FAST FACTS: Norovirus Testing

Recommended Screen — Norovirus Group 1 and 2 PCR (NOROPCR)

- Detects and differentiates genogroup 1 and 2 noroviruses. Genogroup IV is not detected, but these infections are very rare.
- Noroviruses are detectable when the patient is symptomatic and for 1–2 weeks thereafter.
- Extremely high virus concentrations are present in stool and vomit from symptomatic patients. Vomit will not be tested (we have not validated that source).
- Stool is the only acceptable specimen.
- Some stool specimens contain substances that interfere with PCR amplification. These specimens will be reported as INHIBITORY. Submitting another specimen is recommended.
- Norovirus PCR is also part of the screening panel used in the Comprehensive Virus Detection (CVD) test. (see below)

Comprehensive Virus Detection (CVD)

- Stool specimens are screened by PCR for adenovirus and norovirus. Enterovirus PCR is performed in the Summer and Fall. Specimens that are PCR negative are placed into culture to isolate viral agents that are not covered by PCR testing. Culture methods will not detect norovirus.
- Provides the fastest turnaround time when the viral etiology is uncertain. PCR turnaround time averages 24 hours from receipt in the laboratory.
- Will detect co-infections.
- More expensive than an individual PCR test.
- Recommended when multiple viruses could be causing the clinical presentation.
- Negative stool cultures take 10 days.

Norovirus Antigen EIA Testing

- Not recommended for routine use.
- Sensitivity is low – <50% versus PCR
- May not detect all noroviruses.

Virus Culture (VC)

- Not recommended because noroviruses will not grow in culture.

Norovirus Serologies

- Serological testing is a waste of time except for specialized research surveillance studies.