

Virus Disinfection with UV-C Light in the waiting room

Dental practice offers patients and staff additional protection

Viruses, bacteria and other microorganisms spread through tiny water droplets in the air, so-called aerosols. They can survive there for a long time and spread from person to person. The risk is particularly high in rooms with many people - such as waiting rooms, offices, gyms or classrooms in schools. Often, the situation is aggravated by the fact that these rooms cannot be well ventilated or there is no central ventilation. Especially in winter, ventilation is also unpleasant: ideal conditions for viruses.

UV-C light is very effective against viruses, bacteria and fungi. Especially viruses such as the SARS-CoV-2 virus and its mutations which UV-C easily destroys. These viruses have only a thin lipid (fat) layer that the UV-C light easily penetrates and destroys the virus immediately. Elderly and those with certain health conditions are at high risk for Corona and therefore need particularly high protection.

The regular dental exam, a dental cleaning or a dental emergency - a visit to the dentist is necessary, even during the Corona pandemic. However, no one wants to become ill with COVID-19 by catching viruses accidentally introduced into the waiting room. In the dental practice of Dr. Rami Zerini in Hofheim-Wallau, Germany a Soluva Air W air purifier from Heraeus Noblelight is protecting the health of patients and staff. In addition to the usual hygiene measures, the dental team looked for ways to create a safer environment for its patients through enhanced air purification. They found HEPA filter devices were too cumbersome in the practice, plus the team was concerned about germs accumulating in the filters.

"Air purification with UV-C light convinced us because this process is chemical-free and requires much less maintenance," says Dr. Zerini, **"and Heraeus was our first choice because Heraeus has a good name in dentistry!"**

Today, a Soluva Air W disinfects the air in the waiting room, because studies show that the viral load there can be higher there than in the treatment room. Staff and patients are unaware of the disinfection because the UV light remains in the device and destroys the viruses in the air stream - coronaviruses as well as its mutations and many other dangerous germs.



The renowned Fraunhofer Institute for Building Physics has for the first time confirmed the effectiveness of air disinfection by means of closed UV-C air purification devices under real conditions for a classroom on the basis of an elaborate scientific application test. Heraeus UV-C air purification devices can reduce the virus load in closed rooms by over 99%.

The disinfecting effect of UV-C light is also confirmed in further tests, e.g. with the Hygiene institut biotec and the University Hospital Tübingen.



- ✓ chemical free
- ✓ no filters
- ✓ low maintenance requirements

- ✓ no ozone and by-products
- ✓ no uncontrolled escape of UV-C-light
- ✓ viruses can't build up resistance to UV-C