

Print Name: _____ Department: _____ Date: _____

Clostridium difficile Infection (CDI) Diagnosis and Treatment	
Preferred Population for <i>C. difficile</i> testing: Patients with unexplained and new-onset ≥ 3 unformed stools in 24 hours are the preferred target population for testing for CDI.	<small>Initial</small>
<p>Diagnosis and Testing:</p> <ul style="list-style-type: none"> • Patients with unexplained and new-onset ≥ 3 unformed stools in 24 hours are the preferred target population for testing for CDI. • Use a stool toxin test as part of a multistep algorithm (ie, glutamate dehydrogenase [GDH] plus toxin; GDH plus toxin, arbitrated by nucleic acid amplification test [NAAT]; or NAAT plus toxin) rather than a NAAT alone for all specimens. • Do not perform repeat testing (within 7 days) during the same episode of diarrhea and do not test stool from asymptomatic patients, except for epidemiological studies. • Because of the high prevalence of asymptomatic carriage of toxigenic <i>C. difficile</i> in infants, testing for CDI should never be routinely recommended for neonates or infants ≤ 12 months of age with diarrhea. • <i>Clostridium difficile</i> testing should not be routinely performed in children with diarrhea who are 1–2 years of age unless other infectious or noninfectious causes have been excluded (<i>weak recommendation, low quality of evidence</i>). • In children ≥ 2 years of age, <i>C. difficile</i> testing is recommended for patients with prolonged or worsening diarrhea and risk factors (eg, underlying inflammatory bowel disease or immunocompromising conditions) or relevant exposures (eg, contact with the healthcare system or recent antibiotics) 	
<p>Special Contact Precautions:</p> <ul style="list-style-type: none"> • Accommodate patients with CDI in a private room with a dedicated toilet to decrease transmission to other patients. • Healthcare personnel must use gloves and gowns on entry to a room of a patient with CDI and while caring for patients with CDI. • Patients with suspected CDI should be placed on preemptive special contact precautions pending the <i>C. difficile</i> test results if test results cannot be obtained on the same day. Continue special contact precautions for at least 48 hours after diarrhea has resolved. • There are insufficient data to recommend screening for asymptomatic carriage and placing asymptomatic carriers on contact precautions. 	
<p>Treatment Recommendations and Antimicrobial Stewardship</p> <ul style="list-style-type: none"> • Minimize the frequency and duration of high-risk antibiotic therapy and the number of antibiotic agents prescribed, to reduce CDI risk. • Discontinue therapy with the inciting antibiotic agent(s) as soon as possible, as this may influence the risk of CDI recurrence. • Antibiotic therapy for CDI should be started empirically for situations where a substantial delay in laboratory confirmation is expected, or for fulminant CDI. • Either vancomycin or fidaxomicin is recommended over metronidazole for an initial episode of CDI. The dosage is vancomycin 125 mg orally 4 times per day or fidaxomicin 200 mg twice daily for 10 days. • In settings where access to vancomycin or fidaxomicin is limited, we suggest using metronidazole for an initial episode of nonsevere CDI only. The suggested dosage is metronidazole 500 mg orally 3 times per day for 10 days. Avoid repeated or prolonged courses due to risk of cumulative and potentially irreversible neurotoxicity. • Please note: 1) Fidaxomicin is non-formulary at GMHA Pharmacy. 2) Our hospital does not conduct fecal transplants. 	

Recommendations for the Treatment of *Clostridium difficile* Infection in Adults

Clinical Definition	Supportive Clinical Data	Recommended Treatment ^a
Initial episode, non-severe	Leukocytosis with a white blood cell count of ≤ 15000 cells/mL and a serum creatinine level < 1.5 mg/dL	<ul style="list-style-type: none"> • VAN 125 mg given 4 times daily for 10 days, OR <hr/> • FDX 200 mg given twice daily for 10 days <hr/> • Alternate if above agents are unavailable: metronidazole, 500 mg 3 times per day by mouth for 10 days
Initial episode, severe ^b	Leukocytosis with a white blood cell count of ≥ 15000 cells/mL or a serum creatinine level > 1.5 mg/dL	<ul style="list-style-type: none"> • VAN, 125 mg 4 times per day by mouth for 10 days, OR <hr/> • FDX 200 mg given twice daily for 10 days
Initial episode, fulminant	Hypotension or shock, ileus, megacolon	<ul style="list-style-type: none"> • VAN, 500 mg 4 times per day by mouth or by nasogastric tube. If ileus, consider adding rectal instillation of VAN. Intravenously administered metronidazole (500 mg every 8 hours) should be administered together with oral or rectal VAN, particularly if ileus is present.
First recurrence	...	<ul style="list-style-type: none"> • VAN 125 mg given 4 times daily for 10 days if metronidazole was used for the initial episode, OR <hr/> • Use a prolonged tapered and pulsed VAN regimen if a standard regimen was used for the initial episode (eg, 125 mg 4 times per day for 10–14 days, 2 times per day for a week, once per day for a week, and then every 2 or 3 days for 2–8 weeks), OR <hr/> • FDX 200 mg given twice daily for 10 days if VAN was used for the initial episode
Second or subsequent recurrence	...	<ul style="list-style-type: none"> • VAN in a tapered and pulsed regimen, OR <hr/> • VAN, 125 mg 4 times per day by mouth for 10 days followed by rifaximin 400 mg 3 times daily for 20 days, OR <hr/> • FDX 200 mg given twice daily for 10 days, OR <hr/> • Fecal microbiota transplantation^c
Initial episode, non-severe	Leukocytosis with a white blood cell count of ≤ 15000 cells/mL and a serum creatinine level < 1.5 mg/dL	<ul style="list-style-type: none"> • VAN 125 mg given 4 times daily for 10 days, OR <hr/> • FDX 200 mg given twice daily for 10 days <hr/> • Alternate if above agents are unavailable: metronidazole, 500 mg 3 times per day by mouth for 10 days

