**MRSA and Surfaces in a Dental School (12/11)**


Researchers from a dental school isolated Methicillin-resistant *Staphylococcus aureus* (MRSA) from 95 frequently touched surfaces in seven dental clinics and compared them with MRSA-isolated nasal cultures from 61 dental students. Thirteen (21%) dental students and 8 (8.4%) surfaces were positive for MRSA. One surface and one student isolate shared the same multilocus sequence type ST 8 and were 75% related; two groups of students carried the same MRSA strains. This is the first study to characterize MRSA from dental clinic surfaces and dental students and suggests that both may be reservoirs for MRSA. Further studies are needed to verify this premise.

**DECS Comment:** Methicillin-resistant *Staphylococcus aureus* (MRSA) is a type of bacteria that is resistant to certain antibiotics. This type of bacteria causes "staph" infections that are resistant to treatment with usual antibiotics. In the community, most MRSA infections are skin infections. More severe or potentially life-threatening MRSA infections occur most frequently among patients in health-care settings. While 25% to 30% of people are colonized in the nose with staph, less than 2% are colonized with MRSA. As a reminder, colonization refers to when a person carries the organism/bacteria but shows no clinical signs or symptoms of infection. The main mode of transmission of MRSA in health-care settings is via hands, especially health-care workers' hands. Therefore, as always, handwashing remains the single most important factor in preventing the spread of infection. The authors in the present study sampled the uncovered dental chair seat and arm rest, floor beneath the dental chair, the sink, towel dispenser, and countertop. These surfaces are usually not directly contacted during patient care. MRSA has been isolated from environmental surfaces in health-care facilities, but contaminated environmental surfaces and objects likely play a relatively minor role in MRSA transmission.

The authors did not discuss the infection control and prevention protocols practiced at the dental school or the importance of following basic infection control recommendations from the Centers for Disease Control and Prevention (CDC) that are key to the prevention and control of MRSA in health-care settings. However, in a recent ADA News article, the dental school's protocols were described and the authors acknowledged that the risk of MRSA transmission and infection is low, especially with the use of appropriate infection control practices. Additionally, it must be noted that this was a small study and not conducted over a long period of time. The authors did acknowledge that additional studies are needed. Additional information on MRSA is available by visiting the CDC Web site ([http://www.cdc.gov/mrsa/index.html](http://www.cdc.gov/mrsa/index.html)). In summary, the risk of transmission of MRSA is lower for dental clinics than in acute care hospitals, and Standard Precautions combined with other selected measures are recommended.

**Selected References and Additional Resources**
- Palmer C. Infection control journal reports MRSA research. ADA News 2011;42:8,10.