



Future-Proof Education & Biosecurity

Advocating a Social, Civic & Service Framework for Education and Protection of Students & Public Service



GAMING BENEFITS CORPORATION
AUTHENTIC CORPORATE RESPONSIBILITY & NONPROFIT FUNDING INTEGRITY
A New Hampshire Benefit Corporation

Mission Statement

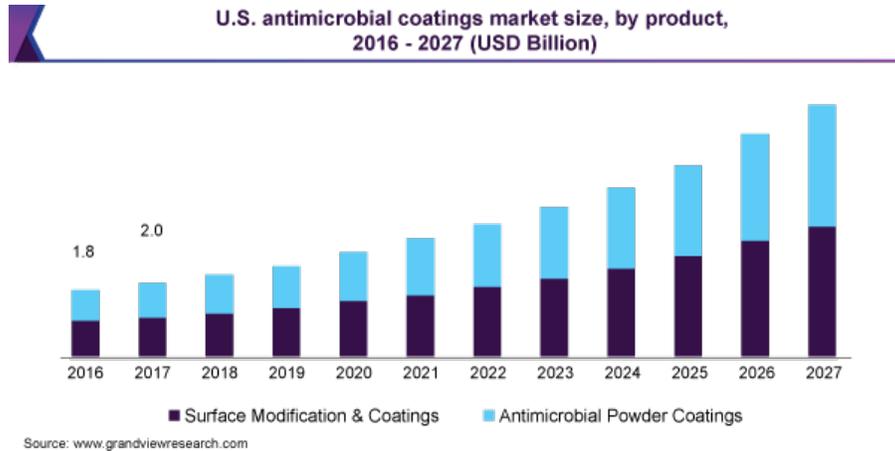
Our mission is **to implement and authenticate corporate social responsibility by enabling guided decisions** grounded in quantitative and qualitative analysis provided through a comprehensive collection of immutable data and key technologies for education.

In response to the present need to regain confidence that it is safe to work at and attend school, we are proposing innovative value-propositions that **fearlessly empower and protect people with information**, and create a level of **transparency and dimension of trust** forming a mutually beneficial relationship between schools and employees, students, stakeholders, and the broader community with whom they interact - establishing accountability in the urgent process of creating a safer environment for the community in a socially responsible way.

This proposal identifies:

- ***best practices and products,***
- ***PPE subject matter experts,***
- ***Proven antimicrobial tools,***
- ***Online learning development techniques and***
- ***Mobile technological advancements that dynamically integrate school***

The Problem:



The global antimicrobial coatings market size was valued at USD 7.1 billion in 2019 and is expected to grow at a compound annual growth rate (CAGR) of 12.8% from 2020 to 2027. G

The demand for antimicrobial coatings is surging in healthcare facilities, food establishments, and commercial spaces due to the COVID 19 outbreak. <https://www.grandviewresearch.com/>

The current approach to education and microbial defense in the U.S. lacks innovation and verifiable support in consideration of the risks of engagement between students, employees and the **pre-existing unmet needs for diverse student-centered education.**

We live in a world of antimicrobial *resistance*. Failures due to the use and misuse of antimicrobial treatments cannot be ignored. The global outbreak of COVID-19 has resulted in a rising demand for antimicrobials and Personal Protection Equipment (PPE). A growing siege of misrepresentations from applicators, PPE providers and politicians are a lethal distraction where profits are driving the process.

The World Health Organization ([WHO](http://www.who.int)) reported “antimicrobials are among the most misused of all medicines.... the unintended wide release of antimicrobials into the environment through sewage and runoff water has public health consequences.”

The Problem: Meeting Responsibilities

- COVID-19 presents many unique ethical, social and legal challenges for organizations & employers. Employers are required to “provide a **workplace** free from serious recognized hazards and comply with **standards, rules** and **regulations** issued under the OSH Act.”
- Schools have long struggled with sick building syndrome, funding, segregation, integration, technology development and the unmet social needs impacting education, employment and student success.
- Administration of learning platforms, technology and programs fall short in integration and effective application, failing to creatively connect students dynamically, personally, individually, socially & civically.



