



Public Health Division

Healthcare-associated Infections Program

2023

Clostridioides difficile **Prevention Toolkit**

Raising awareness among healthcare providers about the prevention of *C. difficile* infection

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What is *C. difficile*?

Clostridioides difficile is a bacterium that causes diarrhea and colitis (an inflammation of the colon). Other symptoms may include fever, abdominal pain, loss of appetite, and nausea. *C. difficile* can affect anyone, but most cases occur while you're taking antibiotics or not long after you've finished taking antibiotics. Other risk factors include being 65 or older, having recently stayed at a hospital or nursing home, history of an earlier *C. difficile* infection, and being immunocompromised.

Why do we care?

C. difficile infections (CDI) are a leading cause of patient harm in the U.S. medical system and are estimated to cause almost half a million infections in the United States each year.

How is *C. difficile* spread?

C. difficile spores are spread between sick patients and healthcare workers by direct contact, or via surfaces that are not thoroughly cleaned. Washing with soap and water is the best way to prevent the spread of germs. Spores are not killed with typical disinfectants; so, you need to use a fresh bleach solution (1:10 dilution) or special disinfectants to clean surfaces. ([EPA List K](#)).

What is a “healthcare-associated” *C. difficile* infection?

To address the causes of CDI, these infections have been designated as being, “healthcare-associated,” or being, “community-associated.” Healthcare-associated *C. difficile* infections occur within 12 weeks of documented admission to a healthcare facility (e.g., hospital, nursing home, etc.); they account for 51% of CDI.

What is a “community-associated” *C. difficile* infection?

C. difficile infections that occur without a history of admission to a healthcare facility in the last 12 weeks are considered community-associated, and account for about 48% of CDI.

Resources

- [CDI Toolkit \(pdf\)](#): Complete document of education, FAQs, NHSN enrollment tools.
- [CDI presentation for Long-term Care Clinical Staff\(pdf\)](#): "Oregon *Clostridioides difficile* Initiative: From spores to sporicidals".
- [CDI presentation for Long-term care Frontline Staff \(pdf\)](#): Oregon *Clostridioides difficile* Initiative: essentials for bedside care.
- [CDI Frequently Asked Questions \(FAQs\) \(pdf\)](#): Printable handout for staff, families, and patients.
- [C. difficile assessment tools for facilities \(pdf\)](#): CDC tools (pilots) for facility baseline assessment, laboratory, and antibiotic stewardship programs for various healthcare settings.
- [Disease Page: C. difficile](#)
- [Oregon Interfacility Transfer Communication webpage](#): Rule definition, FAQs, form examples.
- [Oregon AWARE Antibiotic Stewardship Collaborative](#): Project to promote outpatient antibiotic stewardship through judicious use of antibiotics for common syndromes.

CDC Sites

- [C. difficile Infection Overview](#)
- [C. difficile Resources for Clinicians](#)
- [C. difficile Resources for Patients](#)
- [Tracking C. difficile infections](#)
- [CDC Guidelines for Isolation Precautions](#)

Control Measures

- [Clinical Practice Guidelines for the Management of *Clostridioides difficile* Infection in Adults: 2021 Update by SHEA/IDSA](#)

- [APIC Guide to Preventing *Clostridioides difficile* Infections](#)
- [Sporicidal EPA list for disinfection of *C. difficile*: EPA List K](#)
- [Interfacility transfer communication form](#) to use when transferring a patient or resident with *C. difficile* infection

Publications

- [Emerging Infections Program \(EIP\) *Clostridioides difficile* Oregon Population Surveillance Site](#)
- Korhonen L, Cohen J, Gregoricus N, Farley MM, Perlmutter R, Holzbauer SM, Dumyati G, Beldavs Z, Paulick A, Vinjé J, Limbago BM, Lessa FC, Guh AY. [Evaluation of viral co-infections among patients with community-associated *Clostridioides difficile* infection](#). PLoS One. 2020 Oct 19;15(10):e0240549. doi: 10.1371/journal.pone.0240549. eCollection 2020.
- Guh AY, Mu Y, Winston LG, Johnston H, Olson D, Farley MM, Wilson LE, Holzbauer SM, Phipps EC, Dumyati GK, Beldavs ZG, Kainer MA, Karlsson M, Gerding DN, McDonald LC. [Trends in U.S. Burden of *Clostridioides difficile* Infection and Outcomes](#). N Engl J Med 2020 Apr;382(14):1320-1330. doi: 10.1056/NEJMoa1910215.
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- Weng MK, Adkins SH, Bamberg W, Farley MM, Espinosa CC, Wilson L, Perlmutter R, Holzbauer S, Whitten T, Phipps EC, Hancock EB, Dumyati G, Nelson DS, Beldavs ZG, Ocampo V, Davis CM, Rue B, Korhonen L, McDonald LC, Guh AY. [Risk factors for community-associated *Clostridioides difficile* infection in young children](#). Epidemiol Infect. 2019 Jan;147:e172. doi: 10.1017/S0950268819000372.

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- Guh AY, Adkins SH, Li Q, Bulens SN, Farley MM, Smith Z, Holzbauer SM, Whitten T, Phipps EC, Hancock EB, Dumyati G, Concannon C, Kainer MA, Rue B, Lyons C, Olson DM, Wilson L, Perlmutter R, Winston LG, Parker E, Bamberg W, Beldavs ZG, Ocampo V, Karlsson M, Gerding DN, McDonald LC. [Risk Factors for Community-Associated *Clostridium difficile* Infection in Adults: A Case-Control Study](#). Open Forum Infect Dis. 2017 Oct 26;4(4):ofx171. doi: 10.1093/ofid/ofx171.
- Lessa FC, Winston LG, McDonald LC; Emerging Infections Program C. difficile Surveillance Team. [Burden of *Clostridium difficile* infection in the United States](#). N Engl J Med. 2015 Jun 11;372(24):2369-70. doi: 10.1056/NEJMc1505190.

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