

## Letters to the Editor

To the Editor:

The association between hospitals and the acquisition of *Clostridium difficile* infection (CDI) has been extensively reported, with up to 15% of patients becoming infected during their hospital stay.<sup>1</sup> More recently, however, Chitnis et al reported a strong association between CDI and even low-level healthcare exposure.<sup>2</sup> They found that 40.7% of patients with community-acquired CDI had at least low-level healthcare exposure, defined as “a visit to a dentist, physician, or other outpatient clinic” in the past 12 months.<sup>2</sup> Comparatively, 18% of patients with community-acquired CDI had no healthcare exposure whatsoever. Thus, exposure even to nonhospital healthcare settings increases the risk of CDI, with greater levels of care leading to higher infection rates.<sup>2</sup>

Previous studies have shown that 2.5%-15.3% of healthy individuals are carriers of *C. difficile*<sup>3,4</sup> and that healthcare workers do not have an increased rate of colonization compared to the general population.<sup>4,5</sup> Studies have shown that up to 59% of healthcare workers have skin carriage of *C. difficile* after direct contact with an infected patient, but hand washing after patient care greatly reduces carriage rates.<sup>6</sup> Because hand washing has been proven to be superior to alcohol-based rubs in reducing *C. difficile* transmission, most healthcare workers are aware that they are required to wash their hands after contact with infected patients.<sup>6</sup> This knowledge may help explain why healthcare workers do not have higher colonization rates than the general population even though they spend more time in healthcare settings. If healthcare workers are not an identifiable source of infection transmission, perhaps the healthcare settings themselves are a cause of increased infection transmission.

Although environments can serve as sources of bacterial transmission, most studies quantifying environmental *C. difficile* spores have focused on hospital

settings and not outpatient clinics. Additionally, research into decontamination techniques in hospital settings has shown some methods to be more promising than others. Because Chitnis et al found a correlation between increased level of care and increased CDI, further investigation into the prevalence of *C. difficile* spores in low-level healthcare settings, such as clinics, is necessary. Increased identification of sources of transmission in nonhospital settings and better methods of decontamination may aid in the reduction of community-acquired CDI rates in the future.

Matthew Clark, BS  
The University of Queensland School of Medicine,  
Ochsner Clinical School  
New Orleans, LA  
ven\_maclark@ochsner.org

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