

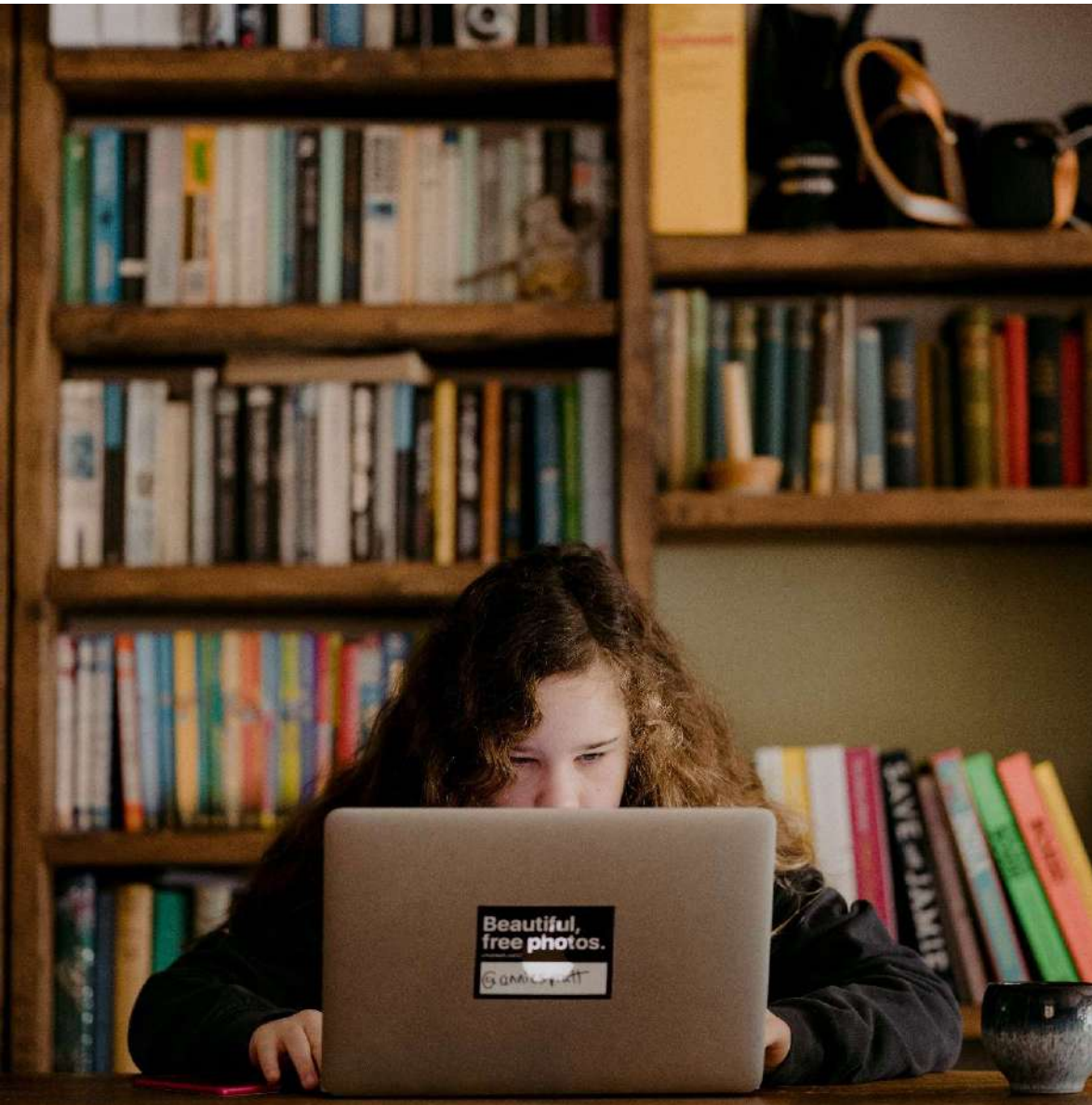


SchoolSafe

Enhanced Hygiene for
School Systems



WCP Facility Solutions



Mission

Utilize physics and chemistry to improve indoor air and surface hygiene when our children and community need it most.

