

Improving Indoor Air Quality in Hospital Environments and Dental Practices with Modular Stand-Alone Air Cleaning Devices

In a study performed in simulated and real-life hospital, laboratory, and dental practice environments, it was shown that the use of IQAir modular, stand-alone room air cleaners improved indoor air quality in appropriately sized rooms. The air cleaners were configured to reduce special contaminants.

The study investigated the efficiency of decentralized, modular air purification systems to reduce mercury vapors, formaldehyde, microorganisms and particulates. Mercury vapor reduction tests used the IQAir Dental Pro and the IQAir Dental Hg FlexVac. Formaldehyde experiments used the IQAir Chemisorber GC and FlexVac. Particulate and microorganism reduction tests used the IQAir Cleanroom Series with HEPA filters. Finally, the IQAir VOC GC was used for odor removal.

The study was performed by L. Erdinger, P. Rezvani, F. Hammes, and H.G. Sonntag, from the University of Heidelberg, Institute of Hygiene, Department of Hygiene and Medical Microbiology, Germany and Incen AG, Switzerland. It was determined that specialized air cleaners are beneficial in medical environments where source control is difficult or impossible. Appropriately equipped air cleaners could significantly optimize comprehensive source control and ventilation strategies to improve indoor air quality in hospital, laboratory, and dental practice environments.

Copy of study attached.