



GASTROENTERITIS, VIRAL (Outbreaks only)

(Both epidemic and sporadic viral gastroenteritis. See also **FOODBORNE DISEASE**)

1. **Agent:** Noroviruses—formerly named Norwalk-like viruses (NLV)—a family of serologically related viruses; rotaviruses; astroviruses; enteric adenoviruses; other viruses.

2. **Identification:**

a. **Symptoms:** See following table for specific agents. The most common etiologies are:

Norovirus: Nausea, vomiting, diarrhea, abdominal pain, headache, and low-grade fever lasting about 24-48 hours. Present in children and adults.

Rotavirus Group A: Diarrhea and vomiting in infants and young children, which often leads to significant dehydration.

b. **Differential Diagnosis:** See **Appendix B—MMWR Guidelines for Confirmation of Foodborne-Disease Outbreaks.***

3. **Incubation:** See Appendix B.

4. **Reservoir:**

- a. **Noroviruses:** Man.
- b. **Rotavirus:** Probably man.
- c. **Other viruses:** Probably man.

5. **Source:** None.

6. **Transmission:** See Appendix B.

7. **Communicability:** During the acute stage of disease while virus shedding continues. May continue for days after recovery.

8. **Specific Treatment:** None. For dehydrated patients, implement supportive treatment with correction of fluid and electrolyte deficits.

9. **Immunity:**

a. **Norovirus:** Short-term immunity lasting up to 14 weeks.

b. **Rotavirus Group A:** By 2 years of age most individuals are immune. A vaccine for infants was approved in 2006.

c. **Other viruses:** Short-term immunity may occur.

REPORTING PROCEDURES

1. Individual cases not reportable. Outbreaks reportable, *California Code of Regulations*, Section 2502.

2. **Report Form:** Depends upon route of transmission.

If foodborne:

INVESTIGATION OF A FOODBORNE OUTBREAK (52.13, 10/00 fillable).

If a prepared commercial food item is the **LIKELY** source of this infection, a **FOODBORNE INCIDENT REPORT (FBIR)** should be filed. For likelihood determination and filing procedures, see Part 1, Section 7 - Reporting of a Case or Cluster of Cases Associated with a Commercial Food: Filing of Foodborne Incident Reports.

If waterborne:

WATERBORNE DISEASES OUTBREAK REPORT (CDC 52.12, 11/99 fillable).

If associated with a health care facility:

CD OUTBREAK NOTICE – HEALTH CARE FACILITY (H-1163, 1/78).

CD OUTBREAK INVESTIGATION – HEALTH CARE FACILITY (H-1164, 1/78).

All other settings:

OUTBREAK/USUAL DISEASE REPORT (DHS 8554, 03/00 fillable)

* CDC. Appendix B: Guidelines for confirmation of foodborne-disease outbreaks. MMWR 2000; 49(SS01):54–62. Available at: www.cdc.gov/mmwr/preview/mmwrhtml/ss4901a3.htm.



3. Epidemiologic Data:

- a. Other cases among persons attending a common gathering, or in hospital or clinics. Secondary cases.
- b. Possible food and water (potable, recreational) sources.

CONTROL OF CASE, CONTACTS & CARRIERS

Investigate outbreaks within 24 hours.

CASE:

Precautions: Enteric precautions. Food handlers should be removed from work until 48 hours after symptoms end.

CONTACTS:

Search for other cases among household members. Symptomatic food handlers should be managed as a case.

PREVENTION-EDUCATION

1. Implement hygienic measures applicable to diseases transmitted via fecal-oral route, or contaminated fomites route.
2. Prevent exposure of infants and young children to individuals with acute gastroenteritis.

DIAGNOSTIC PROCEDURES

Clinical and epidemiological history will determine tests to be performed. Research laboratory protocols can identify norovirus in stools. **In outbreak situations, contact ACDC with outbreak and case information as soon as viral etiology is considered.**

1. **Noroviruses** (children and adults): Testing is a research protocol. Individual patient results will not be released. At least 3 specimens need to be collected for a norovirus-suspected outbreak, but no more than 10.

Test: Norovirus reverse transcriptase by polymerase chain reaction (RT-PCR), performed by the Molecular Epidemiology Laboratory.

Container: Sterile, 30 oz. wide-mouth, screw-capped bottle.

Laboratory Form: Test Requisition and Report Form H-3021 or online request if electronically linked to the Public Health Laboratory.

Note: Check “other” box and write-in “norovirus.” As a research test, norovirus is not on the Sunquest catalog.

Material: 2-3 grams stool (no preservatives). Obtain as soon as possible, preferably within 48 hours of onset, but no later than 7 days.

Storage: Keep refrigerated, not frozen, deliver to the laboratory within 48 hours.

2. **Rotavirus** (infants and children): Testing should be strongly considered when illness is primarily among infants or young children.

Test: EIA (enzyme immunoassay) for rotavirus group A antigen.

Containers: Sterile, 30 oz. wide-mouth, screw-capped bottles.

Laboratory Form: Test Requisition and Report Form H-3021 or online request if electronically linked to the Public Health Laboratory.

Materials: 2-3 grams stool (no preservative). Obtain as soon as possible, preferably within 48 hours of onset, but no later than 7 days.

Storage: Keep refrigerated, not frozen, deliver to the laboratory within 48 hours.