

Safe Preservation of Personal Protective Equipment by EMS

Product (EMS#41) Purpose

This document shares relevant guidance, best practices and resources to assist Emergency Medical Services (EMS) agencies to safely preserve Personal Protective Equipment (PPE) particularly respirators.

Developed By

The Federal Healthcare Resilience Task Force (HRTF) is leading the development of a comprehensive strategy for the U.S. healthcare system to facilitate resiliency and responsiveness to the threats posed by COVID-19. The Task Force's EMS/Pre-Hospital Team is comprised of public and private-sector EMS and 911 experts from a wide variety of agencies and focuses on responding to the needs of the pre-hospital community. This Team is composed of subject matter experts from the National Highway Traffic Safety Administration (NHTSA) Office of Emergency Medical Services (OEMS), National 911 Program, Center for Disease Control (CDC), Federal Emergency Management Agency (FEMA), U.S. Fire Administration (USFA), U.S. Army, U.S. Coast Guard (USCG), Department of Homeland Security (DHS) Cybersecurity and Infrastructure Security Agency (CISA) and non-federal partners representing stakeholder groups. Through collaboration with experts in related fields, the team develops practical resources for field providers, supervisors, administrators, medical directors and associations to better respond to the COVID-19 pandemic.

Intended Audience

State, Local, Tribal, and Territorial (SLTT) government and private EMS agencies.

Expected Distribution Mechanism

EMS.gov, Stakeholder Calls, EMS stakeholder organization's membership distribution Email mechanisms, usfa.fema.gov, Social Media posts

Primary Point of Contact

NHTSA Office of EMS, nhtsa.ems@dot.gov, 202-366-5440

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This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Safe Preservation of Personal Protective Equipment by Emergency Medical Services (EMS)

Due to the COVID-19 pandemic response and associated personal protective equipment (PPE) shortages, it may be necessary for Emergency Medical Service (EMS) agencies (including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers) to adopt strategies for the preservation of PPE in order to ensure the continued availability of protective gear for EMS providers. This document shares relevant guidance, best practices, and resources to assist EMS agencies to preserve PPE.

How to Optimize PPE Supplies

- FEMA has released a [Fact Sheet on PPE Preservation Best Practices](#), which summarizes best practices to sustain PPE supplies while also ensuring the protection of workers during the COVID 19 pandemic response, by implementing three strategies:
 - *Reducing* the usage rate of PPE
 - *Reusing* PPE through decontamination
 - *Repurposing* alternate types and sources of PPE
- The FEMA fact sheet is based on the Centers for Disease Control and Prevention (CDC) [Strategies to Optimize the Supply of PPE and Equipment](#) and explains how EMS agencies can preserve PPE.
 - The CDC has specific guidance on [Strategies for Optimizing the Supply of N95 Respirators](#), which offers a series of strategies or options to optimize supplies of disposable N95 filtering facepiece respirators when there is limited supply.

How to Safely Extend the Use of N95 Respirators

Respirators Beyond Their Shelf-Life

- The Food and Drug Administration (FDA) has authorized the [emergency use of NIOSH-approved N95 respirators that have passed their recommended shelf-life](#), are undamaged, and have been stored under certain conditions.
- The CDC provides information on precautionary measures to be taken prior to using respirators beyond their shelf-life, available at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/release-stockpiled-N95.html>.

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Extended Use and Limited Reuse

- The National Institute for Occupational Safety and Health (NIOSH) within the CDC has published [Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings](#).

Decontamination and Reuse

- The CDC has published guidance on the [Decontamination and Reuse of Filtering Facepiece Respirators](#) during periods of shortage.
- FEMA has published a [Fact Sheet on Using the Critical Care Decontamination System](#), which is a federally-funded solution for the decontamination and reuse of N95 respirators.

How to Safely Leverage Alternative Types and Sources of N95 Respirators

National Institute for Occupational Safety and Health (NIOSH)-Approved Respirators

- The FDA has authorized the [emergency use of all N95 respirators approved by NIOSH](#), including NIOSH-approved N95 respirators that are not approved by the FDA for medical use (e.g., those intended for industrial use).
- A list of N95 respirators approved by NIOSH is available at https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/N95list1.html.

Non-NIOSH-Approved International Respirators

- The FDA has authorized the [emergency use of certain imported, non-NIOSH-approved respirators](#) that have met similar standards in other countries. See the FDA Non-NIOSH approved respirator EUA FAQ page [here](#).
- A list of foreign standards that are similar to NIOSH standards is available at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html>.
- A list of authorized imported, non-NIOSH-approved respirators manufactured in China is available at <https://www.fda.gov/media/136663/download>.
- Imported, non-NIOSH-approved respirators that meet similar standards in other countries can be submitted for a limited NIOSH assessment at <https://www.cdc.gov/niosh/npptl/respirators/testing/NonNIOSH.html>.
- The CDC has published [Factors to Consider When Planning to Purchase Respirators from Another Country](#), including KN95 respirators from China.

Alternatives to non-Healthcare N95 Respirators

- The FDA has authorized the [emergency use of the following alternatives to N95 respirators](#):

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- Other classes of non-powered filtering facepiece respirators (FFRs) approved by NIOSH (e.g., R95, P95)
- Elastomeric half and full facepiece respirators approved by NIOSH
- Powered air-purifying respirators (PAPRs) approved by NIOSH
- Lists of NIOSH-approved FFRs, elastomeric respirators, and PAPRs are available at https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/respsource1quest3.html.
- If PPE supplies are limited, the CDC's [guidance on COVID-19 for firefighters and EMS providers](#) states that EMS agencies may employ reusable respirators, including self-contained breathing apparatus (SCBA) facepieces, that offer an equivalent or higher level of protection as N95 respirators.
- Information on the disinfection of structural firefighting PPE, including SCBA facepieces, is available on the U.S. Fire Administration website at https://www.usfa.fema.gov/downloads/pdf/covid19/covid19_ppe_disinfection_handout.pdf.

How to Identify Counterfeit N95 Respirators

- NIOSH maintains a website to alert users to counterfeit respirators or those misrepresenting NIOSH approval on the market. It is available at <https://www.cdc.gov/niosh/npptl/usernotices/counterfeitResp.html>.

How to Request Additional PPE Supplies

- EMS agencies should continue to order PPE supplies through their regular distribution channels. Due to shortages, orders may be delayed or unfilled.
- If PPE supply needs cannot be met using regular distribution channels, EMS agencies may request PPE supplies through their local emergency management structure. Requests for PPE that cannot be fulfilled locally will be transmitted to state level emergency management and submitted through the FEMA regional office for fulfillment if state resources cannot fulfill the request.
- FEMA is coordinating a national approach to the allocation of limited PPE resources. The strategy to allocate medical supplies and equipment is based on COVID-19 disease activity and its effects, as well as the need to facilitate distribution of limited supplies to areas where resources are needed most urgently.

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