SchoolSafe Agenda

PHASE 1

Identify the Problems

PHASE 2

Increase Indoor Air Quality and Implement Infection control solutions

PHASE 3

Develop monitoring tools for the staff to ensure system compliance

PHASE 4

Construct Cost/Benefit Analysis

Our Approach

WCP Facility Solutions recognizes that there are no silver bullets in the world of infection control. We know the problem is complicated and will require multiple solutions.

Let us attack this problem for you by

- Using a systematic layered approach focused on proven methods of microbe transmission and transference.
- Instituting disruptive antimicrobial technologies to alleviate costs.

Methods of Transmission



From Surfaces

Touch Contamination



From Textiles

Spore Capture / Bacteria



Faulty Hygiene

Hand Washing



Exposure from Other People

Outside Sources



Air

Vectors/ Air System Handling

Schools are the key facilities for transmitting microbes throughout our communities

The toxic combination:

low
humidity



“Super-Emitter”
children



toilet flush
aerosolization



flu
outbreak

*Low humidity ensures that
airborne viruses will stay
aloft and travel far*

**Most schools were designed to extend the life
of HVAC systems, NOT to protect students
and staff from particulates**

Schools and Influenza Virus Transmission:

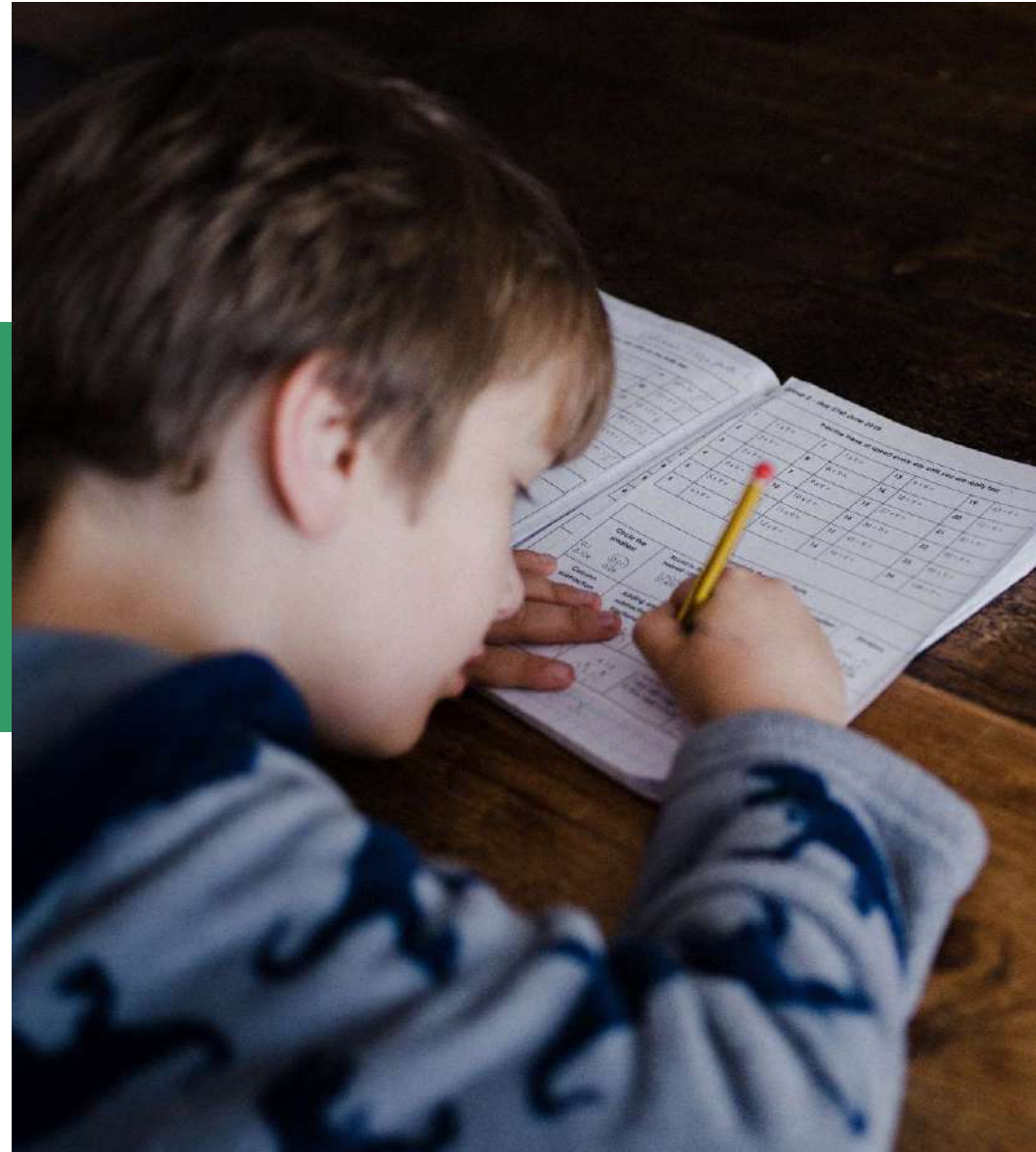
- Children possess immature immune systems, and thus may become “Super-Emitters” **capable of infecting 60+ classmates.**
- Many schools have dry environments consisting of 15-25% indoor relative humidity levels. This is the **perfect environment for airborne Viral transmission** and contagion.
- Few schools in the U.S. recognize the importance of **Indoor Air Quality (I.A.Q.) Standards** and the effects it has on Students and Staff.
- Most bathroom designs do not incorporate **floor level exhaust vents.**

