

Stop C. Difficile: Education and Hand Washing Saves Lives



By [Catherine Bertram](#)

Clostridium difficile or “C. diff.” C. diff. killed more patients in England in 2006 than MRSA. The [Centers for Disease Control \(CDC\)](#) reported a nearly twofold increase in C. diff infections from 1996 to 2003 in the U.S. The same hyper-virulent strain, dubbed ribotype 027, has invaded some hospitals in the U.S. C. diff. infections kill an estimated 5,000 people in the U.S. per year, the CDC [reports](#).

C. diff has been causing trouble for several years. The mortality rate from this disease is rising. What do we know about this enemy? Outside of hospitals and nursing homes, it is only found in the gastrointestinal tracts of about 5% of the general population. Other “good” bacteria usually keep C.diff from getting out of control. However, in hospitals and nursing homes that is not always the case. When a patient is put on antibiotics, the balance of bacteria is affected, and C. diff. may take control, causing severe, watery diarrhea.

Why does this bug spread so fast in hospitals and nursing homes? The answer is very troubling. Traces of one patient's feces, from the watery diarrhea, come into contact with another patient's mouth, thus spreading this dangerous bacteria. How could such a thing happen? The only answer is inadequate cleaning. Patients and staff pick up the C.diff bacteria, in the form of spores, from contaminated surfaces such as

uniforms, stethoscopes, blood pressure cuffs, door knobs, bedrails and IV poles. Unknowingly, caregivers get these C.diff spores on their hands and pass them on to other caregivers and eventually to other patients. The patients then touch their hands to their lips and the bacteria spreads.

Think this is an exaggeration? Look at these confirmed cases according to an article by an organization called [Reduce Infection Deaths](#) (RID), "At Thomas Jefferson University Medical Center in Philadelphia, where C. diff was raging, three patients occupying the same room consecutively came down with C. diff. One died as a result. In 2005, eight infants in the neonatal intensive care unit (NICU) at Intermountain Healthcare in Provo, Utah contracted C. diff. All eight infected infants had shared one of three beds in a corner of the NICU.

At the Cleveland VA Medical Center, researchers cultured commonly touched surfaces such as bed rails, telephones, call buttons, toilet seats, and bedside tables in the rooms of patients with C. Diff. After routine cleaning, **78% of the surfaces were still contaminated with C. diff spores.** However, after re-education of the hospital cleaning staff, including reminders about surfaces commonly overlooked, the staff used bleach and only 1% of surfaces were still contaminated.

The 2000, the University of Pittsburgh Medical Center -Presbyterian experienced a shocking 400% increase in C. diff infections. They responded with a comprehensive strategy that emphasized rigorous cleaning with bleach and rapid identification and isolation of C.diff positive patients to prevent the bacteria from spreading to other patients. It worked. By 2006, C. diff rates were down 71%."

At Intermountain Healthcare, after the eight infants contracted C. diff, the NICU was "cleaned from top to bottom," and they "launched extensive staff education related to C. difficile and its ability to be found on environmental surfaces," and "the importance of washing hands with soap and water when caring for a patient with C. difficile." The results? No new cases of C. diff appeared the NICU in the next two years.

Education is the key. A study at one hospital found that 39% of resident physicians and other medical personnel didn't know that C. diff

spores could be transmitted from patient to patient on equipment. Almost 20% thought C. diff was a blood borne pathogen which is incorrect.

Cleaning the hospital and nursing home environment and educating personnel about C. diff. is essential. Mandatory hand hygiene for patients before meals is also critical. Nonambulatory patients are frequently handed a food tray, but have no way to clean their hands before eating. If their hands are contaminated with C. diff spores, they will infect themselves by eating.

About the author:

Catherine Bertram is board certified in civil trials and was recently nominated as a 2010 Super Lawyer for Washington, D.C. Ms. Bertram has 20 years of trial experience and is unique in that she was formerly the Director of Risk Management for Georgetown University Hospital so she brings a wealth of knowledge to her practice including how hospitals should be run and what doctors and nurses can do to protect patients. She is a partner with the firm and devotes her practice to the representation of patients and families of loved ones who have been injured or lost due to medical errors. Ms. Bertram lectures regularly to lawyers and health care providers, nationally and locally, regarding patient safety, medical negligence and other related issues. She has also recently published a chapter in a medical textbook. She can be reached by email at cbertram@reganfirm.com or by phone 202-822-1875 in her office in Washington, D.C.