“To assure safe and healthful working conditions for working men and women; by authorizing enforcement of the standards developed under the Act; by assisting and encouraging the States in their efforts to assure safe and healthful working conditions; by providing for research, information, education, and training in the field of occupational safety and health...”

Occupational Safety and Health Act of 1970
Occupational Safety & Health Administration

The Problem: Masking Matters & Covid

- Most cleaning measures offer short-term approaches with a limited range of effectiveness & place a tremendous burden on employees
- Commonly used masks have some fatal flaw, drastically limit oxygen intake, impact job function, are uncomfortable to wear and DO NOT provide adequate antimicrobial respiratory protection to the wearer. The masks only reduce the volume of outbound infected pathogens by the wearer, thereby reducing exposure of others in the vicinity.
- The Cares Act grants immunity to face mask manufacturers for years exposing consumers, employers and employees to products that potentially bear incalculable risk.
- Disposable masks and gloves irritate skin, cause discomfort, negatively impact the environment and impair communication.
- Social distancing, mask wearing and hand-washing are all methods intended to minimize the amount of virus a person will encounter; **none will entirely eliminate viral exposure.**



“A single sneeze can contain as many as 30,000 viral droplets – each having as a many as 200,000 aerosol particles – it takes fewer than one thousands of those hundreds of millions of viral particulates to infect the typical person. A single asymptomatic virus-positive person taking no (social distancing or mask wearing) precautions can infect 406 people within 30 days. Active COVID-19 aerosolized particles can linger in a room long after an infected person leaves it.”
(Richard Nicholas)

The Solutions

The starting point of our proposal is aimed to support local community, social and educational responsibility through an initiative that delivers technologies to protect school engagement, expand accessibility and enhance management and benefits for all stakeholders to:

1. **Educate**: Distance Meet, Manage, Mentor, Mobilize and Measure Education
2. **Protect**: Antimicrobial Surface Protection For Schools, Equipment & Transportation
3. **Defend**: Innovative Strategies & Authentic PPE for Students & Public Servants



The Solutions

1. Educate:

Distance Meet, Manage, Mentor, Measure and Mobilize
Education

By embracing digital technology we prove the school's curriculum and standards and provide for development, execution, acknowledge supportable success and aptly identify failures to create impactful solutions.



Educate: *Securely Meet, Manage & Mentor*

Focus on *Equitable Infrastructure* to ensure students and families have access to devices and connectivity conducive to online learning and narrow the existing digital divide among staff, students & community.

Virtual Laboratory

Teachers/ trainers can monitor the learner's progress and the level of knowledge they continuously assimilate during the study process. Teamwork is encouraged as the trainees have to collaborate during every form of learning, applications, hands-on workshops, and long-term projects.

- dynamic allocation of cloud resources for dedicated activities (VMs or containers)
- concurrent access to the same repository and resources for learner and tutor/teacher
- remote support for any problems experienced by students
- virtual collaboration among the learners enrolled in the same study group

Virtual Classroom

Implements the collaborative learning concepts and enables the students to proactively attend the educational sessions.

- video communication
- desktop/ application sharing
- document/ presentation sharing
- interactive whiteboard & mark-up tools
- session recording and playback



Educate: *Effectively* Create & Deliver E-Learning Content

Content Authoring Tool

Enables lecturers to create and deliver interactive educational materials such as multimedia learning objects. Basic resources that involve presentations, documents, images, or video sequences can be easily annotated by using multimedia elements and interactively rendered to learners.

Virtual Library

Virtual library modules allow tutors and learners to store and manage personal and public educational resources. These resources should be used in individual study processes or easily shared among collaborative sessions such as online focus groups or webinar ones.