Student Transmission in Facilities

"Increases in school absenteeism mark the beginning of a new epidemic, suggesting that school-age children play a critical role in disseminating influenza viruses. Increases in school absenteeism are typically followed by increases in work absenteeism." - Virologist Peter Wright¹

Schools now have many good reasons to take a vested interest in advocating for clean and properly humidified air in their buildings.

1. Professor Pediatrics, Pathology, Microbiology and Immunology Chief, Division of Pediatric Infectious Diseases Vanderbilt University School of Medicine



BioProtect™ 6 Hour Hand Sanitizer

- **WCPFS distributes a unique FDA compliant hand purifiers / sanitizer.**
- **It is a non-alcohol based, foaming hand sanitizer with FDA approved residual capacity for protection up to 6 hrs.**
- **Studies show HAI reductions from 20 to 40% using BioProtect™ Organosilane antimicrobial technology.**
- **Safe and cost effective non drying formulation.**



Surface Antimicrobials

Chlorine Dioxide Solution (ClO₂) - Deodorizer

Chlorine Dioxide - Off Gassing Tablets - Deodorizer

Hypochlorous Acid (HOCl)- Disinfectant

- All purpose, hospital grade, multi-surface cleaner, broad spectrum disinfectant
- Tablets require no labor – simply place the tablet in the appropriate container of water
- CDC's recommended product for disinfection of PPE vs Ebola

Label Claims Bacteria and Fungi

- Salmonella enterica
- Escherichia coli
- MRSA
- Salmonella enterica
- Acinetobacter baumannii
- Staphylococcus aureus
- Legionella pneumophila
- Aspergillus niger
- Enterobacter aerogenes
- Listeria monocytogenes

Label Claims Viruses

- HIV-1
- Norovirus (feline calicivirus surrogate)
- Respiratory syncytial virus
- Rotavirus
- H1N1 flu virus
- H5N1 flu virus
- Hepatitis B
- Hepatitis C

KloreSe™



Why Klorese?

When mixed with water, Klorese tablets release Hypochlorous Acid, producing an EPA-registered broad spectrum disinfectant that kills pathogens including biofilm, human coronavirus, C. diff endospores, MRSA, E coli, Norovirus and more. With neutral PH, it is safe and effective to use on any surface and in any facility.

| | Klorese vs Bleach vs Quats | | |
|---|----------------------------|----------------------------------|-------------------|
| Sporicidal | ✓ | ✓ | ✗ |
| Kills biofilm | ✓ | ✗ | ✗ |
| No significant health risk | ✓ | ✗ | ✓ |
| No odor or mild odor | ✓ | ✗ | ✓ |
| No damage to floors | ✓ | ✗ | ✓ |
| Shelf life when diluted | 6 days | 12 hours | 1 day |
| Shelf life before dilution | 3 years | 1 year | 2 years |
| Hazardous Materials Identification System (HMIS) rating | 1 (Slight hazard) | 2-3 (Moderate to serious hazard) | 1 (Slight hazard) |



