



## C. diff Infection Risk Linked with Sharps Containers



According to a new study, hospitals using single-use sharps containers had significantly lower rates of *Clostridium difficile* (*C. diff*) infection compared to hospitals using reusable containers. The finding is reported in *American Journal of Infection Control*.

“This is the first study to show a link between use of single-use sharps containers and lower *C. diff* rates,” author Monika Pogorzelska-Maziarz, PhD, MPH, from Thomas Jefferson University in Philadelphia, PA writes in the journal report.

*C. diff* is a potentially deadly infection and determining key contributing factors is crucial. The Centers for Disease Control and Prevention (CDC) reported that of the estimated half a million *C. diff* infections in 2011, 29,000 patients died within 30 days of diagnosis. Although advancements have been made — such as new tests to detect the *C. diff* in children — the issue still persists.

Dr. Pogorzelska-Maziarz conducted a survey of 1,990 hospitals across the United States about the use of sharps disposal containers. Responses were received from 539 hospitals which, on average, had 289 beds and were predominantly non-for-profit (67 percent) and non-teaching (63 percent).

Of the 539 hospitals, 72 percent reported using reusable sharps containers and data showed that they had more *C. diff* cases.

“In bivariate regression, hospitals using single-use containers had significantly lower rates of *C. diff* versus hospitals using reusable containers (incidence rate ratio [IRR] = 0.846,  $P = .001$ ),” the author explains. “This relationship persisted in multivariable regression (IRR = 0.870,  $P = .003$ ) after controlling for other hospital characteristics.”

Dr. Pogorzelska-Maziarz says further studies are needed to investigate the potential for environmental contamination of reusable containers and the role they may play in pathogen transmission.

Source: [Thomas Jefferson University](#)

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