

Aerus ActivePure® Shield:

For Air and Surfaces in Dentistry





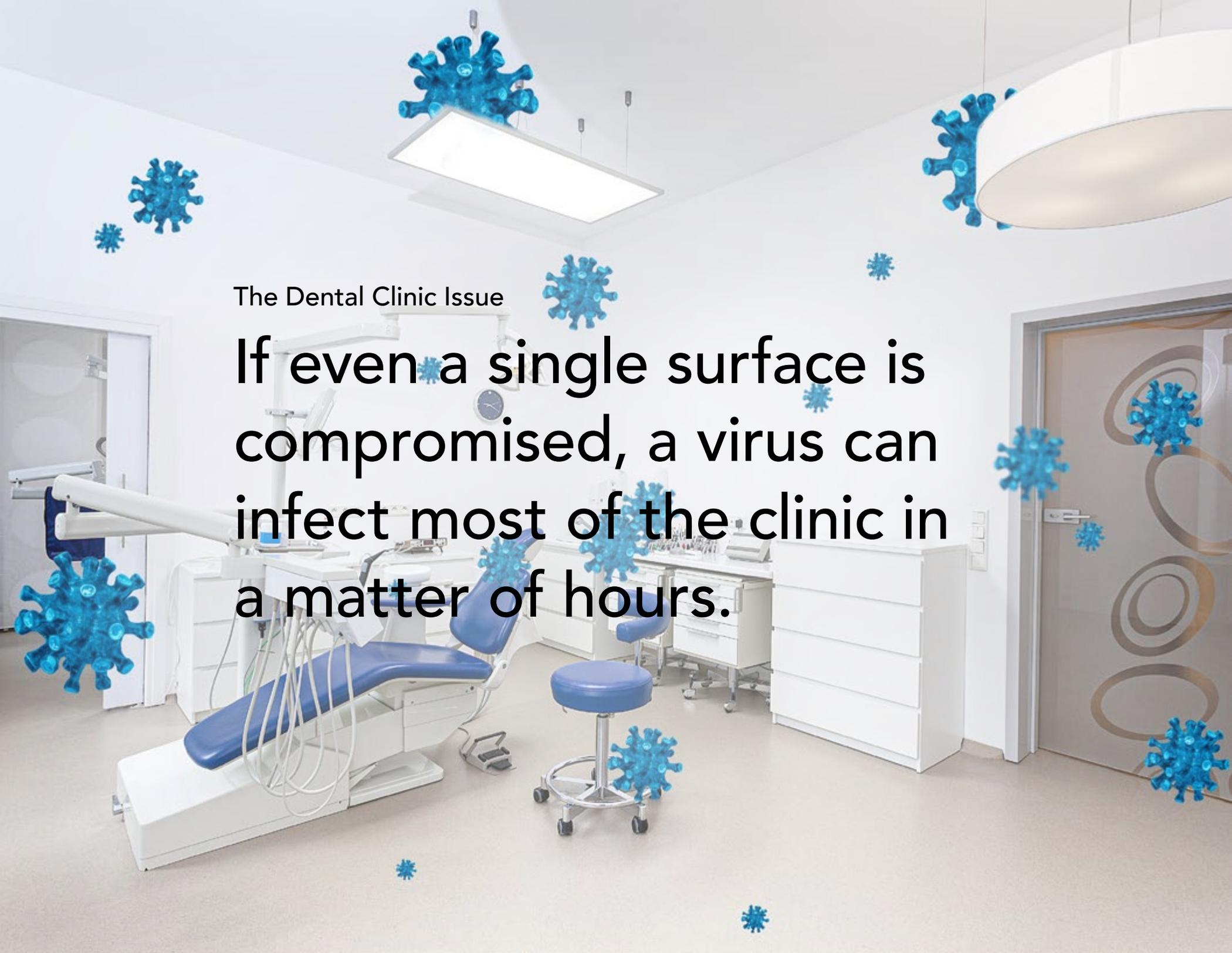
4 sources of contamination in the dental office

1. Team members
2. Patients
3. Patients' families
4. Objects: arrival of parcels, dental appliances, etc.

The customer is unable to wear personal protective equipment when being treated

- Asymptomatic client: even with rigorous pre-appointment screening, up to 50% of cases are asymptomatic
- Coughing & sneezing spreads viruses quickly
- The average sneeze can travel 8 meters, or 26 feet. These droplets stay suspended in the air for up to 10 minutes



A 3D rendering of a modern dental clinic. The room features a white dental chair with a blue cushion, a white desk with a blue stool, and a white cabinet. The ceiling has a large rectangular light fixture and a circular pendant light. The walls are white, and the floor is a light beige. Numerous blue, virus-like particles are scattered throughout the room, including on the ceiling, walls, floor, and furniture. The text "The Dental Clinic Issue" is overlaid on the image.

The Dental Clinic Issue

If even a single surface is compromised, a virus can infect most of the clinic in a matter of hours.

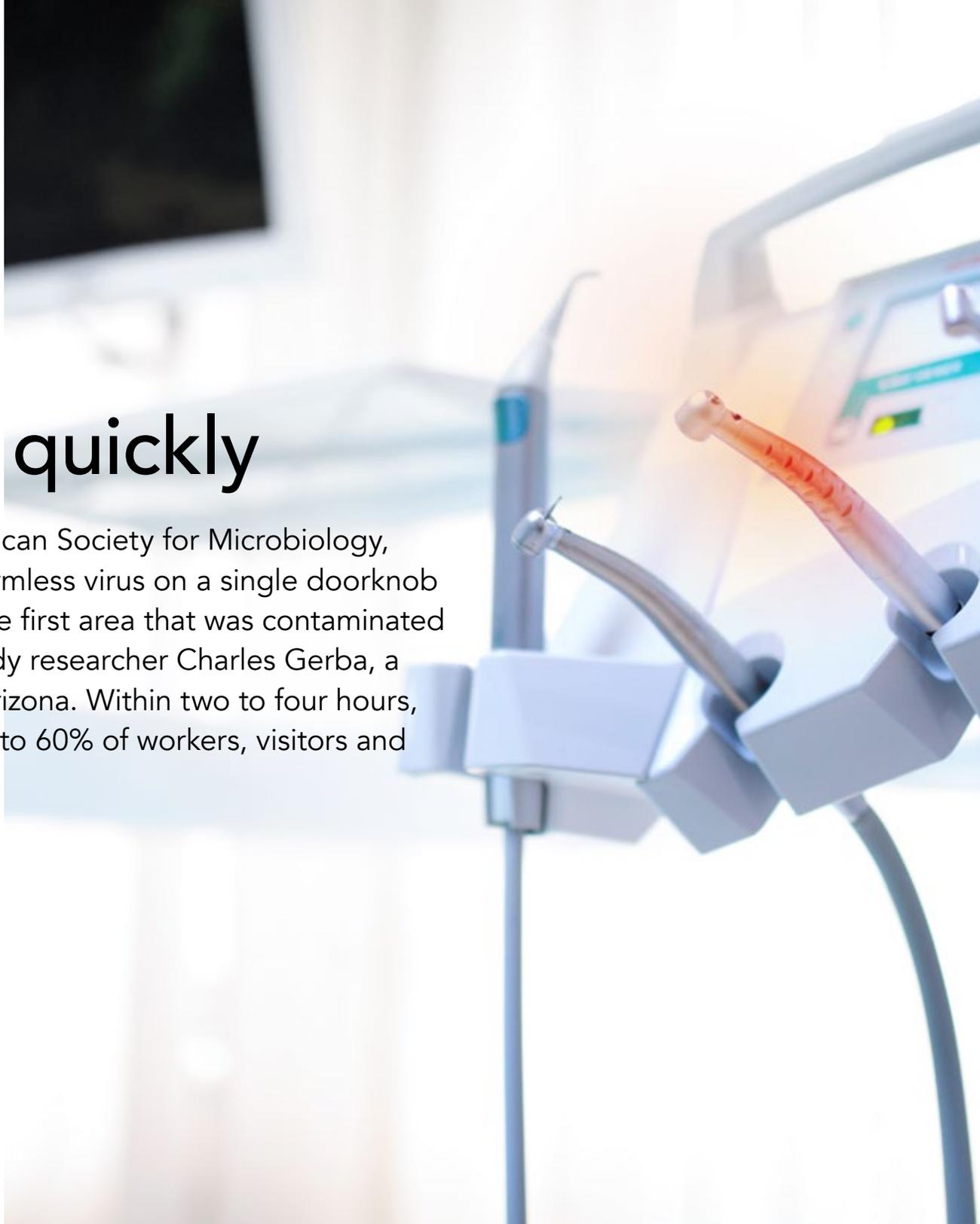
The problem TOUCH areas:

Jonathan Sexton, a researcher at the College of Public Health at the University of Arizona, found that places such as refrigerators, drawer handles, faucet handles, push-out exit doors, dental chair + equipment and coffee pots tend to have the highest concentrations of germs.



