

'BUNDLED' STRATEGIES TACKLE MDROs

"MRSA rates of Cross Infection are being brought under control in the USA and are dropping for the first time in 15 years." That was the message from Professor Robert Weinstein of Chicago at the recent Society of Hospital Epidemiologists of America held in Atlanta, Georgia, last March. Since a new series of measures were introduced into the focus on Healthcare Acquired Infections (or HAIs) during 2008 and 2009 after several widely published outbreaks of MRSA in the US in which children died, the rates of infection of this terrible infection have begun to recede.



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A study on MRSA infection rates in US hospitals published in 2008 revealed that, at the high point, six in every 100 hospital in-patients were at risk of acquiring this multi drug resistant killer bacterium.

'Bundling' of strategies is the new buzz word approach in the fight against multi drug resistant organisms (MDROs) which include MRSA (golden staph), VRE (Vancomycin Resistant Enterococci), MRAB (Multi Resistant Acinetobacter baumannii) and C diff (Clostridium difficile).

The process of strategic bundles with respect to the spread of these organisms, particularly in the context of an outbreak of disease includes five major features. These are antibiotic stewardship; hand hygiene compliance; patient isolation or cohorting; environmental management; and improved management of patient devices (such as catheters). Two of the five of these strategies involve housekeeping and cleaning staff.

Hand hygiene is probably the key issue of the past two years. Hand Hygiene Australia, which is funded by the Australian Government is a major source of the focus on getting health care workers, including cleaning and housekeeping staff, to regularly wash their hands. The WHO identified poor hand hygiene compliance as the number one cause of HAIs and has commented that if 100% compliance for hand hygiene could be attained, then there would be almost an immediate cessation of HAIs.

Environmental hygiene is coming back into focus, particularly in the US, but also in Australia. In the US the pendulum has swung back towards cleaning efficacy and efficiency as being a critical factor in fighting off MDROs in healthcare. There have been more papers published on the importance of cleaning in healthcare during the past two years than at any time in the prior 10 years. Work by Dr Stephanie Dancer in the UK has proven that failure of cleaning, and the understaffing of wards (resulting in lower rates of cleaning) is directly and causally associated with cross

infection with MRSA in UK hospitals.

One study by Dr Phillip Carling of Boston MA showed that the average rate of cleaning of frequently touched objects found in and around the patient bed averaged only 48% across 36 acute care hospitals. Dr Carling and his research associated also demonstrated that the least well cleaned item was the front handle on the pan washers. This is critically important as it is one of the places where one is likely to recover VRE.

Other work on MRAB (also see a featured in a recent article of Inclean (on page 13 April/May 2010 edition) is causally associated with environmental contamination. Like VRE, it is a multi drug resistant organism and infects the most seriously unwell patients. In some instances the mortality rate for these patients has been reported as high as 48%. In the case of both VRE and MRAB, surface disinfectants have been shown to be effective when used as part of a bundled approach, and the disinfectants that work include both phenolic disinfectants and mono-peroxy-sulphate based products. The key issue is to use them at the correct strength and in the correct locations as directed by swab cultures of contaminated surfaces.

In Australia the NHMRC has recently had a revised Infection Control Guideline out for public comment (the Australian Guidelines for the Prevention and Control of Infection in Healthcare, Consultation Draft, 2010). These guidelines are interesting for a number of reasons relevant to INCLEAN readers, not the least of which is the move to bundled strategies including better environmental management under the guise of 'Contact Based Precautions'.

This is all potentially good news for cleaning service providers, particularly those with high quality standards and measurable quality outcomes.

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