Overview of the COVID-19 Healthcare Resilience Working Group (HRWG) and Surge Roadmap Resource
HRWG Organizational Structure

Command Team

Healthcare Delivery Teams
- Pre-Hospital
- Hospital
- Ambulatory
- Long-term Care

Tiger Teams
- Rural Surge Readiness
- Dialysis / ESRD

Coordination with HHS and supporting Agencies
to ensure optimal USG COVID-19 response structure through:

Functional Teams
- Data & Analytics
- External Engagement

Support Teams
- Workforce & Behavioral Health
- Telemedicine
- Supply Preservation

FDA, CMS, IHS, HRSA, SAMHSA, ASPR, CDC, DOT, SCAG, FEMA
Healthcare Resilience Working Group Prehospital/EMS Team Accomplishments

March 20: The Prehospital/EMS team was stood up at FEMA HQ as part of the Healthcare Resilience Task Force (HRTF) organized as an interagency effort between FEMA and HHS. In time, the HRTF transitioned to the Healthcare Resilience Working Group (HRWG). The Prehospital/EMS team has worked tirelessly for EMS within the evolving response structure.

### Goals for Prehospital/EMS Line of Effort

- Ensure the resilience of the Emergency Medical Services (EMS) response capabilities throughout the United States.
  - Promote safety of the EMS workforce, to include physical and behavioral health, as well as keeping their families safe at home.
  - Support planning for alternative workforce strategies.
- Facilitate improved interface among 911, EMS, public health, health care systems, and emergency management from the local to the national level.
  - Identifying and filling any training or guidance gaps related to emerging issues like Crisis Standards of Care and innovative protocol adoption.
- Provide optimal patient care, given the current resources available.
  - Maintaining awareness within logistics to provide necessary resources (workforce, supplies, training and education, reimbursement) to all EMS agencies.

### Prehospital/EMS Accomplishments

- Engaging 911 community to implement screening and modified dispatch.
- Working collaboratively within the response as well as with stakeholders to address PPE issues.
- Engaging repeatedly with CMS to address reimbursement, ET3 model implementation, and improved communication.
- Collaborating with CDC to improve EMS related guidance documents and address vaccine issues.
- Generated multiple internal documents to advocate for and educate about EMS within the response.
- Published 32 cleared documents.
- Hosted multiple webinars for EMS on a variety of topics to include mental health and crisis standards of care.
- Updated the COVID-19 pages of ems.gov and 911.gov.
- Held 8-12 hours per week of stakeholder calls (now holding an average 6 hours of stakeholder calls per week).
- Maintained ongoing two-way communication with EMS and 911 stakeholders.
- Briefed FEMA RAs and planning a briefing of the HHS RECS.
- Maintained the team to be ready to respond to the needs of the community.

Recruited 27 EMS SMEs with more than 450 years of EMS/911 experience, of which 25 remain engaged with the team even post deployment.
Surge Roadmap: Overview

- The Federal Healthcare Resilience Working Group (HRWG) created *Strategies for Managing a Surge in COVID-19 Cases*, also referred to as the Surge Roadmap, to provide guidance to the state, tribal, local, and territorial (STLT) jurisdictions on how to enhance their healthcare capabilities in response to a surge in COVID-19 cases.

- The Surge Road Map concisely consolidates multiple resources related to:
  - Healthcare Workforce Staffing
  - PPE Preservation Implementation
  - Establishing a Medical Operations Coordination Cell (MOCC) and Alternate Care Site (ACS)

Step 1. Enhance healthcare workforce to manage a surge in healthcare provider demand and preserve personal protective equipment (PPE).

Step 2. Consider setting up the Medical Operations Coordination Cell (MOCC) at regional and state levels to ensure load-balancing across healthcare facilities when healthcare demand exceeds the surge capacity (e.g., consider monitoring daily inpatient ICU bed availability and defining ‘triggers’ and thresholds).

Step 3. Consider establishing an Alternate Care Site (ACS), which may help alleviate health system stress caused by COVID-19 patient surge events.

• Health care entities in rural areas face significant and unique challenges related to COVID-19.