Multi-Surface Clean



- Mop Floors
- Sanitize Tables
- Clean Bathrooms
- Clean Grease Traps
- Clean Cooking Equipment
- Clean Windows
- Cost Effective Formulation

SHIELD™ Disruptive Biostatic Agent 90 Day Surface Protectant

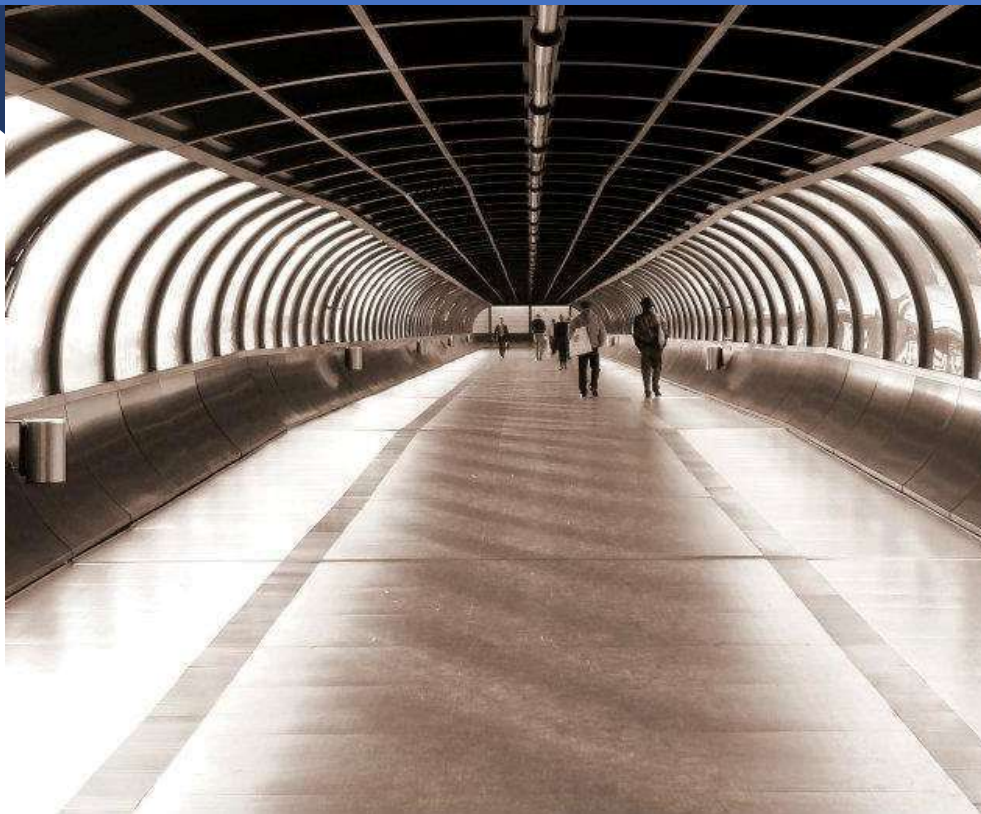
- Effective on surfaces for up to 3 months
- Eliminates bacteria, mold, fungus, algae, and other odor causing microbes
- Organic, non-toxic, non-leaching, water-based molecule
- Persistently kills organisms mechanically instead of chemically
- EPA approved for porous and non-porous surfaces
- Works on textiles in laundry solutions, provides odor control
- Provides an anti-static component to laundered materials
- A Silicone Quaternary Ammonium Salt (Organo-Silane Molecule)
- Approved for direct surface food and pet contact
- Edison Award Winning “Best New Product”



Simix™ Floor Treatment



- EPA certified “Safer Choice”
- Dramatically improves shine of floor finishes due to Lithium ion inclusion
- Hardens the existing floor finish reducing scuffs and soiling
- Eliminates the need for burnishing resulting in Labor savings / less dust
- Increases slip resistance of floors- decreased “slip & fall incidents”
- Reduced labor for application



SIMIX™ Floor Treatment

- Provides a Nano Technology Surface Treatment rendering flooring surfaces antimicrobial.
- Easy to use. *(Two people can apply 10,000 sq ft in approximately two hours)*
- Dramatic labor cost savings over conventional floor treatments.
- Since the Nano-Technology forms a “glass-like” composite, and is not a wax, it is much less slippery
- Maintenance is as easy as periodic swabbing with Simix™ multi-surface cleaner.
- Adjunctive to increased air quality: eliminating bio burdens.



