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|  DOH 420-169 | **Norovirus Outbreak Control Checklist for Facilities: Schools and Child Care Centers** |

The following checklist is intended to help guide school and child care facilities responding to potential norovirus outbreaks. These steps are recommendations, not requirements, and should be executed in consultation with the local health jurisdiction (LHJ).

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| **Norovirus Outbreak Interventions:** | **N/A** | **Date Completed** |
| 1. **Determine if norovirus is the cause of gastroenteritis outbreak.** *See* [*Norovirus Background*](http://www.doh.wa.gov/Portals/1/Documents/5100/420-180-NorovirusBackgroundInfo.pdf) *for a description of norovirus.*
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| 1. Provide information requested by the LHJ (e.g., case count and symptoms, microbiology test results, etc.) to enable the LHJ to determine if norovirus is the cause of the gastroenteritis outbreak.
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| 1. **Communication.** *See* [*sample communication framework*](http://www.doh.wa.gov/Portals/1/Documents/5100/420-177-NoroCommunicationsFramework.xlsx)*.*
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| 1. Report suspected or confirmed outbreak to the LHJ immediately.
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| 1. Ensure that parents and staff are aware of the outbreak and of outbreak control activities:
* Provide periodic briefings outlining the status of the outbreak and outbreak control activities being implemented.4
* Provide information about the transmission of viral gastroenteritis and infection control procedures.4
* Provide clear guidelines on how to report new ill children, new ill staff, public vomiting/fecal accidents, handwashing sinks that need to be stocked, etc.4
* Work with the LHJ to ensure parents and guardians are aware of the outbreak and norovirus control measures, such as by disseminating a child care notification alert and [*Norovirus Guidance for Parents*](http://www.doh.wa.gov/Portals/1/Documents/5100/420-181-NoroParentsGuidance.docx).
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| 1. **Monitor the outbreak.**
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| 1. Consult with the LHJ to determine the most appropriate method of case reporting. If determined necessary by the LHJ, prepare a line list of infected individuals (including staff) with such information as their location, date/time of onset, events attended, etc. at time intervals requested by the LHJ. *See* [*case report worksheet*](http://www.doh.wa.gov/Portals/1/Documents/5100/420-178-NoroCaseReportWorksheet.xlsx) *for sample form the facility could submit.*
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| 1. **Identify and eliminate common sources of transmission.**
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| 1. Follow LHJ direction as to which foods that may have been contaminated need to be removed from service for holding, testing, or discarding, which may include items such as:
* leftover food from meals implicated in a point-source outbreak (an outbreak where several people who shared the same meal become ill in a short period of time);4
* open packages and open boxes of food that might be served without thorough cooking;
* prepared food and ingredients that may be served without thorough cooking;
* condiments that have been out for food worker or customer use including breading, salt, pepper, hot sauce, ketchup, etc.;
* condiment bottles that are refilled, if they cannot be thoroughly cleaned and sanitized;
* open cases of single service articles including to-go boxes, wax paper, napkins, etc.;
* ice and other beverage ingredients.
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| 1. Follow LHJ direction as to whether the facility should discontinue or modify food service and consider having the children bring food from home for the duration of the outbreak.
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| 1. **Prevent personnel from becoming infected.**
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| 1. Review proper handwashing technique with employees.

Use soap and water for at least 20 seconds for hand hygiene after providing care or having contact with individuals suspected or confirmed with norovirus.2,8 | □ | \_\_/\_\_/\_\_ |
| 1. Ensure that handwashing stations have soap, paper towels and hands-free trash bins.
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| 1. Direct personnel coming into direct contact with ill persons to wear disposable gloves.4
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| 1. Provide alcohol-based hand sanitizers with at least 60%-95% ethanol12 (not as effective as handwashing).