Viruses travel quickly

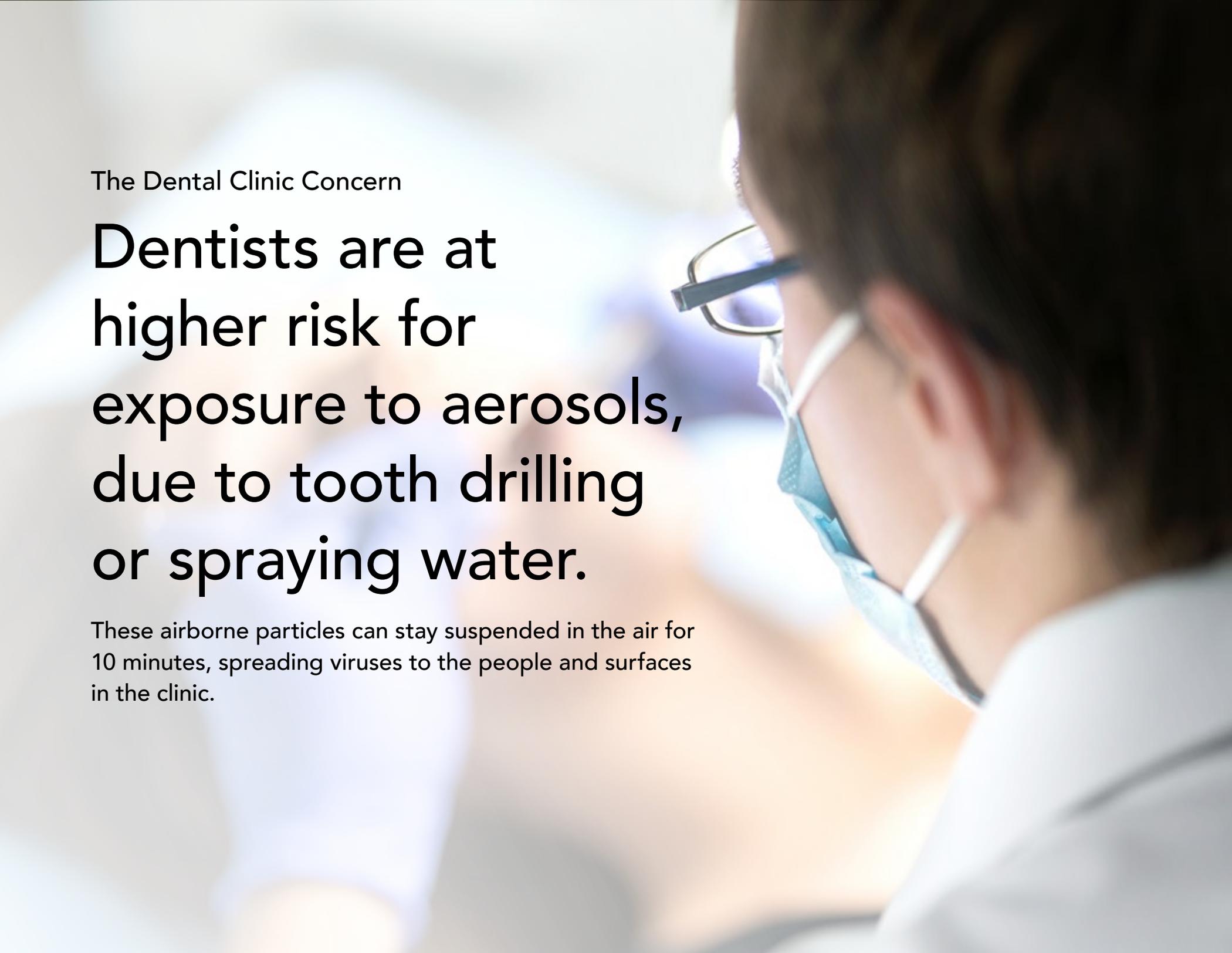
According to a study from the American Society for Microbiology, researchers placed a sample of a harmless virus on a single doorknob or table-top in an office building. The first area that was contaminated was the coffee break room, says study researcher Charles Gerba, a microbiologist at the University of Arizona. Within two to four hours, the virus could be detected on 40% to 60% of workers, visitors and commonly touched objects.



Dental Clinics Face Unique Problems

- Need access to the patient's mouth
- Need multiple patients per day to be profitable
- A unique environment in which PPE and social distancing are very difficult to enforce, making the virus easy to pass on





The Dental Clinic Concern

Dentists are at higher risk for exposure to aerosols, due to tooth drilling or spraying water.

These airborne particles can stay suspended in the air for 10 minutes, spreading viruses to the people and surfaces in the clinic.

Evolution of air purification



1870

1870's Intro of Charcoal (Carbon filtration)



2000

Early 2000's introduced new tech (Ionization / PCO / UltraViolet)



2017

Aerus' ActivePure Technology inducted into the Prestigious Space Technology Hall of Fame: one of only 75 technologies to receive such an honor in 30 years

1940



HEPA filters were developed in the early 1940s and used first by the Manhattan Project to contain the spread of airborne radioactive contaminants

2009



Early generation of NASA Certified Space air and surface purification technology introduced



ActivePure® Technology

THE SOLUTION:





Benefits of ActivePure Technology



Watch this short video to learn about the benefits of ActivePure® Technology.



How ActivePure Technology Works



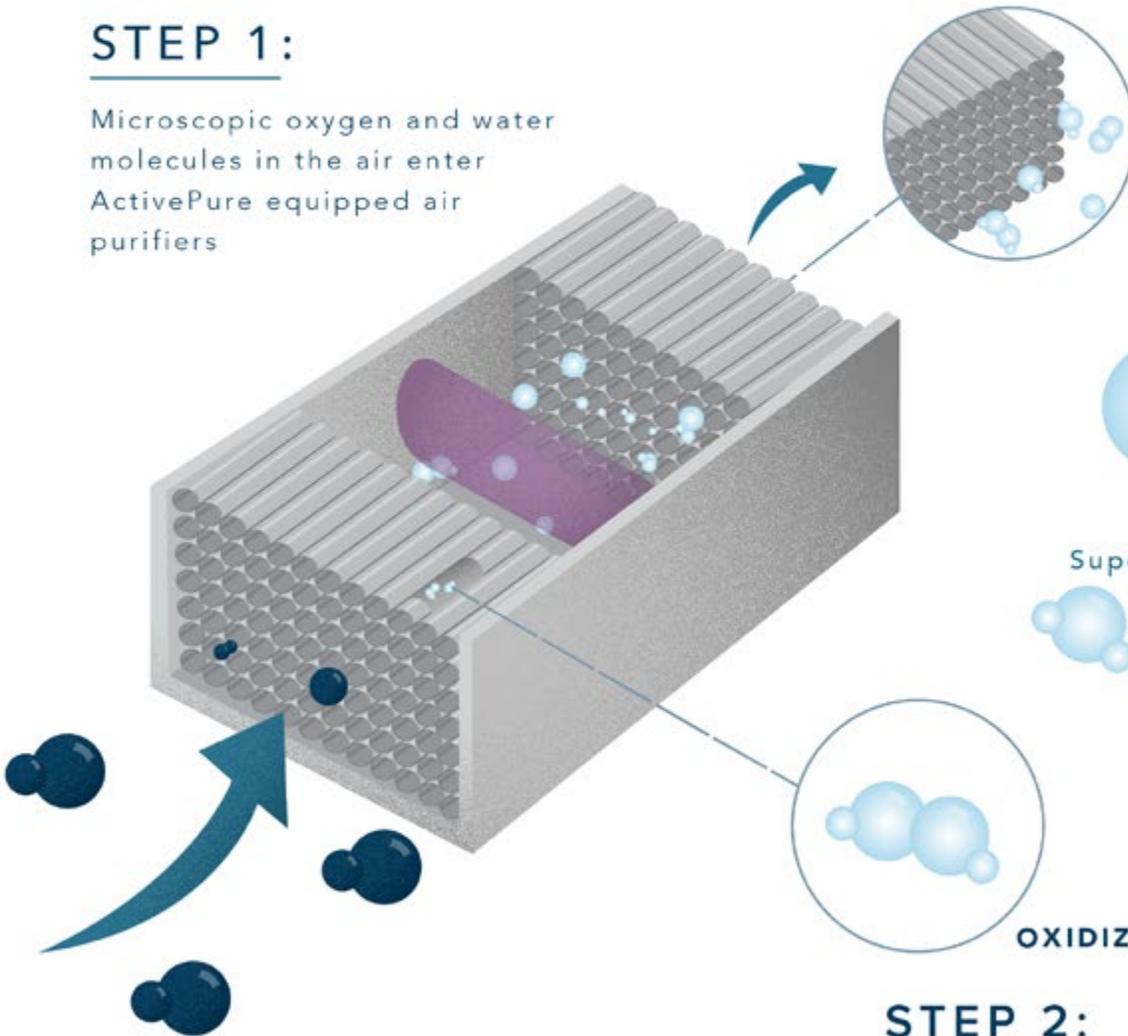
Watch this short video to learn how ActivePure® Technology works.

