

Laboratory Update

Effective date: May 05, 2025
Microbiology Laboratory

TECHNICAL BULLETIN

Switching the current Cepheid Xpert® *Clostridium difficile* (*C. difficile*) PCR assay to Cepheid Xpert *C. difficile*/Epi

Dear Colleagues:

Effective April 5th 2025, Cepheid Xpert® *C. difficile*/Epi Assay will replace the current *C. difficile* assay. The Xpert® *C. difficile*/Epi assay detects and distinguishes toxin producing *C. difficile* from the hypervirulent strains of *C. difficile* that are associated with severe outbreaks in healthcare facilities. The assay targets the toxin B gene (*tcdB*), the binary toxin gene (CDT), and the single base-pair deletion at nucleotide 117 within the gene encoding a negative regulator of toxin production (*tcdCΔ117*).

The result of new assay will be reported as follow:

Positive for *C. difficile*-presumptive 027/NAP1/B1: Toxin producing *C. difficile*, presumptive 027/NAP1/BI target DNA sequences are detected.

Positive for *C. difficile*: Toxin producing *C. difficile* target DNA sequences are detected.

Negative for *C. difficile*: Toxin producing *C. difficile* target DNA sequences are **NOT** detected

Indeterminate: Presence or absence of *C. difficile* target DNA cannot be determined. Repeat test according to DMC *C. difficile* test policy and if clinically indicated.

Thank you

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