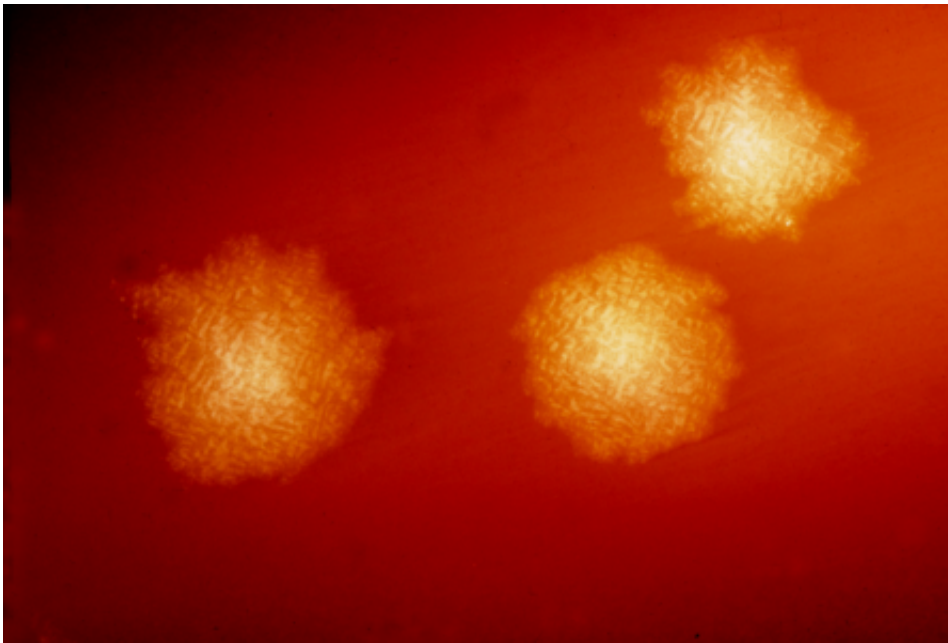


## C. difficile rates highest in Northeast region, spring season

April 28 2015

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This photograph depicts *Clostridium difficile* colonies after 48hrs growth on a blood agar plate; Magnified 4.8X. *C. difficile*, an anaerobic gram-positive rod, is the most frequently identified cause of antibiotic-associated diarrhea (AAD). It accounts for approximately 15–25% of all episodes of AAD. Credit: CDC

Rates of infection with the deadly superbug *Clostridium difficile* were highest in the Northeast region of the country and in the spring season over the last 10 years, according to a study published in the May issue of the *American Journal of Infection Control*, the official publication of the Association for Professionals in Infection Control and Epidemiology

(APIC).

Researchers from the University of Texas retrospectively analyzed 2.3 million cases of *C. difficile* infection (CDI) from 2001-2010 and found the highest incidence in the Northeast (8.0 CDI discharges/1000 total discharges), followed by the Midwest (6.4/1000), South (5.0/1000), and the West (4.8/1000).

Seasonally, spring had the most cases (6.2 CDI discharges/1000 total discharges), followed by winter (5.9/1000), summer (5.9/1000) and fall (5.6/1000). Adults and [older adults](#) followed overall trends, whereas pediatric CDI was highest in winter.

CDI mortality was highest in the Midwest (7.3 percent) and among older adults (9.0 percent).

"The peak incidence in the spring could be attributed to increased utilization of antibiotics in winter months," the authors state. "Prior studies have found a 1 to 2 month lag time between antibiotic exposure and the development of CDI."

*C. difficile* causes inflammation of the colon and life-threatening diarrhea. According to the CDC, *C. difficile* has become the most common microbial cause of healthcare-associated infections in U.S. hospitals and costs up to \$4.8 billion each year in excess healthcare costs for [acute care facilities](#) alone. The CDC estimates that *C. difficile* caused almost half a million infections in 2011 and that 29,000 U.S. patients died within 30 days of their initial diagnosis.

**More information:** "Regional and seasonal variation in Clostridium difficile infections among hospitalized patients in the United States, 2001-2010," by Jacqueline R. Argamany, Samuel L. Aitken, Grace C. Lee, Natalie K. Boyd, and Kelly R. Reveles appears in the *American*

*Journal of Infection Control*, Volume 43, Issue 5 (May 2015).

Provided by Elsevier

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