- flexible document management
- secure access to valuable content
- multimedia annotation tools
- video recording and streaming



Educate: *Responsibly* Manage Educational Excellence

The future-proof strategy assures board and government decisions are not arbitrary, but authoritative and positions the school to be a leader of excellence in education through mobile, comprehensive, flexible in-person & e-learning techniques and developmental pathways designed to resolve unmet needs in the school, not replicate them.

Decentralized Ledgering Technology (DLT) provides immutable, verifiable data asset management that can be utilized in numerous ways and protects the privacy of the users where appropriate, required or desired. By applying DLT, curriculum by, from and between educators and students, engagements, grades, assignments, reviews, suggestions and notifications are tracked and verified. No undefined requirements for staff and students. Guidelines, assets and support are readily available to:

- leverage active digital learning content for all students and broaden engagement anywhere
- support educators in designing learner-centered environments in an online space, grounded in a whole-child approach
- provide comprehensive development & assessment strategies for students, educators & parents
- create a pathway for equitable access to digital devices and services and dynamically diverse classrooms
- engage community leadership, mentors & student teachers in providing an added value in educating our youth
- CLOSE THE GAP IN OUR COMMUNITY'S DIGITAL DIVIDE



Educate: *Competently* Measure Educational Achievement

Applying DLT to educational assessment creates the opportunity to capture quantitative and qualitative analysis in measuring the effort, need and success of both student and educator, building and administration, town & community through tokenization.

- student-teacher
- teacher-student
- teacher-teacher
- student-student
- teacher-admin
- admin-teacher
- student-admin
- teacher/student/staff learning - progress short-term through long-term
- attendance-performance
- health-performance
- student-lesson assessments
- student-community
- community-student
- community-teacher

Assessments can be privately protected, results can be publicly shared & decisions can be made with efficacy based on supporting, verifiable data to ensure student-centered education, directed professional development, equitable pay, and confident tax management.

E-Learning expands opportunities with local professional institutions and employers.

Tokenized schooling creates the opportunity to reward staff and students for participating in projects, programs, assessments, for meeting goals and exceeding goals and provides accountability by encouraging engagement by rewarding tokens.

Tokenization enables data security by substituting a sensitive data element with a non-sensitive equivalent, referred to as a token, that has no extrinsic or exploitable meaning or value. The token is a reference that maps back to the sensitive data such as a student or teacher's lesson assessment, through a tokenization system.

Tokens can be applied through a variety of Smart Contracts, earned & exchanged for special privileges and rewards.



Educate: *Locally Mobilize Community Schooling*



Revitalizing small village and neighborhood teaching expands an operational footprint to mitigate risk, make use of village-local educational satellites, accommodates small group learning and the need for person to person engagement, provides for property improvements of unused structures and meets many tenets of basic town management & will help to establish more Wifi Hotspots.



Give educators and students a creative space to offer valuable learning opportunities without the typical confounds of the classroom. Hardware and software should be available to help the students connect anytime. Employ strategies and a platform to help the board in providing accurate, relevant & shareable information in a timely fashion to improve community participation & build board trust.



Manage organization of the school, its administration and create a constructive space for the community to participate to benefit students and stakeholders while protecting the privacy of individuals within our public spaces and duties virtually and physically.

Operating school, parks & rec and other transportation as a small town charter system with occasional out-of-town service for students and elderly & handicapped creates a public/private coop that services routes, where seating is available by term or by available reservation for students who need to be in school physically.



Provide every student and staff the tools they need to connect to school from anywhere, create and seek new learning opportunities and engage the larger community. Maximize digital technology to provide diverse, individualized education and a life-line for students to seek aid, relief or support by putting devices in their hands with the proper applications.



The Solutions

2. Protect :

Biosecurity Antimicrobial Surface Protection For Schools, Equipment & Transportation

“Antimicrobial products kill and/or slow the spread of microorganisms, including bacteria, viruses, protozoans, and fungi such as mold and mildew.”

-National Pesticide Information Center



Protect Environmental Biosecurity

The world's most widely used antimicrobial surface treatment is Globally registered, **Aegis® Microbe Shield** by **Microban**.

