



THE ULTIMATE GUIDE

CIMR® Active Air and Surface Pathogen Scavenging Technology

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CONTINUOUS INFECTIOUS MICROBIAL REDUCTION (CIMR®)

**Active Air and Surface Pathogen Scavenging Technology
A Unique and Proprietary Solution**

WHO IS CIMR®-TECH

- CIMR® TECHNOLOGIES, LLC., TEXAS, USA (CIMR®-TECH) is a subsidiary of HI-TECH AIR AND WATER PURIFICATION SYSTEMS LLC., TEXAS, USA (HI-TECH).
- CIMR®-TECH was developed in 2004 by Alton Holt of HI-TECH while working with the US Army, Navy and Army Corps of Engineers at Corpus Christi Naval Air Station, Texas.
- HI-TECH, through CIMR®-TECH does not sell, license, or otherwise provide CIMR® to any other third party.
- HI-TECH is the only designer, developer, manufacturer and supplier of CIMR® technology, equipment and programs.
- HI-TECH provides customized engineering design systems and services based on decades of experience, testing and scientific reviews.

WHAT IS CIMR®

- CIMR®'s Air Infusion Technology is designed specifically to fight infectious threats and is an extremely significant leap forward in the fight against airborne and surface pathogens.
- CIMR® is an ultra-low level, safe, and effective Hydrogen Peroxide-based air and surface disinfectant system that produces zero ozone.
- CIMR® Systems are superior because they produce an Active Pathogen Scavenging Technology.
- CIMR® balances safety, disease prevention and life cycle costs by continuously purifying the air much faster than other systems, including "passive Technologies" such as HEPA filters, UV lights, Ionization, etc., all without producing Ozone, other chemicals, or harmful side effects due to filter changes.

WHAT SETS CIMR® APART

What sets CIMR® apart is its proprietary/patent pending methods, materials and components that are not available with other companies.

- CIMR® is a scientifically proven and military-grade technology.
- CIMR® has gone through numerous independent tests and has met and/or exceeded expectations within both the military and civilian communities by eliminating up to 99.9%

pathogens. Hundreds of Military facilities on military bases have/are using CIMR® with thousands of CIMR® units installed worldwide since 2004.

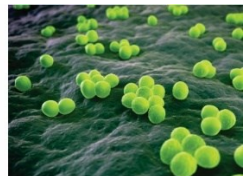
- CIMR® has a proven history of success and customer support since 2004.
- CIMR® is an effective solution for improving indoor shared-air quality.
- CIMR® is an Air Infusion Technology designed to create charged, ionized compounds of safe, self-regulating ultra-low levels of Hydrogen Peroxide that actively targets and deactivates both aerosolized and surface pathogens in enclosed spaces.
- Similar levels of Hydrogen Peroxide are present in the outside air.
- CIMR® produces Hydrogen Peroxide at 1/50th of OSHA (Occupational Safety and Health and Administration) limits and creates no other harmful by-products.



- CIMR® provides a continuous 24/7/365 indoor protection for people, pets, and plants.
- CIMR® is a significant leap forward in the fight against airborne and surface pathogens now, and for the future.

WHAT IS A PATHOGEN

- A pathogen is any organism or agent that can produce disease.
- A pathogen may also be referred to as an infectious agent, or simply a germ.
- Pathogens include a broad range of viruses, bacteria, fungus, and molds.



HOW CAN SUCH A SMALL AMOUNT OF HYDROGEN PEROXIDE POSSIBLY BE EFFECTIVE

- There are millions of molecules in the air.
- Even at 0.02 ppm (parts per million) of Hydrogen Peroxide, there are still 500,000,000,000 (500 billion) Hydrogen Peroxide molecules in a single gallon/3.75 liter of air at room temperature.
 - This means the Hydrogen Peroxide molecules are only 1.25 to 1.5 microns apart.
 - Bacteria are about one micron in size or less, so they cannot move without being engaged by CIMR® Hydrogen Peroxide molecules.
 - Pathogens can be as small as 0.1 microns, but the charged CIMR® Hydrogen Peroxide will seek out, deactivate, and destroy them.



- **Validation:** CIMR® current technology validation study using actual SARS-CoV-2 pathogen shows inactivation of greater than 99.8% of the Virus within three (3) minutes. (MRI Global March 2021)

MRI Global (Test no. 1): Deactivating SARS-CoV-2 Virus from air and on surfaces)

- This test found that CIMR® is proven highly effective at deactivating aerosolized SARS-CoV-2 Virus from the air and on surfaces in near real-time.
- CIMR® Technology and Equipment reduced the viral infectivity relative to the test control by 91.74% continuously during the first 10 (ten) minutes of the test while heavy levels of SARS-CoV-2 were continuously injected.
- Once the SARS-CoV-2 was turned off by the lab technician and ceased to be injected, CIMR® deactivated and eliminated 99.81% within 5 (five) minutes against control. These Virus levels have been calculated to replicates a small room with an estimated human load of approximately 150 highly infected SARS-CoV-2 positive people.












IS CIMR® SAFE AND COMPLIANT

- CIMR® is safe as there is no known oxidizing potential from CIMR® Hydrogen Peroxide. The basic science, and real life applications have confirmed there are no known effects on equipment, silk materials, painting, papers, micro-fish, old-films, old documents, maps fine furnishing, sensitive electronics and metals.
- CIMR Hydrogen Peroxide deactivates micro-organisms essentially neutralizing their cellular components having no adverse effects on metal, wood, fabric, and electronic equipment.
- CIMR® is self-regulating at 0.02 ppm and will not create dangerous levels of Hydrogen Peroxide.
 - When CIMR® Hydrogen Peroxide molecules get close to each other, they are self-consumed, reverting back into atmospheric oxygen and humidity.
 - CIMR® produced Hydrogen Peroxide is not insulated by water vapor or encased in water, thereby allowing the Hydrogen Peroxide to reach and maintain an equilibrium concentration of 0.02 ppm, despite constant production.



- CIMR® is FDA (Food Drug Administration) compliant.
- CIMR® meets and exceeds EPA (Environmental Protection Agency), OSHA (Occupational Safety and Health Administration), CDC (Center for Disease Control) and the WHO (World Health Organization) Regulations in Air and Surface Disinfection standards.

- CIMR® carries the CARB (California Air Resources Board) certifying ZERO ozone emissions.
- FDA compliant means systems, machines, units and/or equipment, in the context of the COVID-19 public health emergency, such as sterilizers, disinfectant devices, and air purifiers that can facilitate rapid turnaround of sterilized or disinfected equipment and that help reduce the risk of viral exposure for people to the SARS-CoV-2, based on the current understanding of the Virus.
- CIMR® technology and equipment has achieved the following certifications, registrations, compliance seals, stamps of approval and compliance:

	CARB The California Air Resources Board (CARB).
	CE (Conformation to European Standards).
	Energy Star (US Department of Energy/EPA Energy Efficiency)
	EPA (Environmental Protection Agency).
	ETV (Environmental Technology Verification).
	FCC (US Federal Communications Commission).
	GS (German Product Safety).
	Intertek (Zero Ozone).
	PS (US Product Safety Certification).
	RoHS (Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment).
	USTC (United States Testing Company).



