

## Epidemiology Alert June 2009

### Your Top Ten Personal Fomites

There is increasing concern about the role of the environment as a reservoir for multi-resistant organisms—Methicillin Resistant *Staphylococcus aureus* (MRSA), Vancomycin Resistant Enterococcus (VRE), and *Clostridium difficile* Associated Disease (CDAD). German researchers have found that these organisms and other gram positive cocci and gram negative rods can survive for long periods of time on dry surfaces. While it is difficult to establish whether patients develop an infection as a result of exposure to these organisms, significant bioburden exist in the environment, and the potential for transmission of disease from reservoirs to patients or health care workers via hands exists.

It is imperative Health Care Providers clean their hands and remove transient bacteria before and after visiting their patients. In addition, they also need to eliminate any reservoir from their personal belongings to avoid recontamination of their hands. The Department Of Healthcare Epidemiology And Infection Prevention has listed the top ten personal fomites that may constitute a reservoir for health care associated bacteria:

1. Cell Phones, Blackberry, I pods, etc.
2. Stethoscopes and Diaphragms
3. Writing tools, e.g. pens
4. Briefcase/satchel/purse
5. Ties
6. Oscopes
7. Glasses
8. Watches, rings
9. Computer keyboards and mouse
10. Keys/ID card

### Studies have reported:

- ✚ 92.9% of writing tools from 42 doctors had significant bacterial contamination, including MRSA, multi-drug resistant (MDR) *Klebsiella pneumoniae* and VRE.
- ✚ 100% of 55 clinic physicians' stethoscopes and 90% of their otoscopes were colonized or contaminated with a variety of organisms, including MRSA.
- ✚ The bottoms of purses have up to 100 times more bacteria than a toilet seat.
- ✚ Nearly half the neckties worn by 42 doctors at New York Hospital Medical Center of Queens contained a reservoir of pathogens, including MRSA, compared to 10% of the security staff.

## What can you do to decrease your risk of infection?

- ✚ Clean your personal items on a routine basis.
- ✚ Send your ties out for dry cleaning frequently.
- ✚ Clean/disinfect your stethoscope and any other patient care item between each patient.
- ✚ Disinfect your ear pieces when someone else uses your stethoscope.
- ✚ Place your briefcase/purse in an out of the way spot at home instead of on the kitchen counter or table.
- ✚ Refrain from wearing jewelry, e.g. rings. They cannot be cleaned adequately when performing hand hygiene because of uneven surfaces.
- ✚ Carry individual bottles of hand hygiene product for use.
- ✚ Clean your hands before and after each patient contact or contact with their environment, e.g. bed rails.
- ✚ Antimicrobial ties, lab coats, stethoscopes, diaphragm covers are now being marketed (though effectiveness in decreasing infection risk is uncertain.)

Blackberries, etc, may require special cleaning agents that are recommended by the manufacturer. (Alcohol may discolor some plasma screens and cause micro fractures).

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