for the Control of Norovirus Outbreaks in Healthcare Settings

**Patient Cohorting and Isolation Precautions**

Place patients with norovirus gastroenteritis on Contact Precautions for a minimum of 48 hours after the resolution of symptoms.

When symptomatic patients cannot be accommodated in single occupancy rooms, efforts should be made to separate them from asymptomatic patients. These efforts may include placing patients in multi-occupancy rooms, or designating patient care areas or contiguous sections within a facility for patient cohorts.

- Staff who have recovered from recent suspected norovirus infection associated with an outbreak may be best suited to care for symptomatic patients until the outbreak resolves.

Consider the following precautions:

- Minimize patient movements within a ward or unit during norovirus outbreaks.
- Restrict symptomatic and recovering patients from leaving the patient-care area unless it is for essential care or treatment.
- Suspend group activities (e.g., dining events) for the duration of a norovirus outbreak.

**Hand Hygiene**

- Actively promote adherence to hand hygiene among healthcare personnel, patients, and visitors in patient care areas affected by outbreaks of norovirus gastroenteritis.
- During outbreaks, use soap and water for hand hygiene after providing care or having contact with patients suspected or confirmed with norovirus gastroenteritis.

*For all other hand hygiene indications refer to the 2002 HICPAC Guideline for Hand Hygiene in Health-Care Settings (http://www.cdc.gov/mmwr/PDF/rr/rr5116.pdf).*

**Personal Protective Equipment (PPE)**

- If norovirus infection is suspected, adherence to PPE use according to Contact and Standard Precautions is recommended for individuals entering the patient care area (i.e., gowns and gloves upon entry).
Patient Transfer and Ward Closure

- Consider the closure of wards to new admissions or transfers as a measure to attenuate the magnitude of a norovirus outbreak.

- Consider limiting transfers to those for which the receiving facility is able to maintain Contact Precautions; otherwise, it may be prudent to postpone transfers until patients no longer require Contact Precautions. During outbreaks, medically suitable individuals recovering from norovirus gastroenteritis can be discharged to their place of residence.

Diagnostics

- In the absence of clinical laboratory diagnostics or in the case of delay in obtaining laboratory results, use Kaplan’s clinical and epidemiologic criteria to identify a norovirus gastroenteritis outbreak.

  Kaplan’s Criteria:
  1. Vomiting in more than half of symptomatic cases, and
  2. Mean (or median) incubation period of 24 to 48 hours, and
  3. Mean (or median) duration of illness of 12 to 60 hours, and
  4. No bacterial pathogen isolated from stool culture

- Consider submitting stool specimens as early as possible during a suspected norovirus gastroenteritis outbreak and ideally from individuals during the acute phase of illness (within 2-3 days of onset).

- Specimens obtained from vomitus may be submitted for laboratory identification of norovirus when fecal specimens are unavailable (consult with your lab). Testing of vomitus as compared to fecal specimens may be less sensitive due to lower detectable viral concentrations.

- Routine collecting and processing of environmental swabs during a norovirus outbreak is not required.

Environmental Cleaning

- Perform routine cleaning and disinfection of frequently touched environmental surfaces and equipment in isolation and cohorted areas, as well as high traffic clinical areas. Frequently touched surfaces include, but are not limited to, commodes, toilets, faucets, hand/bedrail, telephones, door handles, computer equipment, and kitchen preparation surfaces.

- Increase the frequency of cleaning and disinfection of patient care areas and frequently touched surfaces during outbreaks of norovirus gastroenteritis (e.g., increase ward/unit level cleaning twice daily to maintain cleanliness, with frequently touched surfaces cleaned and disinfected three times daily using EPA-approved products for healthcare settings).
Clean and disinfect surfaces starting from the areas with a lower likelihood of norovirus contamination (e.g., tray tables, counter tops) to areas with highly contaminated surfaces (e.g., toilets, bathroom fixtures). Change mop heads when new solutions are prepared, or after cleaning large spills of emesis or fecal material.

No additional provisions for using disposable patient service items such as utensils or dishware are suggested for patients with symptoms of norovirus infection. Silverware and dishware may undergo normal processing and cleaning using standard procedures.

Use Standard Precautions for handling soiled patient-service items or linens, which includes the appropriate use of PPE.

Consider changing privacy curtains routinely and upon patient discharge or transfer.

Staff Leave and Policy

Exclude ill personnel from work for a minimum of 48 hours after the resolution of symptoms. Once personnel return to work, the importance of performing frequent hand hygiene should be reinforced.

Establish protocols for staff cohorting in the event of an outbreak of norovirus. Ensure staff care for one patient cohort on their ward and do not move between patient cohorts (e.g., patient cohorts may include symptomatic, asymptomatic exposed, or asymptomatic unexposed patient groups).

Exclude non-essential staff, students, and volunteers from working in areas experiencing outbreaks of norovirus.

Communication and Notification

Notify appropriate local and state health departments if an outbreak of norovirus gastroenteritis is suspected.