

Pathway inclusion criteria:
Inpatient, confirmed or high suspicion of C. difficile infection (CDI)

Positive C. diff test **-AND-** clinical signs/symptoms consistent with CDI
-OR-
 High clinical suspicion
 (e.g. fever, high white blood cell (WBC) count;
 ≥ 3 documented liquid stools in 24 hours)

For additional information, see [Penn Medicine Antimicrobial Stewardship site](#)

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Contact Nikhil Mull, MD or Emilia Flores, PhD, RN for more information on our PennPathways program.

This PennPathway was developed using a multidisciplinary approach and presents the best model of care based on the best available scientific evidence the time of publication. Recommendations are not intended to replace professional judgement.

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If possible, STOP precipitating antibiotic(s), laxatives, acid-suppression agents, anti-peristaltic agents

- Discontinue therapy with **ANY** other systemic antibiotic agent(s) as soon as possible, as this may influence the risk of CDI recurrence.
- STOP all laxatives immediately to reduce risk of prolonged diarrheal illness
- STOP and **AVOID** anti-peristaltic agents (eg loperamide, Lomotil) throughout treatment course
- STOP and **AVOID** unnecessary proton pump inhibitors (PPI)

Sepsis recognition tool

PENN SEPSIS RECOGNITION TOOL

SEPSIS WITHOUT ORGAN DYSFUNCTION	SEPSIS WITH ACUTE ORGAN DYSFUNCTION	SEPTIC SHOCK
Suspected Infection with New or Worsened Sepsis-Related End Organ Dysfunction (1 of the following systems from other cultures when applicable, use the worst value in 24 hour period)		
	Acute	Acute or Chronic (Change from baseline)
Suspected Infection AND SIRS (2 of the following): • T ≥ 38.0 or ≤ 36.0 • HR > 90 • RR > 20 or P/FiO2 < 12 • WBC > 15, < 4, or > 10% bands	CNS	Altered mental status, delirium or GCS ≤ 15 Decrease in GCS by ≥ 2
	Cardiovascular	SBP < 90 or MAP < 65 Decrease in SBP by > 40
	Perfusion	Lactate > 2.0 Lactate > 2.0
	Respiratory	PaO2/FiO2 < 300 or SpO2/FiO2 < 230 or New Ventilation requirement* Decrease in PaO2/FiO2 by ≥ 100 or New Ventilation requirement*
	Renal	Creat > 2.0 if no known baseline or Creat > 0.5 above baseline or Crigly** (except chronic ESRD)
Coagulation	INR > 1.5 or aPTT > 100**	
Liver	Bilirubin > 2.0	

* Suspected or proven bacterial infection
** INR < 1.5 or aPTT < 100** or 2 hours despite appropriate fluid resuscitation
*** P/a = partial aortic aneurysm rupture
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What to tell patients and families: Sepsis is the body's overreacting and life-threatening response to infection that can lead to tissue damage, organ failure, and death.
What to document: Sepsis, Without Organ Dysfunction*, Sepsis with Acute Organ Dysfunction* or "Septic Shock"

Determine if CDI is fulminant

CDI is fulminant if

- CDI is the **cause** of sepsis with acute organ dysfunction or septic shock without other identifiable etiology
- OR-**
- Abdominal signs/symptoms (vomiting, distension) concerning for ileus or toxic megacolon

Management of fulminant CDI

- Antibiotic therapy should be started empirically
- Order a C. difficile test to confirm infection
- Obtain one view abdominal x-ray upright portable
 - Consider CT abdomen/pelvis (ideally with IV and PO contrast as tolerated) is recommended if abdominal distension consistent with signs / symptoms (vomiting, distension) of ileus, toxic megacolon
- Surgical **-AND-** infectious disease (ID) consults recommended

CDI recurrence?
 Recurrence is defined as:
Positive C. diff test with recurrent symptoms attributable to CDI **within 8 weeks of successfully completing treatment** for previous CDI that was associated with interval improvement

NO, First CDI Episode

Non-fulminant

Therapy	Notes
vancomycin 125 mg, PO, Q6H x 10 days*	*If the patient is currently receiving other systemic antibiotics, consider extending the CDI treatment course for 7 additional days beyond the final day of systemic antibiotics (minimum 10 day CDI course)

Intolerance/allergy to oral vancomycin
 Consider fidaxomicin, 200mg, 2x day, 10 days; or metronidazole 500 mg, 3x/day, 10 days, or infectious diseases (ID) consult

First Recurrence
 Select ONE

vancomycin	vancomycin tapered regimen
125 mg, PO Q6H x 10 days (Use especially if your patient was treated previously with metronidazole)	125 mg, PO <ul style="list-style-type: none"> Q6H x 14 days Q12H x 7 days Q24H x 7 days Q2-3 days x 2-8 weeks

Multiple recurrences
 vancomycin tapered regimen 125 mg, PO

- Q6H x 14 days
- Q12H x 7 days
- Q24H x 7 days
- Q2-3 days x 2-8 weeks

Intolerance/allergy to oral vancomycin
 Consider fidaxomicin, 200mg, 2x day, 10 days; or infectious diseases (ID) consult

Consult infectious disease (ID) for consideration of fecal microbiota transplantation (FMT)
 Evaluation for FMT is recommended for patients with 2+ recurrences of CDI

If no improvement in diarrhea within 5 DAYS

- Consider alternative causes for infection
- Consider non-infectious etiologies for diarrhea such as recent initiation of enteral nutrition or medication related effects
- If above evaluation is unrevealing, consider refractory CDI; consult ID

