Controlling the transmission of SARS-CoV-2 critical to reduce the widespread effects of the COVID-19 pandemic on human health and the economy but also to retard the evolution and the emergence of variants that could alter transmission dynamics or affect the usefulness of diagnostics, therapeutics, and vaccines. Until vaccine-induced population immunity is achieved, universal masking is a highly effective means to slow the spread of SARS-CoV-2 when combined with other protective measures COVID-19 cases in the United States might be declining, but the authorities believe there is no reason at this present time to remove the polices for wearing protective masks.

In fact, scientists feel that wearing a protective mask is a viable measure for persons that have not yet received a vaccine but new recommendations now suggest wearing double masks for enhanced protections.

Double masking has been scaling the radar on national headlines in recent months especially in regions still recording a high number of infections. Many conscious minded persons are opting to use this feature when using homemade cloth masks to further safeguard themselves.

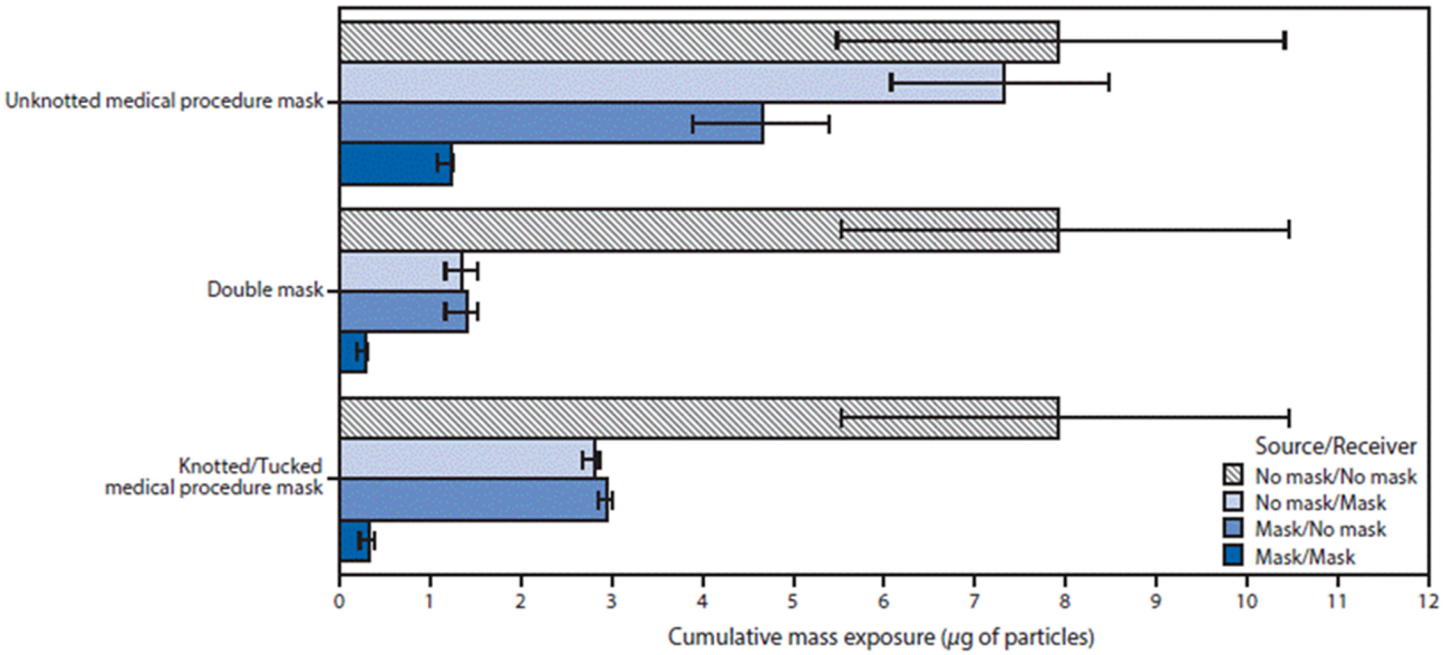
The Centers for Disease Control and Prevention in January conducted various experiments to assess two methods to improve medical procedure mask performance by improving fit and, in turn, filtration: 1) double masking and 2) knotting and tucking the medical procedure mask (See Fig. below).

