

Site Applicability

All PHC Acute and Long Term Care Sites.

Practice Level

Basic: Physicians, NPs, Nursing, Clinical Nurse Leader, Clinical Site Coordinator, Bed Placement Coordinator

Standards

In addition to Routine Practices, [Contact Plus Precautions](#) must be initiated on all patients/residents suspected or confirmed to have norovirus. [Droplet Precautions](#) may be added if patient/resident is also vomiting.

The patient/resident will remain on Contact Plus Precautions until symptoms have stopped for 48 hours or as directed by Infection Prevention and Control (IPAC).

In scenarios when three patients/residents have symptoms of or confirmed norovirus infection within a four day period, inform unit CNL/Charge Nurse, notify IPAC and refer to the [Gastrointestinal Outbreak Protocol](#).

Description of the Disease

Noroviruses are a group of small, non-enveloped RNA viruses that cause the majority of outbreaks of diarrhea and vomiting in hospitals and residential care facilities. Increased norovirus activity is generally observed in winter months. Noroviruses are found in the stool or vomit of infected people. They are very contagious and can spread easily from person to person, requiring as few as 10-100 virions to become infected. The disease is self-limiting but dehydration is a potential complication.

Noroviruses are relatively stable in the environment and can survive freezing or heating to 60°C. They can survive on practically any surface, including door handles, sinks, and railings. On hard surfaces, they have been found to survive for up to 12 hours. A bleach-containing disinfectant is required for cleaning.

Signs & Symptoms

Symptoms may appear as early as 10 hours and up to two days after exposure to the virus and usually last for 24 to 72 hours. Common symptoms include:

- Vomiting (often sudden onset and projectile)

- Nausea
- Diarrhea (watery, non-bloody with abdominal cramps)
- Myalgia
- Malaise
- Headaches
- Low-grade fever is present in about half of cases

Incubation Period

Norovirus has an incubation period of 12 to 48 hours.

Period of Communicability

Patients/residents remain infectious for approximately 48 hours after symptoms have stopped.

Route of Transmission

Transmission is primarily via the fecal-oral route, either by direct person-to-person spread or fecally contaminated food or water. Noroviruses can also spread via the droplet route from vomitus. Transmission can also occur through oral mucosa via contact with materials, fomites, and environmental surfaces that have been contaminated with feces or vomitus.

Populations at Risk

Anyone who is exposed to norovirus is at risk of infection. Individuals at the extremes of age may be more at risk of developing dehydration.

Assessments and Interventions

Infection Control Precautions

- **Additional Precautions:** In addition to Routine Practices, [Contact Plus Precautions](#) will be initiated for patients/residents with known or suspected norovirus. [Droplet Precautions](#) may be added if patient/resident is also vomiting.

Precautions should be maintained until all symptoms have stopped for 48hrs. For immunocompromised patients (i.e. oncology, transplant), isolation precautions need to be maintained for a longer duration due to prolonged viral shedding. Contact IPAC for discontinuation of precautions.

The most responsible nurse will ensure Contact Plus Precautions are ordered in Cerner and post the appropriate sign on the door (i.e., Contact Plus).

- **Hand Hygiene:** Hands should be cleaned before and after every patient/resident contact, as well as after touching potentially contaminated items in the environment. Soap and water is

the preferred method of hand hygiene. Encourage and assist the patient to perform hand hygiene.