WHAT DOES THE AIR TREATED BY CIMR® SMELL LIKE

- CIMR® Hydrogen Peroxide is undetectable by the human nose in indoor environments.
- CIMR® eliminates odors by disinfecting the pathogens that produce odors.
- As odor-producing microbes are disinfecting, they will stop making new odors, and old odors produced will dissipate over time.
- Independent Test and operational usage confirmed that CIMR® reduces VOCs (Volatile Organic Compounds).

WHAT ARE THE BENEFITS FOR USING CIMR®

- CIMR® provides a way for people to safely operate in indoor shared air.
- CIMR® deactivates or eliminates COVID-19 (SARS-CoV-2 Virus), other viruses, bacteria, fungi, molds and their odors and combats their transmission.
- Using CIMR® in water damaged facilities ensures remediation and prevention of mold and bacterial contamination without major tear-out.
 - CIMR® lowers the cost of prevention, remediation and sanitization.
- Using CIMR® Systems protects against current and future pathogens in indoor shared air.
- It provides real-time protection: 24/7/365.
- CIMR® has a significant lower life cycle sustainment cost.
- CIMR® reduces the risk of spreading or cross contamination of air and surface.
- CIMR® minimizes health related absenteeism of employees/workers.
- CIMR® requires minimal labor to operate the technology.
 - Some CIMR® portable units require periodic filter cleaning.
 - Other CIMR® equipment only require a periodic visual inspection.
 - We recommend a UPS (Uninterrupted Power Supply) for the CIMR® 414 and CIMR® 2000.
- CIMR® disinfects odor-causing viruses, bacteria, fungi and molds.
- CIMR® helps with crawling pest control. It destroys the scent trail of insects, such as ants and cockroaches, and it makes it difficult for them to return.
- Most CIMR® units carry a limited three-year warranty.
- CIMR® is uniquely designed, engineered, and manufactured with patent pending.

WHAT TYPES OF CIMR® UNITS ARE AVAILABLE

- CIMR® is available in a range of portable units and units which are integrated permanently or temporarily into the HVAC (Heating, Ventilation and Air Conditioning) systems.
- CIMR® is fully scalable from vehicles to large industrial facilities.



- Multiple CIMR® units can be combined to disinfect larger indoor areas.
- CIMR® can be safely and effectively deployed in any occupied indoor/outdoor environments.
 - Tents, field hospitals, airplanes, combat vehicles, mobile command centers, cargo and storage containers, etc.

Portable units

- Can be maintained in a manner similar to any other standard office equipment.
- Can be moved by a single person.
- Can be plugged into a standard United States electric outlet.
 - Three models come with international plugs.
- Have an internal air circulation capability.
- Quietly operate in indoor/outdoor settings without any disturbance.
- Can be turned on and left on without further human interaction other than cleaning, if required, for approximately three years.
- Multiple portable CIMR® units can be combined to disinfect larger indoor areas.

Duct Work units

- Are integrated into the supply side of the HVAC ductwork or as otherwise recommended.
- Are supplied with both 120/240 volts and runs on both 50/60 HZ.
- Require an electrical connection drawing electricity not more than a typical night light.
- Will clean ductwork and HVAC coils as CIMR® circulates through the system.
- These units have no filters to clean and require only a periodic visual inspection.
- Multiple Duct Work CIMR® units can be combined to disinfect larger indoor areas.

DOES CIMR® EQUIPMENT NEED MAINTENANCE, ADJUSTMENT, AND/OR CLEANING

- Except for CIMR® 414, 500 and 2000 no other units have filters.
 - The cleaning of the filters in these specific units is easy.
 - A visual indicator will appear on the control panel of the CIMR® 2000 to perform filter cleaning or CIMR® cell replacement.
- The quality of the indoor air and the level of contaminants will determine how often these units will have to be cleaned.
 - It could be monthly or quarterly.
- Periodic visual inspection required to ensure CIMR® units are functioning.
- Duct Work (DW) units are protected by the HVAC filter and this filter should be changed in accordance with HVAC system requirements.

WHO USES CIMR®



**US Army Corps
of Engineers®**

United States Government

- The United States Military
- FEMA (Federal Emergency Management Agency)
- State and County facilities
- United State Department of Homeland Security
- National Historical Society

Educational

- Universities (Lamar University, Beaumont, Texas)
- Texas Educational Systems
- Colleges
- Schools
- Day Care facilities

Health Care

- Hospitals
- Clinics
- Doctor's Offices
- Senior Care Homes

Business, Retail and Industries

- Entertainment Venues
- Corporate Offices
- Oil and Gas Drilling Facilities
- Hotel and Leisure Facilities

Other users

- Shelters
- Food Production and Processing Facilities
- Places of Worship
- Churches
- Homes

WHY IS CIMR® THE BEST KEPT SECRET IN THE WORLD

- CIMR® was primarily developed for and conjunction with the Military and other government agencies, but the COVID-19 pandemic provided business opportunities not previously explored.

WAS CIMR® INDEPENDENTLY TESTED

- CIMR® Technology and Equipment are tested, registered, and verified by regulatory, accredited, and independent authorities, and scientific labs in accordance with national and international standards.
- This ensures compliance with regulations and requirements.
- Extensive testing was performed using established protocols certifying that CIMR® Technology and Equipment is safe and comply with Government regulatory agencies.



MRI Global (Test no. 1: Deactivating SARS-CoV-2 Virus from air and on surfaces)

- This test found that CIMR® is proven highly effective at deactivating aerosolized SARS-CoV-2 Virus from the air and on surfaces.
- CIMR® Technology and Equipment reduced the viral infectivity relative to the test control by 91.74% continuously during the first 10-minutes of the test while heavy levels of SARS-CoV-2 were continuously injected.
- CIMR® deactivated and eliminated 99.81% within 5 minutes after SARS-CoV-2 injection ceased. These Virus levels have been calculated to replicates a room with an estimated human load of approximately 150 highly infected SARS-CoV-2 positive people.
- The Test also revealed that CIMR® either drops the other particulate out of the air faster or eliminates airborne particles reducing 45% of particulates from the air.

MRI Global (Test no. 2: Deactivating SARS-CoV-2 Virus from air and on surfaces even at relatively low humidity levels)

- Based on this testing protocol, CIMR® is effective at deactivating and eliminating aerosolized SARS-CoV-2 virus from the air, even at relatively low humidity levels (average 24%).
- The CIMR® Technology and Equipment reduced viral infectivity relative to control by 78.46%.
- The test result percent log reduction values are calculated based on comparative analysis of viral sample concentrations at each sample time point for Control vs CIMR Test Device trials.

