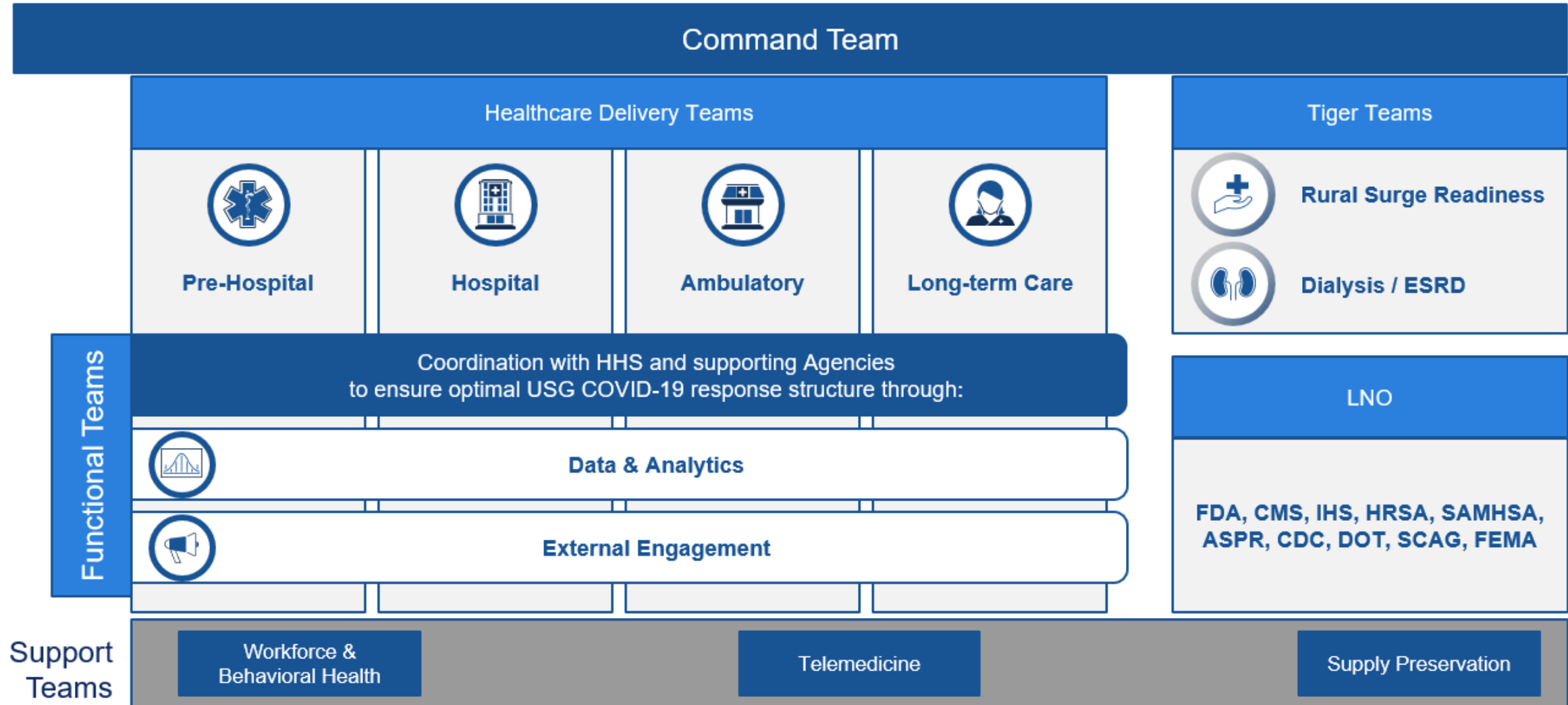


# Overview of the COVID-19 Healthcare Resilience Working Group (HRWG) and Surge Roadmap Resource



# HRWG Organizational Structure



# 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.

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

## 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](https://www.ems.gov) and [911.gov](https://www.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.

# 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)
- Hosted on ASPR TRACIE: <https://files.asprtracie.hhs.gov/documents/strategies-for-managing-surge-roadmap-final.pdf>

# Surge Roadmap: Overview



**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.

# Rural Healthcare Surge Readiness



- 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.

**Rural Healthcare Surge Readiness**

Access critical healthcare resources to prepare for and respond to COVID-19

A circular icon divided into four quadrants. Top-left: ambulance with a cross. Top-right: hospital building. Bottom-left: two people sitting at a table. Bottom-right: three people standing together.

Utilization: >23,800 web portal visits including every state in the U.S.

