

1st Clinically-Tested UVC Product To Kill Germs On The Soles Of Shoes

HealthySole® Plus Product Peer Analysis





In recent years, high incident rates of infections have the healthcare industry in a frenzy.

The abundance of deadly organisms, as well as antibiotic resistant "Superbugs" has Infection and Quality Control searching to find effective technologies above and beyond the traditional protocols of chemical disinfection. Healthcare Associated Infections (HAI's) are responsible for up to 2 million infections and 99,000 deaths annually in the United States alone. Recently, pinpoint focus has developed among healthcare professionals in the Infection Control industry in order to interfere with specific pathogen vectors that lead to the transmission of infection.

Similar to hands, high touch surfaces and air, shoe soles are among the worst reservoirs for dangerous organisms leading to pathogen transmission and are the first step that leads to infecting patients. Shoe soles and booties are often the starting point of rapid microbial dissemination to hands, high touch surfaces, air and room to room. This migration leads to aerosolization and subsequently starts the process of airborne, touch surfaces and hand contamination. To achieve the greatest potential for success of an Infection Control program, healthcare facilities must address ALL main forms of pathogen transmission. Aggressively taking action against other vectors such as hands, air and touch surfaces, while lacking attention to shoe soles as a vector for pathogen transmission can be extremely deadly and very costly to patients and healthcare facilities.

No other product can be substituted to achieve up to 99.9+% kill rates.

Due to the lack of effective technologies in the past, there has been very little attention to the bottom of shoes and booties as well as to the transfer of pathogens from these reservoirs onto the floors. This lack of attention leaves the window of opportunity open for organisms to enter or exit any one room (even after terminal or other disinfection interventions) and start the process that leads to transmission. Regardless of what other products, technologies and protocols are used, until now nothing has effectively stopped and killed the vast majority of pathogens on the soles of shoes and booties in order to lower the overall microbial load. HealthySole® Plus is the first and only 24/7-active, patented, UVC, chemical-free and green technology that can be placed at every location throughout a healthcare facility in order to reduce the spread of pathogenic organisms. By implementing HealthySole® Plus, an I.C. program will attack the one transmission vector that has been unaddressed in the past.

In conjunction with other germicidal technologies, products, chemicals and protocols, HealthySole® Plus is the one and only product that prohibits shoe borne organisms from becoming a severe and deadly danger. No other product can be substituted to achieve up to 99.9+% kill rates, from 24/7-active disinfection of shoe soles and booties that HealthySole® Plus is clinically proven effective in doing. Without the bundling of HealthySole® Plus, even the most proactive, modern and cutting edge infection control programs in the world are leaving one of the main vectors for pathogen transmission untouched, allowing themselves to always be vulnerable to widespread infections.



HealthySole® Plus is the one and only product that prohibits shoe borne organisms from becoming a severe and deadly danger.

UV ROBOTS

UV Robots such as Tru-D® and Xenex® technologies predominantly concentrate on elevated high-touch surfaces, which do not include the floors of healthcare facilities. UV robots are a single application, which requires additional staff to set up and operate and can only be used without the presence of patients or staff. Although UV robots can reduce the microbial load for a short amount of time in a specific empty room, they do not have any effect on organisms recontaminating that environment from shoe soles or booties walking back into the room. Furthermore, after a room has been re-entered and immediately re-contaminated, UV robots cannot prevent germs from exiting a room and spreading throughout the entire healthcare facility.

HYDROGEN PEROXIDE AND DRY **GERMICIDAL MISTERS/FOGGERS**

Hydrogen Peroxide and Dry Germicidal Misters/Foggers focus on terminal chemical cleaning once a patient has been discharged or in unoccupied rooms. These types of technologies require staff set up and break down upon treatment completion and require significant time for effective disinfection, which can result in slow bed or room turnaround. The mist technology does not prevent the organisms on the soles of shoes or booties from re-contaminating the floors and subsequently the air and elevated touch surfaces in a previously cleaned room. Mist technologies are not effective on preventing shoe borne pathogens from exiting a contaminated floor and spreading from one area to another within a healthcare environment.

ION GENERATORS

Ion Generators have been ineffective at reducing the spread of germs from room to room throughout a healthcare facility through the means of shoe soles or booties. The rapid natural decay of ions makes ion generators inefficient for decontamination of floors and shoe soles. In addition, ion generators do not have any effect on pathogens entering or exiting a sensitive area via shoe soles.

UVC HVAC OR UPPER AIR MOUNTED SYSTEMS

UVC HVAC or Upper Air Mounted Systems have been proven to decrease the amount of infectious pathogen concentrations in the air of healthcare facilities; however, they have no effect on the soles of shoes or booties. Organisms can attach to shoe soles or booties and spread from room to room. Regardless of an existing upper air or HVAC UVC system, organisms on shoe soles will still require an additional disinfection strategy to be effective in the spread and migration of organisms and in reducing the overall microbial burden in the healthcare environment.

CHEMICAL TREATMENT OR CLEANING

Chemical Treatment or Cleaning with compounds such as ammonium, sodium hypochlorite, hydrogen peroxide, bleach, and alcohol-based mopping solutions, sprays and wipes are typically effective when wet, but are significantly less effective just a short amount of time after drying. Although terminal chemical disinfectants must be used, scientific evidence proves that those surfaces (especially floors) will be back to the same contaminated levels in a rapid amount of time. Chemicals do not address shoe soles or booties directly and will not stop the spread of pathogens via the shoe borne transmission route. Any healthcare room floor, which has been chemically treated, will be re-contaminated by the shoes or booties of the first occupant into that environment. Chemicals and floor disinfectants although necessary, will not aid in the spreading of shoe borne pathogens into and out of any healthcare environment.