- The CIMR® Test Device showed similar viral deactivation results at the eleven (11) to twenty-one (21) minutes, and twenty-two (22) to thirty-two (32) minute test time points.
- This can be attributed to a reduction of control sample natural decay viability and a limitation in sample concentration yield at the later test collection time points of the baseline control standard results.
- Theoretically, it can be inferred that the CIMR® Technology would have a greater reduction with increased viral aerosol exposure time which could not be precisely quantified based on experimental limitations.



University of Texas Medical Branch (UTMB)

- CIMR® Technology inactivated airborne SARS-CoV-2 to undetectable levels.
- The results show that, when accounting for the LLD (Lower Level of Detection), the percent reduction in the Virus was ≥ 99.87 to $\geq 99.96\%$; however, since no Virus was detected after using the experimental device, the true percent reduction was likely greater than 99.99% in every case.
- The true net reduction could not be determined due to the LLD of the quantitation assay, but this too was likely greater than 99.99%.



Fort Hood, United States Military Post, Killeen, Texas

- CIMR® Technology Air Purification System, was installed to address the mold, mildew and bacteria as a result of a malfunction in the heating, ventilation and cooling system, water leakage and an outdated building design.
- Both tests were successful in eliminating black mold and mildew growth and demonstrated that CIMR® is an efficient, cost-effective solution.
- The remediated materials of the furniture, such as cloth and mattresses look brand new.
- No other process was able to duplicate these results.
- CIMR® saves the Government time, money, equipment and facilities while improving the quality of life.



Lamar University, Beaumont, Texas

- Hurricane Rita caused extensive damage to multiple buildings throughout the Campus. Electrical services could only be restored after approximately 7 (seven) days allowing microbial contamination to appear through the area due to the lack of air movement, high humidity, and no temperature controls.
- CIMR® provided an alternative to the conventional cleaning and remediation process: Treating the air to the contaminated services instead of removing the contaminated materials and contents.
- Positive results were noticed immediately.
- Microbial contamination and 'sick building syndrome' are no longer a problem.



Spindletop Gladys City Boomtown Museum, Beaumont, Texas

- Another casualty of Hurricane Rita as extensive water damage resulting in microbial contamination.
- A large majority of the contents were delicate and considered 'one of a kind' which cannot be easily washed or cleaned. These items included leather goods, lace fabrics, antique paintings, original historic documents, glass and wooden items and items too large or too contaminated to be removed to be cleaned elsewhere. CIMR® Equipment were installed in all of the buildings, even though some of the roof, doors, windows and walls were only temporarily repaired.
- Microbial contamination was quickly stabilized, and several buildings passed 'clearance' for healthy indoor air quality.
- The artifacts were restored and sanitized with less than one tenth of a percent(.001) having to be discarded. (Before starting all the remediation companies said nothing could be saved. Only pictures of the artifacts could be taken).
- CIMR® demonstrated that traditional remediation methods would have been more costly, time consuming and resulting in a loss of many 'one of a kind' items.



Food Safety Systems Biosecurity Laboratory, LLC., Texas

- CIMR® Technology is effective at reducing populations of Methicillin resistant Staphylococcus aureus (MRSA) and Listeria Monocytogenes (Listeria) on stainless steel surfaces.
- The Hydrogen Peroxide system has the potential to reduce sources of microbial contamination in health care and other indoor air environments.
- This Technology is effective at reducing populations of Methicillin resistant Staphylococcus aureus and Listeria Monocytogenes on stainless steel surfaces.
- The active antimicrobial in the CIMR® System is Vaporized Hydrogen Peroxide.
- CIMR® Systems do not produce measurable levels of ozone.
- Within 2 hours the Virus were reduced by 99.0%
- Within 4 hours the Virus were reduced by 99.7%
- Within 8 hours the Virus were reduced by 99.85%
- Within 24 hours the Virus were reduced by 99.995%.



Kansas State University and Sandia Laboratories, Kansas

- It was found that within 24 hours, 96.4% to 99.9% microbial reduction was noted on surfaces contaminated with Staphylococcus Aureus (Staph), E-Coli (stomach bug), Listeria Monocytogenes (food borne bacteria), Candida Albicans (common fungus), Streptococcus (strep throat virus), and Pseudomonas (infectious bacteria) due to CIMR®.
- Thereafter new microbe reduction was virtually instantaneous.
- CIMR® has the potential to reduce sources of microbial contamination in health care and other indoor air environments.
- CIMR® is effective at reducing populations of Methicillin resistant Staphylococcus Aureus and Listeria Monocytogenes on stainless steel surfaces.
- The active antimicrobial in CIMR® Technology is Vaporized Hydrogen Peroxide.
- CIMR® does not produce any measurable levels of ozone.
- Hydrogen Peroxide Gas Technology disinfected 99% of the H5N8Virus on surfaces within two hours.
- They found that the Hydrogen Peroxide Gas Technology disinfected surfaces contaminated with MRSA (Methycillin Resistant Staphylococcus Aureus), nonresistant Staphylococcus Aureus, E-Coli, Listeria Monocytogenes, Candida



Kansas State University, Manhattan, Kansas State and Sandia Labs, Albuquerque, New Mexico

- The study demonstrated the effectiveness of the CIMR® Cell for the inactivation of Influenza A – (Swine Flu) H1N1.
- After 6 (six) hours of treatment, levels of the H1N1 Virus on inoculated stainless-steel coupons were below the detection limit.
- No recovery was observed at 8, 12, or 24 hours.
- This preliminary study indicates that the CIMR® Cell was effective at inactivating Influenza H1N1 Virus on inoculated stainless coupons under the conditions of these tests.
- It was further observed that Hydrogen Peroxide Technology demonstrated the ability to disinfect 96.4% to 99.93% of inactivates and disinfects a broad range of viruses, bacteria, fungus, and mold spores on surfaces within two hours.
- It was also found that within 24 hours, 96.4% to 99.9% microbial reduction was noted of surfaces contaminated with Staphylococcus aureus, E-Coli, Listeria Monocytogenes, Candida Albicans, Streptococcus, and Pseudomonas and thereafter new microbe reduction was virtually instantaneous.
- This study demonstrated microbial reduction on contaminated surfaces by 96.4% to 99.9% within the first twenty-four hours.



Radil LLC, Columbia MO

Outcomes of the test confirmed that Murine Norovirus on stainless steel were reduced by 99.9% and on carpet and cloth more than 99.6%.



FDA Compliant Lab Tests

- CIMR® has been proven 99.999% effectiveness rate in FDA compliant lab testing against gram-negative (highly resistant) and gram positive fungal bacterial spore mold.

