Clostridioides difficile infection: antimicrobial prescribing

NICE National Institute for Health and Care Excellence

Assessment

For suspected or confirmed *C. difficile* infection, see Public Health England's guidance on diagnosis and reporting

Assess:

- whether it is a first or further episode
- severity of infection
- individual risk factors for complications or recurrence (such as age, frailty or comorbidities)

Prescribing considerations

Review existing antibiotics and stop unless essential

If still essential, consider changing to one with a lower risk of *C. difficile* infection

Review the need to continue:

- proton pump inhibitors
- other medicines with gastrointestinal activity or adverse effects, such as laxatives
- medicines that may cause problems if people are dehydrated, such as NSAIDs

Do not offer antimotility medicines such as loperamide

Do not offer bezlotoxumab to prevent recurrence of infection because it is not cost effective

Consider a faecal microbiota transplant for a recurrent episode of infection after 2 or more previous episodes

July 2021

Clostridioides difficile

Treating suspected or confirmed *C. difficile* infection in **adults**

Offer an oral antibiotic

In the community, consider seeking prompt specialist advice before starting treatment

If oral medicines cannot be taken, seek specialist advice about other enteral routes for antibiotics (nasogastric tube or rectal catheter)

Treating suspected or confirmed *C. difficile* infection in **children and young people**

Offer an oral antibiotic

Treatment should be started by, or after advice from, a specialist

Base choice on what is recommended for *C. difficile* infection in adults; take into account licensed indications for children and young people, and what products are available

Preventing *C. difficile* infection

See Public Health England's guidance on *C. difficile* infection, and NICE's guidance on healthcare-associated infections and antimicrobial stewardship

Ensure a diagnosis is recorded (particularly when a person transfers from one care setting to another)

Do not offer antibiotics

Do not advise people taking antibiotics to take prebiotics or probiotics to prevent *C. difficile* infection

Advise on:

- drinking enough fluids to avoid dehydration
- preventing the spread of infection
- seeking medical help if symptoms worsen rapidly or significantly at any time

Reassess if symptoms or signs do not improve as expected, or worsen rapidly or significantly at any time; daily review may be needed, for example, in hospitals

If antibiotics have been started for suspected *C. difficile* infection, and subsequent stool sample tests do not confirm infection, consider stopping these antibiotics

Refer people in the community to hospital if they are severely unwell, or symptoms or signs worsen rapidly or significantly at any time; refer urgently if the infection is life threatening

In the community, consider referral if the risk of complications or recurrence is high because of individual factors such as age, frailty or comorbidities

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Choice of antibiotic for adults aged 18 years and over

Treatment	Antibiotic, dosage and course length
First-line antibiotic for a first episode of mild, moderate or severe *C. difficile* infection	**Vancomycin**: 125 mg orally four times a day for 10 days
Second-line antibiotic for a first episode of mild, moderate or severe *C. difficile* infection if vancomycin is ineffective	**Fidaxomicin:** 200 mg orally twice a day for 10 days
Antibiotics for *C. difficile* infection if first- and second-line antibiotics are ineffective	Seek specialist advice. Specialists may initially offer: **Vancomycin**: Up to 500 mg orally four times a day for 10 days **With our without** **Metronidazole**: 500 mg intravenously three times a day for 10 days
Antibiotic for a further episode of *C. difficile* infection within 12 weeks of symptom resolution (relapse)	**Fidaxomicin**: 200 mg orally twice a day for 10 days
Antibiotics for a further episode of *C. difficile* infection more than 12 weeks after symptom resolution (recurrence)	**Vancomycin**: 125 mg orally four times a day for 10 days **OR** **Fidaxomicin**: 200 mg orally twice a day for 10 days
Antibiotics for life-threatening *C. difficile* infection	Seek urgent specialist advice, which may include surgery. Antibiotics that specialists may initially offer are: **Vancomycin**: 500 mg orally four times a day for 10 days **With** **Metronidazole**: 500 mg intravenously three times a day for 10 days

See the BNF for appropriate use and dosing in specific populations, for example, hepatic impairment, renal impairment, pregnancy and breastfeeding.
See Specialist Pharmacy Service guidance on choosing between oral vancomycin options. If ileus is present, specialists may use vancomycin rectally.
Use clinical judgement to determine whether antibiotic treatment for *C. difficile* infection is ineffective. This is not usually possible to determine until day 7 because diarrhoea may take 1 to 2 weeks to resolve.
There is no agreement on the definition of relapse or recurrence in *C. difficile* infection. For this guideline, 12 weeks was agreed as the cut-off point between relapse and recurrence.