**Background**

The aims of this study were to compare standard cleaning practice using OxyCide™, a novel, sporicidal, one-step disinfectant concentrate, on environmental contamination and hospital-acquired infections (HAIs).

**Methods**

A cross-over study was conducted using 1 medical-surgical and 1 intensive care unit. In the intervention group, OxyCide™ was used for routine cleaning of all patient rooms. In the control group, standard cleaning practice to cleaning using OxyCide™, a novel, sporicidal, one-step disinfectant concentrate, on environmental contamination and hospital-acquired infections (HAIs). OxyCide™ was used for routine cleaning of all patient rooms. In the control group, standard cleaning practice to cleaning using OxyCide™, a novel, sporicidal, one-step disinfectant concentrate, on environmental contamination and hospital-acquired infections (HAIs). OxyCide™ was used for routine cleaning of all patient rooms. In the control group, standard cleaning practice to cleaning using OxyCide™, a novel, sporicidal, one-step disinfectant concentrate, on environmental contamination and hospital-acquired infections (HAIs). OxyCide™ was used for routine cleaning of all patient rooms. In the control group, standard cleaning practice to cleaning using OxyCide™, a novel, sporicidal, one-step disinfectant concentrate, on environmental contamination and hospital-acquired infections (HAIs).

**Results**

The rate of HAI in the control group was 6.6 in the control arm and 4.8/1000 patient days respectively (p=0.04); of infection was 1.6 and 0.6/1000 patient days, respectively (p=0.04). There was no growth from 331 cultures of A. baumannii or C. difficile respectively (p=0.36). MD, MPH, FIDSA, FSHEA (1)Detroit Medical Center / Wayne State University, Detroit, MI; (2)Detroit Medical Center/Wayne State University, Detroit, MI, (3)LAB-Microbiology Core, DMC University Laboratories, Detroit, MI, (4)Medicine, Boston University School of Medicine. This study was supported by a research grant from ECOLAB®.

**Conclusion**

Use of OxyCide™ was associated with decreased device-related infections when compared to standard cleaning with quaternary ammonium compound +/- bleach. Recovery of environmental pathogens was low in both study arms.