American Journal of Infection Control

Scientific Journal published by Elsevier on behalf of the Association of Professionals in Infection Control and Epidemiology

- The results of this study demonstrate that Hydrogen Peroxide was effective in reducing the residual microbial bioburden on surfaces and in the air.
- Hydrogen Peroxide demonstrated potent antimicrobial activity against a broad spectrum of micro-organisms, including those most commonly associated with health care-associated infections (HAI), spore-forming organisms, and mycobacteria.
- Hydrogen Peroxide Technology and Equipment are safe when used in any occupied setting and produce Hydrogen Peroxide at far more dilute concentrations than other airborne Hydrogen Peroxide Systems.
- Hydrogen Peroxide demonstrates an effective microbiocidal activity because of its nonaqueous gas state.
- Hydrogen Peroxide Technology and Equipment achieve Hydrogen Peroxide concentrations well below OSHA's (Occupational Safety and Health Administration), safety limit of 1.0 ppm.
- This Technology and Equipment, by contrast, offer a continuous infectious microbial reduction that can address in real-time the ongoing contamination of the health care environment without interrupting patient care.
- Individual exposure to Hydrogen Peroxide showed no negative side effects or adverse reactions during the course of the study.
- Hydrogen Peroxide was effective in reducing surface and air microbial bioburden in an occupied space.

Department of Horticulture

Faculty of Agricultural Sciences, University of Talca, Chile,

Department of Vegetable Production, University of Almería, Spain

- Hydrogen Peroxide easily degrades into oxygen and water.
- Hydrogen peroxide is biodegradable and not harmful to humans, animals and plants.



**The University of Pittsburgh Medical Center Presbyterian
(A 766-bed tertiary care facility), Pittsburg, Pennsylvania**

- The Health Care Associated Infection (HAI) rate was reduced by 48% and the Vancomycin-resistant Enterococcus (VRE) A rate reduced by 56% during the post period.
- VRE A rates were significantly lower in the in the post period and the HAI rate trended towards significance.
- MRSA A was low in both time periods.
- Methicillin Resistant Staph Aureus A (MRSA A) was low in both time periods.



University of Cincinnati Center for Health-Related Aerosol Studies, Department of Environmental Health, Ohio

- The study concluded that within one hour it could kill 90% of airborne viruses and 70% of airborne bacteria.



Austin ISD (Independent School District), Texas

- The CIMR® 414 Technology proved to be successful beyond anyone's expectations despite the amount of moisture vapor, area exposed to wet soils, temperature variations, car exhaust, etc. in a non-conditioned test area.
- This study proved CIMR® ability to improve and maintain excellent air quality in a harsh non-conditioned environment.



Golden Living Centers, Milwaukee, Wisconsin

- CIMR® Equipment were installed to reduce the amount of harmful bacterial fungal microbes in the Nursing Home Facility.
- Three tests were performed.
- The first two a month a part a third one two months later.
- Results for the Airborne and Surface CFU Testing confirmed the following:

- Greatly reduced or eliminated the bacterial growth
- Controlled new growth on a continual basis
- Controlled bacterial growth in humid conditions within the building
- Controls the particulate levels within the building.

WHAT DOES CIMR® DEACTIVATE AND ELIMINATE

- CIMR® protects against any pathogens...anywhere air can reach indoors.
- It deactivates and eliminates viruses, bacteria, fungi, molds, and their odors and combats the transmission thereof.
- CIMR® inactivates and eliminates the following and more:

CIMR® inactivates and eliminates the following and more:

Bacillus Subtilis (Common infections)
Candida Albicans (Fungi: Thrush and Yeast infections)
Escherichia Coli (E-Coli)
H5N8 Virus (Influenza A or Bird Flu)
Influenzas (General Flu)
Listeria Monocytogenes (Listeriosis)
Methicillin Resistant Staphylococcus Aureus (MRSA)
Norovirus (Common food poisoning - "Stomach bug")
Pseudomonas aeruginosa (Pneumonia)
SARS-CoV-2 (COVID-19)
Streptococcus Lactis (Infective Endocarditis or IE)
<p>Various types of molds such as:</p> <ul style="list-style-type: none"> ○ Acremonium ○ Bacillus (Gram negative and Gram positive) ○ Alternaria ○ Aspergillus ○ Aureobasidium ○ Chaetomium ○ Cladosporium ○ Fusarium ○ Mucor ○ Penicillium ○ Smuts/Myxomycetes/Periconia ○ Stachybotrys Chartarum (Black Mold) ○ Synecphalastrum ○ Trichoderma ○ Ulocladium

IS CIMR® EFFECTIVE IN A LOW HUMIDITY ENVIRONMENTS

The MRI Global (Test no 2), with the objective of deactivating SARS-CoV-2 Virus from air and on surfaces, even at relatively low humidity levels confirmed that:

- CIMR® is effective at deactivating and eliminating aerosolized SARS-CoV-2 virus from the air, even at relatively low humidity levels (average 24%).
- The CIMR® Technology and Equipment reduced viral infectivity relative to control by 78.46%.

WHAT ARE THE DIFFERENTIATING FACTORS OF THE CIMR® MONITORING SYSTEM

- In near real-time, CIMR® Technology System Monitors provide (24/7/365) detection of airborne environmental conditions in various types of environments.
- The CIMR® Monitoring System is designed for continuous operation and stores data offsite.
- This intelligence is for future use to improve the performance of mechanical systems, cleaning crews and to show regulatory compliance.
- The System is designed to give building owners, operators and administrative staff near real-time data and notifications, in and away from the facility.
- The System is password protected and user identification information and notifications are tractable.
- The CIMR® Monitoring System also has the capacity to know if the Equipment/Unit is working properly.
- The CIMR® Monitoring System gives assurance in real time that the facility and indoor air purification system is working effectively.
- If a challenge arises within the facility the System will help identify the issue so it can be resolved.
- Once the issue has been addressed the System will help verify that the challenge has been resolved.

The CIMR® Monitoring System Features the following:

- VOC detection
- Particle counting
- Temperature
- Humidity
- Carbon Dioxide
- Carbon Monoxide
- Time.

HOW DOES CIMR® COMPARE WITH OTHER AIR PURIFICATION SYSTEMS

Passive Solutions

Passive air purification systems are defined by having the virus, mold, particle, and germs pass over or near the device/equipment to get trapped, deactivated, neutralized, and eliminated.

Types of Passive Systems

- HEPA Filters
- HEPA Filters with UV, UVC, carbon filters, and Ionizers,
- UV, UVC, UVA lights
- Electrostatic Air Cleaners
- Killer Scrubbers
- Air Filters with or without UV/UVC lights.

