

March 2007

Norovirus Outbreak Testing

To Health Care Providers:

Since November 2006 the Virus Detection Laboratory has been evaluating the RT-PCR methodology for the detection of Norovirus in faecal samples. Traditionally, the detection of Norovirus using Electron Microscopy (EM) has had poor sensitivity. Current literature suggests that the sensitivity could be improved by using RT-PCR methodology.

For a period of one year, faecal samples submitted as part of a suspected gastro-intestinal outbreak (as declared by the local Public Health Unit) will be tested both by EM and RT-PCR methodology. Both EM and RT-PCR results will be reported. The RT-PCR result will be followed by the comment, "This test is for investigational/research purposes only".

Recommended Specimen

Collect faecal samples in a sterile container (with no additives or preservatives) as soon as possible after onset of illness. If samples are collected more than 48 hours after symptom onset, or if there may be a need to test more than 10 samples from an outbreak, consult the Public Health Laboratories Microbiologist.

Results

The following combination of results and interpretations may occur:

EM	RT-PCR	Interpretation
Negative	Not detected	No Norovirus detected
Negative	Inhibition or Indeterminate	RT-PCR reaction was unsuccessful
Positive	Detected	Norovirus detected
Negative	Detected	Norovirus detected: Viral load below EM detection limits
Positive	Not detected, inhibited or indeterminate	Norovirus detected by EM

For Further Information:

- Contact the Electron Microscopy Lab at **416-235-6121**