

GASTRO-INTESTINAL TRACT INFECTIONS

*Clostridioides difficile***Assess for the severity of disease and consider whether hospital admission is appropriate:**

- If any evidence of severe disease or their symptoms or signs worsens rapidly or significantly at any time, the patient should be referred for urgent admission and Gastroenterology review.

Severe disease if **ANY** of the following regardless of stool frequency:

- WCC $>15 \times 10^9$ /L
- Temp $>38.5^\circ\text{C}$
- Tachycardia >100 beats/min
- An acute increase in serum creatinine $>50\%$ from baseline
- Evidence of colitis (abdominal pain/distension, hypotension, ileus, radiology)

Treatment of non-severe suspected *C. difficile* associated diarrhoea:

- Empirical treatment of *C. difficile* infection can be considered if there is a high likelihood from history and clinical assessment. See [below](#) for empirical first-line treatment.
- **Do not prescribe anti-motility agents in possible or confirmed *C. difficile*.**
- **Stop unnecessary antibiotics** (consider changing to one with a lower risk of *C. difficile* infection if still required) **and any Proton Pump Inhibitors (PPIs) to re-establish normal flora.**
- Review the need to continue other medicines with gastrointestinal activity or adverse effects (e.g. laxatives), and medicines that may cause problems if people are dehydrated (e.g. NSAIDs). See APC [Sick Day Rules](#) guidance and [Patient Leaflet](#).
- Note - if first *C. difficile* stool test is negative but clinically on review no other cause found and *C. difficile* disease is still likely, send a repeat stool to check not a false negative result. See the testing information on the [NUH microbiology web page](#).
- If symptoms are not improving and otherwise stable, this should **not** normally be deemed as non-responsive to treatment until the patient has received at least one week of treatment.
- If non-responding disease, refer to Microbiology or Gastroenterology for advice.
- See NICE [Clostridioides difficile infection: antimicrobial prescribing](#) for more information.

Advise patient or carer:

- To drink enough fluids to avoid dehydration.
- That they will remain infectious while they are still ill and have symptoms and will need to try to prevent the spread of infection. Discuss the importance of hand hygiene and use of liquid soap.
- That diarrhoea should resolve in 1–2 weeks. It is not usually possible to determine whether antibiotic treatment is effective until **day 7**.
- That they should not return to work or school until they have been free from diarrhoea for 48 hours. If medication is prescribed, they should ensure that the full course is completed and there is no further diarrhoea or vomiting for 48 hours afterwards.
- To seek medical help if symptoms worsen rapidly or significantly at any time.
- Once recovered, they should seek medical advice if they develop unexplained diarrhoea, as there is a high rate of recurrence with *C. difficile* infection.
- [Vancomycin prescriptions](#) issued by a GP/Primary Care should be taken to one of the listed pharmacies to be fulfilled.

Recurrent disease

- Up to 20% of patients will have a recurrence and is increased in elderly patients (nearly 50%). If recurrence is suspected, clinical review, prompt repeat stool sampling and empirical treatment should be considered.
- [Please note repeat stool samples for *C. difficile* testing are not routinely required from confirmed *C. difficile* toxin positive cases and will not be tested by the laboratory if sent \$<14\$ days since the positive toxin result.](#)
- [Exceptions where a further sample \(\$>14\$ days from known positive\) is indicated are:](#)
 - [Symptoms resolved on treatment and recurred after cessation of treatment.](#)

- Symptoms persist despite a course of treatment.
- Exclude other causes for persistent diarrhoea
- Confirmed *C. difficile* toxin positive recurrence - discuss with microbiology who may recommend fidaxomicin if the patient is fidaxomicin naïve ([see below](#)).

If more than 1 recurrence or non-responding disease, refer to Microbiology or Gastroenterology for advice.

Other practitioners and Out Of Hours medical practitioners should be made aware of patients previously positive for *C. difficile* by the use of a **Special Patient Note on GP clinical systems** to ensure that appropriate prescribing occurs in and out of hours.

Vancomycin is NOT routinely stocked by community pharmacy.

Community pharmacies that hold stocks of vancomycin for the treatment of *C. difficile* can be found [here](#). Patients **SHOULD** be directed to these pharmacies to have prescriptions issued in Primary Care fulfilled.

First Occurrence of infection (consider commencing treatment before test results are available):

Antibiotic	Dosage	Duration
Vancomycin (oral)	125mg four times a day	10 days

N.B. LICENSED capsules are available, and injection is LICENSED for oral administration (*injections for oral administration is practised in hospital settings only due to complex preparation*).

Vancomycin oral solution can be procured as a special order by the community pharmacies for patients with swallowing difficulties in the community.

Patients discharged from the hospital on *C. difficile* treatment may be on higher doses, longer courses, or tapering courses on the advice of Gastroenterology.

If non-responsive see the [above](#) bullet points.

Recurrent Infection:

Antibiotic	Dosage	Duration
First recurrence (awaiting sample results)	Send stool and start empirical ORAL vancomycin dose as above.	
First recurrence (confirmed <i>C. diff</i> toxin positive + not had fidaxomicin before): Fidaxomicin* (oral) (<i>on infection specialist advice only</i>)	200mg twice a day	10 days (cost ~£1350)
Subsequent recurrences: Discuss with Gastroenterology/Microbiology		

* If concomitant antibiotics are essential, or in recurrent disease, Microbiology may recommend **fidaxomicin**. Fidaxomicin is licensed in the UK and available via standard wholesalers but is **unlikely to be stocked in community pharmacies**.

Supplies may be obtained from hospital pharmacy departments if an undue delay in initiation is anticipated.

Contact details for hospital pharmacy departments:

- Trust Pharmacy, Queen's Medical Centre, B floor:** Tel. 0115 9709472
Opening hours: Monday to Friday: 9am-midnight, Saturday and Sunday: 10am-midnight
- King's Mill Hospital:** Tel. 01623 622515 ext. 3166
Opening Hours: Monday to Friday: 9am-5.30pm, Saturday and Sunday: 9am-1pm

Version Control – <i>Clostridioides difficile</i>			
Version	Author	Date	Changes
V2.2	Shary Walker, Interface and Formulary Pharmacist	01/07/21	Metronidazole was removed as an option Link of pharmacies holding stocks of vancomycin
V2.3	Shary Walker	19/07/21	Updated in line with July 2021 NICE C.difficile guidelines .
V2.4	Shary Walker	30/09/21	Updates on <i>C. difficile</i> lab re-testing and injection taken orally
V3.0	NNICB Interface team	Nov 24	Further patient advice added. No change to treatment options. Link to sick day rules and PIL added. Further information added about vancomycin not being routinely stocked at community pharmacy.