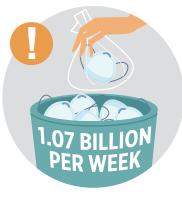


REUSABLE HALF-MASK RESPIRATORS A SAFE SOLUTION TO ADDRESS THE CHALLENGES WITH DISPOSABLE RESPIRATORS

While disposable masks serve an important role across many industries and various settings to help keep workers safe, they can also present several challenges, especially when it comes to sustainability. While this has long been the case, the COVID-19 pandemic only accelerated the trend to create more waste. In fact, at the height of the COVID-19 pandemic, the United States generated an entire year's worth of medical waste in only two months.¹

CHALLENGES WITH USING DISPOSABLE RESPIRATORS



An estimated **1.07 billion** maximum number of disposable face masks were **thrown away per week** in the U.S. at the height of the COVID-19 pandemic.²



The **average shelf life** for disposable N95 respirators is **3-5 years**.⁴



The CDC recommends **reusing one N95** a maximum number of **5 times**.³



There is a **23.3% loss of speech intelligibility** while wearing disposable face masks in noisy environments.⁵

WE KNOW WHAT'S AT STAKE.



THE MSA ADVANTAGE® 900 HALF-MASK RESPIRATOR CAN HELP

The Advantage 900 Half-Mask Respirator is an effective solution that provides healthcare professionals and other essential workers with secure respiratory protection. With the elimination of the exhalation valve and addition of the speaking diaphragm, it allows for clearer communication between the wearer and others and is suitable for use when sterile environments are needed.



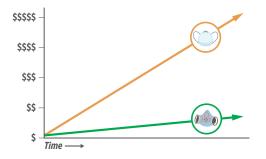
SUSTAINABLE

Designed to be repeatedly cleaned, disinfected, and placed back into service, helping to eliminate unnecessary waste.



EXTENDED STORAGE LIFE

Respirators can be stored indefinitely for stockpile purposes. Respirator filters have proven storage time of 10 years.



COST-EFFECTIVE

A comparative cost analysis found reusable elastomeric respirators to be less costly to stockpile than disposable masks.⁶





CLEAR COMMUNICATION

Mechanical speaking diaphragm helps to improve communication among patient and providers. On average, speaking diaphragm provides a 15% increase in speech transmission index (STI) performance compared to other respirators.



THE MSA ADVANTAGE® 900 HALF-MASK RESPIRATOR

COMFORT Available in 3 sizes with straps **P100 LEVEL PROTECTION** and head cradle that can be Provides more efficient filtration adjusted to individuals for compared to N95 respirators. a comfortable fit throughout the day. The AnthroCurve[™] face seal helps to provide a pressurefree fit, and rear clasp and dropdown head harness keeps straps away from the user's face. SOURCE CONTROL The elimination of an exhalation valve achieves source control speaking diaphragm helps by filtering exhaled breath

CLEAR COMMUNICATION

The addition of the mechanical to clarify and amplify speech.

Sources:

- 1 https://www.reuters.com/investigates/special-report/health-coronavirus-plastic-recycling/
- 2 Kajanan Selvaranjan, Satheeskumar Navaratnam, Pathmanathan Rajeev, Nishanthan Ravintherakumaran. "Environmental challenges induced by extensive use of face masks during COVID-19: A review and potential solutions." Environmental Challenges. April 2021.
- 3 https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html#:-:text=CDC%20recommends%20limiting%20the%20number,manager%20or%20 appropriate%20safety%20personnel
- 4 https://multimedia.3m.com/mws/media/14303830/3m-filtering-facepiece-shelf-life-letter.pdf
- 5 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7778571/
- 6 Baracco, G., Eisert, S., Eagan, A., & Radonovich, L. 2015. Comparative Cost of Stockpiling Various Types of Respiratory Protective Devices to Protect the Health Care Workforce During an Influenza Pandemic. Disaster Medicine and Public Health Preparedness, 9(3), 313-318. doi:10.1017/dmp.2015.12

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit https://us.msasafety.com/Trademarks.

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to help reduce the likelihood of contaminating the surrounding area.

