

Regarding Coronavirus outbreak and LED Tailor's photon disinfection technology

We want to send out a strong message that paying attention to **good hand hygiene and installing air purifiers is simply NOT enough if you want to prevent spreading coronavirus and other microbes**. Coronavirus is mainly transmitted as respiratory droplets that are generated and spread into the air when an infected individual coughs or sneezes. <u>These</u> <u>respiratory droplets will not stay in the air, instead they will quickly fall onto surrounding **surfaces**.</u>



Common modes of transmission from inanimate surfaces to susceptible patients.

Figure 1:

Figure I

"In hospitals, surfaces with hand contact are often contaminated with nosocomial pathogens and may serve as vectors for cross transmission. A single hand contact with a contaminated surface results in a variable degree of pathogen transfer. Due to the overwhelming evidence of low compliance with hand hygiene, the risk from contaminated surfaces cannot be overlooked."

Ref: Kramer et al 2006. How long do nosocomial pathogens persist on inanimate surfaces? A systematic review. BMC Infectious Diseases 2006, 6:130. doi:10.1186/1471-2334-6-130.

A nosocomial pathogen is a hospital or health care acquired pathogen. A nosocomial infection is an infection that have been caught in a hospital, more commonly referred to as a health care associated infection.

Washing your hands will not keep you safe if your frequently touched items (like cell phones, key cards and medical equipment) and frequently touched surfaces (like door handles, handrails, toilet flush buttons and faucets) are not being disinfected. On a daily basis, hands touch many surfaces which can be contaminated with the virus. If you touch your eyes, nose or mouth with your contaminated hands, you can transfer the virus from the surface to yourself.

Slue is Clean

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LED Tailor solutions for preventing the spread of microbes

LED Tailor's solution for automatic **disinfection of whole rooms** is based on <u>blue LED light combined with a</u> <u>photocatalytic coating</u>. By installing photon disinfection luminaires and applying a catalytic coating on room surfaces, this system will automatically disinfect the unoccupied room with consistent results.

Photon disinfection is an effective method for improving the level of hygiene by **automatically disinfecting frequently touched surfaces**, such as counter tops, door handles, handrails, toilet flush buttons and faucets.

Some examples of most potential areas of use:

- sanitary spaces
- operating rooms
- central sterile services departments
- laboratories

- microbiological safety cabinets
- elevators
- isolation wards and cut-off rooms

Blue light does not harm people or materials, but is commonly used when the room is unoccupied, because it is not convenient to work under the intensive blue lighting.

Combination of blue light and catalytic coating is effective on destroying all kind of bacteria, mold, yeast, fungi, viruses and microbial spores.

More information at <u>www.ledtailor.com/surface-disinfection</u>

LED Tailor's solution for fast and efficient **disinfection of medical equipment and other objects** is the <u>WiSDOM DS</u> <u>UVC surface disinfection box</u>.

With just one push of a button and 3-minute disinfection time, WiSDOM DS makes it **easy to disinfect commonly used medical devices in between patients and tasks**. It delivers consistent disinfection results and can even disinfect several objects at once.

WiSDOM DS makes it extremely easy to effectively disinfect all sorts of equipment:

- electronics (mobile phones, beepers/pagers, pipettes)
 - sensitive materials (protective goggles, keycards, plastics)
- oddly shaped objects (dental/surgical loupes)
- porous surfaces (tourniquets, blood pressure meter cuffs)

WiSDOM DS uses LEDs for emitting a high dose of UVC, which is effective on inactivating all kind of bacteria, mold, yeast, fungi, viruses and even microbial spores.

More information at www.ledtailor.com/wisdom-ds-2



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What we know about the recent Corona virus (2019-nCoV)

The 2019-nCoV is a new strain of coronavirus that has not been previously identified in humans.

The 2019-nCoV coronavirus strain 2019-nCoV is from the same family of viruses as Severe Acute Respiratory Syndrome (SARS-CoV) and Middle East Respiratory Syndrome (MERS).

Coronaviruses are a large family of viruses found in both animals and humans.

There is currently no treatment available to treat a coronavirus infected person. There is neither any vaccine developed that would prevent a person from catching the disease.

The new coronavirus is a respiratory virus which spreads primarily through contact with an infected person through respiratory droplets generated when a person, for example, coughs or sneezes, or through droplets of saliva or discharge from the nose.

Respiratory viruses in general do not survive on surfaces as long as many other viruses. For example, Norovirus is known to survive up to 2 weeks on surfaces.

It is still not known how long the 2019-nCoV virus survives on surfaces. Preliminary information suggests the virus may survive a few hours, which is still enough time to infect many other people. Some other members of the Coronavirus family are known to survive on surfaces 2-3 days (SARS).

The incubation period is the time between infection and the onset of clinical symptoms of disease. Previous estimates of the incubation period range from 1-12.5 days. New information suggests that the incubation period could be up to 24 days. The longer the incubation period, the bigger the risks of a infected person having time to transmit the disease to others before knowing themselves that they have caught the disease.

Common signs of infection include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death.

Sources: LED Tailor R&D team, World Health Organization (WHO), European Centre for Disease Prevention and Control (ECDC)

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