

## 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 are transmitted from host to host. 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 energy and very effective against viruses, bacteria and fungi. Especially viruses, such as the SARS-CoV-2 virus and its mutations are easily destroyed by it. They have only a thin lipid (fat) layer. This is easily penetrated by UV-C light and destroys the virus immediately. Elderly and pre-diseased patients belong to the risk group for Corona and need particularly high protection.

The regular check of the teeth, a useful dental cleaning or the removal of dental damage in an emergency - the visit to the dentist is necessary, even during the Corona pandemic. However, no one wants to catch viruses which accidentally introduced in the waiting room and fall ill with Covid19. In the dental practice of Dr. Rami Zerini in Hofheim-Wallau, a Soluva Air W air purifier from Heraeus Noblelight has recently been protecting the health of patients and staff. In addition to the usual hygiene measures, the dental team was looking for ways to create a safer environment for its patients through enhanced air hygiene. HEPA filter devices were found to be too clunky in the practice, plus the team was skeptical about how germs would accumulate 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 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 mutants 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 has been confirmed in further tests, e.g. with the Hygiene institut biotec or the University Hospital Tübingen.



### Advantages of UV-C air purification with Heraeus Soluva equip-

- ✓ free from chemicals
- ✓ without filter
- ✓ low maintenance requirements
- ✓ without ozone and by-products
- ✓ no uncontrolled escape of UV-C-light
- ✓ no germ resistance formation