Initial episode, severe ^b	Leukocytosis with a white blood cell count of ≥ 15000 cells/mL or a serum creatinine level >1.5 mg/dL	<ul style="list-style-type: none"> • VAN, 125 mg 4 times per day by mouth for 10 days, OR • FDX 200 mg given twice daily for 10 days
Initial episode, fulminant	Hypotension or shock, ileus, megacolon	<ul style="list-style-type: none"> • VAN, 500 mg 4 times per day by mouth or by nasogastric tube. If ileus, consider adding rectal instillation of VAN. Intravenously administered metronidazole (500 mg every 8 hours) should be administered together with oral or rectal VAN, particularly if ileus is present.
First recurrence	...	<ul style="list-style-type: none"> • VAN 125 mg given 4 times daily for 10 days if metronidazole was used for the initial episode, OR • Use a prolonged tapered and pulsed VAN regimen if a standard regimen was used for the initial episode (eg, 125 mg 4 times per day for 10–14 days, 2 times per day for a week, once per day for a week, and then every 2 or 3 days for 2–8 weeks), OR • FDX 200 mg given twice daily for 10 days if VAN was used for the initial episode
Second or subsequent recurrence	...	<ul style="list-style-type: none"> • VAN in a tapered and pulsed regimen, OR • VAN, 125 mg 4 times per day by mouth for 10 days followed by rifaximin 400 mg 3 times daily for 20 days, OR • FDX 200 mg given twice daily for 10 days, OR • Fecal microbiota transplantation^c

Recommendations for the Treatment of *Clostridium difficile* Infection in Children

Clinical Definition	Recommended Treatment	Pediatric Dose	Maximum Dose
Initial episode, non-severe	<ul style="list-style-type: none"> • Metronidazole \times 10 days (PO), OR • Vancomycin \times 10 days (PO) 	<ul style="list-style-type: none"> • 7.5 mg/kg/dose tid or qid • 10 mg/kg/dose qid 	<ul style="list-style-type: none"> • 500 mg tid or qid • 125 mg qid
Initial episode, severe/ fulminant	<ul style="list-style-type: none"> • Vancomycin \times 10 days (PO or PR) with or without metronidazole \times 10 days (IV)^a 	<ul style="list-style-type: none"> • 10 mg/kg/dose qid • 10 mg/kg/dose tid 	<ul style="list-style-type: none"> • 500 mg qid • 500 mg tid
First recurrence, non-severe	<ul style="list-style-type: none"> • Metronidazole \times 10 days (PO), OR • Vancomycin \times 10 days (PO) 	<ul style="list-style-type: none"> • 7.5 mg/kg/dose tid or qid • 10 mg/kg/dose qid 	<ul style="list-style-type: none"> • 500 mg tid or qid • 125 mg qid
Second or subsequent	<ul style="list-style-type: none"> • Vancomycin in a tapered and pulsed regimen^b, OR 	<ul style="list-style-type: none"> • 10 mg/kg/dose qid • Vancomycin: 10 mg/kg/dose 	<ul style="list-style-type: none"> • 125 mg qid • Vancomycin: 500 mg

recurrence	<ul style="list-style-type: none"> • Vancomycin for 10 days followed by rifaximin^c for 20 days, OR • Fecal microbiota transplantation 	qid; rifaximin: no pediatric dosing • ...	qid; rifaximin: 400 mg tid • ...
Initial episode, non-severe	<ul style="list-style-type: none"> • Metronidazole × 10 days (PO), OR • Vancomycin × 10 days (PO) 	<ul style="list-style-type: none"> • 7.5 mg/kg/dose tid or qid • 10 mg/kg/dose qid 	<ul style="list-style-type: none"> • 500 mg tid or qid • 125 mg qid
Initial episode, severe/ fulminant	<ul style="list-style-type: none"> • Vancomycin × 10 days (PO or PR) with or without metronidazole × 10 days (IV)^a 	<ul style="list-style-type: none"> • 10 mg/kg/dose qid • 10 mg/kg/dose tid 	<ul style="list-style-type: none"> • 500 mg qid • 500 mg tid
First recurrence, non-severe	<ul style="list-style-type: none"> • Metronidazole × 10 days (PO), OR • Vancomycin × 10 days (PO) 	<ul style="list-style-type: none"> • 7.5 mg/kg/dose tid or qid • 10 mg/kg/dose qid 	<ul style="list-style-type: none"> • 500 mg tid or qid • 125 mg qid
Second or subsequent recurrence	<ul style="list-style-type: none"> • Vancomycin in a tapered and pulsed regimen^b, OR • Vancomycin for 10 days followed by rifaximin^c for 20 days, OR • Fecal microbiota transplantation 	<ul style="list-style-type: none"> • 10 mg/kg/dose qid • Vancomycin: 10 mg/kg/dose qid; rifaximin: no pediatric dosing • ... 	<ul style="list-style-type: none"> • 125 mg qid • Vancomycin: 500 mg qid; rifaximin: 400 mg tid • ...

Participant Physician's Signature

Date

Provided by: Edgar Magcalas, MD

Date