Results from the first experiment demonstrated that the unknotted medical procedure mask alone blocked start highlight 56.1% end highlight of the particles from a simulated cough, and the cloth mask alone blocked start highlight 51.4% end highlight. The combination of the cloth mask covering the medical procedure mask (double mask) blocked start highlight 85.4% end highlight of the cough particles , start highlightand the knotted and tucked medical procedure mask blocked 77.0% (SD = 3.1) end highlight.

In the second experiment, adding a cloth mask over the source head form's medical procedure mask or knotting and tucking the medical procedure mask reduced the cumulative exposure of the unmasked receiver by 82.2% (SD = 0.16) and 62.9% (SD = 0.08), respectively (See chart below).

When the source was unmasked and the receiver was fitted with the double mask or the knotted and tucked medical procedure mask, the receiver's cumulative exposure was reduced by 83.0% (SD = 0.15) and 64.5% (SD = 0.03), respectively. When the source and receiver were both fitted with double masks or knotted and tucked masks, the cumulative exposure of the receiver was reduced 96.4% (SD = 0.02) and 95.9% (SD = 0.02), respectively.

Mean cumulative exposure* for various combinations of no mask, double masks, and unknotted and knotted/tucked medical procedure masks



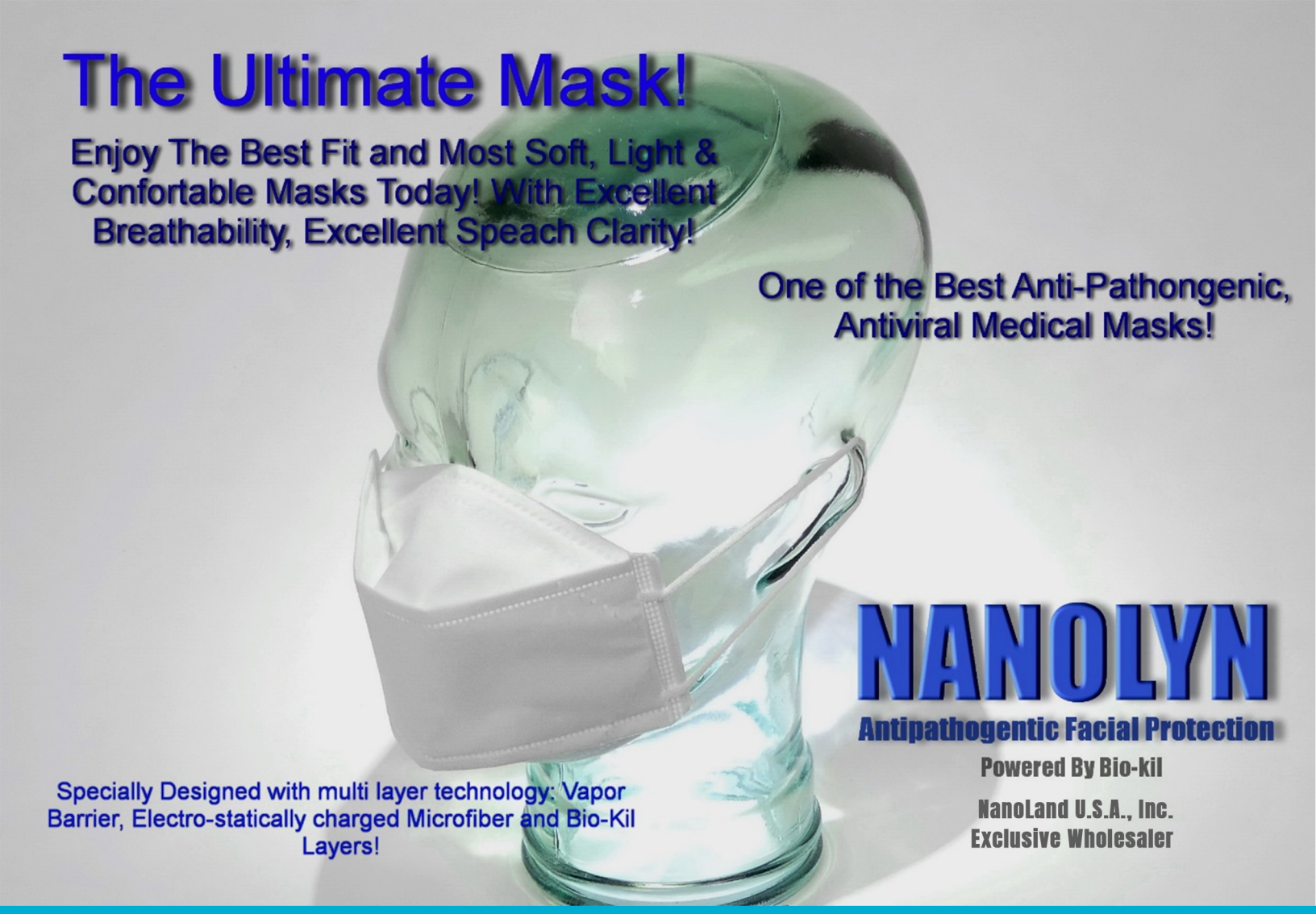
During Mid February U.S. government researchers reported the results of a lab experiment that spaced two artificial heads 6 feet from each other and checked to see how many coronavirus-sized particles spewed by one were inhaled by the other. They found that two masks are better than one in slowing coronavirus spread, but health officials stopped short of recommending that everyone double up.