Liquid Cleaners and Disinfectants Leave Behind Biofilm

Simix Cleaner

Detergent
Dissolves the lipid membrane

Hydrogen Peroxide
Destroys viral structure

High pH
Hostile to viral and microbial growth

Biofilm is a Hideout for Viruses and a Food Source for Microbes

Simix Removes and Prevents Biofilm Build-up

SIMIX™ Floor Coating **Reducing “Slip and Fall” Incidents**

SIMIX Multi-Surface Ceramic Clearcoat creates less slippery floors and is rated as high traction by ANSI standard “Dynamic Coefficient of Friction” (DCOF) testing. Using a tribometer on a wet surface, floors treated with Simix™ maintain high DCOF ratings (above .42) and are safer for students, customers, faculty and staff. This results in a reduction of “slip and fall” incidents, relating filing of potential lawsuits, insurance claims and processing of requisite paperwork.



Coating DCOF result ANSI Standard Range SIMIX
Ceramic Clearcoat = .436 High traction

PerfectCLEAN Microfiber

- **Physically removes 85% of grime, dust and Micro-organisms**
- **Durable and Chlorine Stable designed to meet CDC guidelines for Blood-Borne Pathogens**
- **Lint-free therefore lessens particulates produced from paper towels**
- **Multicolor to identify use area (Bathroom vs Kitchen Applications) helps limit cross contamination**
- **Provides an electrostatic charge to *attract* debris**
- **Aides in achieving Dwell Time**
- **Reduces waste**
- **Highest Absorption Capacity of any Product Tested**
- **Multiple patents including internationally patented "Built-in Antimicrobial Product Protection"**



Scrub & Clean Sponge

Proprietary Antimicrobial coated.
One side is a dense terry-type material ideal for cleaning and the back side has “thin film” knitted into the surface to provide for a less aggressive scrubbing action. The terry side is made from TW420AM, a proprietary double sided terry material developed to meet the rigorous quality, durability and performance of the commercial laundry. Adhering to strictest Quality Control Standards this material offers the highest concentration of micro-denier fiber resulting in unrivaled performance – it takes the effort out of cleaning.





SHIELD™ Textile/Laundry Technology

- Organic product non-toxic (water-based molecule) laundry softener for clothing, uniforms and textiles (table cloths)
- Add 2-4 ounces to laundry (depending on load size) during rinse cycle to turn garments antimicrobial and hydrophobic
- Extends garment / uniform life as bacteria feed off dead skin cells imbedded within the clothing fibers.
- Exceptional odor control.
- Effective against a host of microbes.

Indoor Air Quality Approach

We understand that removing overall particulates and bio-burdens found in confined spaces leads to requisite decreases in associated cleaning costs, student and staff absenteeism along with decreased risk of microbial air-borne contamination and exposure to pathogenic organisms.



SIMIX Multi-Surface Ceramic Clearcoat improves the ability of any new or old unit to produce dramatically colder and fresher air

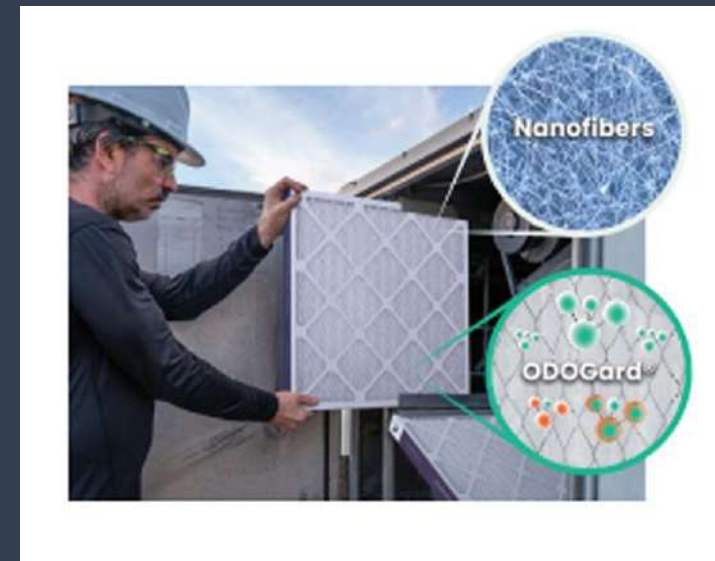


Multi-Surface Ceramic Clearcoat

- **Lowers your energy bill 10%–20%**
- **Add years to the life of your A/C units**
- **Destroys all foul musty odors**
- **Prevents salt damage**