<https://www.ruralhealthinfo.org/healthcare-surge-readiness>

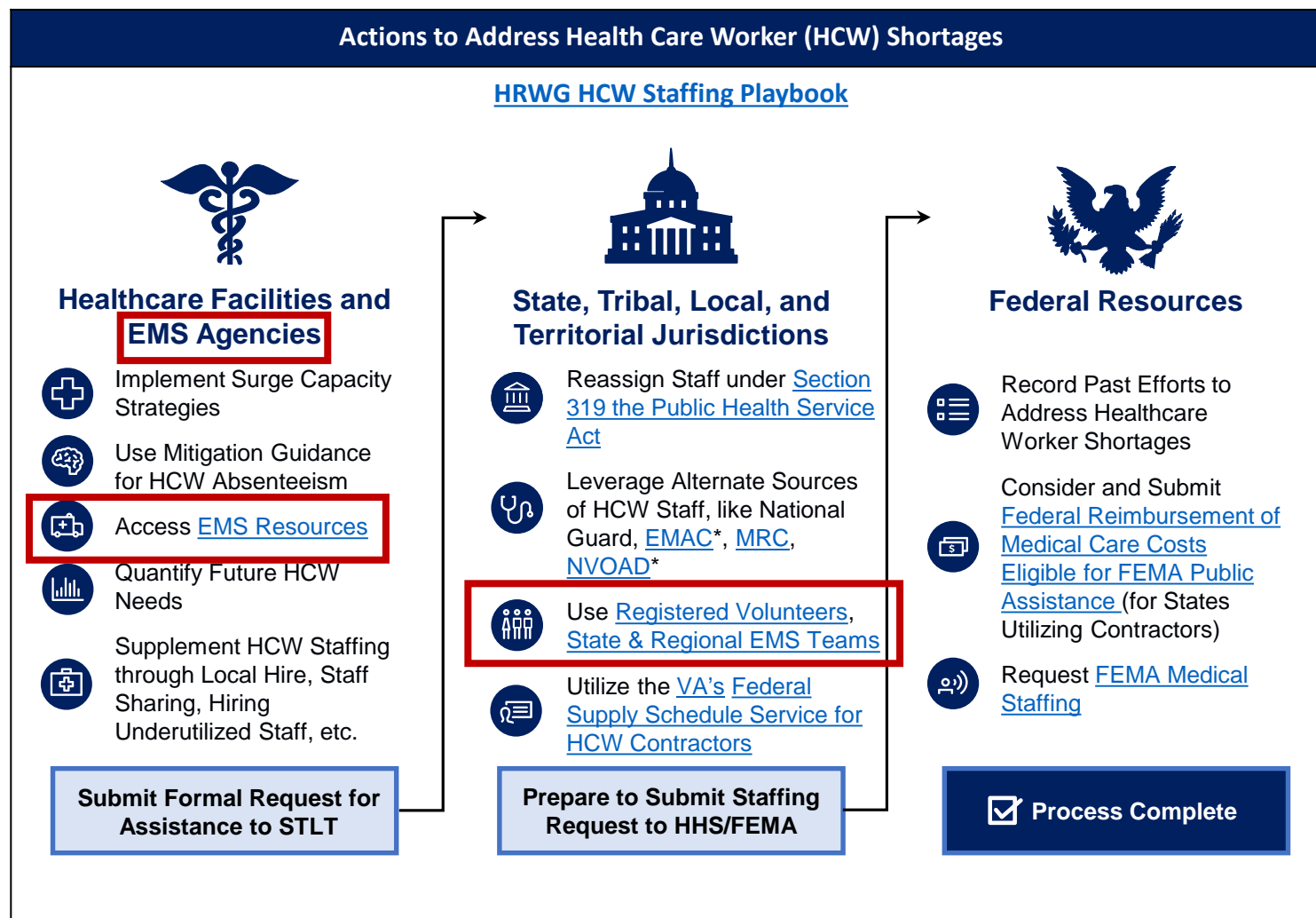
*Developed by the Rural Surge Readiness Team, COVID-19 Healthcare Resilience Working Group*

A smaller version of the Department of Health & Human Services USA logo, featuring the eagle and text.

