

Clostridioides difficile (C. diff) Testing Algorithm Change

In late Dec 2022, all RWJBH microbiology labs switched to a new 2-step algorithm for the diagnosis of *C. diff* infections. The first test is a PCR. All positive *C. diff* PCR results will then reflex to a *C. diff* toxin assay. Only cases with a positive toxin assay will be reported to NHSN.

FREQUENTLY ASKED QUESTIONS

Q: Why did we change the *C. diff* testing methodology?

A: The change was made to streamline *C. diff* testing, simplify the interpretation of results for providers, and reduce unnecessary antibiotic treatment of colonized patients.

The initial *C. diff* PCR is extremely sensitive. False negatives are extremely uncommon. A negative result can rule out *C. diff* infection in the vast majority of circumstances.

Because the *C. diff* PCR is so sensitive, all positive results are reflexed to a toxin assay. *C. diff* toxin is better correlated with true *C. diff* infection and is less likely to represent asymptomatic colonization.

Q: The C. diff PCR came back positive but the toxin test is negative. What does this mean?

A: This is an equivocal result. It may represent either true infection due to *C. diff*, or it could indicate the patient is colonized with *C. diff* and has diarrhea due to other reasons. Many patients with PCR+/toxin- results do not require treatment, however, some do need antibiotics. It is up to the clinical team to decide whether the *C. diff* is causing infection and warrants treatment. Infectious Disease consults are recommended for challenging or unclear cases.

Q: Does my patient require Enteric Contact Precautions?

A: Any patient with a positive *C. diff* PCR (regardless of toxin result) and diarrhea needs to be placed on enteric contact precautions to reduce the potential for spread of *C. diff*.



Q: How long are enteric contact precautions required?

A: Until the patient has #1 completed *C. diff* antibiotics AND #2 diarrhea has resolved x 48 hours. If the patient does not require antibiotic treatment of a positive *C. diff* test, enteric contact precautions can be discontinued when patient is free of diarrhea x 48 hours.

Q: How can I keep up-to-date with the latest treatment for C. diff infections?

A: Please view our institutional evidence-based guidelines for the diagnosis and treatment of C. difficile at:

https://thebridge.rwjbh.org/Resource.ashx?sn=RWJBarnabasCDIDxTxGuidelinesFINAL