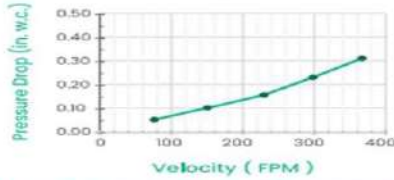
Air – Greentech™ Containment Filter with ODOgard™

- The most cost effective solution for improving indoor air quality, eliminating odors, and saving energy in commercial buildings.
- Great for older equipment, areas that require better filtration, construction material off-gassing, high traffic areas, LEED buildings, and any odors or volatile organic compounds, everywhere you have a pleated
- True mechanical MERV 13A with low pressure drop equal to a true mechanical 8A airflow, for better energy efficiency and provides less stress on existing HVAC systems.
- 2 in 1 filter- High MERV rated filter plus the advantages of gas phase reductions for odors and VOC's.
- ODOgard™ creates a molecular bond with odors and renders the odor inert, eliminating them.



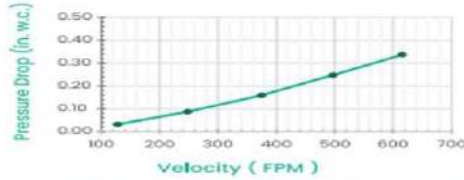
Greentech Filters+ Pressure Drop vs. Flow Rate

1" Filter



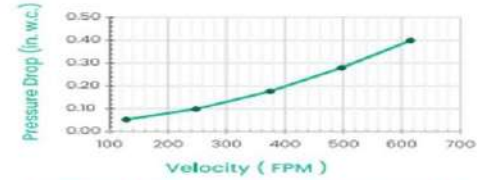
| Velocity (FPM) | Press Drop (in. w.c.) |
|----------------|-----------------------|
| 73.75 | 0.05 |
| 147.50 | 0.10 |
| 221.25 | 0.16 |
| 295 | 0.23 |
| 368.75 | 0.31 |

2" Filter



| Velocity (FPM) | Press Drop (in. w.c.) |
|----------------|-----------------------|
| 123.00 | 0.03 |
| 246.00 | 0.09 |
| 369.00 | 0.16 |
| 492.00 | 0.25 |
| 615.00 | 0.34 |

4" Filter



| Velocity (FPM) | Press Drop (in. w.c.) |
|----------------|-----------------------|
| 123.25 | 0.05 |
| 246.25 | 0.10 |
| 369.50 | 0.18 |
| 492.50 | 0.28 |
| 615.75 | 0.40 |

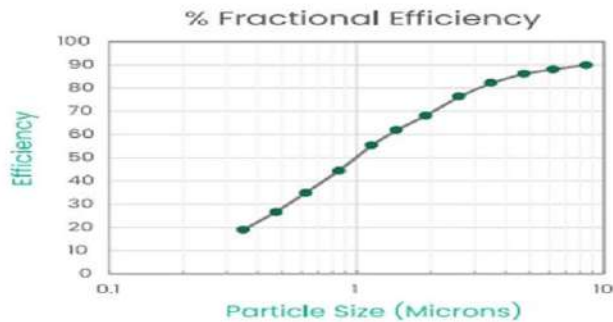
ASHRAE 52.2 Test Data

Filter Size:
24" x 24" x 2"

Test Aerosol:
KCl, Neutralized

Flow Rate:
1,968 CFM

Velocity:
492 FPM



| Size Range (µm) | Initial Fractional Efficiency | |
|-----------------|-------------------------------|----------------|
| 0.30 - 0.40 | 19.0% | E ¹ |
| 0.40 - 0.55 | 26.7% | |
| 0.55 - 0.70 | 34.9% | |
| 0.70 - 1.00 | 44.3% | E ² |
| 1.00 - 1.30 | 55.3% | |
| 1.30 - 1.60 | 61.9% | |
| 1.60 - 2.20 | 68.0% | E ³ |
| 2.20 - 3.00 | 76.3% | |
| 3.00 - 4.00 | 82.3% | |
| 4.00 - 5.00 | 86.3% | |
| 5.50 - 7.00 | 88.2% | |
| 7.00 - 10.00 | 90.0% | |