The researchers found that wearing one mask — surgical or cloth — blocked around 40% of the particles coming toward the head that was breathing in. When a cloth mask was worn on top of a surgical mask, about 80% were blocked. When both the exhaling and inhaling heads were double-masked, more than 95% of the particles were blocked, said the CDC's lead scientist, Dr. John Brooks.

Joining the need for standardized protection outside of a true medical setting the ASTM International just released it's certification standard for barrier face coverings. A fist of its kind, at a time when face masks are everywhere, creates best practice criteria regarding construction, fit, manufacturing and use for non-medical masks.

Specifically the ASTM F3502 standard will state that the product::

MEETS ASTM F3502, SPECIFICATION FOR BARRIER FACE COVERINGS, THIS PRODUCT IS PRIMARILY INTENDED AS A MEANS OF SOURCE CONTROL FOR MINIMIZING THE PROJECTION OF EXPELLED MATERIALS FROM THE WEARER'S NOSE AND MOUTH. WARNING: THIS BARRIER FACE COVERING IS NOT A MEDICAL FACE MASK AS DEFINED IN ASTM F2100, IS NOT INTENDED FOR USE IN MEDICAL PROCEDURES, AND IS NOT A RESPIRATOR.



**** New antipathogenic medical grade face mask powered – Nanolyn powered by the award winning BioKil technology mitigates bacteria, microbes as well as virus microorganisms. Pending ASTM F3502 certification**

This mask is made of medical grade fiber cloth and treated with Bio-Kil inside.

