484. An Equally Effective but Better Tolerated Formulation of Bleach
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Methods. We examined the efficacy of the spray application of the new formulation of bleach (sodium hypochlorite 0.32%) in comparison to a spray application of the standard bleach product (sodium hypochlorite 0.62%) for killing Clostridium difficile spores, methicillin-resistant Staphylococcus aureus (MRSA), and carbapenem-resistant Escherichia coli in 5% fetal calf serum on steel disk carriers. We assessed real-world materials compatibility of the products by repeated spray applications on a hospital mattress, formica bedside table, and textiles. Personnel trialing the products were interviewed to obtain information on tolerability and residue.

Results. Both bleach formulations reduced each of the pathogens by >6 log CFU with a 2 minute contact time. With repeated applications, the standard bleach product caused rapid visible discoloration of the hospital mattress and textiles and gradual fading of the formica bedside table surface, whereas the new spray formulation cause minimal to no adverse effects with up to 60 applications. Personnel using the products reported that the new product left much less residue after use and was more tolerable than the standard bleach product.

Conclusion. A new spray formulation of bleach was as effective as a standard bleach product, but was less damaging to surfaces, more tolerable for users, and left less residue on surfaces. The new formulation of bleach may provide an alternative sporidical disinfectant for facilities concerned about the adverse effects of standard bleach products.

Disclosures. All authors: No reported disclosures.

485. Environmental Cleaning and Disinfection in Long-Term Care Facilities: Opportunities for Improvement
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Methods. The Nebraska (NE) Infection Control Assessment and Promotion Program (ICAPP) in collaboration with NE Department of Health and Human Services conducted on-site inspections to assess infection prevention and control programs (IPCP) in 30 LTCF from 11/2015 to 3/2017. The CDC Infection Control Assessment tool for LTCF was used for on-site interviews. When possible, observations of IPCP were made using the Centers for Medicare and Medicaid (CMS) Hospital IC Worksheet. GF were calculated for each question (10 on CDC tool and 18 on CMS worksheet) representing best practice recommendations (BPR). The Fisher’s exact and Mann Whitney tests were used for statistical analyses examining associations of gaps with bed size, hospital affiliation and experimentally examined the germicidal efficacy of the new technology.

Results. GF identified during interviews are displayed in Figure 1. LTCF with at least 6 out of 10 BPR in place (n = 12), as compared with those with <6, had higher median IP WH/100 beds but the difference did not reach statistical significance (P = 0.054). Upon analyzing gaps individually, it was found that LTCF with policies on cleaning and disinfection (C&D) of high-touch surfaces in common areas had higher median IP WH/100 beds than others (8.5 vs. 2.5, P < 0.05). A similar association was noted when examining the presence of job specific training and competency validation on C&D procedures at time of hire (8.4 vs. 2.4, P < 0.05). HA and having trained IP were also associated with a lower likelihood of the presence of one gap each.

Upon analyzing actual practices of EVSS we found that most (n = 16) of the 18 BPR on the CMS worksheet were being followed in over 80% of LTCF.

Conclusion. EVSS in LTCF in NE appears to be performing well in ECD. However, gaps related to BPR dealing with ECD policies and procedures still exist, which can be a threat to continuity of a good ECD program. Providing training and more dedicated time to IP towards IPCP may help mitigate some of the gaps.

Disclosures. All authors: No reported disclosures.

486. Application of Dilute Hydrogen Peroxide Gas Technology for Continuous Room Decontamination of Multidrug-Resistant Organisms: Negative Results from A Preliminary Experimental Study
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Methods. The Nebraska (NE) Infection Control Assessment and Promotion Program (ICAPP) in collaboration with NE Department of Health and Human Services conducted on-site inspections to assess infection prevention and control programs (IPCP) in 30 LTCF from 11/2015 to 3/2017. The CDC Infection Control Assessment tool for LTCF was used for on-site interviews. When possible, observations of IPCP were made using the Centers for Medicare and Medicaid (CMS) Hospital IC Worksheet. GF were calculated for each question (10 on CDC tool and 18 on CMS worksheet) representing best practice recommendations (BPR). The Fisher’s exact and Mann Whitney tests were used for statistical analyses examining associations of gaps with bed size, hospital affiliation and experimentally examined the germicidal efficacy of the new technology.

Results. GF identified during interviews are displayed in Figure 1. LTCF with at least 6 out of 10 BPR in place (n = 12), as compared with those with <6, had higher median IP WH/100 beds but the difference did not reach statistical significance (P = 0.054). Upon analyzing gaps individually, it was found that LTCF with policies on cleaning and disinfection (C&D) of high-touch surfaces in common areas had higher median IP WH/100 beds than others (8.5 vs. 2.5, P < 0.05). A similar association was noted when examining the presence of job specific training and competency validation on C&D procedures at time of hire (8.4 vs. 2.4, P < 0.05). HA and having trained IP were also associated with a lower likelihood of the presence of one gap each.

Upon analyzing actual practices of EVSS we found that most (n = 16) of the 18 BPR on the CMS worksheet were being followed in over 80% of LTCF.

Conclusion. EVSS in LTCF in NE appears to be performing well in ECD. However, gaps related to BPR dealing with ECD policies and procedures still exist, which can be a threat to continuity of a good ECD program. Providing training and more dedicated time to IP towards IPCP may help mitigate some of the gaps.

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