



Drug Therapy Guidelines

Management of *Clostridium difficile*-Associated Diarrhea (CDAD)

Antibiotic disruption in the normal intestinal flora is the common cause of *Clostridium difficile* infection (CDI).

Note: *C. diff* spores are shed by patients for up to two weeks after treatment. Repeat stools to “test for a cure” is not a recommended practice and should not be routinely performed for this reason.

Once a patient is diagnosed with CDI, he/she will remain in contact precautions for the duration of his/her stay. The patient should be isolated and educated on CDAD and hospital staff should be instructed on proper care measures.

CDI Treatment

1. Offending antimicrobials should be discontinued (if appropriate).¹ Antibiotics commonly implicated with CDI include clindamycin, amoxicillin, ampicillin, second and third generation cephalosporins, Zosyn, and Tygacil—all of which have a broad spectrum of antimicrobial activity.
2. Physician to consult pharmacy for appropriate **case-specific** treatment protocol.
3. Mild to moderate CDAD should be treated with oral metronidazole (Flagyl®) 250 mg PO QID or 500 mg PO TID for 10 days.^{1,2,3}
 - NPO patients should be started on IV metronidazole 500 mg Q8H.^{1,2}
4. Oral vancomycin (Vancocin®) should be reserved for treatment due to developing resistance patterns.
 - a. Indications for oral vancomycin use²
 - Allergy to metronidazole
 - Failure to respond to metronidazole after three to four days of treatment
 - Pregnant or breastfeeding women
 - Patients on warfarin
 - Children less than 10 years of age
 - **Severe cases of CDAD** that include ileus, toxic megacolon, bowel perforation, peritonitis, fever (>101.5°F) and marked leukocytosis (>15,000 cells/ml).
 1. Drug therapy may include a combination of oral vancomycin and IV metronidazole and/or vancomycin enema.
 - b. Oral vancomycin dosage should consist of 125 mg PO Q6H for 14 days.^{2,3}
 - IV vancomycin should not be administered as it does not reach therapeutic concentrations in the bowel. It should also be noted systemic side effects and harm to the fetus will also be avoided for this reason.
5. Recurrent CDAD³
 - a. 1st recurrence: Use previous therapy shown to be effective
 - b. 2nd recurrence: Vancomycin 125 mg PO Q6H for 14 days
 - c. 3rd recurrence: Vancomycin 125 mg PO Q6H for 14 days followed by vancomycin taper for six weeks
 - Week 1: 125 mg QID
 - Week 2: 125 mg BID
 - Week 3: 125 mg QD
 - Week 4: 125 mg QOD
 - Weeks 5 and 6: 125 mg every three days
6. Antiperistaltic agents (loperamide, diphenoxylate, opioids) should NOT be administered to CDAD patients due to further retention of *C. diff* toxin and increased risk for toxic megacolon.¹
7. Supportive therapy of fluid and electrolytes should be initiated.

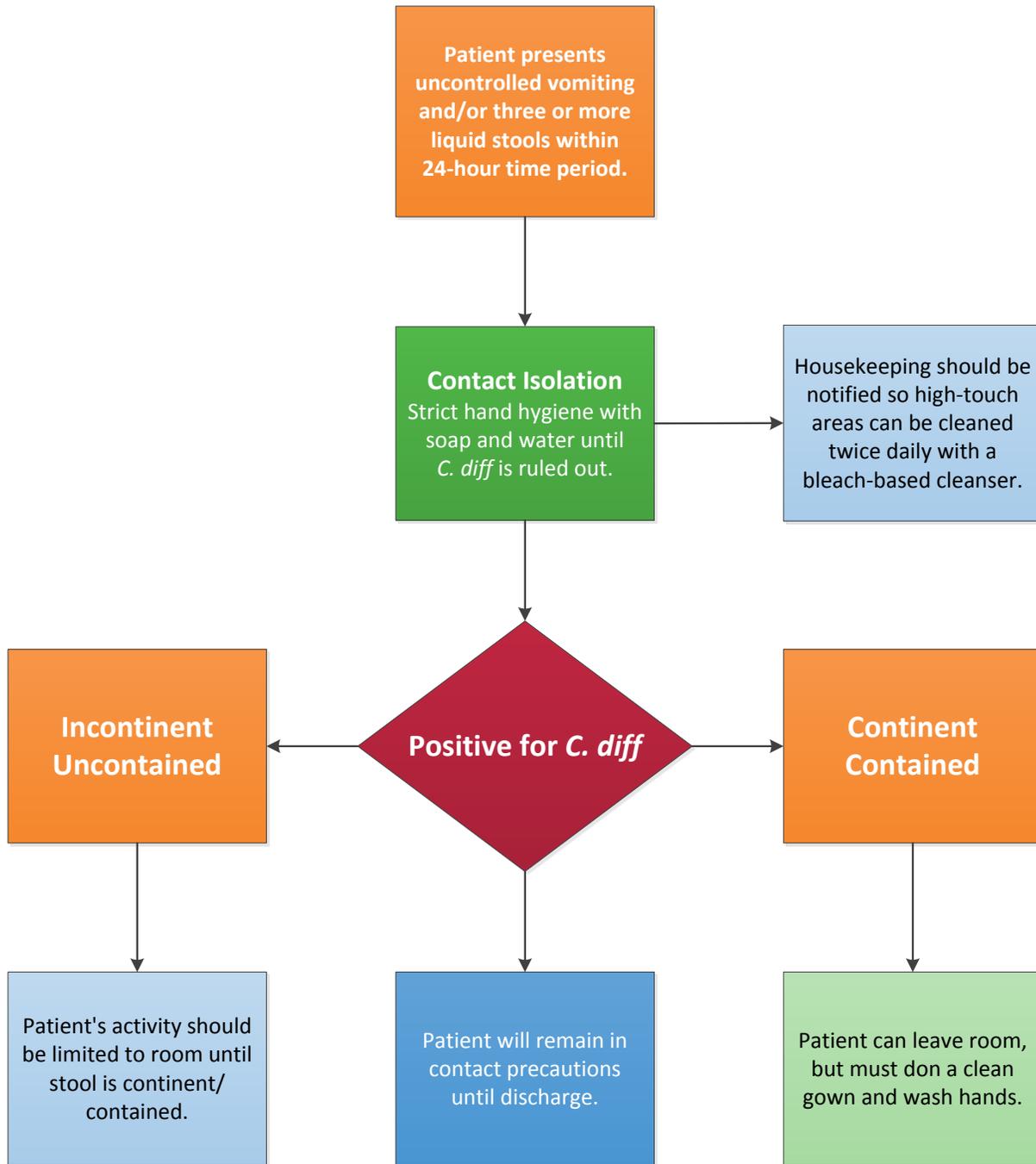
¹ Gerding D., Johnson S., Peterson L., et al. *Clostridium difficile*-associated diarrhea and colitis. Infection control hospital epi. 1995;16:459-477.

² Fekety R. Guidelines for the diagnosis and management of *Clostridium difficile*-associated diarrhea and colitis. American College of Gastroenterology, Practice Parameters Committee. Am J Gastroenterol. 1997;92:739-750.

³ Malnick SDH and Zimhony O. Treatment of *Clostridium difficile*-associated diarrhea. Annals of Pharmacotherapy. 2002;36:1767.



CDI Bundle



Note: This document is intended as a general guideline, and represents many widely supported best practices. This template should be adapted to fit each organization’s needs after a thorough, internal multidisciplinary review.