

## **AiroCide® destroys Swine Flu virus in the air stream**

Swine Flu is caused by influenza A virus subtype known as H1N1. Influenza A viruses are highly susceptible to the germicidal effects of Hydroxy Radical (OH<sup>·</sup>) in the AiroCide reaction chamber, designed and patented by **NASA**. Technically speaking, Hydroxy Radicals annihilate the virus, leaving behind only water vapor (H<sub>2</sub>O) and a trace amount of Carbon Dioxide (CO<sub>2</sub>), which helps to clean the reaction chamber and hence no cleaning is ever required and since there is no filter it does not require any maintenance. The same is true for all airborne viruses and pathogens as all viruses have a carbon signature. So even if the swine flu mutates into a new virus, AiroCide will still incinerate it even if the mutation occurs X<sup>n</sup> times.

## **Is Swine Flu airborne?**

Existing research on influenza transmission is not definitive. However, there is a growing consensus amongst scientists that influenza viruses are transmitted through the air. All research agrees that influenza viruses are airborne as they are expelled by infected people via coughs, sneezes and normal respiration. Some of these infectious droplets settle on surfaces, some of the droplet nuclei travel through the air. Swine Flu is transmitted when a person inhales the infectious nuclei or touches the droplets and then transfers the virus to the body through the nose, mouth or eye. So the real issue isn't if influenza is airborne, the debate focuses on how the virus enters the body either by inhaling flu aerosols or by contact and transfer to the body. Most researchers say airborne and contact transmission both play a role, but are not certain of each mode's relative contribution to human infection.

## **The AiroCide® Solution**

When it comes to pandemic planning, there is no panacea. The best strategies involve a comprehensive approach to reducing pathogens in the built environment and preventing transmission of disease. AiroCide® is a proven technology **developed, funded & patented by NASA and designed by Wisconsin Space Automation & Robotics Center (WASCAR)**. It is currently used for pathogen control and bio-defense in hospitals, research labs and other high profile government buildings. AiroCide captures and destroys pathogens such as A(H1N1) as the microorganisms circulate through the environment. Each AiroCide system is designed to yield a 99.99987% kill rate on all pathogens. Engineering and design are crucial for Pathogen Control within the reaction chamber to achieve the desired efficacy. With 14+ years of experience, and a US-FDA approved Class II medical certification, AiroCide is the only technology that has proven applications with live infectious agents including Anthrax, Avian flu (H5N1) and the SARS virus to name a few.

## **For Doctors, Architects and Engineers**

In light of the recent Swine Flu outbreak, you may be asked if there are any engineering controls to help prevent or lessen exposure to A(H1N1). While no one individual tactic can eliminate virus transmission, there are steps to lessen exposure to the virus. AiroCide is a proven technology that reduces the concentration of infectious microorganisms within buildings.

AiroCide is an evidence based design tool that you can recommend to your clients as they seek innovative solutions to the challenges caused by A(H1N1) namely the swine flu.