HOW ACTIVEPURE TECHNOLOGY WORKS

The science behind this technology is incredible.

STEP 1:

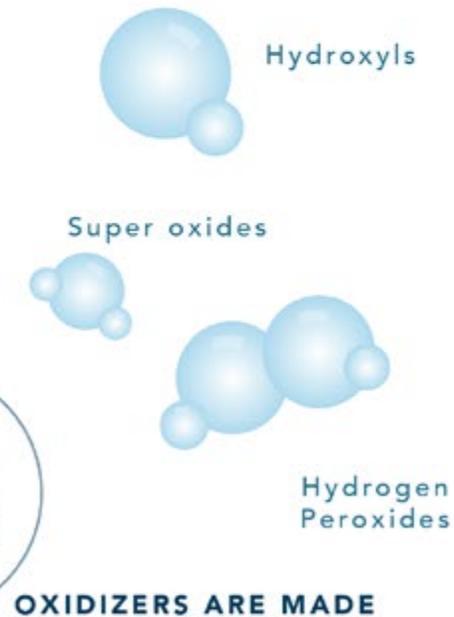
Microscopic oxygen and water molecules in the air enter ActivePure equipped air purifiers



WATER AND OXYGEN ARE ABSORBED BY THE ACTIVEPURE HONEYCOMB MATRIX

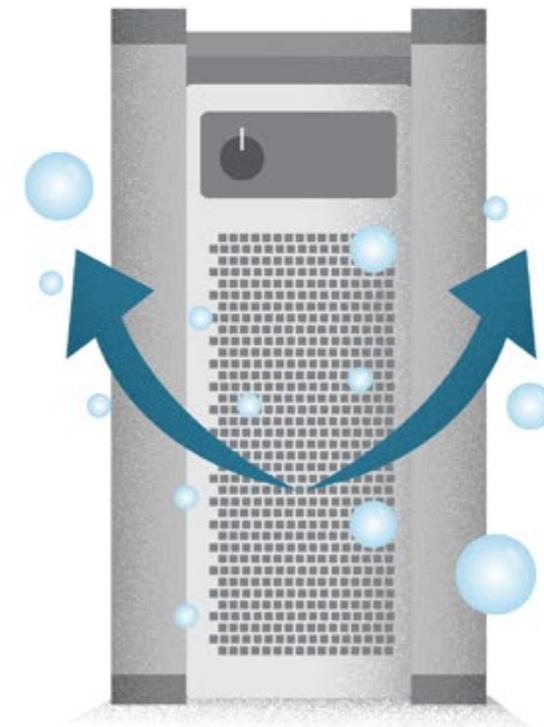
STEP 3:

When they're released back into the air, the supercharged ActivePure molecules seek and rapidly destroy contaminants, fungi, mold, and odor-causing bacteria



STEP 2:

They pass through the ActivePure honeycomb matrix and transform into friendly-yet-powerful oxidizers



BEYOND GUARDIAN AIR PURIFIER



The Dental Clinic Solution:

**ActivePure[®] Technology purifies air
and sanitizes surface contaminants
such as viruses and bacteria 24/7**

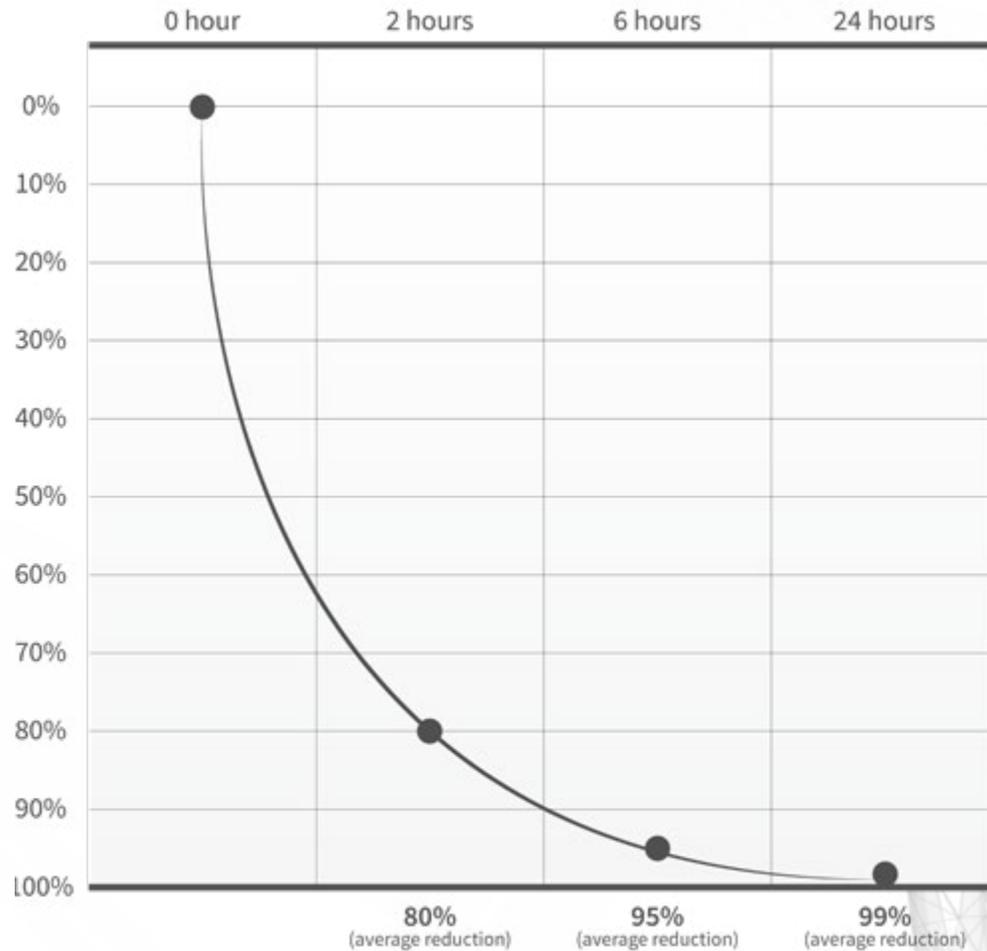


ACTIVEPURE HAS BEEN PROVEN EFFECTIVE IN THE **REDUCTION OF SURFACE CONTAMINANTS**

Reduction of Airborne Contaminants – testing conducted by **KANSAS STATE UNIVERSITY**