- **Patient Placement:** Patients with norovirus should be placed in a private room with a dedicated toilet. The door may remain open. If a private room is not available, affected individuals may be cohorted with other patients who also have norovirus in multi-bed rooms. A dedicated commode is required if sharing a room with a patient who does not have norovirus.
- **Equipment:** Dedicate equipment whenever possible. Clean and disinfect shared patient equipment routinely and between different patients/residents.
- **Environment:** All high-touch surfaces in the patient's room must be cleaned and disinfected at least daily using a bleach-containing disinfectant. IPAC will coordinate with EVS for bleach cleaning. Following discharge of the patient, the room should have a terminal clean carried out prior to the next patient being admitted.
- **Visitors:** Education should be provided regarding hand hygiene, and visitors must perform hand hygiene before entry and on leaving the room. Assist visitors to wear PPE, but gown and gloves are not required unless the visitor is providing [direct care](#).
- **Patient Transport:** Transport outside of the room should be limited. When the patient is required to leave the room for diagnostic purposes:
 - Notify receiving department prior to transport of the precautions in place.
 - Encourage and/or assist patient to clean their hands.
 - Assist the patient to use the bathroom prior to transport and use incontinence products as needed during transport.
- **Outbreaks:** Three (3) patient/residents or staff with diarrhea and/or vomiting in a four (4) day period may constitute a gastrointestinal (GI) illness outbreak.
 - Inform your CNL/Charge Nurse immediately if you suspect an outbreak and notify IPAC as soon as possible. Refer to the [Gastrointestinal Outbreak Protocol](#).
 - Start a line list of affected individuals and collect stool specimens (coordinate ordering of tests for norovirus with IPAC).
 - Provide care to affected individuals in private rooms or cohorted in multi-bed rooms on Contact Plus precautions.
 - Symptomatic staff should consult Occupational Health and Safety.
 - If norovirus is confirmed, the Medical Health Officer may declare an outbreak, and IPAC will provide assistance to manage outbreak.

Lab Testing

- Stool and emesis/vomit specimens should be collected in an empty sterile container that does not contain any preservatives (e.g. urine specimen container). Contact IPAC for approval of norovirus testing prior to sending to lab.

Treatment

- There is currently no vaccine or specific antiviral treatment for norovirus. Ensure your patient/resident is adequately hydrated.

Transfer/Discharge Planning

- Notify the receiving facility, hospital, nursing home or community agency involved in the patient's care of their status.

Documentation

- Ensure Contact Plus precautions appears in Cerner on Banner Bar.
- Acute Care: Symptoms should be document in I-View and chart stools using the Bristol Stool Scale (see [Appendix A](#)).
- Long Term Care: When symptomatic residents are identified, complete and send line lists to IPAC (found in [Gastrointestinal Outbreak Protocol](#))

Patient and Family Education

- Explain to the patient/resident and visitor the importance of cleaning hands frequently, especially after using the washroom.
- Provide the patient/resident and visitor the [Keep Your Hands Clean](#) pamphlet.
- Instruct the patient/resident and visitor on proper hand-washing techniques (i.e., with soap and water).
- HealthLinkBC Files:
 - [Norovirus](#)

Related Documents

- [B-00-07-13074](#) - Contact Plus Precautions - Infection Control
- [B-00-07-13030](#) - Droplet Precautions - Infection Control
- [B-00-13-13002](#) - Gastrointestinal Outbreak Protocol
- Occupational Health and Safety guide for staff with [Gastrointestinal Illness \(Norovirus\)](#)

References

Barclay, L., Park, G. W., Vega, E., Hall, A., Parashar, U., Vinjé, J., & Lopman, B. (2014). Infection control for norovirus. *Clinical microbiology and infection: the official publication of the European Society of Clinical Microbiology and Infectious Diseases*, 20(8), 731–740. <https://doi.org/10.1111/1469-0691.12674>

Centers for Disease Control. (2022). 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. Retrieved from <https://www.cdc.gov/infectioncontrol/pdf/guidelines/isolation-guidelines-H.pdf>

Division of Viral Diseases, National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention. (2011). Updated norovirus outbreak management and disease prevention guidelines. *MMWR. Recommendations and reports : Morbidity and mortality weekly report. Recommendations and reports*, 60(RR-3), 1–18.








Public Health Agency of Canada. (2021). Norovirus. Available from <https://www.canada.ca/en/public-health/services/food-poisoning/norovirus.html>

Definitions

“Direct care” includes providing hands-on care, such as bathing, washing, turning the patient, changing clothing, continence care, dressing changes, care of open wounds/lesions or toileting. Feeding and pushing a wheelchair are not classified as direct care.

Appendix A: Bristol Stool Chart

Bristol Stool Chart

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces. Entirely Liquid

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