

The use of An HEPA Respirator in combating SARS

[K.S. AU-YEUNG](#), K.P. CHEUNG, M.K.H. LEUNG, K.S. FUNG, C.H. LIU, and H.K. YIP, University of Hong Kong, Hong Kong

Objectives: The objectives of this study were to determine the air quality in a dental office with ultrasonic scaling being carried out with and without the use of a High Efficiency Particulate Air-Filter (HEPA) respirator. Methods: General indoor air quality (IAQ) parameters, RSP and airborne microbes were measured to ascertain the environmental conditions of a dental office were performed with and without the use of ultrasonic scaling. Results: Bacterial counts on the dentist side of the office were higher than that on the DSA side, by an average of 31.5%. Both RSP and airborne bacteria were almost completely removed by the HEPA respirator. Discussion: The pollutants were more concentrated on the dentist's sides and the HEPA respirator reduced the levels of pollutants in the dental office. Conclusion: The HEPA respirator effectively reduced the aerosols during aerosol-generating dental procedures in treating patients with known or suspected infections. (The private donation for Research combating SARS (a/c 20003958) is gratefully acknowledged.)

[Microbiology / Immunology and Infection Control](#)

[The Preliminary Program for Annual Scientific Meeting, 19th International Association for Dental Research-Southeast Asia Division and 13th Southeast Asia Association for Dental Education \(September 3-6, 2004\)](#)