CDC Data on Air Filtration (HEPA)

- The CDC has published data that explains the time it takes to circulate air (to pass by or through a passive device) in order to clear and eliminate 99% and also 99.9% of particles (inactivates and disinfects a broad range of viruses, bacteria, fungus, and molds).
- The initial core analysis assumes the following:
 - The room is empty of any furniture or internal walls.
 - The room has near perfect air circulation (practically impossible in an occupied and furnished space)
 - Nothing is in the room to create turbulence or to create a place for particles to get trapped.
 - No additional pathogens are further introduced into the room during the measurement period, i.e., the source of infection is no longer expiring pathogens into the room.
 - While the (ACH) average air changes per hour vary, the typical ACH of modern buildings are approximately 4 ACH.

The CDC has stated that under 'perfect conditions':

- It takes 69 minutes to eliminate 99% of airborne contaminants.
 - It takes 104 minutes to eliminate 99.9% of airborne contaminants.?
- The CDC describes "perfect conditions" as empty rooms, no people, ideal air circulations, no ongoing source of virus.

Under 'real world conditions', which would include:

- An occupied and furnished room.

- One or more infected individual(s) continuing to expel infected air remains in the room.
- Under these conditions it has been estimated that to achieve these levels of virus or pathogen elimination it would take 5 to 10 times longer.
- 5.75 to 11.5 hours to achieve a 99% reduction of airborne contaminants, and
 - 8.67 to 17.33 hours to achieve a 99.9% reduction of airborne contaminants.
- Under this CDC analysis, the category of “passive Technologies” are NOT LIKELY to be effective in preventing the rapidly infecting of COVID-19 and other disease transference in shared indoor air space.

Weakness of Passive Systems

- Passive, relying on pathogens to travel to the filter(s) simply will not prevent disease transmission.
- Ongoing cost with filter replacement and/or maintenance mean passive devices have high lifecycle costs.
- No HVAC decontamination will happen with passive devices.
- Ionization will cause ductwork to become dirty and sticky.
- What all these passive devices have in common, is it takes them too long to scrub, sanitize and or disinfect the air to be able to effectively protect people from health risks and disease transference in shared indoor air space.
- HEPA filtration-based systems are passive systems as is typical of other filter solutions.
- These systems require air and pathogens to pass through the filters which only happen periodically, depending on the Air Changes per Hour (ACH), typically only are effective 4 - 6 times per hour or once every 10 - 15 minutes maximum.
- This means that there is an increased risk from viruses and other pathogens being suspended in the air for longer periods of time.
- This increases the risk of infection because a COVID-19 positive individual will infect others in the room ‘sharing the indoor air’ including other individuals who would walk into the room after the infected person left.
- Passive systems are also ineffective on surface pathogens.
- Virus particles are very small, requiring a very dense filter (HEPA) to be effective.
- Filters of fine particle design to capture a small percentage of SARS-CoV-2 Virus will restrict air flow and increase the cost and reduce efficiency of the HVAC system.
- To overcome this challenge ionization is used to permit use of a lower density filters (~MERV 13 or less), to cause airborne particles to clump together into a larger particle which can then be captured by the filtration system and gravity.
- The best of these systems including HEPA, use a UV light source for terminal kill but remain passive systems.



- These systems are not only slower (by as much as 75 times) to deactivating the SARS-CoV-2 and other similar size pathogens and cleanse the air in a room but are also much more expensive to operate across a life cycle than CIMR®.
- These passive filter-based systems require ongoing labor to maintain and are considered a biohazard when changing the filters.
- The Ionization has been shown to clog HVAC fan coils and ductwork in buildings and increasing maintenance and equipment costs.
- They also require more frequent filter replacement and other maintenance, where particulates and these virus clumps are created.
- Other than removing pathogen particulates from the air, it provides no disinfection.

CAN CIMR® BE USED WITH HEPA FILTRATION SYSTEMS

- CIMR® can be used simultaneously with HEPA passive air filtration systems and will increase the overall effectiveness of the air purification rate by 75 times.

PASSIVE SYSTEMS PAIRED WITH CIMR® TECHNOLOGIES

- HEPA filters combined with CIMR® make a passive filter both a defense system and a proactive system.
- The defense is trapping particles down to 0.3-.02 microns as air passes through the filter.
- The active side is when CIMR® generates HP completely infusing the air, anywhere air can reach to 'seek out' pathogens in the air and on surfaces.
- By adding CIMR® to a passive system in an occupied room, the response time for clearing 99.9% pathogen risks in the air goes from 8 - 17 hours to less than (3) three minutes with a proper CIMR® solution.
- This has been proven in rigorous independent testing by MRI Global.
- These tests report shows the actual impact of the CIMR® Technology relative to controls averaged over three tests and three control runs.

UV, UVB, UVC Lights combined with CIMR®

- Lights, when combined with a HEPA system, HEPA filters with perform the same at 4 air changes per hour (ACH). For 99.9% deactivation in an occupied space, it still takes 8 - 17 hours.



CIMR® combined with unipulse ionization (positive and negative), HEPA or High MERV Filters, Carbon Zeolite filtration

- By combining CIMR®'s unipulse ionization (positive and negative charged particles), located in the CIMR® 2000 works in a 60-foot radius in the indoor air to make particles larger, thereby increasing the overall efficiency of the HEPA and other type of filters.

Radio Frequency Ionization (RFI)

- Radio Frequency Ionizers emit a low energy electromagnetic pulse at 30 kHz within a 60-foot radius. Proprietary components produce a ratio 3000 positive ions and 4000 negative ions per cubic centimeter. This causes:
 - The rapid, proactive dispersal of all purification components throughout a volumetric space 60' (feet) in diameter from each machine.
 - The conglomeration of all particles in the air to greater and greater average diameters – which results in greater efficiency increases in the HVAC filtration units that are continuously utilized! The pulse causes small particulates to become ionized (some positively and some negatively) clump together into larger particles, and precipitate from the air.
- This Technology has passed FCC (Federal Communications Commissions) safety testing in an independent lab test. A review of the FCC (Federal Communications Commissions) test protocol and test records indicates that this Technology is safe for use in occupied environments.
- Ref. Williams Air Technologies laser data: After fifteen minutes the .3-micron particulate count is reduced from 5,900,158 to 120,000.
- The report shows a 97.97% particulate drop in fifteen minutes.
- This Equipment increases the efficiency of getting particles out of the air that people breathe faster than HEPA filters at 21 air changes an hour for a 99.99% capture.
- By combining Carbon and Zeolite materials with 2 anti-microbial filters we can capture chemical VOCs to create a broader range of chemical entrapment and biological deactivation.
- If placed in the fresh air and return air, the makeup air combined with CIMR®; we can create a bio-active defense model to protect troops in forward positions against chemical and biological defense and critical infrastructures here in the United States of America through a layered building defense model.
- This model is designed to handle heavy continuous contamination while allowing command centers to continue of operate.

