uchealth

March 2017

Clostridium difficile Testing

Effective March 1, 2017, Memorial Hospital Laboratory Services will change stool testing for *Clostridium difficile* to a 2-step algorithm (with reflex to PCR) to aid in diagnosis of *Clostridium difficile* infection.

C. difficile GDH (glutamate dehydrogenase) antigen and toxin A/B will be performed at both Memorial Central and North Laboratories as an enzyme immunoassay test to screen.

- GDH antigen is produced by all *C. difficile*, both non-toxigenic and toxigenic strains
- Toxins A and/or B may be produced by toxigenic strains of *C. difficile*.
- Disease onset is associated with the toxins produced by the toxigenic strains

If both GDH antigen and toxin A/B are negative, the interpretation is Negative for toxigenic C. difficile
If both GDH antigen and toxin A/B are positive, the interpretation is Positive for toxigenic C. difficile

If GDH antigen is positive, and toxin A/B is negative, PCR testing will be reflexed:

a. If PCR is negative, interpretation will be Negative for toxigenic C. difficile.
b. If PCR is positive, interpretation will be Potential Carrier, Toxin Level Undetected
Note: several studies suggest that clinical outcomes and morbidities associated with these patients are comparable to patients without C. difficile infection.

If GDH antigen is negative, and toxin A/B is positive, PCR testing will be reflexed:

a. If PCR is negative, interpretation will be Negative for toxigenic C. difficile.
b. If PCR is positive, interpretation will be Positive for toxigenic C. difficile.

C. difficile Antigen and Toxin Rapid Screen Reflex PCR

Epic Code:	LAB8633
Methodology:	Qualitative Enzyme Immunoassay
Sample Collection:	Liquid or unformed stool ONLY in clean container or Cary-Blair transport medium
Unacceptable:	○ Formed stool ○ Stool submitted in formalin or PVA containers
Transport Temperature:	Ambient, Refrigerated or Frozen
Performed:	Monday through Sunday at both MHC and MHN Labs
Reported:	Within 8 hours
CPT Codes:	87324 (GDH Antigen), 87449 (toxin), 87493 (PCR)

For any questions regarding this new test or algorithm, please contact:

- Nathan Johnston, DO, Microbiology Medical Director, 719-365-5260
- Amery Ray, Microbiology Supervisor, 719-365-5133

Ova and Parasite Testing

Effective March 1, 2017, Memorial Hospital Laboratory Services will make a change to stool Ova and Parasite testing to standardize with laboratories in the UCHealth system.

Due to low prevalence of parasites in stool specimens without pertinent travel history, compromised immune status, or outbreak/endemic area exposure, full ova and parasite testing is not indicated.

During test ordering, if all of the following screening questions are answered as "NO", only Giardia and Cryptosporidium Antigen will performed. The full Ova and Parasite test will be cancelled, and specimen will be held for 14 days for any add-on requests.

If any of the screening questions are answered as Yes, then the Ova and Parasite test, Giardia and Cryptosporidium antigen tests will be performed.

Note: The Ova and Parasite test will be referred to the University of Colorado Hospital Lab.

For off-site clinics utilizing paper requisitions for ordering, please ensure any "YES" answers are written on the req, which will ensure the Ova and Parasite test will be performed at University of Colorado Hospital Lab.

For any questions regarding this new workflow, please contact:

- Nathan Johnston, DO, Microbiology Medical Director, 719-365-5260
- Amery Ray, Microbiology Supervisor, 719-365-5133

June 2017

Discontinued Testing:

- 6/1/2017
    - LAB254 Viral Culture
    - LAB946 Herpes (HSV) Culture – **only the culture tube will be discontinued; shell vial will still be performed**

    * All remaining shell vial cultures will be discontinued on 6/30/2018