# Healthcare Workforce Staffing



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	Step 2: Actions and Resources For STL Jurisdictions	
<p>❑ HCFs experiencing staffing shortages in the face of increasing patient surges have implemented contingency and crisis capacity strategies to mitigate staffing shortages</p> <p><a href="#">Strategies to Mitigate Healthcare Personnel Staffing Shortages</a></p>	<p>❑ STL has received HCFs' formal requests for assistance to address staffing shortages</p> <p>See State Resources</p>	<p>❑ STL has reviewed and utilized the Veterans Administrations (VA) Federal Supply Schedule Service (FSS) for seeking HCW contractors to fill staffing shortages under COVID-19 National Emergency Declaration</p>
<p>❑ HCFs used mitigation guidance for HCW absenteeism due to HCW psychological health and well-being issues</p> <p><a href="#">Mitigate Absenteeism by Protecting Healthcare Workers' Psychological Health and Well-being during the COVID-19 Pandemic</a></p>	<p>❑ STL 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</p> <p><a href="#">Guidance for Temporary Reassignment of State and Local Personnel during a Public Health Emergency</a></p>	<p>1. <a href="#">VA Federal Supply Schedule Service</a>                  2. <a href="#">VA National Acquisition Center (NAC) Contract Catalog Search Tool (CCST)</a>                  3. <a href="#">GSA Federal Acquisition Service eLibrary</a></p>
<p>❑ HCFs have quantified future HCW needs</p> <p>1. <a href="#">COVID-19 Health Workforce Surge Planning</a>                  2. <a href="#">Visier® Staff Demand Calculator for COVID-19 Surge Planning</a>                  3. <a href="#">COVID Staffing Project: COVID-19 Staffing Needs Calculator</a></p>	<p>❑ STL considered and leveraged National Guard to fill non-clinical positions at HCFs to assist in staffing shortfalls</p> <p>❑ STL has utilized Emergency Management Assistance Compact (EMAC®) for other States to assist with staffing shortages</p> <p><a href="#">EMAC® Website</a></p>	<p><b>Step 3: Request for Federal Resources</b></p>
<p>❑ HCFs began supplementing HCW staffing through</p> <ul style="list-style-type: none"> <li>• Local hiring;</li> <li>• Health Care Coalition (HCC) staff sharing plans;</li> <li>• Hiring furloughed or underutilized staff from other local providers</li> </ul> <p><a href="#">Healthcare Resilience Working Group (HRWG) Strategies for Managing a Surge in Healthcare Provider Demand</a></p>	<p>❑ STL has leveraged state-registered healthcare provider volunteers to fill staff shortages</p> <p><a href="#">The Emergency System for Advance Registration of Volunteer Health Professionals</a></p>	<p>❑ Jurisdictions prepared to submit a medical staffing request through assigned FEMA/HHS regional leadership by first addressing the following:</p> <ul style="list-style-type: none"> <li>• Decompressing hospitals;</li> <li>• Cross leveling and augmenting staff;</li> <li>• Recalling retirees and activating MRC;</li> <li>• Extending DOL Support via state workforce agency coordination;</li> <li>• Expanding delivery of care;</li> <li>• Eliciting support from National Governors Association + Volunteers;</li> <li>• Utilizing EMAC;</li> <li>• Executing Contracts;</li> <li>• Employing National Guard;</li> <li>• Requesting Support from VA;</li> <li>• Extending Support from HHS</li> </ul>
<p><b>NOTE:</b> This document contains references and web links to non-federal resources and materials. Such references are for factual purposes only and do not constitute an endorsement by the U.S. government or any of its employees.</p>	<p>❑ STL has leveraged Medical Reserve Corps (MRC)</p> <p><a href="#">MRC Website</a></p>	<p><a href="#">FEMA Advisory – Coronavirus Pandemic Response: Medical Staffing Requests</a></p>
	<p>❑ STL has leveraged use of National Voluntary Organizations Active in Disaster (NVOAD) and other volunteer resources</p> <p><a href="#">NVOAD Website</a></p>	<p>❑ States that have utilized HCW contractors to address staffing shortages have considered, submitted Federal reimbursement of medical costs eligible for FEMA public assistance</p> <p><a href="#">Coronavirus (COVID-19) Pandemic: Medical Care Costs Eligible for Public Assistance (FEMA Policy FP 104-010-04)</a></p>



# Plan and Implement PPE Preservation



## ***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:

- **PPE Preservation Best Practices Fact Sheet:**

<https://files.asprtracie.hhs.gov/documents/fema-fact-sheet-ppe-preservation-best-practices-update---14-july-2020.pdf>

- **PPE Preservation Planning Toolkit:** Dynamic tool to estimate PPE supply duration with preservation strategies