AEGIS® has a thirty-year history of safe use and durability, ensuring long-lasting antimicrobial efficacy. Used by Nike, Reebok, NY Transit, Toronto Transit and others, AEGIS® antimicrobial protection is a common solution for hypoallergenic environmental solutions in HVAC systems, textiles and is a long-lasting antimicrobial surface protectant.

AEGIS® surface protection lasts 24/7 for up to one year, makes surfaces easier to clean and saves time, money and resources on janitorial services.

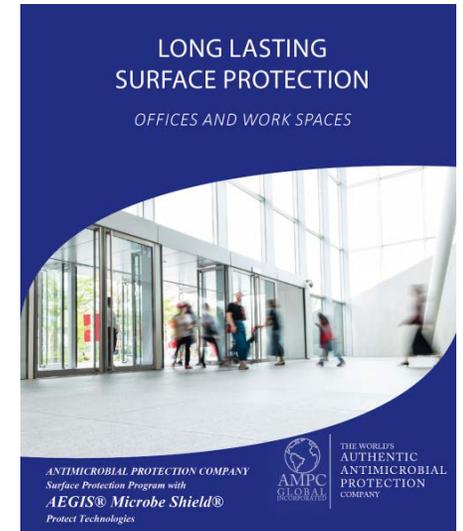
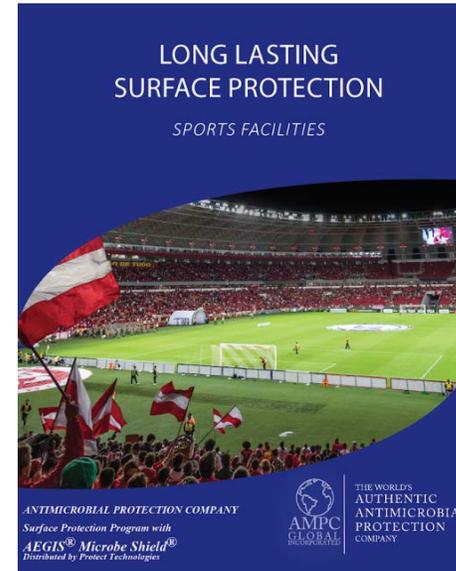
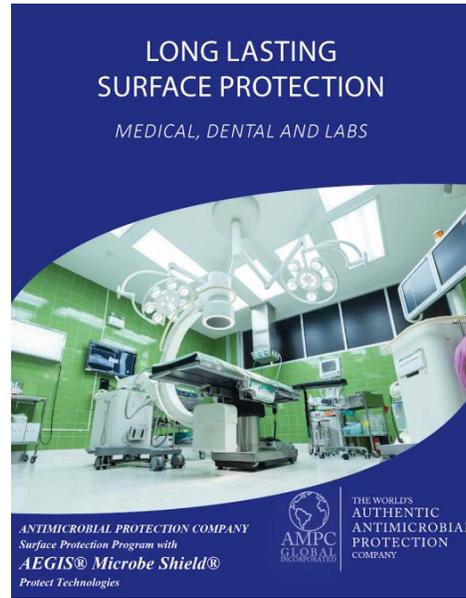
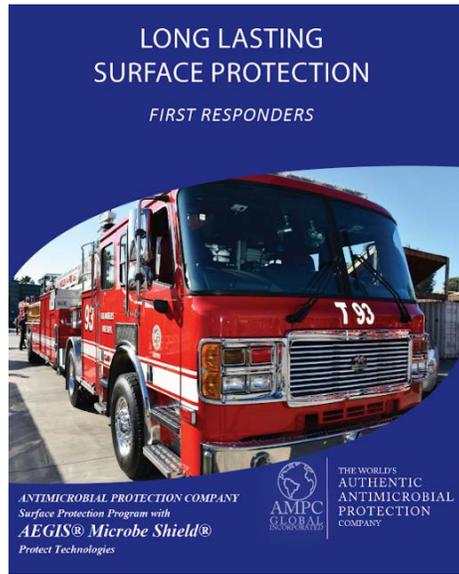
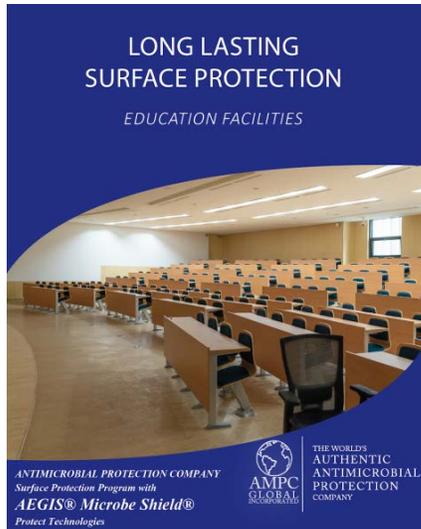


