

EFFECTIVE INTRODUCTION OF ALCOHOL/CHLORHEXIDINE HANDRUB (DeBug™) IN MEDICAL, SURGICAL & INTENSIVE CARE UNITS at ARMC.

O’Keeffe J, Johnson PDR*, Martin R, Barr W, Grabsch EA, Mayall BC, Kirsas SW, Edmonds D, Benton B, Burrell LJ, Plumley N, Grayson ML.
Infection Control Team, Austin & Repatriation Medical Centre (ARMC), Studley Rd., Heidelberg, VIC, 3084

Background: Alcohol/chlorhexidine hand hygiene (HH) is potentially superior to traditional methods of hand washing for busy hospital staff. During the past 12 months we have introduced alcohol 70%/chlorhexidine 0.5% handrub solution (DeBug™) combined with a multi-modal education campaign. We targeted 8 units with high rates of methicillin resistant *S. aureus* (MRSA) colonisation and assessed the impact of our intervention on rates of staff compliance with hand hygiene recommendations.

Methods: A standardised assessment tool was developed to record healthcare worker HH opportunities during multiple observation periods. Rates of HH compliance and the volume of alcohol/chlorhexidine HH products per 1000 patient bed-days were compared before and after DeBug™ introduction. Potential adverse reactions (AEs) to DeBug® DeBug™ were assessed by an occupational dermatologist.

Results: In the 3 study intervention areas (8 Units) assessed, HH compliance increased from 297/794 (41%; Liver transplant, vascular/colorectal/ENT surgery), 117/619 (19%; respiratory, orthopaedics/cardiothoracic surgery) and 203/1554 (13%; Intensive Care Unit) to 305/598 (51%), 224/628 (36%) and 257/822 (31%), respectively ($p < 0.001$ in all areas). Use of alcohol/chlorhexidine solutions increased in study areas from 11.8L to 20L per 1000 patient bed-days during the past 12 months. Seven HCWs reported AEs to DeBug™ - 6/7 had contact dermatitis, but none was allergic to DeBug™. No consistent improvement has been observed so far in rates of patient colonisation with MRSA.

Conclusion: The introduction of alcohol/chlorhexidine (DeBug™) HH solution was associated with significant improvements in HH compliance, usage of alcohol/chlorhexidine solutions and minimal adverse reactions. These data support the use of alcohol/chlorhexidine solutions as a suitable HH alternative.