

Clostridium Difficile by PCR

HCCL is pleased to announce *Clostridium difficile* by PCR testing.

CLINICAL APPLICATION & BENEFITS

- Eliminates the need for multiple screening and confirmatory assays.
- The rapid turnaround time leads to more timely treatment and infection control management of patients with suspected *C. difficile* colitis.
- *C. difficile* by BD GeneOhm™ assay targets the toxin B gene and detects up to 24% more *C. difficile* true positive specimens.
- PCR methodology provides higher sensitivity (>93%) and greater specificity (>95%) than traditional EIA (48-73%).

CLINICAL BACKGROUND

Clostridium difficile-associated diarrhea is an important illness among both hospitalized and non-hospitalized patients. It is the primary cause of hospital-acquired colitis in patients who receive antibiotics, chemotherapeutic agents or other drugs that alter their normal flora. In the United States, the reported rates for *C. difficile* infection increased from 5.7 per million population in 1997 to 23.7 per million in 2004.

C. difficile infection is an independent predictor of increased length of hospital stay and total cost for patients and hospitals. A recent study (Infect Control Hosp Epidemiol 28:1219, 2007) reported the mean *C. difficile* infection-related incremental length of stay as 2.95 days. Therefore, pressures are increasing for the laboratory to provide accurate and rapid diagnostic results.

TEST INFORMATION

DESCRIPTION	<i>C. Difficile</i> by PCR Toxin B Gene
METHOD	Real-Time PCR
ORDER CODE	6615
SPECIMEN REQUIREMENTS	1 gram liquid or soft feces. Transfer liquid or soft stool to a dry sterile container. Store and transport refrigerated. Formed stool will be rejected. Submit only 1 specimen per week unless symptoms return after treatment.
COMMENTS	1) Min Amt: 0.5 grams feces. 2) Unacceptable conditions: formed or hard stool, urine, toilet paper, water or soap contamination of specimen. 3) Stability: Room Temperature - 2 days, Refrigerated - 5 days
RANGES	Negative for <i>Clostridium difficile</i> Toxin B by PCR

TEST UPDATE

Quick Facts

- *Clostridium difficile* is the primary cause of hospital-acquired colitis.
- PCR testing provides significantly increased sensitivity and specificity over other *C. difficile* testing methods.
- BD GeneOhm™ PCR assay targets the toxin B gene.
- Formed stool samples are not appropriate for PCR testing.
- Order Code is 6615.
- 24 hour turnaround time (TAT) in most cases.