• The Rural Healthcare Surge Readiness Web Portal provides a collection of essential resources, tools, and trainings to prepare for and respond to surge events in rural settings.
  • Searchable by health care sector (pre-hospital, hospital, ambulatory, and long-term care) and role (executive, manager, provider).
  • Also organized by topic area (e.g., behavioral health, telehealth, regulatory and policy, workforce).
  • https://www.ruralhealthinfo.org/healthcare-surge-readiness

• Podcast: Rural Health Resources Roundup: Rural Hospital Resources - collaboration with the HRSA Office of Regional Operations.
As healthcare systems experience significant patient surge resulting in near or exceeded maximum capacities in staffed beds, worker shortages also occur due to illness, fatigue, and/or other factors.
Healthcare Workforce Staffing

Step 1: Actions and Resources for HCFs and EMS Agencies

- HCFs experiencing staffing shortages in the face of increasing patient surges have implemented contingency and crisis capacity strategies to mitigate staffing shortages
  - Strategies to Mitigate Healthcare Personnel Staffing Shortages
- HCFs used mitigation guidance for HCW absenteeism due to HCW psychological health and well-being issues
  - Mitigate Absenteeism by Protecting Healthcare Workers’ Psychological Health and Well-being during the COVID-19 Pandemic
- HCFs have quantified future HCW needs
  1. COVID-19 Health Workforce Surge Planning
  2. VA Federal Staff Demand Calculator for COVID-19 Surge Planning
  3. COVID Staffing Project COVID-19 Staffing Needs Calculator
- HCFs began supplementing HCW staffing through:
  - Local hiring
  - Health Care Coalition (HCC) staff sharing plans
  - Hiring furloughed or underutilized staff from other local providers


Note: This document contains references and web links to non-federal resources and materials. Such references are for educational purposes only and do not constitute an endorsement by the U.S. government or any of its employees.

Step 2: Actions and Resources for STLT Jurisdictions

- STLT has received HCFs' formal requests for assistance to address staffing shortages
- See State Resources
- STLT has considered and reassigned staff under Section 319 of the Public Health Service Act allowing Governor, Tribal Leader or Designee to request temporary assignment of State and Local public health personnel to address public health emergency
- Guidance for Temporary Reassignment of State and Local Personnel during a Public Health Emergency
- STLT considered and leveraged National Guard to fill non-clinical positions at HCFs to assist in staffing shortages
- STLT has utilized Emergency Management Assistance Compact (EMAC) for other States to assist with staffing shortages
- EMAC Website
- STLT has leveraged state-registered healthcare provider volunteers to fill staff shortages
  - The Emergency System for Advance Registration of Volunteer Health Professionals
- STLT has leveraged Medical Reserve Corps (MRC)
  - MRC Website
- STLT has leveraged use of National Voluntary Organizations Active in Disaster (NVOAD) and other volunteer resources
  - NVOAD Website

Step 3: Request for Federal Resources

Jurisdictions prepared to submit a medical staffing request through assigned FEMA/NHS regional leadership by first addressing the following:
- Decompressing hospitals;
- Cross-leveling and augmenting staff;
- Recalling retirees and activating MRC;
- Extending DOL Support via state workforce agency coordination;
- Expanding delivery of care;
- Eliciting support from National Governors Association + Volunteers;
- Utilizing EMAC;
- Executing Contracts;
- Employing National Guard;
- Requesting Support from VA;
- Extending Support from HHS

FEMA Advisory – Coronavirus Pandemic Response: Medical Staffing Requests

States that have utilized HCF contractors to address staffing shortages have considered, submitted Federal reimbursement of medical costs eligible for FEMA public assistance

Coronavirus (COVID-19) Pandemic: Medical Care Costs Eligible for Public Assistance (FEMA Policy FP-10-010-04)

Always implement conventional strategies prior to contingency or crisis strategies!

