

Control Measures for Suspected Norovirus Outbreaks N.C. Public Health Recommendations for Long Term Care Facilities

Specific control measures**:

1. Strict hand hygiene: Staff, residents and visitors should wash with soap and warm water for at least 15 seconds. Discontinue the use of alcohol-based hand sanitizers because they are not effective against norovirus.
2. Exclude ill staff from work until 48 hours after last symptom resolves. It is common for LTCF staff members to work in multiple facilities. Therefore, it is important to remind ill staff that they should not report to work in any other facility during this period.
3. Disinfect: Recommend a bleach-based disinfectant for non-porous surfaces. The minimum concentration effective against norovirus is 1000 parts per million (ppm). The maximum concentration effective against norovirus is 5000 parts per million (ppm) and should be considered when surfaces are more porous and or difficult to clean. See table below for the quantities of water and bleach needed based on the amount of sodium hypochlorite in the product and the desired concentration you want to achieve. For best efficacy, the bleach solution should be made daily,

Recommended Bleach Preparation Quantities		
5.25% Sodium hypochlorite		
		Bleach per gallon of water
Bleach (Free Chlorine) Concentration	1000 ppm	1/3 cup
	5000ppm	1 2/3 cup

Recommended Bleach Preparation Quantities		
8.25% Sodium hypochlorite		
		Bleach per gallon of water
Bleach (Free Chlorine) Concentration	1000 ppm	3 TBSP
	5000ppm	1 cup

4. Clean and disinfect soiled carpeting: Visible debris should be cleaned using an absorbent material (double layer) and discarded in a plastic bag to minimize aerosols. Clean with hot water and detergent and then steam clean (158° F for 5 min or 212° F for 1 min) for complete inactivation. A professional carpet cleaning company is recommended to reduce the risk of aerosolizing virus. Dry vacuuming is not recommended. CDC recommends avoiding the use of upholstered furniture and rugs or carpets in patient care areas, as these objects are difficult to clean and disinfect completely. If this option is not possible, immediately clean soilage, such as emesis or fecal material, from upholstery, using a manufacturer-approved cleaning agent or detergent. Opt for seating in patient-care areas that can withstand routine cleaning and disinfection.
5. Ill patients should remain in their room as much as possible during their illness.
6. Observe contact isolation.
7. Restrict admissions and transfers until outbreak is over (i.e., no new cases for at least 96 hours).
8. Visitor considerations:
 - a. NC Division of Public Health nor the CDC routinely recommend discouraging visitors

- b. Facilities should encourage visitors to enter the facility through one central location
 - c. Facilities should ensure that signage and information is readily available explaining the illness impacting the facility
 - d. Facilities should instruct ill visitors to refrain from visiting until their symptoms resolve.
9. Consider canceling group activities that include sharing items between residents (i.e. playing cards, self-serve pot lucks, etc.) until 96 hours after last case.
10. Your local Environmental health specialist may review food service and disinfection practices. They will pay particular attention to staff hand washing and ice machines.
11. Maintain a line list you can share with your local health department. A sample line list worksheet is available <http://www.cdc.gov/hai/pdfs/norovirus/229110-A-NoroLineList508.pdf>

** These control measures should be implemented until the outbreak is over. An outbreak is considered over once two incubation periods have passed without new illness. This is 96 hours for norovirus.

Laboratory Testing

Your local health department can arrange for norovirus testing through the North Carolina State Laboratory for Public Health (NC SLPH). This testing is for outbreaks only, and not for diagnosis of individual patients. Specimens from at least five patients must be submitted for testing to begin.

Please note: Testing for norovirus may not be useful for outbreaks that are clinically and epidemiologically consistent with norovirus and occur in areas where norovirus is known to be circulating. Control measures should never be delayed while awaiting laboratory confirmation.

Additional Information

North Carolina Statewide Program for Infection Control and Epidemiology (NC SPICE) at: <http://spice.unc.edu/infection-control-guidelines-and-recommendations/published-2011/>.