

MARKET FOCUS

Healthcare

At SecureAire™ we've been preparing for the pandemic for a decade. More than ever we parents, educators, clinicians, and employers must provide a safe environment for our families, students, patients, customers, and colleagues so they can experience breathing zone air-security. It's something that's been very difficult to do this year.

While many competing technologies chose to focus on design, marketing, and promotion, SecureAire™ has been based on one thing: science. We began with an understanding of the physics of forces controlling the movement of ultra-fine particles and pathogens. We employ Gauss's law (Maxwell's first equation) each and every day as we have built on our platform technology originally used in cleanrooms for silicon chip manufacturing. We are following the science as we develop our broad product portfolio. The science has enabled us to produce technology that can provide cleanroom quality air to your breathing zone, whether it's for the home, office, healthcare, manufacturing, transportation, or industrial sectors.

To evaluate our science and technology we've focused on real-world evidence generated from real-world studies.

Back to healthcare. We've followed the science in evaluating the clinical impact of our technology. While many others use small air-chamber studies or subjective reports on efficacy measured immediately adjacent to their filter media we document objective results within your breathing zone. We measure particle and pathogen counts within the treated and breathing space. And while many others publish subjective or anecdotal reports on a small number of subjects from highly controlled studies, we publish works from highly recognized third-party scientists. We publish objective clinical results from physician led studies in live hospitals.



No one follows the science like we do.

Disinfecting bioaerosols from sneezing, coughing, speaking, and simply breathing is difficult in any indoor air environment especially the dynamic hospital environment. Airborne pathogens travel great distances and remain suspended for hours and aerosols and droplets are subject to one's thermal plume, human traffic, door movements, and electrostatic forces. Evidence warrants engineering solutions targeting airborne transmission of infectious risks.

SecureAire's ACTIVE Particle Control™ Technology reduces fine and ultrafine airborne particles and pathogens in live operating rooms, reduces bacterial contamination in active hospitals, and rapidly inactivates (kills) the highly resistant anthrax surrogate (*Bacillus subtilis*) [Ereth, *Am J Infection Control*, 2020]. Being able to kill the anthrax surrogate ensures that we can kill virtually all bacteria and viruses [Hernandez, 2019]. We manipulate the electromagnetic field [control polarization and control particle transport (direction and velocity)]. Micro-particles and pathogens are conditioned and particle-particle (ionization) and particle-molecular (polarization) collisions occur. The ionically driven aggregations of particles and pathogens increase in mass and then transport

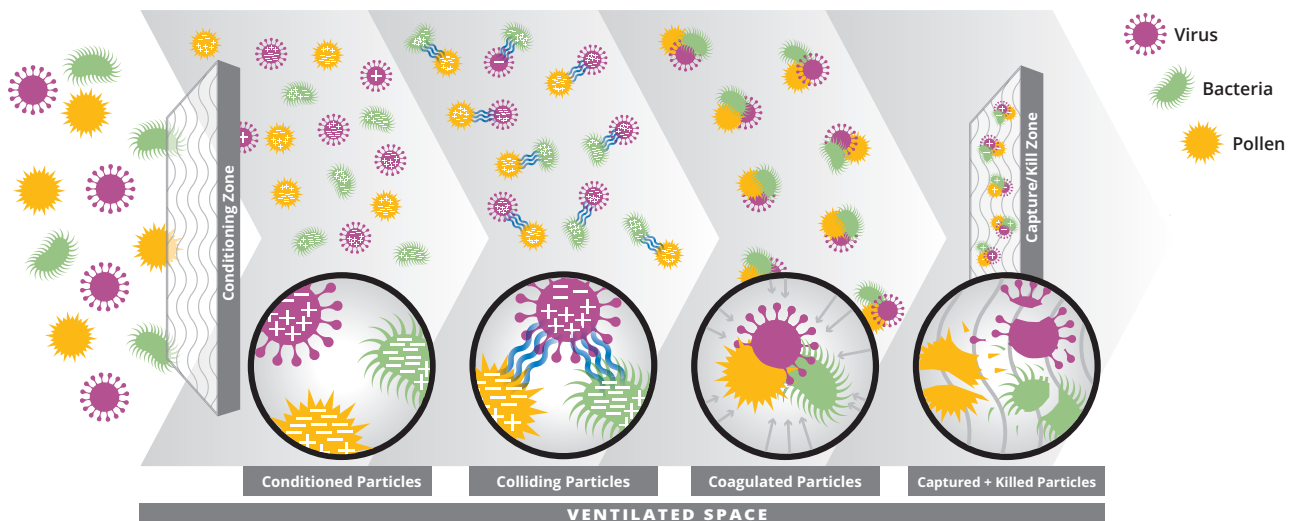
becomes controlled by airflow and they can be carried by air currents to the particle collector where they are captured and killed.

Having trouble holding your breath during an elevator ride? Don't worry. Our third-party study demonstrated an 88% reduction in airborne particles and pathogens in an operating elevator [Ereth, Submitted, 2021]. We significantly reduce bacterial contamination and have enabled wildfire challenged facilities to remain open without any complaints about outside smoke when treated with our technology.

We've published results that demonstrated a 45% reduction in health care-associated infections over 30 months on 100,000 patient days in a live 124 bed hospital [Ereth, *Journal of Hospital Infection*, 2021]. We significantly reduced wound infections by 63%, and tracheal infections by 89%. That's the science.

