

# Air Disinfection: Dental Centers Case Study

With more than 70 centers across the United States, this provider of quality dental implant treatments sought to enhance their protocols to further protect patients and staff from airborne pathogens.

## An Added Layer of COVID-19 Safety



UV-C sanitation has been proven effective in helping to prevent the spread of COVID-19 and other airborne illnesses



The devices direct germ-killing UV-C light upwards, never at patients



### Secure

Committed to meeting and exceeding CDC guidelines on COVID-19 prevention, the dental centers sought an added layer of security to help protect patients' health and stop the spread of COVID-19

#### The Project

As an essential service at the beginning of the pandemic, the dental centers already had processes in place to deal with Healthcare-Associated Infections (HAIs), but they wanted to expand protocols to further protect patients and staff from airborne pathogens. They realized they needed to work with a disinfection lighting expert like EMC who could successfully guide them through audit, design and implementation processes across their nationwide footprint. They also wanted the project done quickly and professionally to further elevate patient and staff confidence in the steps being taken to protect health and safety at their centers.

#### The Solution

After considering a wide variety of options, the dental centers selected an upper air UV-C disinfection solution that hospitals have used for decades to reduce transmission of airborne infectious pathogens including influenza and tuberculosis. Endorsed by the CDC for use against SARS-CoV-2 (COVID-19), this technology mounts near the ceilings of waiting and patient rooms where it applies a calculated dose of UV-C energy. As the air circulates above people in the room, it passes through the upper zone of disinfection lighting, where UV-C energy inactivates pathogens in the air.

EMC faced challenging design parameters as patient rooms came in a variety of sizes with differing ceiling heights and varying equipment and furniture. The nature of the procedures performed in these rooms also required developing a design that met unique safety and efficacy requirements.

EMC carefully audited each room and created a design that optimized the position and number of fixtures used in the space. They then created an installation plan with implementation happening primarily on Fridays, the one day of the week when procedures were not taking place. Installation began with an aggressive schedule to complete 15 locations in 10 business days. A variety of EMC installers from around the country accomplished this feat using the audit data and design plans to execute efficiently and accurately.

With successful implementation at the clinic locations underway, the dental centers decided to include the upper air disinfection solution in their Pandemic Plan for returning office employees to their corporate headquarters. EMC collaborated with the distributor who sourced the specialized UV-C fixtures used in the project, optimizing specifications for use in office environments. EMC facilitated mock installations and post install performance verification as part of the full-service implementation process at the headquarters.





**UV-C Air Disinfecting Wall Unit** 



**UV-C Air Disinfecting Ceiling Unit** 



**UV-C Air Disinfecting Unit Quality Check** 

## Benefits of Audit + Design



Decrease material and installation costs



Validated guidelines for ensuring right amount of UV-C energy used to reduce pathogens



Increased safety for occupants



Provided clear, consistent, timely nationwide installation process

### MAXXimize Your Air Disinfection System

EMC's turnkey disinfection approach, CleanMAXX<sup>™</sup>, helps customers maximize the results of each project phase—from purification analysis to maximizing the long-term value of the disinfection system—bringing an immediate and positive impact to health and safety.



The CleanMAXX<sup>™</sup> Process ensures your disinfection system's success by maximizing results in each project phase:

#### **Prioritize**

Formulate an effective disinfection strategy for your business

#### **Audit**

Ensure accurate baseline to develop an effective solution and executable proposal

#### Design

Select the best fit and performance for your existing equipment and application

#### Logistics

Coordinate turnkey services to support daily business and project needs

#### Installation

Complete on time with a comprehensive and clear scope

#### Service

Maintain long-term safety, value and effectiveness of your new disinfection solution