Aegis® Microbe Shield® is used in Healthcare, commercial and industrial properties and has been applied for transit authorities and in these manufacturer products:



Safely Protect Environmental Biosecurity

AEGIS® antimicrobial protection is used in original equipment manufacturing, health care and many other industries and has been proven for over 30 years.



Applied throughout the physical space, hard, soft, textile surfaces & HVAC systems to significantly reduce microbial contamination and effectively treat molds, mildew and other microbes.

Clean as normally. Make surfaces easier to clean. Protect surfaces for up to ONE YEAR.

Aegis Microbe Shield from the Antimicrobial Protection Company Global & Protect Technologies

STEP 1. Clean, Sanitize & Disinfect

STEP 2. Antimicrobial Treatment

STEP 3. Annually Apply as Needed

Responsibly Protect Environmental Biosecurity

Physical, *not chemical* control of microorganisms.

AEGIS® forms a protective coating that molecularly bonds with all types of surfaces upon application and inhibits the growth of microbes. When applied to surfaces, AEGIS® forms a colorless, odorless, positively charged long-carbon chain polymer that attracts, then electrocutes, ruptures, and disintegrates a microbe's negatively charged cell membrane.

Long-Term Broad-Spectrum Microbial Defense

Aegis® destroys microbes that come into contact and remains active as long as the treated surface remains intact.

Non-Leaching Hypoallergenic Layer of Biosecurity

Since the Aegis® is permanently bound to the surfaces it protects, it does not leach from the fabric to the skin or into the environment. Extensive toxicological testing shows the antimicrobial does not cross the skin barrier. In fact, **AEGIS® is so safe that it is used on baby diapers to prevent rash.**

Comprehensive Professional Antimicrobial Application

Aegis® is professionally applied by a team who cleans, sanitizes & disinfects all areas then integrates the Aegis® solution on high-touch and high-traffic surfaces throughout schools and transportation for protection **up to one year.**



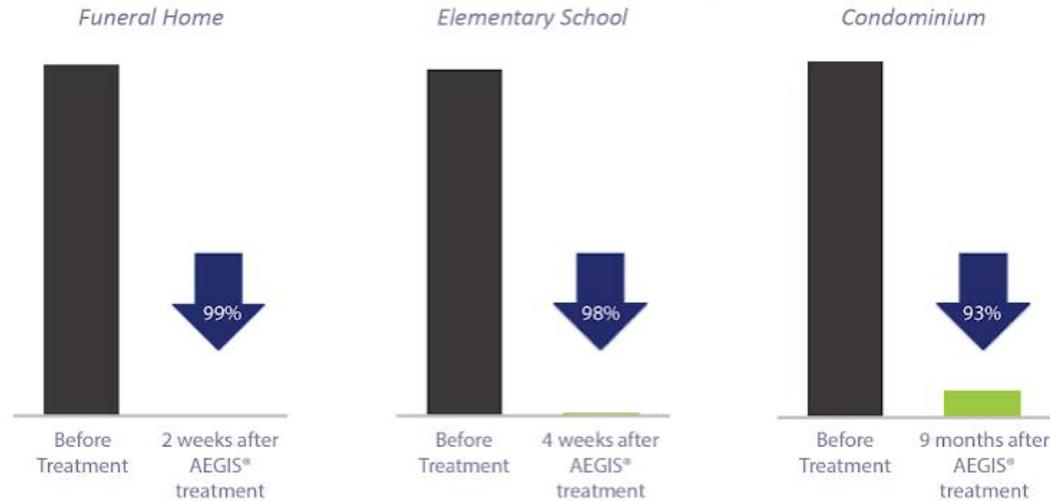
- Destroys microbes on contact
- Effective on all types of surfaces including glass, metal, carpets, fabric & plastics
- Stronger HVAC System protection and defense
- Lasting protection of up to a year
- Safe, effective and long-lasting
- Over 30 years of state-of-the-art laboratory by Microban®
- Health Canada PCP 15133,
- EPA registered US EPA 64881-1



