

Virus Disinfection with UV-C Light in the Kindergarten

UV air purification when ventilation is impossible

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. Small children and their care givers thus receive additional protection to the usual hygiene measures in daycare centers and nurseries.

Since the beginning of the corona pandemic, the ventilation of rooms has become more important. But what to do if you can't ventilate a large room well? The breakfast room of the Zwergen- burg daycare center in Massenheim has now been equipped with UV air disinfection from Heraeus Noblelight for this purpose.

The Zwergen- burg daycare center has a special room layout. The group rooms are arranged so that they all have direct access to the outdoor area. This creates a large room in the middle of the building, which is used as a breakfast room. However, it has no direct windows and doors and so ventilation was not efficiently feasible. Thanks to UV disinfection with the Soluva Air W, the room can be fully used again.

Katrin Schüb, head of the daycare center, is pleased with this addition to the hygiene measures: "By constantly ventilating the rooms, fresh air is always provided in the group rooms. Now that we can also ensure good air inside the building, we can give parents an even better feeling on this point as well."



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 equipment:

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