**OVER 99%
REDUCTION**
of microbes in 24 hours!

**OVER 80%
REDUCTION**
in just 2 hours!



Microbes Tested

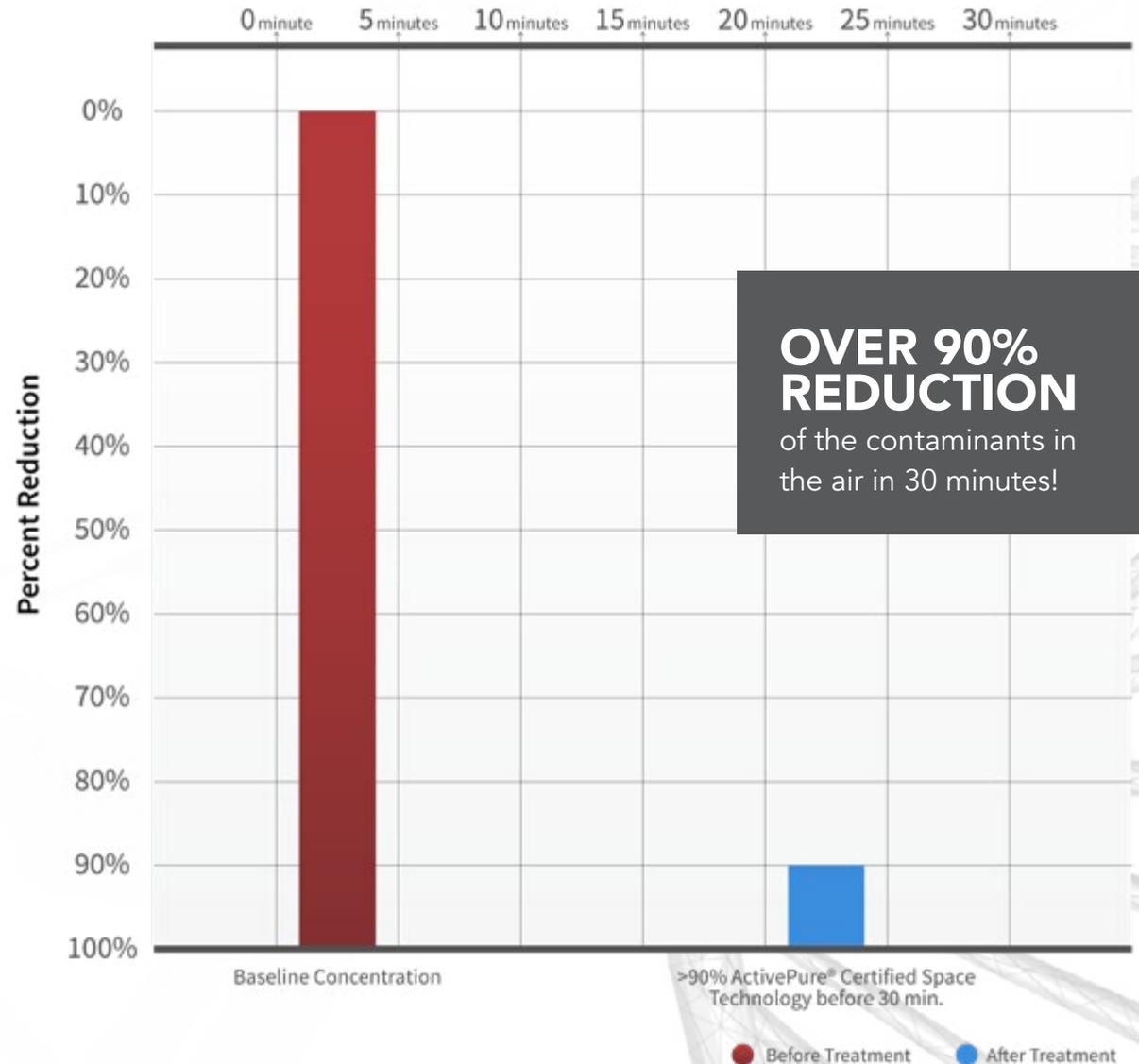
- Staph (*S. aureus*)
- E. Coli
- Bacillus spp.
- MRSA (*S. aureus r*)
- Strep (*Streptococcus* spp.)
- Pseudomonas spp.
- Listeria (*L. monocytogenes*)
- C. albicans
- S. chartarum
- Avian-Bird Flu (Influenza Virus H5I)
- Hepatitis (Hepatitis A HAV)
- Swine Flu (H1N1)
- Norovirus





ACTIVEPURE HAS BEEN PROVEN EFFECTIVE IN THE **REDUCTION OF AIRBORNE CONTAMINANTS**

Reduction of Airborne Contaminants – testing conducted by **UNIVERSITY OF CINCINNATI**



In only 30 minutes our technology reduces over 90% of the contaminants in the air - **which is 50 times more powerful** than normal HVAC filtration

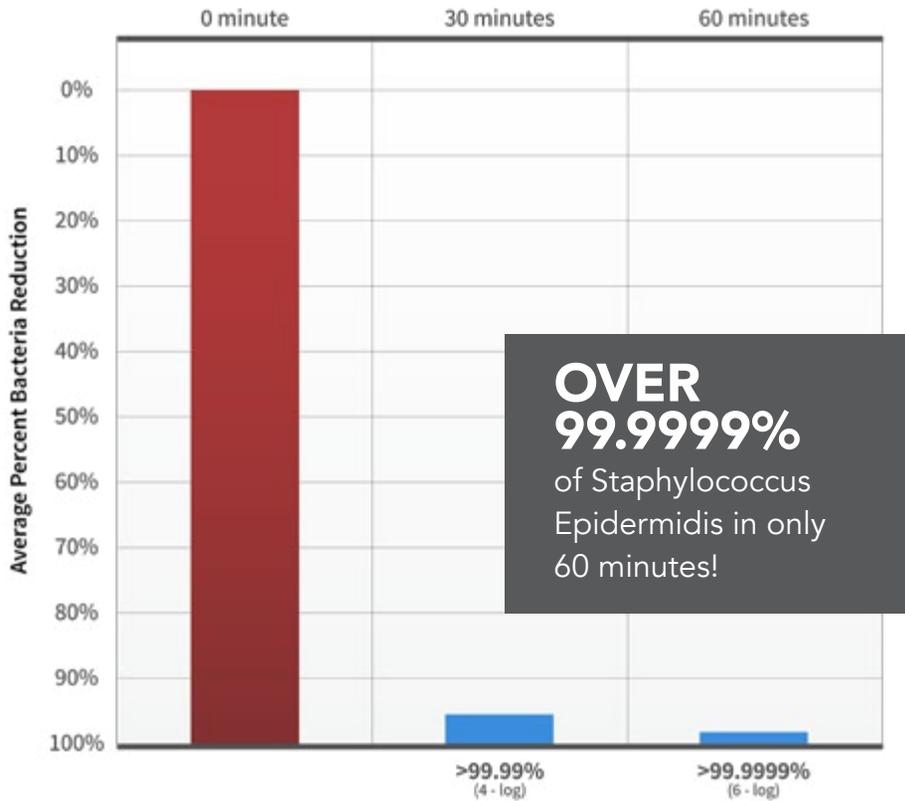
Results based on laboratory testing
Scientific testing has demonstrated the use of ActivePure® Technology to substantially reduce airborne and surface contaminants.

Field results may vary based on environmental conditions. These results have not been certified by the FDA.

