

**Norovirus PCR\***  
**Specimen Collection and Requirements**  
**Sonoma County Public Health Laboratory**

**Timing** Stool specimens should be obtained during the acute phase of illness (within 48-72 hours of diarrhea onset) while the stools are still liquid or semisolid. Viral shed is the greatest during this phase. The increased sensitivity of molecular assays (PCR) often allows the virus to be detected in stools collected up to 7-10 days after onset. For specimens collected late in the illness, the utility of viral diagnosis and interpretation of the test results should be discussed with laboratory personnel before tests are conducted.

**Specimen** 5 grams unpreserved whole stool or vomitus in a sterile container, transported refrigerated, 4°C. (> 32 degrees F)  
*(Specimens received in Carrie Blair transport media will be rejected.)*

**Number of samples (for suspected outbreak)** For meaningful laboratory results (see interpretation below) specimens from 4-10 ill persons should be obtained during the acute phase of illness. The greater the number of stool samples submitted (a maximum of 10 will be accepted for assay), the more meaningful the test results.

- *Single stool samples testing as positive or negative will not be meaningful in an outbreak.*
- *Testing of asymptomatic cases is not encouraged without prior consultation.*

**Interpretation of Laboratory Results** We recommend that the following interpretative guidelines be used to evaluate laboratory PCR results:

- **POSITIVE:** Norovirus can be considered to be the etiologic agent if Norovirus nucleic acid is detected in two (2) or more stools per outbreak.
- **NEGATIVE:** To be considered negative for Norovirus, at least four (4) or more acute stool samples (all collected within 7-10 days of onset of diarrhea) must be submitted and all must be negative for Norovirus nucleic acid.
- **INCONCLUSIVE:** all other outcomes.

\*Norovirus PCR testing has not yet been approved by the FDA for clinical use. For research purposes only. This test and its performance has been validated by the Sonoma County Public Health Laboratory. Please contact (707)565-4711 for any questions.

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