

ENTERIC OUTBREAK CONTROL

Guidelines for Child Care Centres



York Region Health Services
Infectious Diseases Control Division



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WHAT IS AN ENTERIC OUTBREAK?

An enteric outbreak may be occurring when there are three or more related (e.g. same room, age group) children or staff with similar signs and symptoms of an infection or illness, OR two or more laboratory-confirmed cases, OR when the number of ill staff/children exceeds what is normal in the school or day nursery within a short period of time.

Typical symptoms of enteric illness are:

- Diarrhea
- Bloody diarrhea
- Vomiting
- Nausea
- Fever
- Stomach cramps
- General irritability
- Malaise
- Headache

Early detection of signs and symptoms through observation of children's health, as well as good record keeping are crucial to the recognition and control of an outbreak.

WHO DO YOU CALL?

If you suspect an outbreak, please notify York Region Health Services, Infectious Diseases Control Division immediately.

Monday to Friday, between 8:30 a.m. and 4:30 p.m. (905) 830-4444 x 3500

After hours including weekends and holidays (905) 953-6478

HOW DO YOU CONTROL THE OUTBREAK?

STEP 1

Notify York Region Health Services and form an outbreak management team

The team should consist of:

- Child Care Supervisor/Director
- Outbreak Investigator from the Infectious Diseases Control Division (IDCD)
- Child Care Staff, as appropriate
- Food Services staff/Catering Company

The team should meet daily or as often as necessary.

a. Keep records during the outbreak

- i. Complete the “Enteric Outbreak Line Listing” form (Appendix A). List all ill persons chronologically in order of illness onset. Complete all information required on the line listing. You may have to contact the parents/guardians to obtain accurate information.
- ii. Update the line listing daily and report new information to the Outbreak Investigator.
- iii. Consider a case to be resolved if the individual is free from symptoms for 24 hours.

Do not remove names of resolved cases from the line list; simply add each new case to the existing line list.

b. Formulate a case definition

A case definition helps the outbreak investigator identify who is included as a case in the outbreak. A case definition will consist of information about the onset the date of illness, symptoms and the location of the outbreak. At the outset of the outbreak the case definition may be general, however, as the outbreak progresses and the pattern of illness is observed, the definition may be narrowed. The outbreak investigator will assist you with the case definition using information from the line listing.

c. Identify the source or causative agent

In order to isolate the causative agent in an outbreak and to identify the source of the agent, it is important to obtain stool, water and/or food specimens. The outbreak investigator will assist you in obtaining the appropriate samples. Occasionally other specimens may be required and the outbreak investigator will provide information on how these specimens should be obtained.

Stool Sample Collection

- Encourage all persons who meet the case definition to submit a stool sample for analysis.
- Obtain stool kits and instructions from your investigator. Contact the investigator if more kits are required.
- If symptomatic cases are at home, please contact parents/staff to arrange for stool kit drop-off and pick-up by the investigator.
- Complete all information on each vial within the kit and the information required on the outside packaging of the kit.
- Store the specimens in the refrigerator until they are ready for pick-up. It is very important to make sure that filled kits are not stored in a fridge that is used for food.

Food Sample Collection

- If you suspect there is an outbreak situation, keep leftover food samples for the inspector who will collect them. The Public Health Laboratory needs approximately 100 to 200 grams of each food for analysis.
- Store all leftover food in the refrigerator. The food must be dated and labelled.
- If food is being catered, keep all leftovers. **Note:** All menus must be made available in the event of an outbreak.

Water Sample Collection

In the event of an enteric outbreak, schools and child care centres on private well water supplies should submit a water sample for testing through the York Region Health Services Water Line or through the Health Protection Inspector who routinely inspects your daycare.

<p style="text-align: center;">York Region Health Services Water Line 1 (877) 464-9675 Markham, Richmond Hill, Vaughan, Whitchurch-Stouffville: Ext. 4402 Aurora, East Gwillimbury, Georgina, King, Newmarket: Ext. 4599</p>

- Review water testing results required under the *Safe Water Drinking Act* and its regulations for trends in deteriorating water quality. You can get assistance interpreting water quality reports from York Region Health Services Water Line.
- Check the well and/or reservoir tank for potential structural or maintenance problems. You can get advice from York Region Health Services or your local well contractor.
- Ensure that the well water disinfection systems, e.g. ultraviolet systems, filters and chlorinators are functioning properly. For chlorinated supplies, a chlorine residual should be taken to ensure that the chlorinator is working properly.