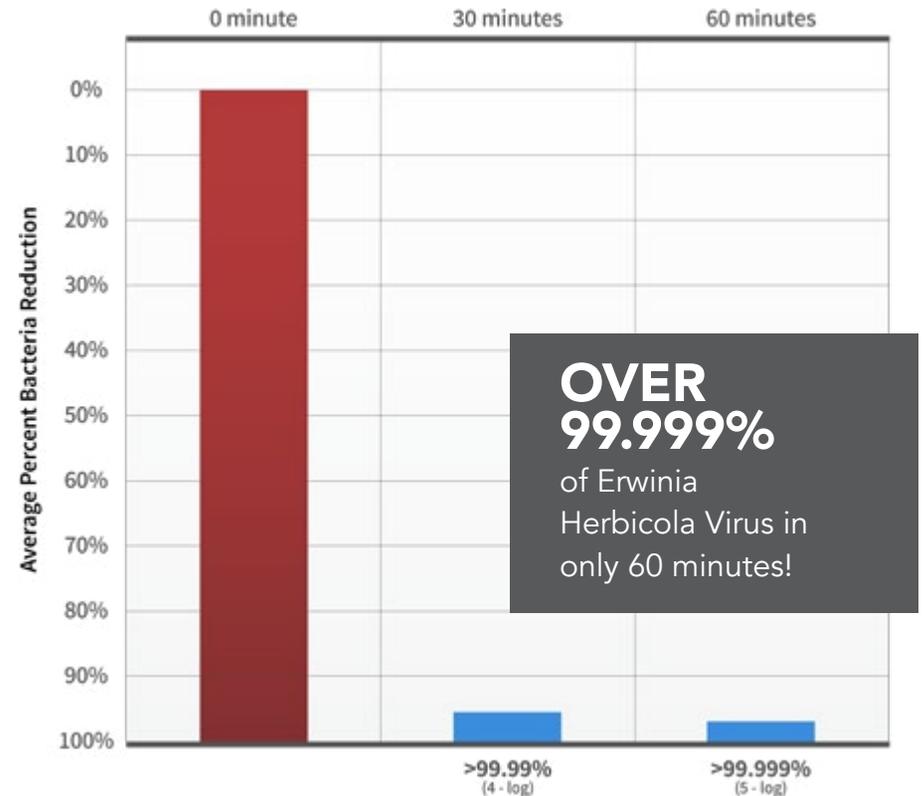


ACTIVEPURE HAS BEEN PROVEN EFFECTIVE IN **FDA-COMPLIANT LAB TESTING AGAINST GRAM-POSITIVE AND GRAM-NEGATIVE BACTERIA.**

Reduction of Airborne Contaminants Staphylococcus epidermidis – Gram-positive Bacteria



Reduction of Airborne Contaminants Erwinia herbicola – Gram-negative Bacteria



Results based on laboratory testing Scientific testing has demonstrated the use of ActivePure® Technology to substantially reduce airborne and surface contaminants.

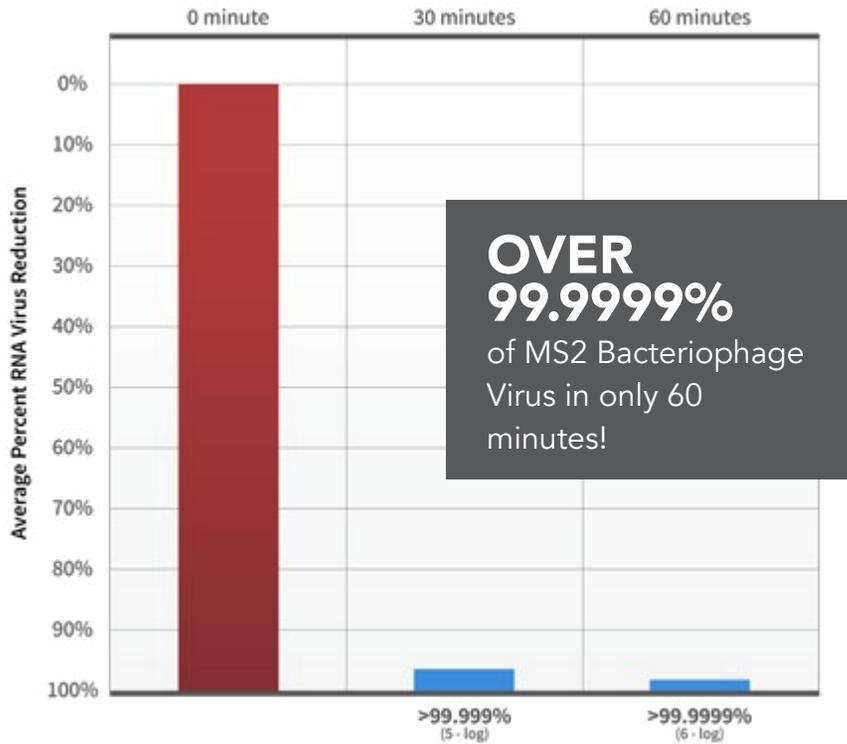
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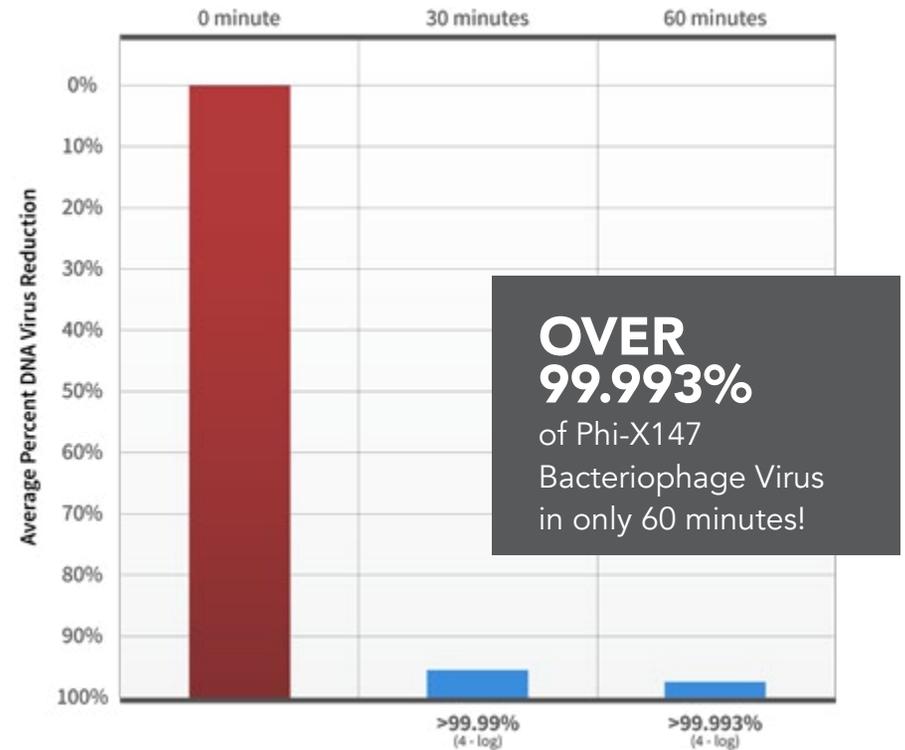


ACTIVEPURE HAS BEEN PROVEN EFFECTIVE IN **FDA COMPLIANT LAB TESTING AGAINST RNA VIRUS AND DNA VIRUS.**

Reduction of Airborne Contaminants MS2 bacteriophage RNA Virus



Reduction of Airborne Contaminants Phi-X147 bacteriophage DNA Virus



Results based on laboratory testing Scientific testing has demonstrated the use of ActivePure® Technology to substantially reduce airborne and surface contaminants.

