

Surface Contamination in the Dental Operatory (5/03)

Surface contamination in the dental operatory: a comparison over two decades. Williams HN, Singh R, Romberg E. J Am Dent Assoc 2003;134:325-330.

This study compared surface bacterial contamination levels in a large teaching clinic in 1998 with that of a 1976 study in the same clinic to determine if renovation and more stringent infection control practices have made a difference. The authors obtained samples from light-handle covers, jacket cuffs, sinks and floors in the morning and afternoon. The bacterial counts were compared with those from the 1976 study. In both the 1976 and 1998 studies, mean bacterial counts were higher at the end of the day than in the morning; however the differences were only significant in the 1976 study. **Improvements in clinic design and equipment, as well as infection-control procedures and practices resulted in a lower level of surface bacterial contamination in 1998 than in 1976 in this large teaching clinic.**



DIS Comment: This study reinforces the importance of surface cleaning and disinfection in the dental operatory. Attention to clinic and equipment design is also a contributing factor in reducing environmental contamination. Using barriers, particularly on difficult to clean and disinfect surfaces, is an excellent option vs. surface cleaning/disinfection. The study used microbial sampling to compare contamination levels. However the Centers for Disease Control and Prevention does not recommend routine microbial monitoring of environmental surfaces except for the purposes of research and epidemiological investigations.