- Conventional capacity measures should be implemented as standard practice
- Contingency capacity practices are used temporarily during periods of expected PPE shortages
- Crisis capacity practices are considered during periods of known PPE shortages

Resources available:

Personal Protective Equipment (PPE) Preservation Strategies and Resource Request Process Guide
Action Plan for Current or Anticipated COVID-19 PPE Shortages

For healthcare facilities (HCFs) and first-responder organizations (FROs), PPE is critical to prevent COVID-19 spread while providers perform life-saving activities. This is a concise guide for organizations to plan and to implement PPE preservation strategies, including information on ways to obtain new PPE supplies, either from commercial vendors or through state, local, tribal, and territorial (SLTT) jurisdictions or through federal channels. Facilities should work through each step until a step leads to a resolution.

Step 1: Determine and Preserve Current Supply
- Determine PPE requirements.
  - CDC PPE Burn Rate Calculator
  - EMS PPE Supply Estimator
  - Healthcare Resilience Working Group (HRWG) PPE Preservation Planning Toolkit
- Receive PPE supplies from commercial vendors as scheduled, when commercial vendors are not reporting any current or anticipated delays.
- Plan for potential PPE shortages, with awareness of:
  - Contingency Capacity Strategies, and with implementation of PPE-preserving Conventional Capacity Strategies.
  - CDC Strategies for Optimizing Supply of PPE during Shortages (refer to conventional and contingency capacity strategies)
  - COVID-19: PPE Preservation Best Practices
  - HRWG PPE Preservation Planning Toolkit
  - Elasticomeric Half-Mask Respirators and Powered Air-Purifying Respirators
  - Authorized Use and Avoiding Fraudulent Products

Step 2a: Implement Contingency Capacity Strategies
- Implement contingency strategies when PPE shortages are expected while a greater than three-day supply is on-hand and PPE delivery delays are anticipated. HRWG Contingency and Crisis Strategies to Alleviate PPE Shortages
- Get Us PPE*

Step 2b: Request Additional Supplies from External Organizations
- When experiencing PPE critical shortages:
  - actively get new commercial suppliers;
  - seek donations from volunteer organizations or from the community;
  - solicit help externally from surrounding communities;
  - implement mutual aid agreements with surrounding HCFs and FROs.

Step 3: Request Additional Supplies from SLTT Health Departments and Emergency Management Agencies
- Submit resource requests at the local health department and local emergency management agency.
- if local jurisdiction cannot fill PPE requirement, submit resource requests to state, tribal, or territorial health department.

Step 4: State, Local, Tribal, or Territorial Resource Requests to Federal Government
- FEMA Regional Office in coordination with HHS/ASPR Regional Office reviews the SLTT Resource Request to clarify the requirement and to approve the request.
- FEMA, in coordination with HHS, processes Approved Resource Requests.
- FEMA/ HHS delivers PPE to SLTT jurisdictions for delivery to HCFs or FROs in need.

Step 5: Implement Crisis Capacity Strategies (only after completing Steps 1-4)
- Implement crisis strategies when PPE shortages become critical (3 days or less supply on-hand) and PPE delivery delays are anticipated.
  - CDC Strategies for Optimizing Supply of PPE during Shortages (refer to crisis capacity strategies)
  - HRWG Contingency and Crisis Strategies to Alleviate PPE Shortages
  - FDA EUA Devices for N95 Decon & Reuse

*This document may contain content and web links to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

# Plan and Implement PPE Preservation: Prioritization of Respirators and Facemasks by Activity Type

<table>
<thead>
<tr>
<th>Respirators for Medical Use</th>
<th>Considerations for use by healthcare providers for COVID-19 patient care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use for aerosol generating procedures</td>
<td>Use for care for patients with suspected or confirmed SARS-CoV-2 infection</td>
</tr>
<tr>
<td><strong>Surgical N95 Respirator</strong></td>
<td>Acceptable¹</td>
</tr>
<tr>
<td><strong>N95 Filtering Facepiece Respirator</strong> (Non-surgical N95)</td>
<td>Preferred</td>
</tr>
<tr>
<td><strong>N95 Filtering Facepiece Respirator</strong> (Industrial non-medical N95)</td>
<td>Acceptable</td>
</tr>
<tr>
<td><strong>Elastomeric Half-mask respirators equipped with filters and PAPRs</strong></td>
<td>Acceptable</td>
</tr>
<tr>
<td><strong>KN95 Respirators and other international</strong></td>
<td><em>Evaluated by NIOSH listed on the FDA EUA²</em></td>
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</tr>
<tr>
<td><strong>Surgical Mask</strong></td>
<td>Not to be used even in crisis</td>
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</tbody>
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**Footnotes:**