DO OTHER HYDROGEN PEROXIDE SYSTEMS HAVE LIMITATIONS

There are other Hydrogen Peroxide disinfection processes available, and they do have limitations compared to CIMR® such as:

- Vaporized Liquid Hydrogen Peroxide Systems create a mist of water droplets containing liquid or aqueous Hydrogen Peroxide which is highly corrosive.
- Some systems use ultra-high levels of Hydrogen Peroxide, which exceeds the recommended indoor air exposure limits for occupied spaces, making the facility unavailable for use.
 - The aqueous Hydrogen Peroxide droplets precipitate out of the air, so they have trouble spreading efficiently throughout indoor air (visible and unseen).

TECHNOLOGY COMPARATIVE ANALYSIS							
Technology	Active or Passive System	Breaks chain of infection (in all 7 areas)	Produces no negative by-products	Disinfects indoor air	Disinfects surfaces	Self regulating	No adverse affects on equipment
CIMR®	Active	X	X	X	X	X	X
CIMR® with Ionization	Active	X	X	X	X	X	X
CIMR® with Ionization and HEPA	Active	X	X	X	X	X	X
HEPA Filter	Passive			X			X
HEPA Filter with UV	Passive		X	X			X
HEPA with carbon filter and UV	Passive		X	X			X
UV Light	Passive			X			X
Photocatalytic Oxidation	Active	X		X	X		
Ozone	Active			X	X		
Bipolar Ionization	Active			X			X
Electrostatic air filter	Passive			X			
Electrostatic spray	Passive				X		
Vapor	Passive			X	X		

An Active System aggressively seeks and deactivates both aerosolized and surface pathogens in indoor shared air.
A Passive System relies on the pathogens to be circulated through the equipment in order to remove them from the indoor shared air.

HOW DO OTHER SYSTEMS COMPARE TO CIMR®

Hydrogen Peroxide Misting Systems

- Overly aggressive
- Not safe in areas occupied by peoples, pets and plants
- Not continuous
- No HVAC decontamination feature
- Relies on human programming and deployment
- Labor costs
- Ongoing costs of chemicals.

Chemical Misting Systems

- Overly aggressive
- Not safe in areas occupied by peoples, pets and plants
- Not continuous
- No HVAC decontamination feature
- Relies on human programming and deployment
- Labor costs
- Ongoing costs of chemicals.

Ozone Systems

- Overly aggressive in decontamination mode
- Not safe in areas occupied by peoples, pets and plants in contamination mode
- Not safe at lower levels
- Banned from use in many locations
- Does not self-regulate
- Ionic Technologies.

Ionic Technologies

- Does not kill pathogens
- No HVAC decontamination benefit
- Surfaces are not decontaminated
- Air is not sanitized.

Photo-Catalytic Technologies

- Proactive Technologies which produce Ozone as a by-product (called Friendly Oxidizers).
- Create Super Ions, Hydroxyl Radicals, super oxide ions.
- Will produce limited amounts of Hydrogen Peroxide to reduce ozone production.



- Photo-Catalytic with black light produces (non-hydrated) purified Hydrogen Peroxide still containing the water molecule structure (much different then CIMR® because the water molecule is removed).
- This Equipment is not self-regulating and is based off of a much older generation of Photo-Catalytic Technologies).
- No-Ozone Photo-Catalytic cells are different from CIMR® in that they depend on the production of hydroxyl radicals, super oxide ions, production of UVC light around the cell to produce it purification. In most of these units would be considered passive to semi-proactive because more of the purification is done at the cell/unit.

ARE THERE ANY KNOWN ALLERGIES CAUSED BY CIMR®

- No known allergies to CIMR® have been reported.
- CIMR® is self-regulating at 0.02% ppm which is 1/50th of preferred exposure limits determined by OSHA (Occupational Safety and Health and Administration), EPA (Environmental Protection Agency), NIOSH (National Institute for Occupational Safety & Health) and the CDC (Center for Disease Control).



CAN CIMR® TRIP OFF SMOKE AND FIRE DETECTORS

- CIMR® has no adverse impact on fire and smoke detector systems.

DO FACE MASKS, SHIELDS AND SOCIAL DISTANCING NEED TO BE ENFORCED WHEN CIMR® TECHNOLOGY IS IN USE

- CIMR® actively destroys viruses such as COVID-19, bacteria, fungi, and molds up to 98%.
- The U.S. Air Force and the University of Auburn study recommend a Multi-Layered Air Defense Strategy (MLADS), that is protection and mitigation, based on a hierarchy of controls.
- Face masks/shields and social distancing are part of that strategy but are not as effective as CIMR®. People are advised to follow local ordinances and applicable laws on social distancing and mask wear. CIMR® eliminates the hazard which is the most effective form of control.
- Elimination (interruption of transmission) as part of the MLADS (Multi-Layered Air Defense Strategy) is the reduction to zero incidences of infection caused by a specifically established



- pathogen in a defined geographical area resulting from deliberate efforts and continued actions to prevent re-establishment and transmission.
 - Zero transfers occurred where CIMR® is installed or in use.

A MULTI-LAYERED AIR DEFENSE STRATEGY (MLADS)

A comprehensive study was undertaken between Auburn University's McCrary Institute and Air University, based in Auburn, with additional centers in Washington, DC and Huntsville, together with The Air University, based at Maxwell Air Force Base, Alabama.

The authors of the Multi-Layered Air Defense Strategy (MLADS) are:

- P.H. Nelson, M.D., M.P.H. Air Force Surgeon General's Chair to Air University
- R. A. Norton, Ph.D. Professor, Veterinary Infectious Diseases, Biosecurity and Public Health, Department of Poultry Science, Auburn University Faculty Fellow, McCrary Institute, Auburn University
- M. D. Ervin, M.D. Chief of Operational Medicine, 59th Medical Wing Joint Base San Antonio
- S. M. Galvagno, D.O., Ph.D. Professor, University of Maryland School of Medicine Commander, 459th Aerospace Medicine Squadron Joint Base Andrews.

This partnership seeks practical solutions to pressing challenges in the areas of cyber and critical infrastructure security.

Recommendation

- The authors of the Multi-Layered Air Defense Strategy (MLADS) recommend that America adopt a multi-layered air protection and mitigation strategy to provide safe fresh indoor air across the 16 designated critical infrastructures.
- Coupled with traditional public health guidance including testing, contact tracing, social distancing, and isolation of people with known disease or exposure, they further recommend a focus on engineering solutions and administrative controls.
- These controls, applied in a multi-layered and redundant model, at-scale, could provide the public confidence to allow America to fully reopen the economy and sustain our critical infrastructures. Together with Personal Protective Equipment for our most vulnerable populations, we can sustain our country economically while protecting public health and those most vulnerable to this or future diseases.
- Until we achieve a herd immunity either through a vaccine, a profound natural disease spread (a costly and painful prospect involving significant suffering and loss of life), or some

- combination thereof, the country's only weapon to slow the progress of COVID-19 are restrictions on gathering together, particularly in enclosed spaces, that is shared indoor areas.
- Until the risk of spreading infection can be mitigated, an unintended but very real side effect is the paralysis of our economy and the threat to our nation's ability to sensibly reopen critical infrastructure sectors.
- Restoring the confidence of people and communities is the critical opportunity we must seize to ensure each vital infrastructure sector can reliably support our society.
- As our understanding of COVID-19 is refined, we now recognize that a majority of the disease transmissions occur through an airborne spread.
- As of now, there is no single solution to eliminating airborne spread of the pathogen or of an unrecognized, asymptomatic individual contaminating the shared air in an enclosed space, thus passing the Virus to a population.
- Until we fix this, people and industry sectors will not have confidence to embrace, at-scale, a robust movement to return to work.

