

## **Guidelines for Stool Cultures for Diagnostic Testing**

### **Rationale**

Clinicians need guidelines for number and/or timing of collection of stool specimens submitted for routine bacterial testing.

### **Policy**

Optimum timing and numbers of stool cultures has not been established when investigating cause of a possible bacterial pathogen causing diarrhea. History may be helpful in noting onset of symptoms in relation to time of ingestion of food and water. Some causes are related to bacterial invasion like *Salmonella*, *Shigella* and *Campylobacter*. Others are toxin related like *Escherichia coli* O157, *Clostridium difficile*, and some *Vibrio* species. Finally, notifying laboratory of pertinent history and suspicion for unusual pathogens like *Yersinia* or *Aeromonas* is helpful.

The following are reasonable indications for doing a stool culture for bacterial pathogens. Generally no more than 1 specimen is accepted within a 24 hour period:

- Patients who present with onset of bloody diarrhea.
- Immunocompromised patients with acute onset of diarrhea.
- Patients with comorbidities who would do poorly with untreated infectious diarrhea.
- A food handler or cafeteria worker with symptomatic diarrhea or evaluating clearing of a pathogen.
- Patients with inflammatory bowel disease and differentiation of that primary disease from bacterial pathogen would be important.

*Clostridium difficile* is becoming most common cause of infectious diarrhea, especially in relation to diarrhea that is associated with antibiotics, hospitalization, use of antiperistaltics or acid suppressors. Laboratory may accept no more than 1 stool specimen within a 72 hour period. Type 6 or Type 7 on Bristol Stool Scale is the only acceptable specimen for *Clostridium difficile* PCR testing. Formed stool specimens are not acceptable for *Clostridium difficile* PCR testing.