1. Surgical N95s should be reserved for surgical settings.
2. [FDA International Umbrella EUA](http://example.com)
3. Refer to NIOSH’s [PPE-CASE-P2020-0113-508](http://example.com) for detailed listing of KN95 models

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**CDC/NIOSH Respirator Infographic**

<table>
<thead>
<tr>
<th>Training and Approval</th>
<th>FDA Respirator Approval</th>
<th>FDA International Umbrella EUA</th>
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</thead>
<tbody>
<tr>
<td>Testing and Approval</td>
<td>Evaluated, tested, and approved for the listed respirator in the EUA.</td>
<td>Evaluated, tested, and approved for the listed respirator in the EUA.</td>
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**Intended Use and Preparation**

- Respirators are intended for use only when respirators are worn as directed, as per the instructions on the product label, and in accordance with the manufacturer’s recommendations. 
- Respirators should be used only by individuals who are trained and competent to use respirators, and who have read and understood the instructions for use.

**Face Seal Fit**

- N95 Respirators: N95 Respirators are designed to fit snugly to the face, with no gaps between the respirator and the skin. 
- Surgical Masks: Surgical Masks are designed to fit loosely around the nose and mouth, and are not designed to fit tightly to the face.

**Fit Testing Requirement**

- N95 Respirators: N95 Respirators require fit testing to ensure a proper seal against the face. 
- Surgical Masks: Surgical Masks do not require fit testing.

**PAPR Design**

- N95 Respirators: N95 Respirators are designed to be used with Powered Air-Purifying Respirators (PAPRs) to provide additional respiratory protection. 
- Surgical Masks: Surgical Masks are not designed to be used with PAPRs.

**PPE-CASE-P2020-0113-508**

- Refer to NIOSH’s [PPE-CASE-P2020-0113-508](http://example.com) for detailed listing of KN95 models
Supporting Health Systems: Medical Operations Coordination Cells and Alternate Care Sites

- **MOCC → Systems**
  - Enables patient load balancing and situational awareness

- **ACS → Space**
  - Provides additional local capacity
  - Flexible, scalable implementation

[Diagram showing MOCC coordinating with ACS and hospitals of varying stress levels]

Supporting Health Systems: Medical Operations
Coordination Cells and Alternate Care Sites

MOCC/ACS Resource Package
• Quick reference guide to MOCC/ACS resources developed by the federal government and practical examples of establishment and operations, including toolkits:
  • MOCC toolkit first edition
  • ACS toolkit fourth edition (new guidance under development for ACS establishment as an outpatient infusion center)
• Includes critical considerations from state, local, tribal, and territorial partners and subject matter experts to address potential capacity and capability gaps
• Available at: https://files.asprtracie.hhs.gov/documents/alternative-care-site-resource-package.pdf

ACS Discussion Guide (in development)
• Intended to help to inform and reassure patients, facilitate communication, and optimize ACS utilization
Hospitals are responding to the current COVID-19 patient surge by implementing mitigation measures. However, shortages in specific resources (e.g. ICU beds) are expected.

As a result, hospitals and healthcare providers should actively plan for and support the provision of healthcare under Crisis Standards of Care (CSC).

- CSC is defined by the National Academy of Medicine as a substantial change in usual healthcare operations and the level of care that it is possible to deliver, due to pervasive or catastrophic events.

An external CSC working group led by the Association of American Medical Colleges, Johns Hopkins University, and the National Academies of Sciences, Engineering, and Medicine has been established to catalyze and inform CSC implementation.
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<tr>
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<td>PPE Supply Calculator</td>
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Questions?

Please **share** this resource within your organization and professional networks

**Contact** the Healthcare Resilience Working Group at: [COVID-Healthcare-RFI@hhs.gov](mailto:COVID-Healthcare-RFI@hhs.gov)

*Thank You!*