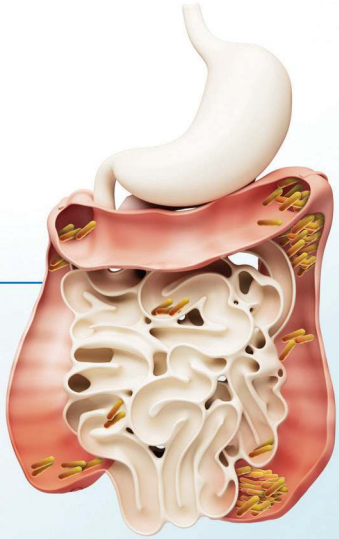
Cepheid
A better way.

What is *C. difficile*?

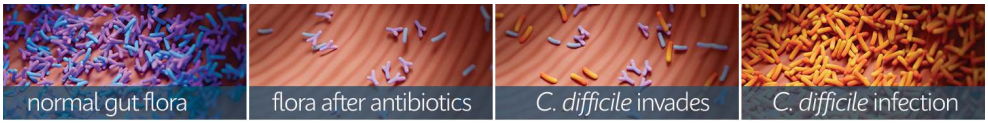
Clostridioides difficile (*C. difficile*) is a gram-positive, spore-forming, anaerobic bacterium found in the gut. It is usually harmless, but it can cause diarrhoea in people who have recently been treated with antibiotics.



Why is *C. difficile* a problem?

C. difficile is the biggest cause of infectious diarrhoea in hospitalised patients. It can cause large outbreaks and lead to severe life-threatening inflammation of the bowel (pseudomembranous colitis).[1]

It causes disease when the normal bacteria in the gut are "wiped out" by antibiotics, allowing *C. difficile* to grow to unusually high levels.



Who should be tested?

Diagnostic testing should only be performed in patients with significant clinical indicators, most notably diarrhoea (Bristol Stool Chart types 5–7 in ≤ 24 hours) who are more at risk for *C. difficile*:[2]

- Recent exposure to antibiotics
- Older age (>65 years)
- Recent hospitalisation
- Patients with chronic underlying illness

How to test?

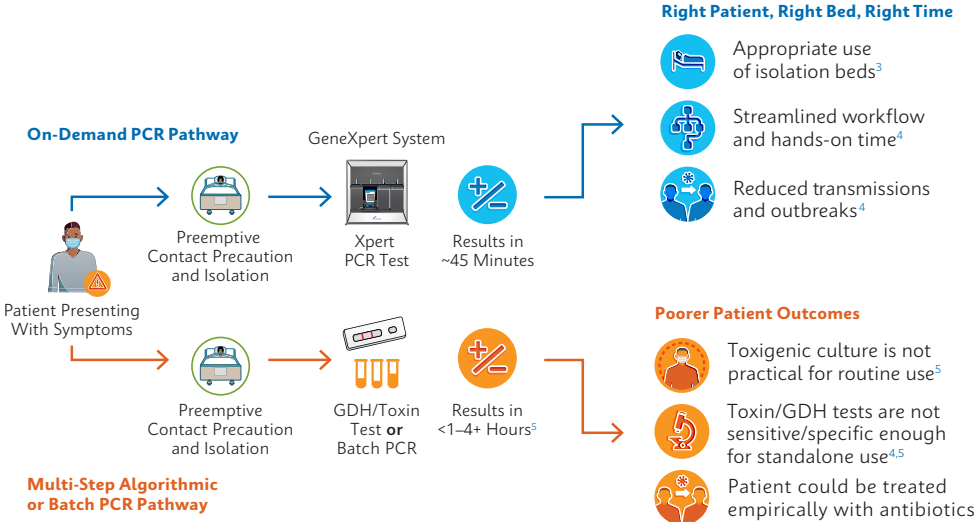
UKHSA recommends that hospitals adhere to a 2-stage testing approach.[2]

1 A highly sensitive screening test (e.g. PCR or GDH), followed by
2 A highly specific test for toxin detection (EIA or PCR) for positive samples

Contemporary evidence is also available demonstrating the clinical utility and impact of a standalone "one & done" PCR algorithm.[3,4]

Why test with fast PCR?

Fast and accurate PCR diagnostics with Cepheid's GeneXpert® system and Xpert® *C. difficile* BT test provides standardised, on-demand, and actionable results for better patient management.



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Broad Coverage for Reliable Performance

Detection of *C. difficile* infection with an independent call-out of binary toxin and differentiation of the 027 strain in around 45 minutes.

Scan here to learn more

CE-IVD. *In Vitro* Diagnostic Medical Device. May not be available in all countries.

1 Health Protection Agency- Clostridium difficile Fact Sheet. Last reviewed February 2009, Accessed August 2023. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/339322/Clostridium_difficile_fact_sheet.pdf

2 UKHSA Clostridioides difficile infection- Update guidance on management and treatment. Published July 2022. Accessed August 2023. https://www.elft.nhs.uk/sites/default/files/2022-08/ukhsa-cdi-guideline-july-2022-1.pdf

3 Peppard W, et al. Implementation of polymerase chain reaction to rule out C. difficile infection is associated with reduced empiric antibiotic duration of therapy. Hosp Pharm. 2014 Jul;49(7):639-43.

4 Casari E, et al. Reducing rates of C. difficile infection by switching to a stand-alone NAAT with clear sampling criteria. Antimicrob Resist Infect Control. 2018 Mar;7(40).

5 Carroll K & Mizusawa M. Laboratory tests for the diagnosis of Clostridium difficile. Clin Colon Rectal Surg. 2020 Mar;33(2):73-81.

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