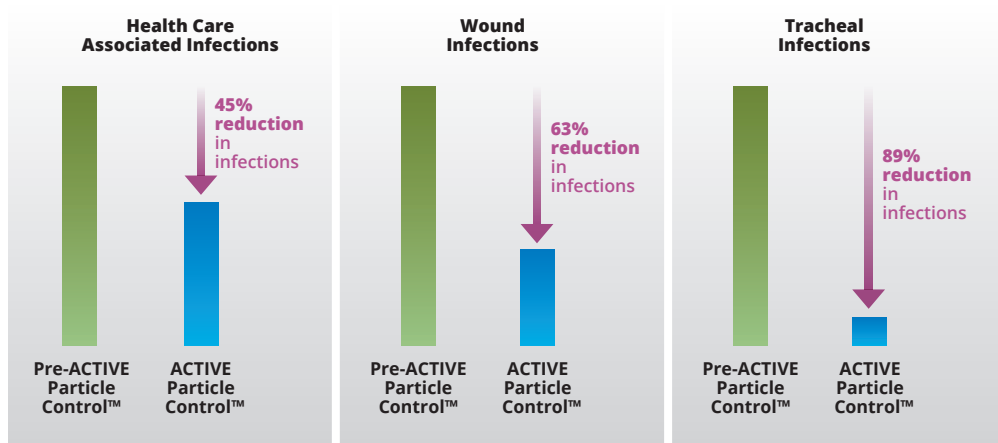
To combat breathing-zone pathogens ACTIVE Particle Control™ can provide ubiquitous, continuous, and unobtrusive air-security for you, your family, your patients, and your colleagues. Come follow our science, if it can impress the scientists and clinicians it should impress you.

ACTIVE Particle Control Technology conditions particles and pathogens, induces collisions leading to particle coagulation, and then once collected on the capture media kills all biologic matter.



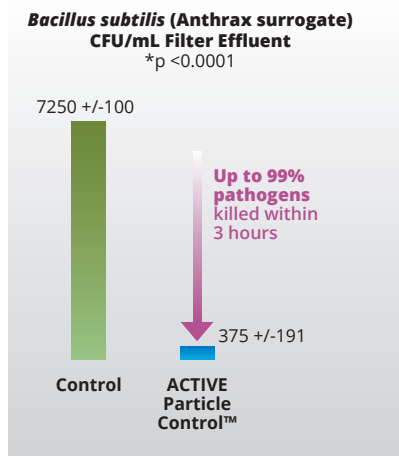
SecureAire Features and Benefits to Healthcare

ACTIVE Particle Control (APC) Technology	Only SecureAire provides ACTIVE Particle Control Technology. The technology is non-selective in that it reduces or removes <i>all</i> airborne contamination by removing even the smallest particles (fine and ultra-fine particles, the most dangerous, are not susceptible to airflow the way larger particles are).
Low Static Pressure = Fan Energy Savings	0.28" water gauge, initial clean differential pressure at 492 feet per minute of airflow.
INACTIVATE Technology	Up to 99% inactivation of all captured viable airborne pathogens as verified through third-party testing.
Small Footprint	11.5" of airway length.
Ability to Measure Performance	The AQM-150 has the ability to measure airborne particles instantly in any indoor space, providing you with the opportunity to continually measure and validate system performance.



HEALTH CARE ASSOCIATED INFECTION STUDY

ACTIVE Particle Control Reduces Health Care Associated Infections by 45%



PATHOGEN INACTIVATION STUDY

ACTIVE Particle Control Kills 99% of Anthrax surrogate (*Bacillus subtilis*)

The **Only Complete** IAQ Solution¹

	VOCs	Particulate Air Pollution	Viral Pathogens	Bacterial Pathogens	Allergens	Wildfire Smoke/Fumes
SecureAire	✓	✓	✓	✓	✓	✓
UV Light			✓	✓		
HEPA Filter		✓			✓	
Bipolar Ionizers²		✓				
Photocatalytic Oxidation²		✓				

¹ Based on real-world evidence published in peer-reviewed medical journals.

² Generates toxic byproducts (Joo, et al, 2021)

References

Ereth M, Hess D, Driscoll A, Hernandez M, Stamatatos F.; Particle control reduces fine and ultrafine particles greater than HEPA filtration in live operating rooms and kills biologic warfare surrogate. *American Journal of Infection Control*, 2020; 48:777-80. <https://doi.org/10.1016/j.ajic.2019.11.017>.

Ereth M, Fine J, Stamatatos F, Mathew B, Hess D, Simpser E.; Health care-associated infection impact with bioaerosol treatment and COVID-19 mitigation measures, *Journal of Hospital Infection*, 2021, <https://doi.org/10.1016/j.jhin.2021.07.006>

Hernandez M, Technical Report, University of Colorado, Personal Communication, 2019.

Joo T, Rivera-Rios J, Alvarado-Velez D, Westgate S, Ng, N, Formation of oxidized gases and secondary organic aerosol from a 1 commercial oxidant-generating electronic air cleaner, *Environmental Science & Technology Letters*, 2021, <https://doi.org/10.1101/2021.06.01.21258186>

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