- Ensure that the well is properly disinfected in accordance with the “Well Disinfection” guideline (see Appendix D), if applicable.
- Be aware that in the event of a waterborne disease outbreak, York Region Health Services will issue a Boil Water Advisory or Order. Please follow and refer to the “Guide to using water safely during a ‘boil water advisory’” for Child Care Facilities (Appendix B) and for Food Service Establishments (Appendix C).

STEP 2

Implement outbreak control measures

a. Cohorting

- Move all children who are symptomatic (with similar symptoms) to a separate area away from those who are well until they can be picked up by a parent.
- Restrict staff members’ activities/duties to one area/room if possible.

b. Exclusion

- If a child is symptomatic, contact the parent/guardian to take the child home and advise them to consult a physician.
- Exclude symptomatic individuals (including staff) until symptom-free for 24 hours under most circumstances. In the event that the outbreak does not appear to be coming under control, the exclusion period may be extended. The investigator working with you on the outbreak will provide direction as more information becomes available.

Note: Some organisms can continue to be shed by cases even as they are getting better. If there is a laboratory confirmation of a specific organism that is implicated as the cause of the outbreak, this may affect the exclusion period. Cases must be excluded until they are no longer able to pass the infection on to others.

The outbreak investigator will determine the length of the exclusion period.

c. Hygiene

- Reinforce good personal hygiene practices with children, their parents/guardians and staff members.
- Practice good handwashing, especially before eating and after using the toilet.
- Suggest to parents/guardians that during the outbreak period, they may want to use paper towels to dry hands after handwashing, or at least use separate hand towels for everyone at home.
- Recommend that parents/guardians use a commercially available high-level disinfectant (or a homemade solution of one part household bleach to nine parts water mixed fresh daily in a spray bottle) for daily or as-needed cleaning of their toilet and bathroom to prevent further spread of the infection. Other items in the home that may be easily contaminated include light switches, door handles, drawer pulls, toothbrushes and taps.

d. Specimen Collection

- Provide the parents/guardian with information regarding the outbreak and an outbreak stool kit to collect the stool specimen from the symptomatic child. Directions on how to use the stool kit are available from the IDCD Outbreak Investigator.
- Obtain permission from parents/guardians **before** collecting stool specimens from the child.
- Make staff aware that under certain circumstances, they may be required to submit specimens to help identify or rule out a source of infection. Symptom-free carriers of an enteric pathogenic organism may be excluded from work if the organism they carry is the same as the outbreak strain. They will remain off work until cleared by the Investigator.

e. Notification

- Advise all staff that there is an outbreak.
- Make staff aware of the signs and symptoms of the outbreak and the need to report any cases or suspect cases to the supervisor.
- Educate staff about the procedures for preventing the spread of infection including those mentioned above.

STEP 3

Reinforce infection control measures to contain the outbreak and stop the spread of infection

a. Handwashing

- Promote proper handwashing. It is the single most effective method for reducing the spread of enteric outbreaks. (See Proper Handwashing Procedures in the previous section - Appendix 2)

b. Diapering

- Use disposable gloves for changing diapers and discard the gloves after each change.
- Use a disposable covering for the change table and discard after each change.
- Clean and disinfect the change table with a high level disinfectant after each use.
- Place any soiled laundry into a plastic bag, which in turn is placed in a covered container.

c. Environmental Cleaning

- Clean and disinfect toilets (seats, bowls and flush handles) and hand sinks with a high level disinfectant or 1:10 bleach and water solution immediately after each episode of diarrhea.
- Clean and disinfect all toys and play materials daily during the outbreak using a 1:10 bleach and water solution or high level disinfectant.
- Clean and disinfect mouthed toys after each use
- Clean and disinfect all beds, tables, chairs, door handles and other regularly touched surfaces and objects daily using a high level disinfectant.

d. Activities

- Do not allow use of water play tables, play dough and modelling clay during an outbreak.
- Permit individual sensory play to continue however throw out items after play is finished.

e. Food Safety

- Ensure all food items are obtained from an inspected source.
- Protect all foods from contamination and adulteration.
- Change the menu so the same foods served in the days previous to the outbreak will not be served again during the outbreak.
- Ensure that hot foods are held at 60°C or higher.
- Ensure that refrigerated foods are held at 4°C or lower.
- Clean and disinfect all equipment, utensils and work surfaces in the kitchen. In an outbreak, disinfection levels and frequency may be increased.
- Check dishwashing procedures and equipment to ensure proper cleaning.

Note: Foodhandlers who do not have symptoms may work provided that good personal hygiene including meticulous handwashing is maintained.