Efficiently Protect Environmental Biosecurity

Independent Test Results

Testing was conducted by independent labs, showing the sustained decrease in surface microbial contamination. Additional tests and case studies available upon request.



Approvals & Care



AEGIS® & the AEGIS® Microbe Shield are trademarks of Microban® International.



AEGIS® is not a disinfectant. AEGIS® is registered with health authorities around the world including Health Canada and the US Environmental Protection Agency. Health Canada PCP 15133, US EPA 64881-1

How to Care for AEGIS®

- AEGIS® bonds instantly and dries in 3 to 5 minutes on high-touch and high-traffic surfaces to 24 hours on treated fabrics such as carpets.
- AEGIS® can be weakened or deactivated over time by highly caustic materials (pH 11+).
- Clean AEGIS® treated surfaces with soap and water or non-caustic disinfectants.
- AEGIS® can be removed by abrasion.

1 High-touch

*Recommended Annually**

Our most comprehensive Surface Protection Program. Cleaning, disinfection and AEGIS® treatment on all high-touch and high-traffic surfaces located throughout the building and residences:

- Any accessible building door handles, including emergency exit doors
- Food courts and eating areas
- Security desk and/or gate house
- Mailroom/mailwall
- Elevator buttons and elevator handrail
- Escalator handrails
- Garbage and recycling bins
- Parking garage high-touch surfaces
- Stairwells including door handles and handrails
- Accessibility access buttons
- Work stations and kiosks
- Garbage and recycling room high-touch areas
- Common washroom touch surfaces including toilet seat, toilet flush, dryer buttons, taps, sinks and handrails
- Surfaces in the staff offices, including, but not limited to, chairs, desks, computer keyboards and mice, printer/fax buttons, phones and cell phones
- Additional common area touchpoints that are discovered while onsite including furnishings, light switches and tabletops that are currently open to the public

2 Classrooms

*Recommended Annually**

Treatment of all high-touch surfaces found within classrooms and lab spaces. Cleaning, disinfection and AEGIS® treatment typically includes the following surfaces:

- Chairs and desks
- Computers, keyboard and mice
- Podium
- Light switches

3 Recreation Facilities

*Recommended Annually**

This three-dimensional treatment regimen is recommended for areas where people meet in groups. Cleaning, disinfection and AEGIS® treatment typically includes the following surfaces:

- Gyms and athletic facilities
- Recreation facilities
- Libraries
- Student lounges
- Pools
- Games areas

**Depending on your cleaning protocol. Harsh and abrasive cleaners can reduce the life of AEGIS.*

The Solutions

3. **Defend** :

Innovative Strategies & Authentic PPE for Students & Public Servants

PPE is Personal. Personal Protection Equipment of a genuine value should be provided for employees & students. It is our responsibility to protect the wearer at a level that matches or exceeds that of the N95 device.



