

Clostridioides difficile

Community IPC team

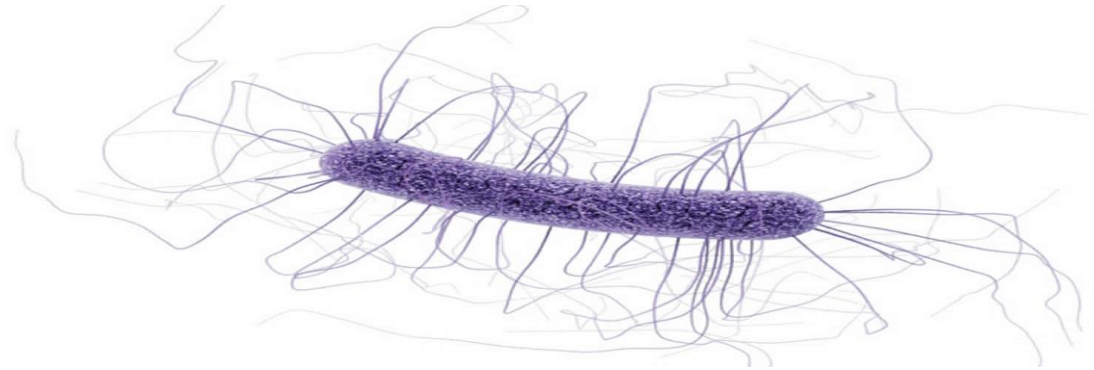


What is Clostridiodes difficle?

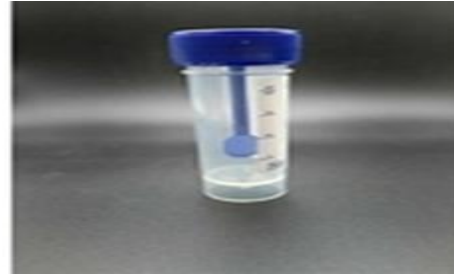
A gram positive bacteria

It is spore forming

It is an anerobic bacillus
(rod shaped and can live without oxygen)



Tests for C/difficile



- **GDH positive**
- Glutamate Dehydrogenase Test:
- GDH is an enzyme that is produced by all C/difficile species.
- This test is used as a screening test. If it is negative, it is unlikely that the patient has CDI. If it is positive, further tests are carried out.

- **PCR positive Polymerase chain reaction Test**
- This test looks for the presence of the genes that encode for the production of the Clostridioes difficile toxin.
- If it is positive, it implies that the patient has C/difficile bacteria with the capability to produce Clostridioes difficile toxin.

- CDI positive = Clostridioes difficile infection.
- This is when toxin A and B is present in the stool.
- A positive toxin test suggests the patient has Clostridioes difficile infection and its toxin is being passed out in their stool.

How to sample

([How to collect a sample of poo \(stool sample\) – NHS](#) for patients)

- **Faecal sample container should be at least 1/3rd full,** many samples are rejected due to insufficient volume.
- Ensure that you send some liquid not just the lumps, as formed stools are not routinely tested for C/difficile.
- Please ensure that patient identifiers are recorded and accurate

Symptoms of a *Clostridioides difficile* infection

Common symptoms of a C/diff infection include:

- diarrhoea
- a high temperature
- loss of appetite
- feeling sick
- a stomach ache



How do you get a C/difficile infection?

C/diff bacteria usually live harmlessly in the bowel along with lots of other types of bacteria.

- Taking antibiotics can cause the balance of bacteria in your bowel to change, causing an infection.
- When someone has a C/diff infection, it can spread to other people very easily if the bacteria found in the person's stool gets onto objects and surfaces (Faecal oral route)

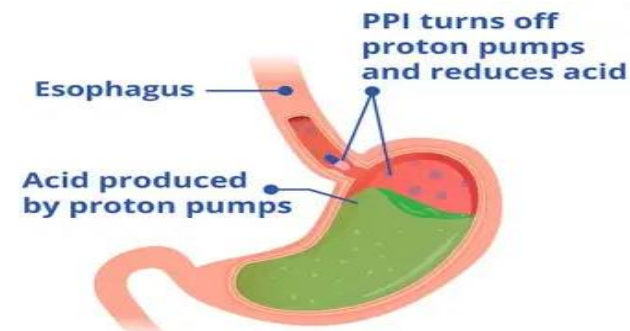


Who's at risk

You're more likely to get a C/diff infection if:

Over 65 years

- Taking, or have recently taken, antibiotics
- Staying in hospital or a care home for a long time
- A weakened immune system – for example, from having a long-term condition like diabetes or kidney failure, or treatment like chemotherapy
- Taking a proton pump inhibitor (PPI)
- C/diff infection in the past



Treatment

Antibiotic /Antimicrobial - Prescribing Guidelines - BEST

- Vancomycin
- Fidaxomicin [Fidaxomicin Amber G Guideline Shared care guideline \(barnsleyccg.nhs.uk\)](https://www.barnsleyccg.nhs.uk/guidelines/fidaxomicin-amber-g-guideline-shared-care-guideline)

- Faecal microbiota transplant



Environmental cleaning

- A chlorine-based product or equivalent should be used to clean the environment if C/difficile is suspected.



Know the signs

- Sample appropriately

Treat the infection

- Please contact the medical microbiologist if further advice is required.

Any Questions

