

# New Study Shows Higher Rates of C. difficile Infection in Hospitals that Use Reusable Sharps Containers

**Results from independent analysis of survey of more than 600 hospitals presented today at the 42nd Annual APIC Conference**

**FRANKLIN LAKES, N.J. June 27, 2015** – BD Medical, a segment of BD (Becton, Dickinson and Company) (NYSE: BDX), a leading global medical technology company, today announced that results from a new independent study of acute care hospitals shows higher rates of C. difficile (C. diff) infection among hospitals that use reusable sharps containers. A poster presentation on the results of the analysis will be presented today by Monika Pogorzelska-Maziarz, PhD, MPH, assistant professor at the Jefferson School of Nursing, at the 42nd Annual Conference of the Association for Professionals in Infection Control and Epidemiology (APIC), taking place June 27-29 at the Music City Center in Nashville, Tenn.

The study analyzed data from the results of a national survey of hospitals in the U.S. conducted in December 2013, with survey responses linked to the FY2012 Medicare Provider Analysis and Review (MedPAR) data set<sup>1</sup>. According to the analysis, hospitals that used single-use containers had significantly lower rates of C. diff as compared to those using reusable containers, with an Incidence Rate Ratio (IRR)=0.8701 (which translates to nearly a 15 percent difference in the prevalence of C. diff infection rates).

The study was based on completed surveys from more than 600 U.S. hospitals. In multivariable regression, data showed that hospitals with single-use sharps disposal containers had significantly lower rates of C. diff infections versus hospitals with reusable containers after controlling for several hospital characteristics<sup>1</sup>.

“The use of containers to properly dispose of sharps in the health care setting is a critical component of most occupational safety programs in health care settings,” said Dr. Pogorzelska-Maziarz. “These findings, while they do not confirm a direct correlation between protocols for sharps disposal and risk of health care associated infection, do raise important questions about the potential role that reusable sharps containers may play in pathogen transmission.”

The burden associated with C. diff infections is at a historic high, with an attributable mortality of more than 29,000 deaths in 2011, according to the Center for Disease Control<sup>2</sup> and an estimated annual cost to the U.S. health care system of \$4.8 billion. C. diff was selected by Dr. Pogorzelska-Maziarz as the organism of interest for this study due to the high morbidity, mortality and costs, as well as the acknowledged role that environmental contamination plays in its transmission.

“Given the widespread use of sharps containers in the health care setting, we applaud Dr. Pogorzelska-Maziarz’s dedication in working to identify and assess a possible link between the use of single-use containers and lower hospital-wide C. diff infection rates,” said Lynne Kelley, MD, FACS, vice president, worldwide medical affairs, BD Medication & Procedural Solutions, BD Medical. “At BD we are continuing to work to identify effective strategies to reduce health care-associated infections. This study provides very compelling new insights demonstrating where infection control protocols might be modified to reduce risk.”

BD Medical’s portfolio of single-use disposable sharps solutions will also be on display at the APIC conference at booth #509. For more information visit <http://www.bd.com/sharps/>.

## About BD

BD is one of the largest global medical technology companies in the world and is advancing the world of health by improving medical discovery, diagnostics and the delivery of care. The company supports the heroes on the frontlines of health care by developing innovative technology, services and solutions that help advance both clinical therapy for patients and clinical process for health care providers. BD and its 65,000 employees have a passion and commitment to help enhance the safety and efficiency of clinicians’ care delivery process, enable laboratory scientists to accurately detect disease and advance researchers’ capabilities to develop the next generation of diagnostics and therapeutics. BD has a presence in virtually every country and partners with organizations around the world to address some of the most challenging global health issues. By working in close collaboration with customers, BD can help enhance outcomes, lower costs, increase efficiencies, improve safety and expand access to health care. For more information on BD, please visit [bd.com](http://bd.com)

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