

Stool Specimen Collection for GI Illness Outbreaks

Stool specimen results do not typically impact outbreak management strategies for GI illness outbreaks; however, from a public health perspective it is valuable to collect stool specimens from cases during outbreaks to try and identify the etiology, if possible. Please note that norovirus cannot presently be isolated from vomitus; therefore, the collection of vomitus specimens is not recommended for GI illness outbreak management.

A unique EI# is assigned to each specific outbreak. Public Health will obtain an EI# from ProvLab when a GI illness outbreak is reported. Stool specimens submitted without an EI# on the requisition will not be analyzed for norovirus; therefore, it is important that an EI# be obtained **prior to** collection of outbreak stool specimens. The typical turnaround time for norovirus PCR results from the Provincial Laboratory (i.e., time between receipt of the specimen at the lab and report of results) is 48 hours. Results are also available on Netcare within 48 hours. Public Health will report the result to the ICP/ICD within one business day of receipt of results from the lab.

Procedures to collect stool specimens

Check ProvLab Bulletins for most current information on specimen collection, testing and interpretation of lab results: <http://www.provlab.ab.ca> or <http://www.albertahealthservices.ca/3290.asp%20>

ProvLab Bulletin (May 11, 2011) - New Laboratory Policy - Acceptance of Laboratory Samples and Test Requests.

ProvLab Bulletin (August 22, 2011) – Reminder Laboratory Policy, Acceptance of Laboratory Samples and Test Requests.

- Consult with Public Health prior to collecting any specimens from outbreak cases.
- As directed by Public Health, collect stool specimens from clients/residents that are acutely ill with diarrhea, preferably within 24-48 hours of onset of symptoms.
- Public Health will typically ask that staff at the outbreak site collect one stool specimen from up to 5 symptomatic clients/residents per outbreak investigation (EI#), preferably during the acute phase of illness. This number of specimens is usually sufficient to determine the etiology of the outbreak.
- Collect stool in a specimen collection “hat” or other clean and dry receptacle (i.e., bed pan, margarine container).
- Do not mix stool with urine or water.
- Place the stool in a clean, dry specimen container by using a scoop from stool collection kit, or a disposable tongue depressor or plastic spoon, keeping the outside of the container clean. Fill the container with stool up to one third or at least one-tablespoon full, and discard the remaining stool. (Sterile container may include container from stool collection kit or sterile urine container).
- Screw the lid tightly to avoid leakage.
- Put the container with the stool into the plastic (biohazard) bag, and seal the bag.
- Complete the ProvLab Requisition form to include the EI# and the client/resident’s full first and last names; Personal Health Number (PHN) or unique numerical assigned equivalent; client/resident demographics to include date of birth (DOB), gender, address, phone number; physician’s full name and complete address/location; test orders clearly specified including body site and sample type; date and time of collection.
- Label the sample container with the EI#, client/resident’s full first and last names, PHN or unique numerical equivalent, and date of sample collection.

Stool Specimen Collection for GI Illness Outbreaks | 2

- Keep stool specimens in the fridge (not the freezer) until ready for transport.
- If one or more of these samples are positive and an etiological agent has been identified, then further specimens should not be collected. If additional specimens are received under the same EI# at some later period, these will not be tested unless Public Health has contacted the ProvLab point person for the EI# (e.g., MOC/VOC/Designate).
- If all batched samples received have been tested and if all are negative for a particular EI#, additional samples will not be tested unless there is consultation between Public Health and the ProvLab.
- Public Health will contact the ProvLab if the clinical situation for the outbreak has changed and additional testing needs to be done.

Specimen transport

- Sites must collect specimens as directed and arrange for delivery of specimens to the laboratory.
- Follow current Provincial Laboratory standards for transporting specimens.
- AHS is reviewing current transportation processes within zones to identify gaps and make appropriate recommendations.