Defend With Authentic PPE

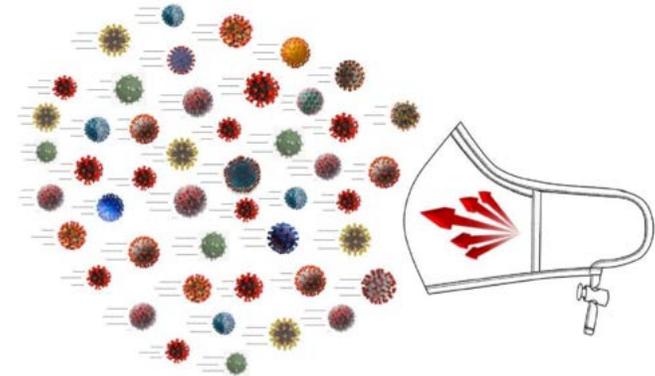
This PPE responsibility framework is centered around ensuring health and safety of employees and students balanced by the community interests and school operations.

To effectively open schools, educate and protect our students and staff, we must change the way we materially view masks and education.



The Definitive Employer Guide to Purchasing Face Masks *for Your Valuable Employees*

A clever person solves a problem.
A wise person avoids it.
— Albert Einstein



**[READ The Definitive Employer Guide to
Purchasing Face Masks For Your Valuable Employees
by Richard Nicholas, The Research Consortium](#)**

**READ: Understanding Face Coverings and COVID-19 – A False Sense of Security by Breathable Air Technologies, LLC.
FOR IMMEDIATE RELEASE: JUNE 3,2020© 2020 -BREATHABLE AIR TECHNOLOGIES, LLC. – Howard Weinberg**

“The starting point in understanding the dilemma and concerns all users should have is with the Centers for Disease Control and Prevention’s recommendation that the general public NOT wear N95 facial respirators to protect themselves from respiratory diseases, including the coronavirus (COVID-19). The CDC’s rationale is these masks are critical supplies that must continue to be reserved for health care workers and other medical first responders. Facial masks are intended to only protect the wearer against unintended transmission if a person is an asymptomatic carrier of the coronavirus. According to the American Lung Association, one in four people infected with COVID-19 might show mild symptoms or none at all. Therefore, using any form of a face mask other than an N95 or better can only help block large particles that might eject through a cough, sneeze or unintentionally launched saliva (e.g., through speaking) and provides only a bare minimum degree of barrier protection from respiratory droplets that are coughed or sneezed around them. They were not conceived to protect anyone from acquiring COVID-19...

Advocating, suggesting, or acquiring the wrong mask protection can become a serious health and financial liability to all concerned. To compound the situation State and Municipal governments continue to impose by Executive Order face-covering requirements in response to the ongoing COVID-19 pandemic and purchasing departments, agents, resellers, etc., have begun procuring surgical masks, other similar models, and even homemade masks as N95’s are simply not available. All of these other ‘masks’ will create serious, unintentional health and safety hazards of which the public must become aware of...

A face covering such as cloth, bandanna, or other type of material that covers a person’s mouth and nose is as equally ineffective as a surgical mask. Homemade cloth face coverings are not Personal Protection Equipment(PPE). This is primarily because they provide the wearer little to no protection from exposure to the coronaviruses. Respiratory hazards can also become a legal liability when inadequate face masks become wet, retain saliva, or sweat, and become a growth environment for bacteria and other pathogens that exist in the workplace. “Face covering” is a generic term!”

Safely Defend With Authentic PPE

- N95 respirators are difficult to breathe through.
- Medical masks fit too loosely-Studies show that a < 2% gap in a face mask's seal can reduce its protection effectiveness by half.
- Polyester is a noxious product and enables COVID-19 to survive longer on it.
- Charcoal filters are unhealthy and don't filter coronavirus-size particles.
- Valved masks let unfiltered air in.
- Silver and copper antimicrobials pose a health risk and, like graphene (which is untested for mask applications) & wear off quickly.
- Masks without nose forms don't enable a snug fit and most ear pieces are unadjustable and uncomfortable.
- Most cloth face masks are intended for use by non-medical wearers. These barriers are typically not very effective at filtering inbound microbe-size particles or viral aerosols that are suspended in the air and they do little to protect the mask wearer.