The traditional models of public health should be followed as a starting point to prevent community spread. They include:

- Traditional social distancing
- Testing and contact tracing
- Isolating cases and contacts
- Aggressive surface cleaning and disinfecting
- The authors argue for a multi-layered and redundant model, focused on the shared air we breathe, using established or emerging technologies when available, applied systematically across each infrastructure, and modified to both the requirements of the workplace or gathering, as well as, tailored to a population at risk.
- This model should continuously evolve as we discover keys to efficiency and effectiveness.
- The authors further advocate taking all steps currently available to decrease the number of potential airborne viral particles in the "shared air" of our critical infrastructure sectors.
- They define "shared air" as the air that exists in or around gathering spaces (public or private), meaning indoor air.
- They further recommend a multi-layered approach to protecting the public from "shared air" that potentially contains infectious viral particles using the NIOSH "Hierarchy of Controls" model of hazard mitigation.

Hierarchy of Controls (from the most to the least effective)

- Elimination – physically remove the hazard
- Substitution – replace the hazard

- Engineering controls – isolate people from the hazard
- Administrative controls – change the way people work
- PPE – protect the worker with Personal Protective Equipment.

Engineering Controls (to consider for indoor/enclosed “shared air”):

- Increasing air turnover with fresh outdoor air using open windows.
- Increasing air turnover with fresh air using HVAC room turnover.
- Installing physical barriers between people where they share air.
- Providing directional air flow as a virtual barrier between “shared” and “personal” air. Surveying/mapping/mitigating air flow hazards in high-risk public indoor spaces (bathrooms, elevators, etc.
- Filtering shared indoor air with inactivates and disinfects a broad range of viruses, bacteria, fungus, and molds through UV or ceramic filtration
- Installing pathogen-scavenging (virus, but potentially also bacteria and mold) technology that provides a continuous level of protection using ionized compounds (vaporized low-level Hydrogen Peroxide, Hypochlorous Acid, etc.), repurposed to target aerosolized or vaporized COVID-19, as well as other pathogens that may be encountered in the future.

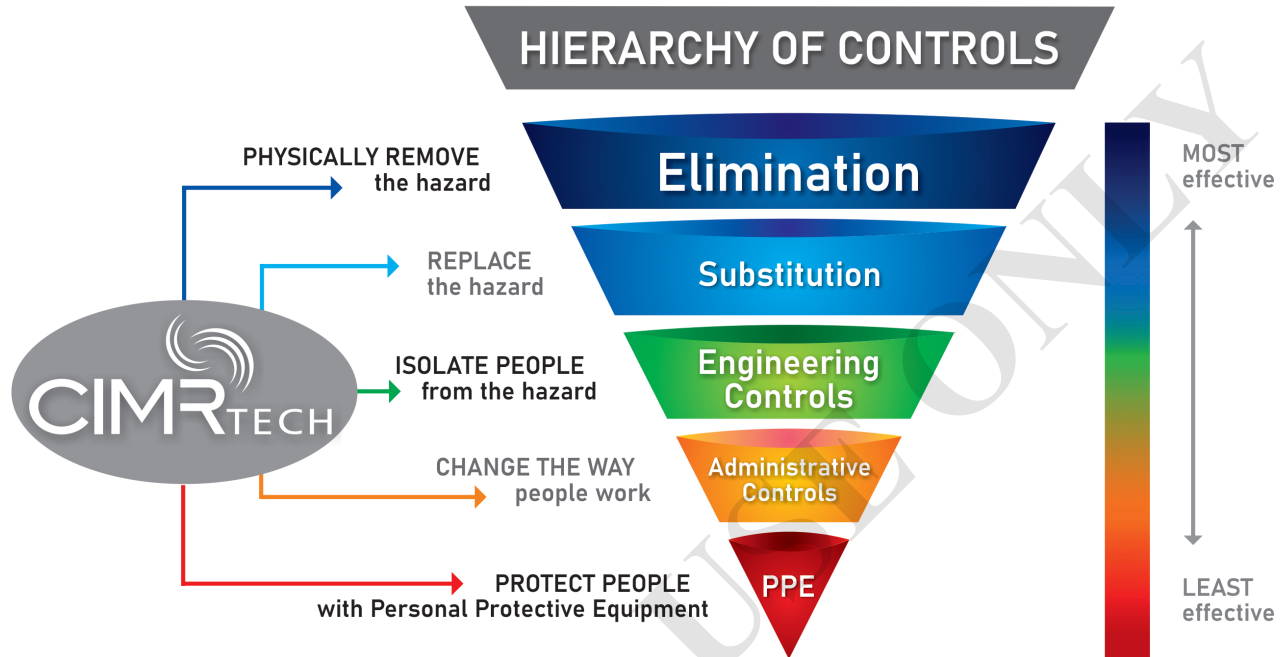
Administrative Controls:

- Developing and executing mandatory mask use in populated indoor/enclosed areas
- Decreasing numbers of people in indoor/enclosed areas.
- Developing and executing plans to decrease personal traffic through high-risk areas
- Developing and executing terminal cleaning of high-risk areas between use, decreasing surface re-aerosolization potential.

Personal protective equipment:

- N95 mask and goggles/face shields when available to protect high risk individuals, populations, or critical workers who could become single point failures. (Consider virus scavenging technology PPE).
- PPE expanded to general population when more supplies are available, but not at expense of high-risk groups.
- Explore new virus scavenging technologies that could either be worn or deployed as portable units for workstation use (personal clean air zone).

Since all sectors of American society (industry, business, government, civil society) benefit, all should have a stake in success. Unlike vaccine and treatment strategies, clean air technology has the potential to mitigate risk and impact the current crisis as well as serve as a known line of defense for future airborne threats.



