

## Micro News

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### 1. VRE environmental contamination: be careful what you touch!

A recent US study investigated VRE environmental and hand contamination on an ICU (Hayden et al. 2008). A stunning 21% of the 131 HCW hands sampled before touching either the patient or the surfaces in the room already had VRE on their hands. 52% of 23 healthcare workers who touched environmental surfaces in the rooms of VRE-positive patients but did not touch the patients themselves picked up VRE on their hands. Each contact with patient or environmental surface represented a 10% risk of picking up VRE so it seems that touching a surface in the room of a VRE-positive patient is just about as risky as touching the VRE-colonised patient in terms of picking up VRE on your hands!

### 2. MRSA contamination of curtains

A study from Nottingham in the UK identified MRSA contamination on 15% of 200 curtains sampled from various different wards (Klakus et al. 2008). The investigators used a novel sampling methodology by 'sweeping' the leading edge of an agar plate down the curtain to disturb loose material and fibres onto the surface of the plate – as opposed to direct contact. This methodology probably underestimated the true prevalence of curtain contamination. Unfortunately, the samples were anonymised so it is not possible to draw any associations between curtain contamination rates from different specialities.

### 3. Survival of *C. difficile* spores on metals

A collaboration between Copper Development Association Inc., and the University of Southampton investigated the survival of *C. difficile* vegetative cells and spores on the copper and steel (Weaver et al. 2008). The study found that *C. difficile* vegetative cells and spores lose viability more rapidly on copper surfaces compared with steel surfaces. Another feature of the study is the use of a novel viability dye, which gave comparable viability results more rapidly than culture. This study presents similar findings to an investigation into the survival of MRSA on copper surfaces (Noyce et al. 2006), and suggests that hospitals of the future should consider more widespread use of copper-containing alloys!

### 4. *C. difficile* skin contamination?

A team from Cleveland, Ohio, investigated skin contamination on patients *C. difficile*-associated disease (CDAD), which is not often investigated (Bobulsky et al. 2008). The study found that 93% of the 27 patients tested had *C. difficile* spores on their skin at one or more of the five sites tested, that the spores were readily transferred to the hands of healthcare workers on contact and that the spores on the skin persisted for a median 7 days after

the resolution of symptoms. This study raises important questions about when to take patients with CDAD off contact precautions.

## 5. Costs of CDAD

A useful paper from St. Louis, Missouri, reports on the costs of CDAD in non-surgical patients. The cost of the index hospitalisation was found to be approximately \$2500. The study follows each patient for 180 days and the total cost attributable to a CDAD episode, including relapses over the 180 day follow-up are \$5000-7000. However, the numbers are from 2003, which was really before the NAP1/027 epidemic strain emerged, and only non-surgical patients were included (Dubberke et al. 2008).

## 6. And finally...alcoholic *Acinetobacter*...

Not only can *Acinetobacter baumannii* acquire resistance to many if not all useful antimicrobial agents, cause life-threatening infections in critically ill patients, persistently contaminate environmental surfaces and tolerate low levels of alcohol – recent research suggests that the organism can metabolise alcohol (Dixon 2008)!

## References

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