

ABSTRACT

Background: Healthcare-associated infections caused by *Clostridium difficile* remain at historically high levels, posing a grave threat to patients and long-term care facility (LTCF) residents. The New York State (NYS) Department of Health launched a pilot *C. difficile* Prevention Collaborative to encourage implementation of *C. difficile* prevention strategies and to reduce *C. difficile* infection (CDI) rates in LTCFs. This analysis summarizes key findings from the pre-project questionnaire and provides recommendations to improve infection prevention in LTCFs.

Methods: Infection preventionists (IPs) in LTCFs enrolled in the pilot *C. difficile* Prevention Collaborative of NYS (n=106) were administered a pre-project questionnaire. Data were entered into an electronic database, and descriptive statistics were calculated.

Results: Of the 106 IPs surveyed, 74% (n=78) completed the questionnaire. In LTCFs, 55% (n=43) of IPs reported having received some form of infection control training; 12% (n=5) were Certified in Infection Control. Infection control was a part-time job for 71% (n=55) of IPs. Surveillance information was shared with the following groups: facility leadership (100%, n=78), unit managers (97%, n=76), general nursing staff (71%, n=55), and all physicians providing care to residents (73%, n=57). Regarding *C. difficile* management, 94% (n=73) of IPs placed residents with suspected CDI on contact precautions, and 62% (n=48) used dedicated non-critical medical items for residents with CDI. For environmental cleaning and disinfection, 87% (n=68) of IPs reported using bleach-based products in the rooms of residents with CDI. Among IPs, 69% (n=54) were able to identify which laboratory testing methods their facilities used to diagnose CDI.

Conclusions: In NYS, a lack of training might explain the sub-optimal use of dedicated non-critical medical items and presumptive contact precautions. Moreover, limited knowledge of diagnostic procedures and the part-time nature of infection control might indicate insufficient educational and operational resources. Due to the shift in healthcare delivery away from acute care settings, it is imperative that adequate infection control education, training, and resources be available to IPs in LTCFs.

Disclosures: None for all Authors.

BACKGROUND

- Clostridium difficile* (*C. difficile*), a spore-forming, anaerobic Gram-positive bacterium, is responsible for most cases of antibiotic-associated diarrhea¹
- Clinical symptoms of *C. difficile* infection include:^{1,2}
 - Watery diarrhea
 - Fever
 - Loss of appetite
 - Nausea
 - Abdominal pain/tenderness
- Severe, life-threatening forms of *C. difficile* infection include:^{1,2}
 - Pseudomembranous colitis
 - Toxic megacolon
 - Sepsis
 - Death
- Transmission of *C. difficile* occurs through direct contact with a surface, device, or material that has been contaminated with *C. difficile* spores from the fecal matter of an infected individual^{1,2}



<http://www.mrsasurvivors.org/c-difficile>

- Healthcare-associated infections caused by *C. difficile* remain at historically high levels with 94% of all cases connected to receiving medical care³
- Within the last decade, hospital stays from *C. difficile* infections have tripled, posing a grave threat to patients and long-term care facility (LTCF) residents³
- Existing guidance and recommendations have been developed to reduce *C. difficile* infections in acute care facilities; however, these guidelines may not translate to LTCFs
- To encourage implementation of *C. difficile* prevention strategies and to reduce *C. difficile* infection rates in LTCFs, the New York State Department of Health (NYSDOH) launched a pilot *C. difficile* Prevention Collaborative in September 2011

OBJECTIVES

- To summarize key findings from the pre-project questionnaire of the NYS *C. difficile* Prevention Collaborative
- To provide recommendations to improve infection prevention within NYS LTCFs

METHODS

- From 2011–2012, NYSDOH recruited and enrolled infection preventionists (IPs) in NYS LTCFs (n=106) to participate in the statewide *C. difficile* Prevention Collaborative
- Upon enrollment, IPs were asked to complete a pre-project questionnaire, which was made available through Microsoft Word and Survey Monkey
- Completed questionnaires (n=78) were entered into an electronic database and descriptive statistics were calculated in Microsoft Excel