**Graphic revised by HI-TECH for CIMR® from the original version compiled by NIOSH (National Industries for Occupational Safety and Health).*

HOW CIMR'S TECHNOLOGY SUPPORTS THE MUTLI-LAYERD DEFENSE STRATEGY

- **Elimination:**
CIMR®'s Active Pathogen Scavenging Technology eliminated 98% of Aerosolized SARS CoV-2 in independent testing. (MRI Global, Mar 2021)
- **Substitution:**
CIMR®'s Active Pathogen Scavenging Technology Is equivalent to 75 air exchanges per hour thus increasing air turnover without introducing additional outside air. Can be added to current HVAC equipment with only minor modification.
- **Engineering Controls:**
 - Using CIMR®'s Active Pathogen Scavenging Technology Is equivalent to 75 air exchanges per hour thus increasing air turnover without introducing additional outside air.
 - CIMR® generates ultra-low levels of Hydrogen Peroxide that actively seeks out pathogens with minimal human intervention.
 - CIMR® autonomously sanitizes indoor air and surfaces, 24/7/365.
- **Administrative Controls:**
 - CIMR® proven to sanitize aerosolized SARS CoV-2 near-real time and maintain a deactivation rate for 10 minutes at 92% against controls. In the real world with the



- natural decay rate figured in would represent a greater than 99.999 deactivation rate near real time.
- The building occupants and visitors are protected by the CIMR®'s Active Pathogen Scavenging Technology allowing full facility access by occupants, employees and guests. For greater protection physical barriers can be put up for greater protection.
- **PPE:**
- With CIMR® the PPE or masks is more effective in combatting the spread of viruses, and infectious diseases.
- CIMR® not only deactivates the virus but help keep the mask clean which stops the transference of the virus.

WHAT DOES AIR EXCHANGE MEAN

- Air exchange rate, or “air changes per hour,” is the rate at which outdoor air replaces treated indoor air within an air space.
- It is a parameter to determine the indoor air quality of any workplace.
- Organizations are legally bound to provide quality air to employees and occupants inside the workplace.
- Air pollutants can accumulate to higher levels if there is less air flow, which can pose health problems to the occupants.
- If air exchange is insufficient, trapped allergens, pollutants and irritants can degrade the indoor air quality and affect the well-being of all occupants.
- Air enters the building through infiltration, natural and mechanical ventilation.
- Outdoor air flows into the building through openings, joints, windows and doors.
- Air is removed from an interior space mechanically through exhaust fans, air conditioners, etc. The older the building, the more likely air exchange can also occur through leaks in the exterior shell.
- Consistently maintaining the HVAC ventilation and air cleaning system and equipment, and making filter changes as recommended, together with CIMR®, will keep everything operating at an optimal level ensuring safe, clean and healthy indoor air.
- It is, therefore, required to determine the air exchange rate to comply with safety regulations pertaining to workplace air quality.
- An air exchange rate of one (1) means that the complete volume of air filling a room is completely changed one (1) time in one hour when the ventilation equipment is delivering its air to the room for one hour.
- The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) provides guidelines for air changes per hour, and they vary depending on the room: bedrooms should have five–six, kitchens 7–8, and laundry rooms require 8–9 changes.



- HVAC contractors use these “changes per hour” recommended ranges to calculate the amount of airflow that's needed in different rooms to ensure adequate indoor air space-wide air exchange. Each indoor facility’s volume (height × width × length) is multiplied by the recommended number of hourly changes, then divided by 60.
- Installing CIMR® Equipment to the HVAC system will help reduce airborne allergens and pollutants, sanitizes and deactivates pathogens and increases the air quality.
- By installing CIMR® it is equivalent to 75 air exchanges per hour.

WHY THE NEED FOR CIMR® SYSTEMS AND TECHNOLOGY

The negative outcomes of the pandemic

- In June 2022 the total number of recorded COVID-19 infected cases in the United States alone were more than 84 million.
- The total number of deaths in the United States were more than 1 million and in Europe more than 2.3 million died.
- COVID-19 (Coronavirus) has affected our daily lives, is slowing down the global economy, disrupting world trade and restricting movements.
- There was a double negative impact on businesses — countries-imposed lockdowns and several restrictions on businesses, and the general public aimed to avoid public areas due to the health risks which resulted in a dramatic decline in consumer spending.
- Spending dropped between 50% and 60% across Germany, France, Italy, and Spain during the first lockdown in April 2020.
- As a result, millions around the world either lost their jobs or found it increasingly difficult to find work.
- It erased more than 10 (ten) years of consistent employment growth in the United States.
- The pandemic heightened inflation rates and also resulted in a decrease of the global GDP growth rate which Forbes claims is a decrease in GDP growth that has not been seen since the Great Depression.
- Increase in food and produce spoilage as well as shortages resulted in a rise of 40% in Food Price Index due.
- According to UNESCO (United Nations Educational, Scientific and Cultural Organization), various schools were shut down in 22 countries, across 3 continents, and about 421 million students have been disrupted worldwide.
- A higher fraction of them, who relied on mid-day meals, struggled to feed themselves.
- Worldwide, patients had higher hospital and critical care admissions and double the mortality compared to the pre-COVID-19 period.
- Dramatic increase in health care costs.

- More vulnerable populations/workforce.
- Increase in the morbidity/mortality rate.
- Market share, shareholder and brand value decrease in many industries.
- This new viral disease, and its various mutations and variants, makes it very challenging for the Health Care Industry to combat the spread and infection successfully
- Substantial increases in conventional cleaning, sanitization and remediation costs.
- Although the emphasis is on taking extensive precautions such as extensive hygiene protocol (e.g., regularly washing of hands, avoidance of face-to-face interaction etc.), lockdowns, social distancing, wearing of masks, availability of vaccines, and so on, millions still got infected and died.
- Presently the adverse effects of COVID-19 in daily life are extensive and have far reaching consequences and negative impacts on all levels of life, sectors and industries.
- The impact will shape the future of the global economy for years to come. (*Source: Michigan Journal of Economics and the Kennedy Institute*)
- To address fear, reduce the loss of productivity, revenue, absenteeism and unemployment, systems and technologies, such as CIMR®, should be installed and used on a wide scale.

CONCLUSION

- According to the WHO (World Health Organization), viruses, like SARS-CoV-2, change over time and will continue to change the more they circulate.
- Variants of the Virus will continue to develop and will spread more easily between people.
- According to Carbon Health, mutations are random, so it's not really possible to predict how and when they will occur.
- It is possible that future mutations of COVID-19 will lead to strains that are more contagious or cause more severe illness, and/or will impact the Virus's ability to transmit and/or the possibility to resist antibodies.
- In the meantime, we need to continue all of our efforts to prevent viral transmission.
- Unlike all precautionary measures, including vaccines and treatment strategies, sanitized shared indoor air technology, ensured by Active Air and Surface Pathogen Scavenging Technology and Systems such as CIMR®, is the most effective to mitigate the risk and impact the current crisis.
- CIMR® was independently and scientifically tested, is practically proven and a known line of defense for future airborne threats.
- CIMR® will sanitize current and future pathogens in the air and on surfaces
- CIMR® provides sanitized clean indoor air quality for people to safely occupy and operate in.



CIMR® is the solution.

CIMR® protects lives, businesses and economies.

CIMR® is the way forward!

END

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