

# medicair

## Case Study - University Dental Hospital and School, Cardiff

Purchased 180 units in August 2020

“The safe delivery of treatment has always been an essential aspect dentistry. Over the past the 40 years the dental profession has responded to the emergence hepatitis B virus, HIV and prions with introduction of novel decontamination procedures and equipment. Strict universal protocols are now in place, in particular the mandatory use of high-volume aspiration and good ventilation in relation to the control of aerosols. The respiratory nature of the Covid-19 pandemic has emphasised the importance of this aspect of maintaining a safe working environment.

The effectiveness of air cleaning systems in open dental teaching clinics was demonstrated in research carried out in the School of Dentistry in Cardiff in 2010 (Reference). As a result of the Covid-19 pandemic the University Dental Hospital and School in Cardiff invested in 180 DentAir air cleaning machines as an additional layer of protection for patients and staff. The individual units have been placed adjacent to each dental chair within the building. The modern equipment is relatively small when compared to earlier types of these machines and their instalment has not caused any space issues for dental staff whilst treating patients. Personally, I have felt reassured at times when I have notice that the equipment has detected a potential problem and automatically responded by increasing airflow. Importantly, the machines do not cause unacceptable noise even when at maximum air flow.

The delivery of dental care in the university Dental Hospital has returned to approximately 75% of the pre-Covid level of activity in many of the clinics allowing undergraduate and postgraduate teaching to be delivered alongside NHS services. There has be no know transmission of Sars-Cov-2 within the students or staff populations since clinical services resumed six months ago. Whilst this is predominantly due to the universal infection prevention measures that are in place, I am in no doubt that the installation of the DentAir systems throughout the clinical facilities has contributed to the establishment of a safe dental teaching environment.”

**Professor Mike Lewis**

**PhD, FDSRCPS, FRCPATH FDSRCS, FFGDP(UK)**

**Professor of Oral Medicine**

**Former Dental Representative on the Scientific Advisory Committee for Antimicrobial Resistance and Hospital Associated Infection, Department of Health**

### Reference

- Hallier C, Williams DW, Potts AJ, Lewis MA. A pilot study of bioaerosol reduction using an air cleaning system during dental procedures. Br Dent J. 2010;209(8):E14. doi:10.1038/sj.bdj.2010.975