Educate staff to use sanitizers as an adjunct between handwashing and only when hands are not visibly soiled.4 | □ | \_\_/\_\_/\_\_ |
| 1. Direct personnel to practice proper handwashing technique and to wear gloves and – if available – masks when cleaning areas grossly contaminated by feces or vomit.
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| 1. **Prevent employee transmission of illness.**
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| 1. Staff members with symptoms of gastroenteritis should wait at least 48 hours after resolution of symptoms before returning to work.4,8
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| 1. Exclude non-essential staff, volunteers, etc. from working in areas experiencing norovirus outbreaks.8
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| 1. **Minimize transmission between children.**
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| 1. By Washington State regulation ([WAC 170-295-3030](http://app.leg.wa.gov/wac/default.aspx?cite=170-295-3030)), children may not return to school or day care facilities until 24 hours after resolution of diarrhea. During a norovirus outbreak, it may be appropriate to exclude children with norovirus from child care facilities for more than 24 hours (e.g., 48 or 72 hours) after resolution of diarrhea, as determined by the LHJ. *See*  [*Norovirus Guidance for Parents*](http://www.doh.wa.gov/Portals/1/Documents/5100/420-181-NoroParentsGuidance.docx)*.*
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| 1. Restrict new admissions to a facility with an outbreak until the outbreak has ended.4
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| 1. Consider canceling group activities in a facility with an outbreak, especially activities with possible fomite transmission or where food is shared.4,8
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| 1. Temporarily suspend self-serve snacks in a common bowl for the duration of the outbreak.4
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| 1. Conduct health assessments for persons with gastroenteritis at their place of residence or in a separate area of the clinic (e.g., separate area of school clinic) to prevent others from getting ill.4
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| 1. If the setting is an overnight camp or boarding school and a person ill with norovirus does not return home:
* Isolate ill patients/residents from well patients/residents until at least 48 hours after resolution of symptoms.4,15 Either use single occupancy rooms or cohort ill patients together separate from asymptomatic patients/residents.2,8,11
* Feed ill individuals in their rooms with disposable cutlery and dinnerware. If convalescing patients resist dining in their rooms, consider cohorting convalescing patients at tables together.4
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| 1. **Environmental disinfection**
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| 1. Take the following actions to handle laundry safely:
* Individuals who handle soiled linens and clothes should wear disposable gloves and gowns and handle soiled linens and clothes as little as possible, minimizing agitation to prevent microbial contamination of the air.14
* Transport laundry in an enclosed and sanitary manner.
* Promptly machine-wash soiled linens and clothes with a detergent in water at the maximum length cycle, and machine dry.14
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| 1. Take the following actions to clean and disinfect:
* For hard, nonporous environmental surfaces: See the poster “[Help Prevent the Spread of Norovirus (“Stomach Bug”)](http://www.disinfect-for-health.org/resources)”.

Clean by removing any visible organic contamination, followed by disinfection with a chlorine bleach solution or antimicrobial disinfectant approved by the Environmental Protection Agency (EPA) as being effective against norovirus for environmental cleaning (see <https://www.epa.gov/pesticide-registration/list-g-epas-registered-antimicrobial-products-effective-against-norovirus>). This EPA list should be interpreted with caution because the efficacy of these products is tested on the surrogate feline calicivirus, not human norovirus. Therefore, chlorine bleach solutions should be used whenever possible.2 Use a concentration of 1000-5000ppm (5-25 tablespoons or approximately 1/3 to 1 ½ cups of household bleach [5.25%] per gallon of water) for at least 5 minutes, or according to product directions for norovirus outbreak control if not using household bleach.2 Following disinfection, rinse all surfaces intended for food or mouth contact or in child care/school settings with plain water before use.* + Bleach solutions should be freshly prepared for use within 24 hours, or the target concentration should be doubled for storage and used within 30 days.2
	+ Particular attention should be paid to high-touch surfaces and areas of likely greatest environmental contamination, including but not limited to: bathrooms including toilets, showers, walls, floors, benches, faucets, etc.; doors; door knobs; hand rails; light switches; elevator buttons; telephones; computer equipment; tableware; flatware; reusable food storage containers; tables; chairs and chair backs; counters; shelves; equipment faces; kitchen preparation surfaces; equipment (e.g., microwaves, refrigerators) and ice machine interiors.2,4,8
	+ Kitchens should be closed, thoroughly cleaned in accordance with the aforementioned norovirus cleaning and disinfection methods, and then re-opened with a cleaning schedule as part of the kitchen operation plan developed with the regulatory authority after the LHJ verifies that the cleaning is adequate, the proper foods have been removed, and food workers are well. When the building is norovirus-free, routine cleaning can resume.
* For carpets and other porous surfaces: use steam cleaning or an EPA approved cleaner. Disinfection with bleach may discolor carpets or fabric.
* Persons cleaning areas heavily contaminated with vomit or feces should wear appropriate protective barriers (e.g., latex gloves – and if splashing is possible, a mask or face shield and garments such as a uniform, jumpsuit or gown to protect street clothing) and perform disposal in a prompt manner that prevents transfer of this material to other surfaces or persons.14
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