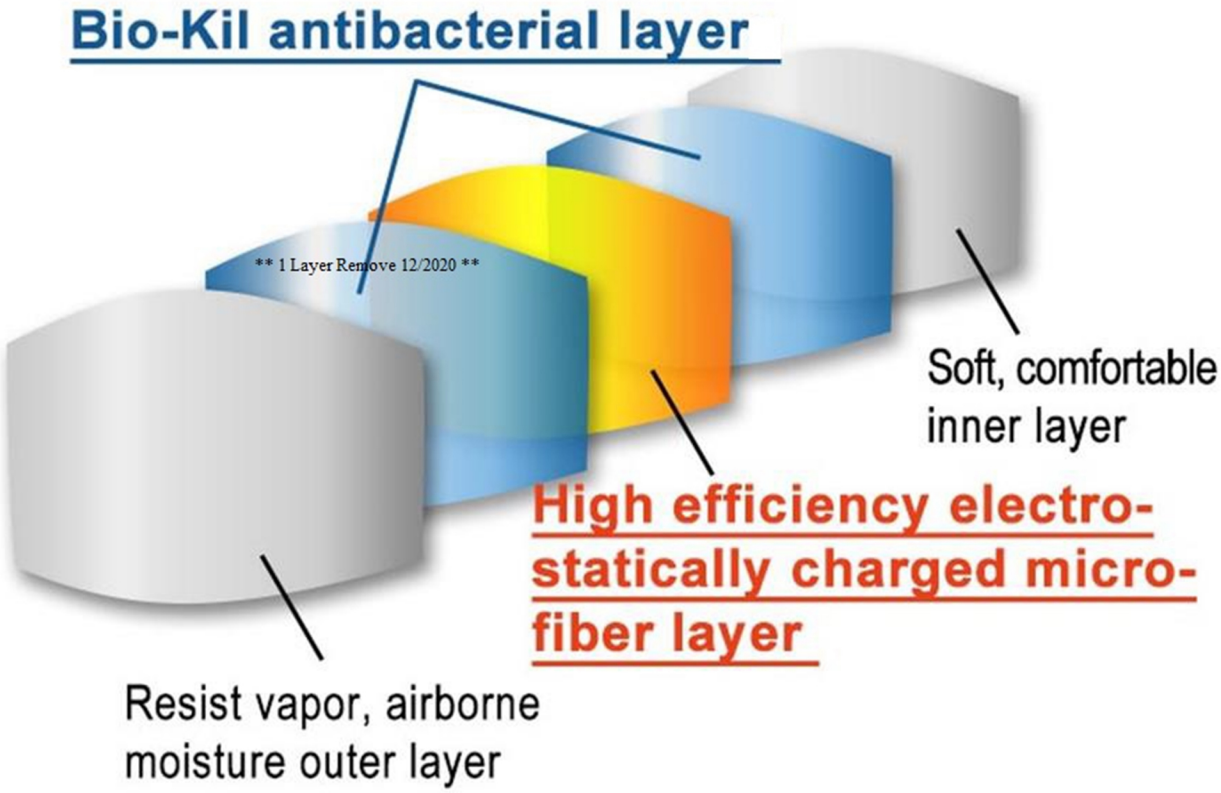
Conventional masks currently available in the market, only filter out but not eradicate bacteria and viruses that deposited on the masks through air. It is the possible risk of infection through careless contact with those harmful pathogens remained on the surface of the untreated masks.

With Bio-Kil inside treated masks, those harmful pathogens will be eliminated immediately upon physical contact with the mask, as proven in numerous studies both in laboratory and the filed experiments. One of the compounds used in the treatment has been proven efective to eradicate microorganism.

Bio-Kil inside mask eliminates microorganism through physically destroying the microorganism's cell membrane and envelope protein. It obviates the possibility of bacterial and viral mutations. Bio-Kil inside has been awarded at 2010 Concours Lepine International Paris, International Exhibition of Invention at Geneva and at Nurnberg in 2002.

The Nanolyn mask is a multiuse disposable unit which follows CDC guidelines of up to 7 days of normal usage. Through covalent bonding, the BioKil application inside is affixed and able to maintain its ability to eradicate harmful pathogens.

Bio-Kil®
Bacteria Elimination Technology



Physically eliminate microbes and remove unpleasant odour both from breathing in and out air.

Bio-Kil inside Antibacterial Masks are produced under strict quality control processes in conformance with ISO 9001 quality regulations to ensure consistency and safety for the user. There are no side effects known and is environmentally friendly.

Sizes: Small, Medium and Large

Nationwide Sales Contact: 214-775-2424

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