

Ensure *C.difficile* is coded in the patient's notes SNOMED code:186431008

Microbiological advice can be obtained from: 0117 4146222 option 1 - UHBristol option 2 – NBT and Weston



Testing for Clostridioides difficile

If a patient has diarrhoea (Bristol Stool Chart types 5-7) that is not clearly attributable to an underlying condition (e.g. inflammatory colitis, overflow) or therapy (e.g. laxatives, enteral feeding) then it is necessary to determine if this is due to Clostridioides difficile (CDI), also known as "C.diff". Diarrhoeal samples should be tested for C.difficile from all community patients aged >65 years, and from community patients aged <65 years wherever clinically indicated.

The stool sample must take on the shape of the container and ideally be at least ¼ filled (to indicate the patient has diarrhoea) before it is sent to the laboratory for testing.

The laboratory now undertakes a two-stage testing algorithm to detect the presence of C.difficile toxins, as illustrated below

| C.difficile testing result on unformed stool (Bristol Stool Chart types 5-7) | | |
|---|------------------|--|
| Test | Result | Interpretation |
| C.difficile toxin B PCR | DNA not detected | CDI is very unlikely. Patient could have other potential pathogens. No further C.difficile-specific tests will be undertaken on this sample |
| OR | | |
| C.difficile toxin B PCR | DNA detected | This indicates that the sample contains C.difficile toxin B DNA. A second test is performed to detect the presence of C.difficile toxin antigens (toxin A/B). |
| C.difficile toxin B PCR will be followed by C.difficile toxin antigen testing | | |
| C.difficile toxin B PCR | DNA detected | |
| C.difficile toxin antigen | Negative | No detectable C.difficile toxin A/B. The patient is colonised with a toxigenic strain of C.difficile, but in the absence of detectable toxin A/B the symptoms are likely to be due to another cause. Treatment is generally not recommended but if the symptoms/ signs are not consistent with the result then discussion with a medical microbiologist is advised |
| OR | | |
| C.difficile toxin B PCR | DNA detected | |
| C.difficile toxin antigen | Positive | Consistent with C.difficile infection. |