

## **Virus Sterilizer and Air Shower**

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CityU suggests two directions to prevent or to minimize the chances of spreading virus similar to SARS.

The first direction is to provide clean breathing indoor air to the public by removing bacteria, virus, and particulates in the air. HEPA filters is one of the best filtration method to remove particulates of 0.3 micron or larger. It is very efficient at lamina flow, i.e. in a very light traffic area like patient room or domestic home. Its efficiency drops dramatically depending on the traffic loading. In addition, extra care is needed in handling the residues , i.e. disposing the filters. The other alternative is to use high voltage negative ion to remove any size of particulates and ozone to oxidize the bacteria and virus. This approach is effective in any traffic condition. However, it requires good control of concentration of ozone within FDA and OSHA safety limit. CityU has developed this unit and proposed to Hospital Authority to replace the HEPA filter air purifier, Tender Ref: HAHO(S)/T/03-G015.

The second direction is to minimize the chances for the bacteria and virus being carried away from the premises. CityU has developed a “Shower Stall” for the hospital staff to take a “shower” before entering the locker room and leaving the hospital. The “shower” process takes less than ten seconds. It is advised that every one shall take a “shower” before leaving the hospital. The main component of the “shower” is the above mentioned ozone air purifier developed by CityU.