

# Galway: GAPP - Galway Antimicrobial Prescribing Policy / Guidelines (GAPP): Clostridioides difficile Infection (CDI)

## Clostridioides difficile Infection (CDI)

1. **Clinical suspicion of CDI: Diarrhoea** ( $\geq 3$  episodes unformed stool within 24 hours) where patient has been off laxatives for past 24-48 hours
2. **Detection of C. difficile toxin +/- gene alone does not diagnose CDI.** Clinical assessment is essential. Asymptomatic colonisation can occur in 20-40% of hospitalised patients and does not require treatment.
3. If CDI diagnosed: See table below for treatment of initial episode and first recurrence of CDI.
4. The following regimens may be recommended by **Microbiology or Infectious Diseases only**
  - Regimen for [tapered pulsed oral Vancomycin](#)
  - Regimen for [intracolonic Vancomycin](#)
  - Reserve agent recommendation.

Antibiotics for Clostridium difficile Infection		
Infection	1st Line Antibiotics	Comment
<b>Clostridioides difficile</b> infection	<p><b>Mild: Mildly symptomatic patient ( With NO features of severe CDI )</b></p> <p>Metronidazole PO/NG 400mg every 8 hours</p> <p><b>IF no response 72 hours after starting treatment, consult Microbiology or Infectious Diseases.</b></p> <p><b>All other patients:</b></p> <p>Vancomycin PO/NG 125mg every 6 hours.</p> <p><b>IF severe discuss with Micro/ID</b></p> <p><b>Severe CDI :</b> Suggested by any of the following:</p> <p><b>Clinical:</b> fever, rigors, abdominal pain</p> <p><b>Laboratory:</b> WCC <math>\geq 15 \times 10^9</math> /L, or rise in serum creatinine <math>&gt;50\%</math> above baseline</p> <p><b>Endoscopic findings:</b> pseudomembranous colitis</p> <p><b>Imaging:</b> distension of the large intestine, pericolonic fat stranding or colonic wall thickening (including low-attenuation mural thickening).</p> <p><b>Severe with ileus or toxic megacolon</b></p> <p>Vancomycin PO/NG 500mg every 6 hours</p> <p>+</p> <p>Metronidazole IV 500mg every 8 hours</p> <p>Consult Microbiology or Infectious Diseases.</p>	<p>Duration 10 days.</p> <ul style="list-style-type: none"> <li>• Maintain hydration.</li> <li>• Avoid anti-diarrhoeal agents.</li> <li>• <b>Stop precipitating antibiotic(s)</b> if possible or switch to agents less likely to be associated with CDI.</li> <li>• Stop proton pump inhibitors (PPIs) if possible.</li> <li>• Use vancomycin injection to prepare oral solution – see IV Guide.</li> <li>• Prescribe vancomycin capsules if required on discharge. <b>Expensive</b> – not routinely stocked in community. Please contact ward and community pharmacy at least 24hrs prior to discharge to arrange supply.</li> </ul>
<b>Clostridioides difficile</b>	Consult Microbiology or Infectious Diseases.	
First or subsequent recurrence or persistent symptoms <b>or patients who are post-Faecal Microbiota Transplant (FMT) for CDI</b>		

Refs:

1. HSE AMRIC National Clostridioides difficile infection (CDI) treatment guidance 2023  
<https://www.hse.ie/eng/services/list/2/gp/antibiotic-prescribing/conditions-and-treatments/gastro/clostridium-difficile/>
2. NICE Clostridioides difficile infection: antimicrobial prescribing 2023.
3. Clinical Practice Guidelines for the Management of Clostridioides difficile Infection in Adults: 2021 Update by SHEA/IDSA

4. [European Society of Clinical Microbiology and Infectious Diseases: 2021 update on the treatment guidance document for \*Clostridioides difficile\* infection in adults. Clin Microbiol Infect 2021 Dec;27 Suppl 2:S1-S21. doi: 10.1016/j.cmi.2021.09.038. Epub 2021 Oct 20.](#)
5. Impact of *Clostridioides difficile* length of treatment on rates of recurrence in patients on concurrent antibiotics Am J Infect Control. 2023 Apr 25:S0196-6553(23)00336.
6. [Japanese Clinical Practice Guidelines for Management of Clostridioides \(Clostridium\) difficile infection. Journal of Infection and Chemotherapy. 2022. 28\(1045-1083\).](#)
7. [Australasian Society of Infectious Diseases updated guidelines for the management of Clostridium difficile i nfection in adults and children in Australia and New Zealand Intern Med J 2016 Apr;46\(4\):479-93. doi: 10.1111/imj.13027.](#)
8. Clinical Efficacy of Fidaxomicin and Oral Metronidazole for Treating *Clostridioides difficile* Infection and the Associated Recurrence Rate: A Retrospective Cohort Study Antibiotics 2023, 12, 1323. <https://doi.org/10.3390/antibiotics12081323>
9. [Comparison of outcomes with vancomycin or metronidazole for mild to moderate Clostridium difficile associated diarrhea among solid organ transplant recipients: A retrospective cohort study Transpl Infect Dis 2018 Jun;20\(3\):e12867. doi: 10.1111/tid.12867.](#)
10. Outcomes associated with recent guideline recommendations removing metronidazole for treatment of non-severe *Clostridioides difficile* infection: a retrospective, observational, nationwide cohort study. CA Gentry, DL Campbell, RJ Williams. Int J Antimicrob Agents 2021 Mar; 57(3):106282. doi: 10.1016/j.ijantimicag.2021.106282. Epub 2021 Jan 17

## Tapered pulsed oral Vancomycin

### Tapered Pulsed Oral Vancomycin

1. **Requires Microbiology or Infectious Diseases approval**
2. Use vancomycin injection to prepare oral solution for inpatients – see IV Guide
3. Prescribe vancomycin capsules on discharge. Note: Expensive – not routinely stocked in community. Please contact ward and community pharmacy at least 24hrs prior to discharge to arrange supply.

Vancomycin

- 125mg every 6 hours for 1 week, then
- 125mg every 12 hours for 1 week, then
- 125mg once daily for 1 week, then
- 125mg every second day for 1 week, then
- 125mg every three days for 2 weeks.

## Intracolonic Vancomycin

### Intracolonic Vancomycin

1. **Requires Microbiology or Infectious Diseases approval**
2. Adapted from University of Washington
3. **Adjunctive** therapy for failing Vancomycin therapy in **severe** CDI
  - 500mg of Vancomycin injection is reconstituted and added to 100ml of NaCl 0.9%
  - An 18G Foley catheter is inserted per rectum and the balloon is inflated
  - The Vancomycin solution is instilled into the rectum and retained for 60 minutes by clamping the catheter
  - Once retention time complete, the catheter is unclamped, the balloon deflated and the catheter removed
  - The process is repeated every 6 hours