MAYO CLINIC LABORATORIES

NEW TEST

Notification Date: January 3, 2024
Effective Date: January 16, 2024

Clostridioides difficile Culture with Antimicrobial Susceptibilities, Varies

Test ID: CDIFS

Useful for: Providing an isolate suitable for antimicrobial susceptibility testing to direct antimicrobial therapy of extraluminal infections and in cases of treatment failure.

Methods: Conventional Culture Technique with Minimum Inhibitory Concentration (MIC) by Agar Dilution

Reference Values:
No growth of *Clostridioides difficile*.
Susceptibility results are reported as minimal inhibitory concentration (MIC) in mcg/mL. Breakpoints (also known as clinical breakpoints) are used to categorize an organism as susceptible, intermediate, or resistant according to the Clinical and Laboratory Standards Institute (CLSI) guidelines.

Specimen Requirements:
Submit only 1 of the following specimens:

Patient Preparation: Patient should not use antacids, barium, bismuth, antidiarrheal medication, zinc oxide paste, Vagisil cream or oily laxatives prior to specimen collection.

Preferred:
Specimen Type: Preserved feces
Supplies: Culture and Sensitivity Stool Transport Vial (T058); Stool Collection Kit, Random (T635)
Container/Tube: Commercially available transport system specific for recovery of enteric pathogens from fecal specimens (15 mL of non-nutritive transport medium containing phenol red as a pH indicator, either Cary-Blair or Para-Pak C and S [T058])
Specimen Volume: Representative portion of feces; 5 mL
Collection Instructions:
1. Collect 1 gram or 5 mL fresh fecal specimen and submit in container with transport medium.
2. Place feces in preservative within 2 hours of collection.

Additional Information: Only diarrheal (ie., unformed) feces should be tested. Testing formed feces for *C difficile* is not clinically indicated.
Specimen Stability Information: Ambient (preferred) 96 hours/Refrigerated 96 hours/Frozen 7 days

Acceptable:
Specimen Type: Unpreserved feces
Supplies: Stool container, Small (Random), 4 oz (T288); Stool Collection Kit, Random (T635)
Specimen Volume: Representative portion of stool
Collection Instructions: Collect fresh stool and submit representative sample in stool container.
Specimen Stability Information: Ambient (preferred) 72 hours/Frozen 7 days
Additional Information: Only diarrheal (i.e., unformed) stool should be tested. Testing formed stool for *C difficile* is not clinically indicated.
Specimen Stability Information: Ambient (preferred) 72 hours/Frozen 7 days

Specimen Type: Fresh tissue or biopsy
Sources: Colon
Supplies: Anaerobe Transport Tube (T588)
Specimen Volume: Entire collection, 1-2 cm
Collection Instructions: Aseptically collect a 1-2 cm piece of tissue whenever possible. In general, a larger piece of tissue is preferred. Submit in an anaerobic transport tube.
Specimen Stability Information: Ambient 72 hours

Note:
Culture is **not the preferred diagnostic test** for *Clostridioides difficile*. For routine diagnostic testing, order CDPCR / *Clostridioides difficile* Toxin, PCR, Feces

Specimen Stability Information:

Specimen Type	Temperature	Time
Varies	Varies	

Cautions:
- The assay must be performed on fresh feces, fresh-frozen feces, or feces in transport medium. Only diarrheal (ie, unformed) feces should be tested.
- Submission of more than 1 specimen for testing is not recommended.
- Repeated testing during a single episode of diarrhea is not recommended.
- Testing of asymptomatic patients (ie, without diarrhea) or for test of cure is not recommended.
- Patients may asymptomatically carry *C difficile*.
- Testing of specimens collected by colostomy, ileostomy, or colonoscopy has not been validated.

- When antimicrobial susceptibilities are performed, in vitro susceptibility does not guarantee clinical response. Therefore, the decision to treat with a particular agent should not be based solely on the antimicrobial susceptibility testing result.

CPT Code:
87081-*C. difficile* Culture
87076-Anaerobe Ident (if appropriate)
87076-Id MALDI-TOF Mass Spec Anaerobe (if appropriate)
87153-Anaerobe Ident by Sequencing (if appropriate)
87181-Anaerobe Susceptibility per agent (if appropriate)
87181 x 3-Antimicrobial Susceptibility, Anaerobic Bacteria, MIC (if appropriate)

Day(s) Performed: Monday through Sunday **Report Available:** 2 to 9 days

Questions
Contact Brandon DeBoom, Laboratory Resource Coordinator at 800-533-1710.