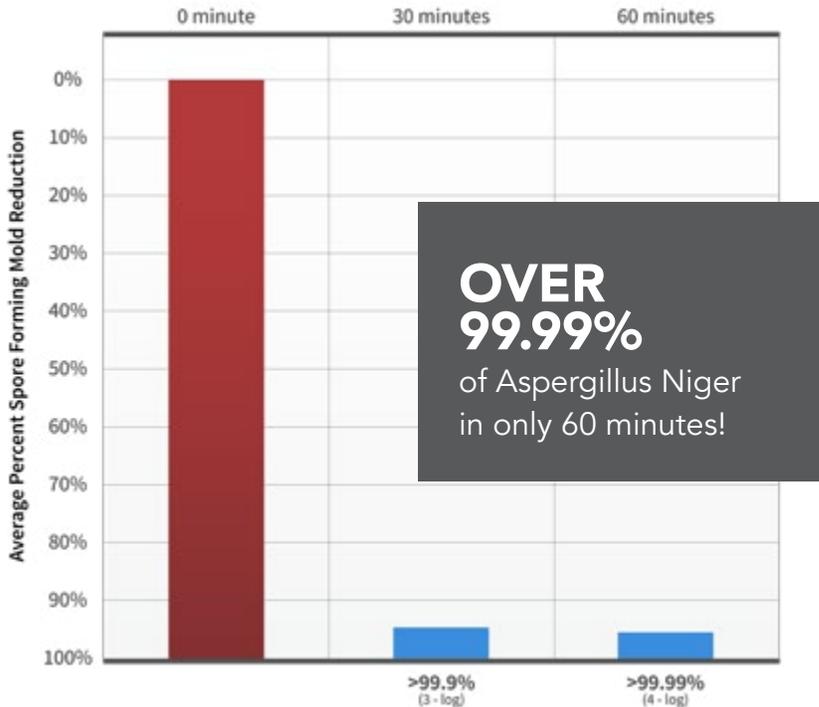
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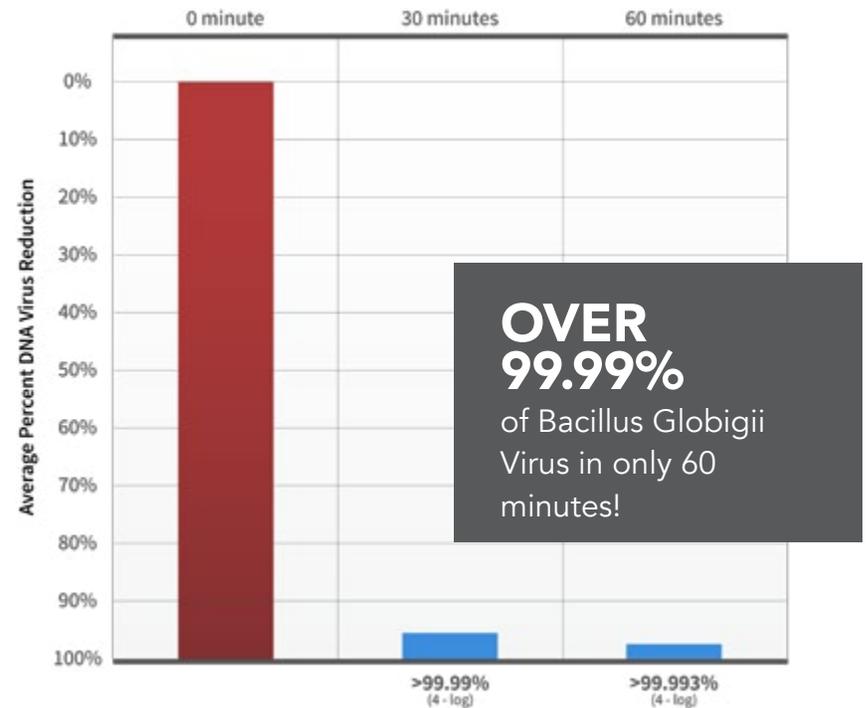


ACTIVEPURE HAS BEEN PROVEN EFFECTIVE IN **FDA COMPLIANT LAB TESTING AGAINST FUNGAL MOLD AND BACTERIAL MOLD.**

Reduction of Airborne Contaminants
Aspergillus niger (Fungal Mold)



Reduction of Airborne Contaminants Bacillus globigii (Bacterial Mold)



Results based on laboratory testing Scientific testing has demonstrated the use of ActivePure® Technology to substantially reduce airborne and surface contaminants.

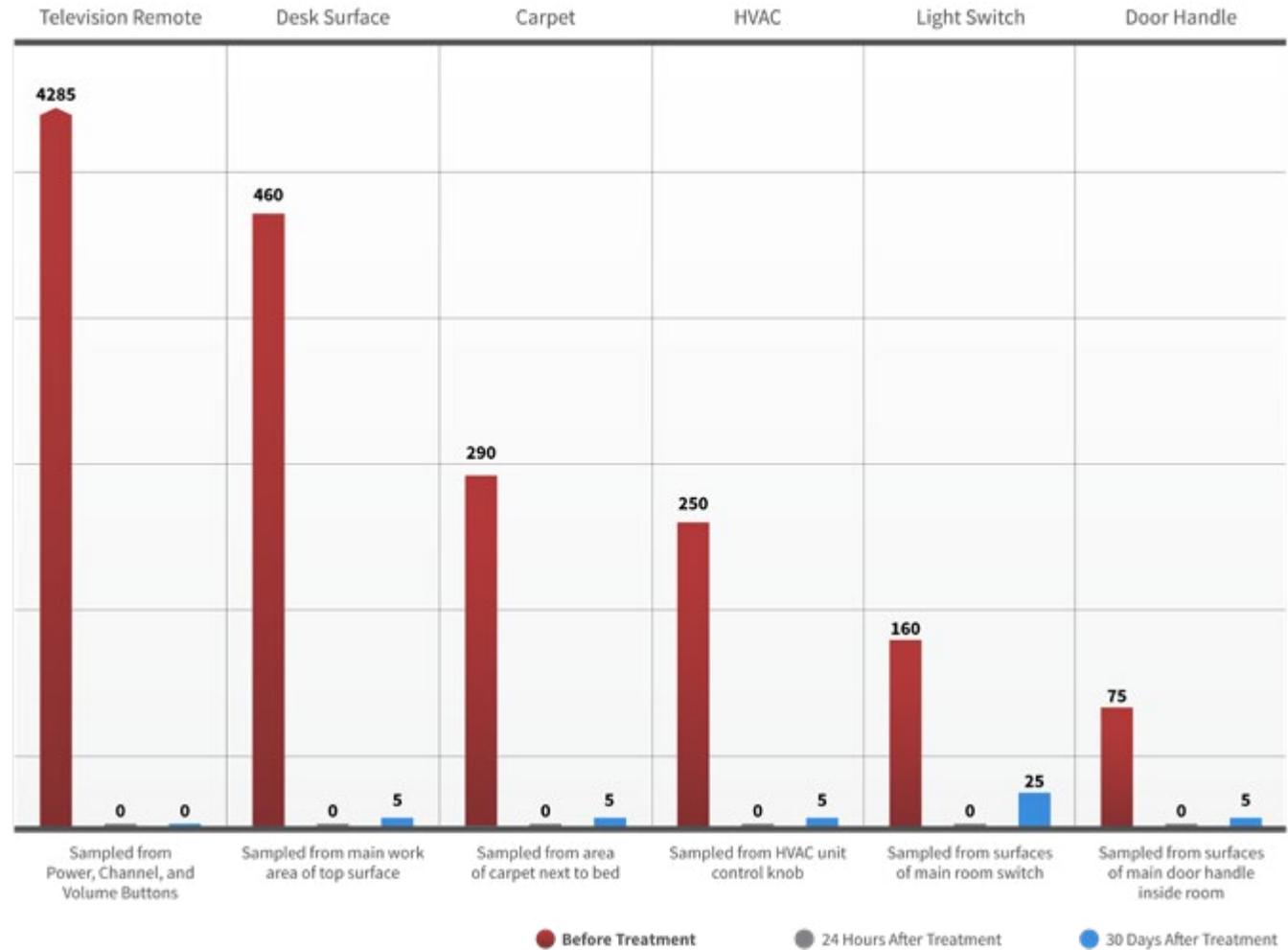
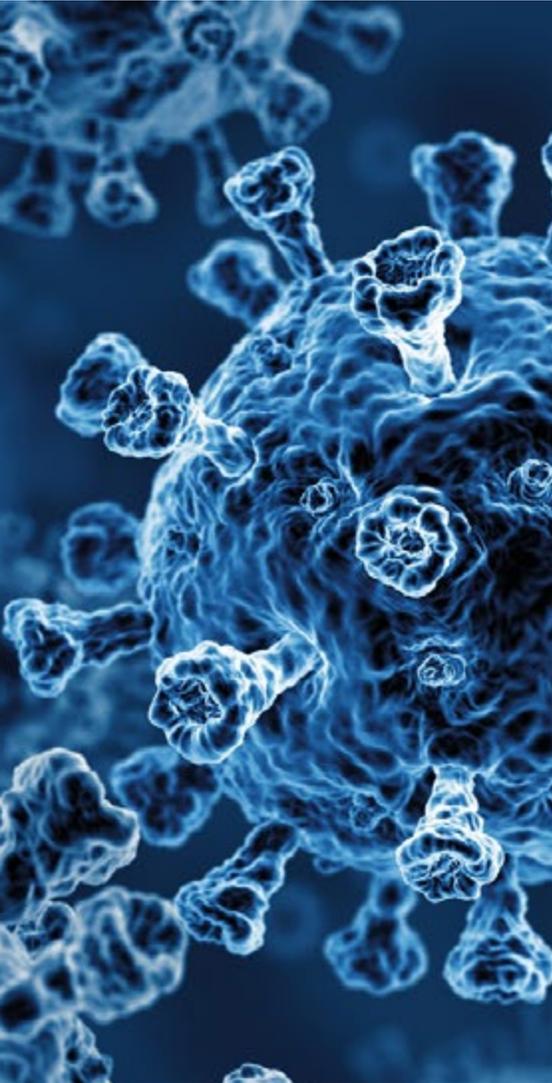
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Case studies

