



November 2008

## ***Clostridium difficile*** **- Specimen Acceptance and Testing During Outbreaks**

To Health Care Providers

On September 1, 2008, *Clostridium difficile* associated disease (CDAD) outbreaks and outbreak-associated cases in hospitals became reportable as per changes to regulations under the *Health Protection and Promotion Act* (HPPA). Public hospitals (as defined under the *Public Hospitals Act*- PHA) are required to report outbreaks of CDAD and outbreak-associated cases to their local medical officer of health when the established provincial definition for a CDAD outbreak is met in their facility.

If a public hospital has identified a CDAD cluster, or declared a CDAD outbreak, unpreserved faeces (no greater than 72 hrs old) or fresh-frozen faeces will be accepted for the following specialized testing:

1. During working hours, consult with the Medical Microbiologist, Dr Dylan Pillai at 416-235-6548 to determine appropriate testing.
2. If testing is approved then send unpreserved faeces no more than 72 hrs old or fresh-frozen faeces directly to the Toronto Public Health Laboratory
3. If an outbreak has been declared, indicate the outbreak number on the requisition.

The following specialized tests are available for outbreak or cluster investigations:

- Culture and typing of *C. difficile* strain by pulse field gel electrophoresis (eg. NAP 1 strain refers to North American pulsotype 1)
- Antibiotic susceptibility testing, including metronidazole and vancomycin
- Specialized toxin typing by polymerase chain reaction (includes binary toxin elaborated by the “hyper virulent” NAP 1 strain)

Results are typically available within seven working days of specimen receipt at the Toronto Public Health Laboratory. Please continue to use your preferred laboratory for routine CDAD toxin testing.

## C. difficile – Specimen Acceptance and Testing During Outbreaks (continued)

### **Specimen storage**

All laboratories which perform routine toxin testing are encouraged to maintain faeces that are *C. difficile* toxin-positive at -20°C for a minimum of two months to enable retrospective typing should the need arise. Approximately 5 ml of well mixed liquid faeces is required. Specimens can be stored in the enteric outbreak white cap container (item L-5034) to optimize storage space.

### **For Further Information:**

- Contact the Enteric Department at the Toronto Public Health Laboratories at **416-235-6377**
- After hours, approval for specialized testing should be directed to the Medical Microbiologist on call by phoning the OPHL help line at **1-800-640-7221**