RESULTS

Figure 1A: Infection Control Training of Infection Preventionists in New York State Long-Term Care Facilities, 2011–2012

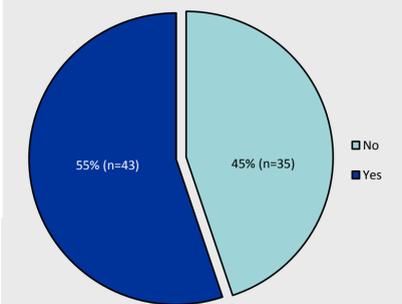


Figure 2: Staffing Resources for Infection Control in New York State Long-Term Care Facilities, 2011–2012

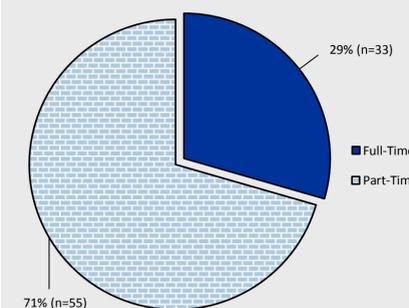


Figure 1B: Of Infection Preventionists with Infection Control Training, Type of Training Received, 2011–2012

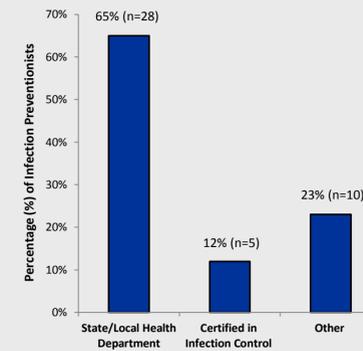
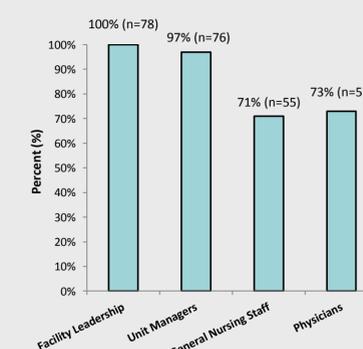


Figure 3: Dissemination of Infection Control Surveillance Information within New York State Long-Term Care Facilities by Group, 2011–2012



RESULTS

Figure 4: Reported Management of *Clostridium difficile* Infection (CDI) in New York State Long-Term Care Facilities, 2011–2012

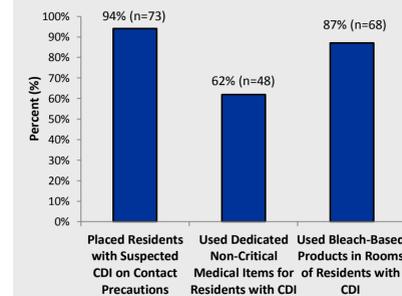
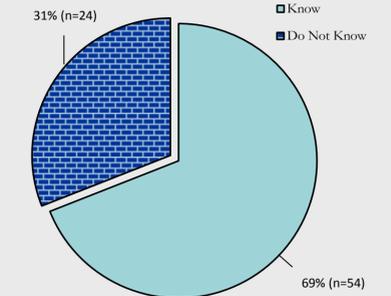


Figure 5: Infection Preventionists' Knowledge of their Facilities' Lab Testing Methods for *Clostridium difficile* in New York State, 2011–2012



CONCLUSIONS

- In NYS, insufficient training might explain the sub-optimal use of dedicated non-critical medical items and presumptive contact precautions.
- Moreover, limited knowledge of diagnostic procedures and the part-time nature of infection control might indicate inadequate educational and operational resources.
- Due to the shift in healthcare delivery away from acute care settings, it is imperative that adequate infection control education, training, and resources be available to IPs in LTCFs.

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