

Supplementary File 9: Studies reporting the effect of decontamination interventions on patient infection rates

STUDY	STUDY DESIGN	INTERVENTION METHOD	EFFECT ON INFECTION OR COLONIZATION RATE
DANCER 2009	Prospective Cross-over	Enhanced cleaning: an additional cleaner was added to the ward and trained to clean hand-touch sites 1-3 times per day	Reduction in rate of new MRSA infections from 9 of 327 MRSA patient days during normal cleaning, to 4 of 475 patients days during enhanced cleaning, a reduction of 26.6% (95% CI 7.7%, 92.3%) (P=0.032).
GRABSCH 2012	Pre-Post	Hospital wide program including 'Bleach-Clean'	24.8% reduction in newly recognized VRE colonizations: 208/1948 patients screened vs 324/4035, (P = 0.001).
NEELY 1999	Pre-Post	All personnel required to wear gloves before using the computer and removed before leaving the room, plus a defined daily cleaning procedure for plastic keyboard covers provided to housekeeping staff	13 acquired colonizations and 16 total colonizations in the 5 months pre-intervention vs. 4 acquired colonizations and 14 total colonizations of Acinetobacter baumannii in the 7 months post-intervention (p <0.05).
RASTOGI 2012	Cross sectional taken biweekly for 1 year	During the study period, blood, respiratory, and cerebrospinal fluid cultures from admitted NICU patients were sent if clinically indicated. If positive, they were temporally correlated with the matching surveillance cultures.	6 of the 48 (12.5%) positive blood cultures matched the organism growing from the surveillance sites, but the correlation was not significant (P=0.076). None of the 31 positive respiratory cultures, nor the single positive cerebrospinal fluid culture correlated to organisms grown from the NICU environment.
WILSON 2011	Prospective randomized cross-over	Enhanced cleaning of hand contact surfaces - trained hygiene technicians performed an extra twice daily cleaning using cloths soaked in a copper-based biocidal formulation.	No effect on incidence of patient acquisition of MRSA (OR, 0.98; 95% CI, 0.58– 1.65; p = 0.93)

Abbreviations: MRSA = Methicillin-resistant Staphylococcus aureus, VRE = Vancomycin-resistant Enterococcus