



OUTBREAK REPORT FOR SUSPECTED VIRAL GASTROENTERITIS

(Outbreaks of viral gastroenteritis are usually caused by norovirus or sapovirus which collectively are referred to as human caliciviruses)

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Primary contact for epidemiologic investigation

Today's Date _____

Name _____

Telephone _____

Agency _____

Facsimile _____

Address _____

Email _____

State Outbreak Identification Number _____

NORS code _____

Outbreak Information

Location outbreak

City _____

County _____

Setting (nursing home, hospital, restaurant, hotel, other) _____

Date of first case _____ / _____ / _____
 mm dd yyyy

Date health department notified _____ / _____ / _____
 mm dd yyyy

Date of last case _____ / _____ / _____
 mm dd yyyy

Outbreak ongoing? Yes No

Illness Characteristics

Number of persons ill _____ Number of persons susceptible _____ Duration of illness (mean/median and range) _____
 Incubation of illness (mean/median and range) _____

Predominant symptoms (frequencies if available) _____

Number of persons who sought medical care _____

Number of persons admitted to a hospital _____ (e.g., emergency room, doctor's office, medical clinic)

Number of deaths possibly as a result of norovirus illness _____

Suspected source(s) of exposure _____
 e.g., water, specific food(s), ice, person, object]



RECOMMENDATIONS FOR COLLECTION of CLINICAL SPECIMENS FOR NOROVIRUSES LABORATORY DIAGNOSIS

Stool Samples

Timing. Specimen collection for viral testing should begin on day 1 of the epidemiologic investigation. Any delays to await testing results for bacterial or parasitic agents could preclude establishing a viral diagnosis. **Ideally, specimens should be obtained during the acute phase of illness (i.e., within 48--72 hours after onset) while the stools are still liquid or semisolid** because the amount of viral excretion is greatest. With the introduction of realtime RT-PCR assays, the ability to detect viruses (norovirus, sapovirus) in specimens collected later in the illness has been improved. In specific cases, specimens might be collected later during the illness (i.e., 7--10 days after onset), if the testing is necessary for either determining the etiology of the outbreak or for epidemiologic purposes (e.g., a specimen obtained from an ill foodhandler who might be the source of infection).

Number and Quantity. Ideally, specimens from **at least 5 ill persons** should be collected during the acute phase of illness. Bulk samples (i.e., 10--50 ml of stool placed in a stool cup or urine container) are preferred, as are acute diarrhea specimens that are loose enough to assume the shape of their containers. Serial specimens from persons with acute, frequent, high-volume diarrhea are useful as reference material for the development of assays. The smaller the specimen and the more formed the stool, the lower the diagnostic yield. **Rectal swabs are of limited or no value** because they usually contain insufficient quantity for typing of the strains.

Storage and Transport. **Stool specimens should be kept refrigerated at 4°C.** At this temperature, specimens can be stored without compromising diagnostic yield for 2--3 weeks, during which time testing for other pathogens can be completed. If the specimens have to be transported to a laboratory for testing, they should be bagged and sealed and kept on ice or frozen refrigerant packs in an insulated, waterproof container. If facilities for testing specimens within 2--3 weeks are not available, specimens can be frozen for antigen or PCR testing.

Vomitus

Vomiting is a characteristic, but not unique symptom of norovirus illness, and vomitus can be collected to supplement the diagnostic yield from stool specimens during an investigation. Recommendations for collection, storage, and shipment of vomitus specimens are the same as those for stool specimens.

Serum

Timing. If feasible, acute- and convalescent-phase serum specimens should be obtained to test for a diagnostic ≥ 4 -fold rise in IgG titer to noroviruses. Acute-phase specimens should be obtained during the first 5 days of symptoms, and the convalescent-phase specimen should be collected from the third to sixth week after resolution of symptoms.

Number and Quantity. Ideally, 10 pairs of specimens from ill persons (i.e., the same persons submitting stool specimens) and 10 pairs from well persons (controls) should be obtained. Adults should provide 5--7 ml of blood, and children should provide 3--4 ml.

Storage. Specimens should be collected in tubes containing no anticoagulant, and the sera should be spun off and frozen. If a centrifuge is not available, a clot should be allowed to form, and the serum should be decanted and frozen. If this step cannot be accomplished, the whole blood should be refrigerated but not frozen.

Environmental Specimens

Current realtime RT-PCR methods allow detection of noroviruses in water, food, and environmental specimens. If a food or water item is strongly suspected as the source of an outbreak, then a sample should be obtained as early as possible and stored at 4°C and CDC (404-639-1923 or 639-3577) should be contacted further testing.

Revised 10/08