Disinfectant tunnels does it help?



Experts have warned against the use of disinfectant tunnels that many countries, including Singapore, are setting up to spray on people as they enter certain premises.

The idea is for people to walk through these tunnels or chambers and be disinfected to reduce the risk of them spreading Covid-19.

However, the experts say these tunnels not only do not help to curb the spread of the

<u>coronavirus</u>, but could also cause harm to people using them. Why is it so?

A report in the British-based Occupational Medicine journal warned: "A chemical may be safe when applied topically in liquid form, but extremely toxic when atomised and inhaled."

It studied a range of nine disinfectants commonly used in such tunnels, and said: "Direct aerosol contact with the cornea can cause irritation and irreversible damage. Skin irritation and damage are also common."

It added that the aerosolised particles are easily inhaled into the lungs and "can react with the mucosal lining (such as the inner lining of mouth and nose) causing irritation, swelling and ulceration in the respiratory tract. Some chemicals can be absorbed through the mucosa into the bloodstream and affect distant organ systems, eg. central nervous system and gastrointestinal tract".



If ultraviolet radiation is used - and 15 minute exposure is needed to kill the virus - it "can cause damage to the eye and skin and is a known cause of skin cancer", the article said.

Furthermore, clothes that have been sprayed causes prolonged skin exposure - "until and unless the contaminated clothing is removed, and the skin thoroughly irrigated".

Dr Kristen Coleman of the Duke-NUS Medical School said that while she can appreciate the efforts to design innovative methods to safeguard the public against Covid-19 as countries and states reopen, "human disinfection chambers are not the answer as they pose extreme health and safety risks".

The expert in bioaerosol research added: "Chemical disinfectants are designed to deactivate

microorganisms outside of the human body, but the disinfectants are toxic to humans if not used properly.

"Exposure to a surrounding mist of chemical disinfectants through direct contact and inhalation can cause damage to the skin, eyes, and respiratory system."

This comes after the World Health Organization said in an interim guidance report last Friday that spraying individuals with disinfectants, such as in a tunnel, cabinet, or chamber, "is not recommended under any circumstances".

"This could be physically and psychologically harmful and would not reduce an infected person's ability to spread the virus through droplets or contact," the report said.

Q⁺ Solution mist system uses a non-toxic, zero-alcohol and non-flammable disinfectant, non-corrosive - Accelerated hydrogen peroxide (AHP) 0.5%

"Individuals working at places with COVID-19 patients or locations with significant COVID-19 outbreaks, face a greater risk of COVID-19 infection, through interactions with patients and contact with fomites or contaminated surfaces in the environment," it said.

With Q⁺ solution to help provide an added layer of protection is the using non-toxic, non-corrosive and non-flammable disinfectant solution to disinfect.