Richard Nicholas has owned and held executive positions with national TPAs, BPOs and MCOs; represented more than 200 TPAs before the U.S. Congress. He recently founded the TPA NETWORK Research Consortium, an industry-wide research initiative aimed at helping healthplan sponsors evaluate new medical technologies and health innovations by conducting payor-focused translational research and facilitating more, smarter and less costly clinical studies. Richard holds a BA with distinction from Boston College and an MBA from Duke University's Fuqua Graduate School of Business. To learn more see www.ResearchConsortium.org



Effectively Defend With Authentic PPE

The Research Consortium explains that an employee face mask must be a tool used to both



1) reduce viral spread

and



2) protect the wearer from a viral cloud

- Breathable Cotton masks with a chiffon inner layer develop a triboelectric charge that kills viral pathogens upon contact;
- Ideal construction optimizes mask breathability and enables healthy, extended wear.
- A soft Supima® cotton inner layer reduces face chafing and supports moisture control.

- Aegis Antimicrobial agents that molecularly bond to a mask's inner and outer layer are extremely effective at inactivating infectious agents.
- Odorless & hypo-allergenic masks can be worn by those with sensitivities.
- A truly snug fit and seal with reusable construction make the mask useful for long-term.



Conclusion

Departments of Education must continually strive to develop creative and innovative methods to assist our students & teachers in achieving the highest possible degree of effective educational programming and learning techniques **now**.

To adequately address the needs of our students and community, boards must provide for risk mitigation plans to maximize available local, state and federal funding to put proven safety strategies & student-centered learning FIRST.

Education stabilization funds levied under the CARES Act and the HEALS Act can be prioritized to meet these needs for funding of schools to assist in responsibly re-opening. Sound support for securing these and other funds is needed for all schools.



The 2020 Back-to-School Pack Deliverables

- ✓ Custom Software Packages for serving, hosting & managing curriculum, administration and multimedia communications PRIVATELY and more dynamically
- ✓ Student & Staff Devices and integral applications to work, collaborate and connect
- ✓ Antimicrobial Surface Protection of school, transportation, equipment, textiles, HVAC
- ✓ Authentic PPE to protect the wearer & high-demand products, such as disinfecting wipes, masks, gloves
- ✓ Custom Learning & Social Distancing Floor Stickers & Specialized Equipment
- ✓ Professional Training, Guidance & Experienced Government Contracting & Procurement



About the Contributors:

Our solutions are born out of the gaming industry which is a leader in corporate responsibility compared to other industries. Tara Sue Myers and her partners have decades of experience endowing nonprofits with technical integrations and corporate responsibility expertise. She serves as a founding board member and Executive Director of the Veterans Foundation of NH and as President of the Gaming Benefits Corporation (GBC). The GBC is a New Hampshire Benefit Corporation founded to implement and authenticate corporate social responsibility (CSR) and nonprofit funding integrity through integration of proprietary products and platforms, certified and secured with decentralized ledgering technology on blockchain. Tara Sue is joined by her Executive Board and these companies in submission of this document for community consideration. Edited by Michael Mendyk.



THE WORLD'S
AUTHENTIC
ANTIMICROBIAL
PROTECTION
COMPANY

Antimicrobial Protection Company
Authorized U.S. Distributor of Aegis
Microbe Shield by Protect
Technologies



Sumus Learning Platforms



TPA NETWORK
Research Consortium



Peerplays

Blockchain Digital Asset
Management



BOESAAM
Boes Aviation and Asset Management
VETERAN OWNED



GAMING BENEFITS CORPORATION
AUTHENTIC CORPORATE RESPONSIBILITY & NONPROFIT FUNDING INTEGRITY
A New Hampshire Benefit Corporation
Member of the Government Blockchain Association

GBA
**CORPORATE
MEMBER**