PHILIPS

Case Study

UV-C disinfection devices

Municipal Health Services Netherlands

For more than 10 years, several GGD locations in the Netherlands have been equipped with UV-C disinfection devices as part of the infection prevention policy.

"For more than 10 years we have used UV-C disinfection lighting in our tuberculosis department, as part of our infection protection policy. Since then, there have been no infections among the staff. The same goes for COVID infections, despite the fact that infected patients have visited."

R.I.N van Nispen-Dobrescu,
Lung and Tuberculosis Physician,
GGD West-Brabant

Challenge

GGD West-Brabant is committed to monitoring, protecting and promoting the health and safety of all residents — with special attention paid to vulnerable people in our society.

At its Breda location, staff assist and treat patients with tuberculosis (TB), a highly infectious airborne disease that's spread through talking, singing, coughing or sneezing. Consequently, it is extremely important to apply hygienic measures that prevent the spread of infections through the air.

The right light

Since moving to a new location in 2009, the institute has been using Philips UV-C upper air disinfection luminaires as a precautionary measure to control airborne infections.

Based on both experience and the scientific literature on this technology, lung and tuberculosis specialist at the department, Roxanne van Nispen-Dobrescu, argues for a wider use of UV-C in society to protect people from airborne infectious diseases.

"For more than 10 years we have been using disinfectant UV-C light as part of the infection prevention policy in our tuberculosis department. Since then, there have been no infections among the staff, whereas there used to be. The same is true of COVID infections, despite the fact that infected patients have visited. The use of UV-C has also been included in the WHO TB guidelines since 2019 for a reason. This should also be done for infectious diseases such as COVID-19. The effect and effectiveness of UV-C has already proven itself sufficiently for this."

GGD West-Brabant

GGD Brabant-Zuidoost

GGD Rotterdam-Rijnmond

Other locations

GGD Brabant-Zuidoost has also been using the Philips upper air fixtures at the Tuberculosis Control Department for about 20 years. The ceiling-mounted devices are installed in all rooms of the department, and in the hallway leading up to it.

"We installed the UV-C lights to protect our employees and our clients. In TB control in the Netherlands, this is a very common application that works to our complete satisfaction. Maintenance and replacement of the UV lamps in the units is arranged through a maintenance contract, so that we can guarantee a properly functioning and safe system," says Elske Beintema, team manager of GGD Brabant-Zuidoost.

The same devices were also installed in various rooms at the GGD locations of The Hague, Rotterdam, Goes, Utrecht, Tilburg, Lelystad and Zaandam. "The system makes no noise and does not cause dry air or drafts. It amazes me that even after one and a half years of a pandemic, we still don't have widespread use of a technology which we have been using for 20 years, and that has proven itself against tuberculosis and SARS-CoV-2. It is such an obvious measure. Moreover, it helps to reassure patients who are afraid of becoming infected during their visit," says Liesbeth Huizer, a medical technician who has been working for the Public Health Service in Rotterdam for more than 40 years.

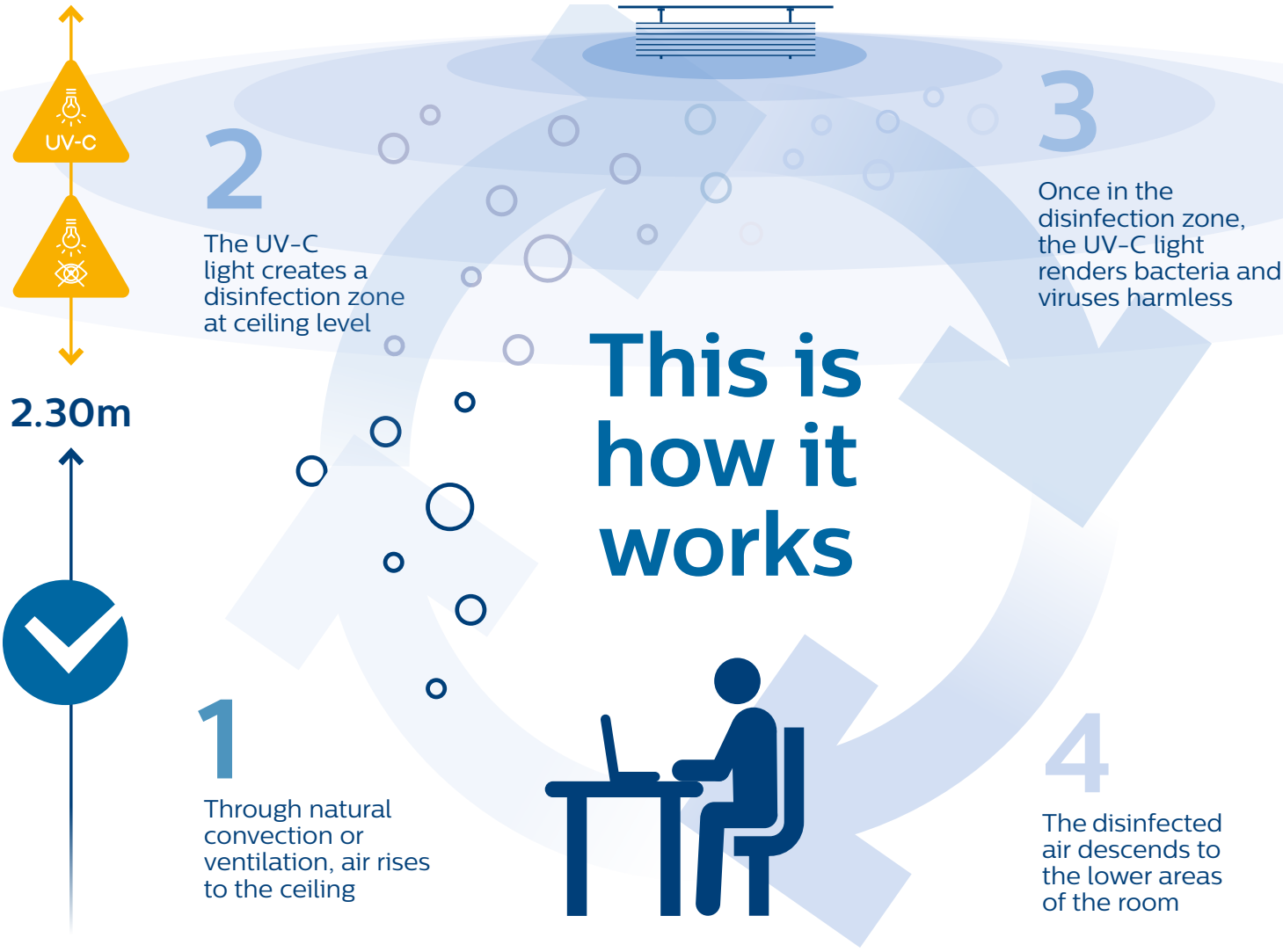
Philips UV-C disinfection upper air ceiling mounted

Upper air
Air disinfection

Designed for mounting on suspended ceilings to disinfect the upper parts of the room while people are present. Air flows by natural convection to the upper air layers of the room where the UV-C light inactivates viruses and bacteria.

Research shows that these types of fixtures inactivated 99.99% of the SARS-CoV-2 virus in just 10 minutes[1].

[1] According to the results of a laboratory test performed by Innovative Bioanalysis, a CAP, CLIA, AABB certified reference laboratory for safety, in a room with adequate air circulation.



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