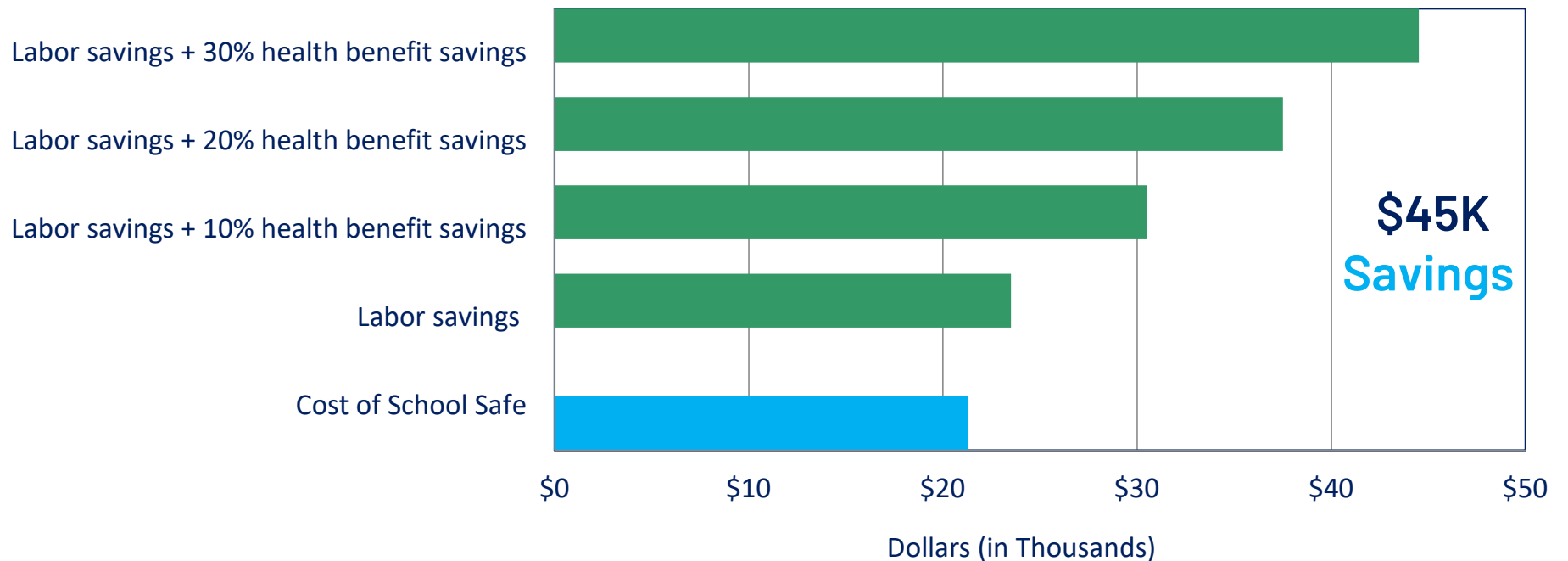
TRANSPORTATION

Keep Students Safe

- **Clean** all Transport Vehicles with Microfiber
- **Deodorize** with Chlorine Dioxide Off-Gassing Tablets
- **Disinfect with Hypochlorous Acid**
- **Protect** with **SHIELD™** Technology or **SIMIX™**

SchoolSafe

Estimated Savings and Benefits per facility



SchoolSafe Summary



Lower Operating Costs

Cleaning, Staff Absenteeism, etc.



Better Attendance

Potentially more government reimbursement



Helps Ensure Safety

of students and staff



Environmentally Safe

Infection Control Program

SHIELD™ Surface
Technology

SHIELD™ Laundry
Treatment

Simix™ Products

Hospital Grade
Antimicrobials

Greentech™ Filter
Technology with
ODOGard™

BioProtect™ Hand
Sanitizer

PerfectCLEAN™
Microfiber



WCP Facility Solutions

Your Partner for Safe and Healthy
Facilities

Thank You For Your Interest!

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