



Georgia Healthcare Associated Infections Advisory Committee Policy Statement: Laboratory Diagnosis of *Clostridium difficile* for Healthcare Facilities

Issued: April 22, 2014

Introduction:

The dramatic rise in *Clostridium difficile* infections over the last 10 years, its spread into the community, and the clinical and economic impact this disease stimulated an intensive review of all facets of the disease including a critical analysis of laboratory testing to diagnose infection.

Guidelines and position statements have been issued by:

- The American Academy of Pediatrics¹,
- The American College of Gastroenterology²
- The American Society for Microbiology³
- The Association for Professionals in Infection Control and Epidemiology⁴
- The Centers for Disease Control and Prevention⁵, and
- The Society for Healthcare Epidemiology of America⁶

Recommendations:

Based on strength of evidence, the Georgia Healthcare Associated Infections Advisory Committee makes the following recommendations for laboratory testing when *Clostridium difficile* is suspected.

1. The preferred testing method is nucleic acid amplification assay (includes polymerase chain reaction [PCR]).
2. An alternative testing method is a 2-step algorithm to detect common glucose dehydrogenase antigen (GDH) and Toxin A/B, with reflex to nucleic acid amplification assay for discrepant results.
3. Diagnostic tests that ONLY detect TOXINS by EIA should NOT be performed (sensitivity 63-94%, specificity 75-100%).
4. Diagnostic tests should be performed ONLY on unformed, diarrheal stool specimens, except in the setting of ileus caused by *Clostridium difficile*⁷
5. Repeat testing during the same episode of diarrhea is discouraged, particularly when a nucleic acid amplification assay is used.
6. Test of cure should NOT be performed as the assay may be positive after clinical cure.

We encourage all healthcare facilities to have a written policy regarding laboratory diagnosis of *Clostridium difficile*. When possible, we encourage healthcare facilities to have a multidisciplinary committee to address all aspects of *Clostridium difficile* disease; at a minimum, this committee should include representation from infectious diseases, infection control, gastroenterology, microbiology, pharmacy, building management, and hospital administration.

¹ *Pediatrics* (2013) 131: 196-200

² *Am J Gastroenterology* (2013) 108:478-498

³ www.asm.org

⁴ www.apic.org/implementationguides

⁵ www.cdc.gov/hai/organisms/cdiff/cdiff_infect.html

⁶ *Infection Control and Hospital Epidemiology* (2013) 5: 431-455

⁷ Brecher S, et al. 2013. *Clin Infect Dis.* 8 :1175-81