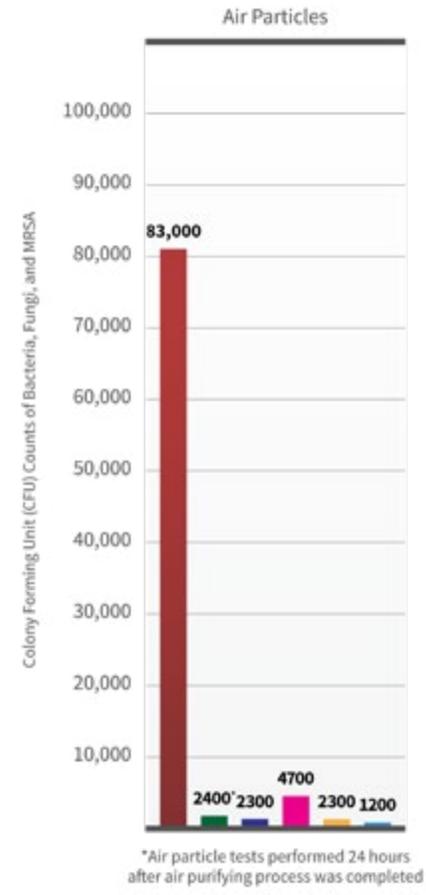
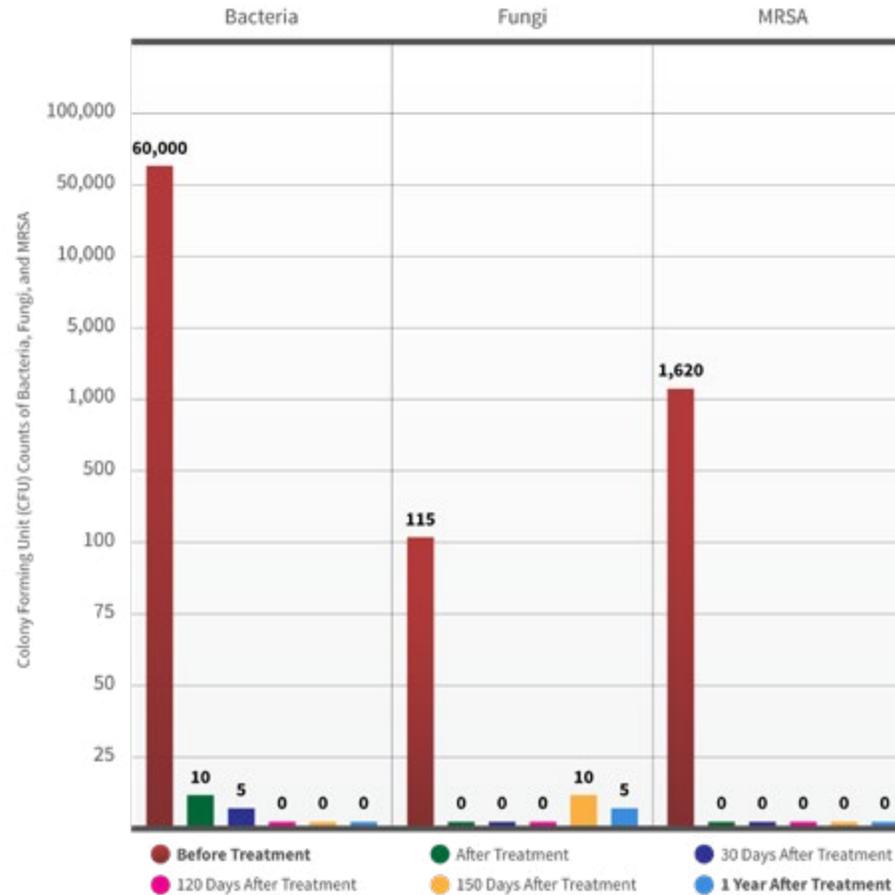


ACTIVEPURE TECHNOLOGY INSTALLED IN HOTELS (BACTERIA)





ACTIVEPURE TECHNOLOGY INSTALLED IN MAJOR LEAGUE BASEBALL

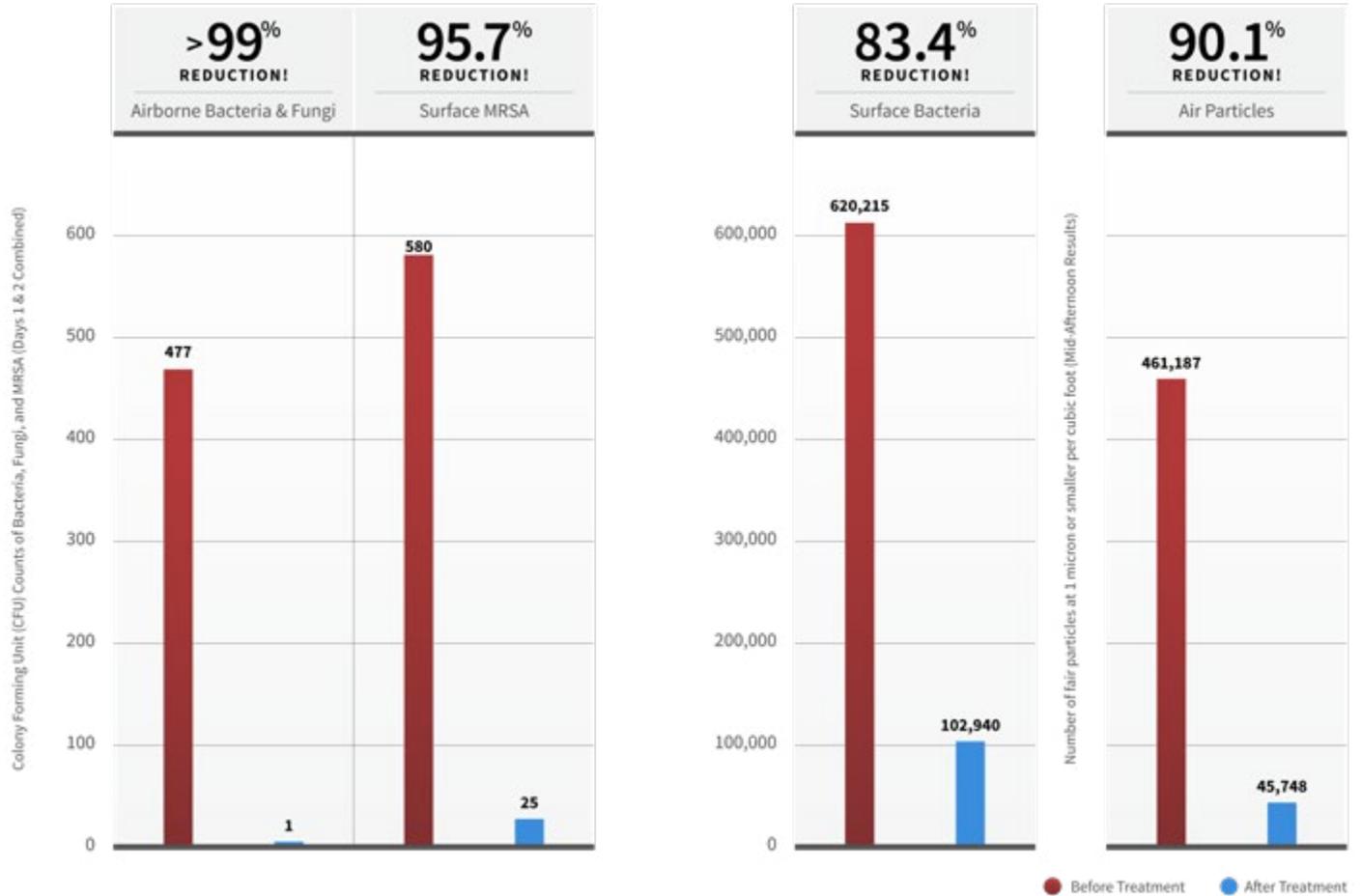


*Air particle tests performed 24 hours after air purifying process was completed





ACTIVEPURE TECHNOLOGY INSTALLED IN HOSPITAL OPERATING ROOMS

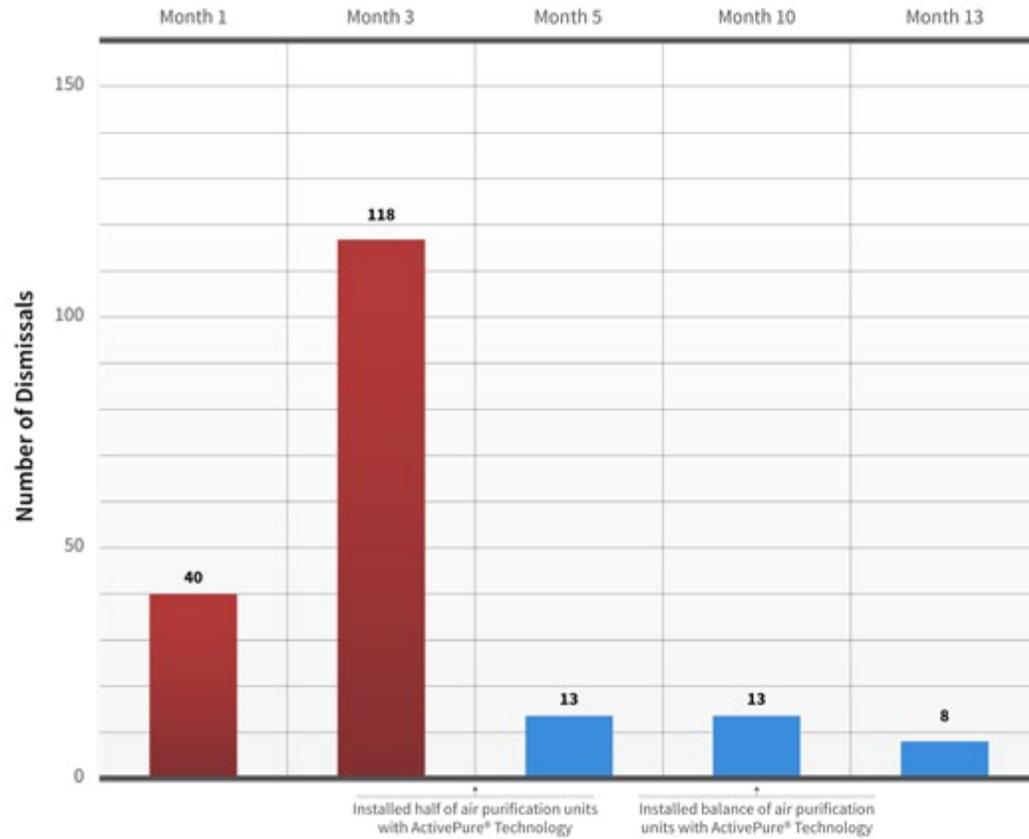




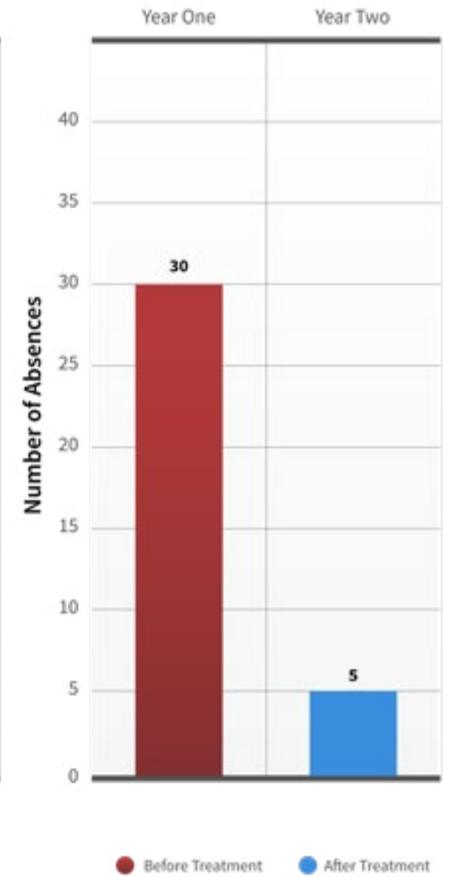
ACTIVEPURE TECHNOLOGY INSTALLED IN **SCHOOLS**



>80% REDUCTION in Flu Related Dismissals

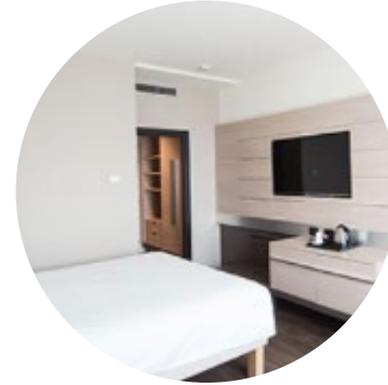


>80% REDUCTION in Preschool Sick Days



Where it's used

- Hospitals
- Homes
- Doctors' offices
- Assisted living facilities
- Schools
- Veterinary clinics
- Athletic facilities
- Hotels
- Liberty Bell
- Businesses
- Ground Zero Museum
- Automobiles



BEYOND GUARDIAN AIR

The only air purifier on the market that uses an exclusive combination of technologies, including ion generation, a sealed better-than-HEPA filter, Photocatalytic Oxidation and our proprietary ActivePure® Technology, which is university tested and proven effective against bacteria, viruses, mold and fungi in the air and on surfaces.

BENEFITS

- Coverage up to 2,000 sq. ft. (185.8 m²)
- Eliminates common triggers of allergies, asthma, and irritants to those with sensitive immune systems
- Portable, no installation required
- Destroys VOCs, smoke and odors without ozone
- ActivePure® is the only air purification technology recognized exclusively, worldwide, as Certified Space Technology.
- 5-year limited warranty available (terms & conditions apply)
- Operates 24/7
- 5-year limited warranty

HOW IT WORKS

- Uses ActivePure® Technology to create pristine air quality and attack contaminants on surfaces
- Ten unique features include technologies to capture 99.97% of particles as small as 0.1 micron

UNIQUE FEATURES

- Directional air intake for less resistance
- Multi-point ion generator creates electrically charged attraction to the filter
- Carbon layer prefilters large particles and odors
- Water-proof, polypropylene filter captures 99.97% of particles as small as 0.1 micron, performing at levels better than HEPA
- UVC light is a germicidal lamp
- ActivePure® Technology is a proprietary, active, Certified Space Technology that goes into the room to destroy contaminants in the air and on surfaces
- 4-speed dual intake fan moves particles toward filter
- Angled blades at emission point create dynamic air flow through room
- Whisper quiet HEPA silent™ setting on 4-speed control knob
- Durable all-steel construction for durability & sound-insulation



AERUS PURE & CLEAN

Aerus Pure & Clean combines five nature-based processes into one unique, proven, active technology system that helps clean the air you breathe and the surfaces you touch, without the use of ozone.

BENEFITS

- ActivePure® Technology destroys over 99% of all surface and airborne contaminants
- Reduces airborne contaminants and allergens that can trigger asthma and allergy symptoms
- Freshens air and removes odors in otherwise stale-prone environments
- Removes dirt and dust from the air to make cleaning easier
- Portable, no installation required
- Destroys VOCs, smoke and odors

HOW IT WORKS

- Our proprietary ActivePure® Technology uses light waves and a catalytic process to produce super oxide ions and hydro peroxides that destroy contaminants in the air and on surfaces
- Features a high intensity UVC light that makes use of the same oxidation and ionizing properties of light as naturally occurring sunlight
- Certified Space Technology continuously protects and purifies the environment
- Proven effective in independent studies against bacteria, viruses, mold and fungi in the air and on surfaces

UNIQUE FEATURES

- Positive and Negative Multi-point and RF Ion Generation
- Five Speed Fan
- LCD Display
- Maintenance Reminders
- Replaceable ActivePure® Cells
- Removable Rear Grill
- Universal Power Supply with cords
- HEPA and Activated Carbon Filters