<https://files.asprtracie.hhs.gov/documents/ppepp-toolkit-fact-sheet-hrwg.pdf>



# 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.




<p><b>Step 1: Determine and Preserve Current Supply</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Determine PPE requirements.             <ul style="list-style-type: none"> <li>• <a href="#">CDC PPE Burn Rate Calculator</a></li> <li>• <a href="#">EMS PPE Supply Estimator</a></li> <li>• <a href="#">Healthcare Resilience Working Group (HRWG) PPE Preservation Planning Toolkit</a></li> </ul> </li> <li><input type="checkbox"/> Receive PPE supplies from commercial vendors as scheduled, when commercial vendors are not reporting any current or anticipated delays.</li> <li><input type="checkbox"/> Plan for potential PPE shortages, with awareness of             <ul style="list-style-type: none"> <li>• national/regional-level delays;</li> <li>• <i>Contingency Capacity Strategies</i>;</li> <li>and with implementation of PPE- preserving <i>Conventional Capacity Strategies</i>.</li> </ul> </li> <li>• <a href="#">CDC Strategies for Optimizing Supply of PPE during Shortages</a> (refer to conventional and contingency capacity strategies)</li> <li>• <a href="#">COVID-19: PPE Preservation Best Practices</a></li> <li>• <a href="#">HRWG PPE Preservation Planning Toolkit</a></li> <li>• <a href="#">Elastomeric Half-Mask Respirators and Powered Air-Purifying Respirators</a></li> <li>• <a href="#">Authorized Use and Avoiding Fraudulent Products</a></li> </ul>	<p><b>Step 2a: Implement Contingency Capacity Strategies</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Implement contingency strategies when PPE shortages are expected while a <b>greater than three-day supply is on-hand</b> and <b>PPE delivery delays are anticipated</b>. <a href="#">HRWG Contingency and Crisis Strategies to Alleviate PPE Shortages</a></li> </ul> <p><b>Step 2b: Request Additional Supplies from External Organizations</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> When experiencing PPE critical shortages,             <ul style="list-style-type: none"> <li>• actively get new commercial suppliers;</li> <li>• seek donations from volunteer organizations or from the community;</li> <li>• solicit help externally from surrounding communities;</li> <li>• implement mutual aid agreements with surrounding HCFs and FROs.</li> </ul> </li> <li>• <a href="#">Get Us PPE*</a></li> </ul>	<p><b>Step 4: State, Local, Tribal, or Territorial Resource Requests to Federal Government</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> FEMA Regional Office in coordination with HHS/ASPR Regional Office reviews the SLTT Resource Request to clarify the requirement and to approve the request.</li> <li><input type="checkbox"/> FEMA, in coordination with HHS, processes Approved Resource Requests.</li> <li><input type="checkbox"/> FEMA/ HHS delivers PPE to SLTT jurisdictions for delivery to HCFs or FROs in need.</li> </ul> <p><b>Step 5: Implement Crisis Capacity Strategies (only after completing Steps 1- 4)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Implement crisis strategies when PPE shortages become critical (3 days or less supply on-hand) and PPE delivery delays are anticipated.             <ul style="list-style-type: none"> <li>• <a href="#">CDC Strategies for Optimizing Supply of PPE during Shortages</a> (refer to crisis capacity strategies)</li> <li>• <a href="#">HRWG Contingency and Crisis Strategies to Alleviate PPE Shortages</a></li> <li>• <a href="#">FDA EUA Devices for N95 Decon &amp; Reuse</a></li> </ul> </li> </ul>
<p>*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.</p>		

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



Respirators for Medical Use	Considerations for use by healthcare providers for COVID-19 patient care			
	Use for aerosol generating procedures	Use for care for patients with suspected or confirmed SARS-CoV-2 infection	Use for patients infected with multiple infectious diseases	Use for cohorted patients
<b>Surgical N95 Respirator</b>	Acceptable <sup>1</sup>	Acceptable <sup>1</sup>	Acceptable <sup>1</sup>	Acceptable <sup>1</sup>
<b>N95 Filtering Facepiece Respirator (Non-surgical N95)</b>	Preferred	Preferred	Preferred	Preferred
<b>N95 Filtering Facepiece Respirator (Industrial non-medical N95)</b>	Acceptable	Acceptable	Acceptable	Acceptable
<b>Elastomeric Half-mask respirators equipped with filters and PAPRs</b>	Acceptable	Acceptable	Acceptable	Acceptable
<b>KN95 Respirators and other international</b> Evaluated by NIOSH listed on the FDA EUA <sup>2</sup>	Acceptable (crisis capacity ONLY)	Acceptable (crisis capacity ONLY)	Acceptable (crisis capacity ONLY)	Acceptable (crisis capacity ONLY)
<b>KN95 Respirators and other international</b> Removed from FDA EUA <sup>3</sup>	Not to be used even in crisis	Not-acceptable (crisis capacity ONLY, use when no other respirators are available)	Not-acceptable (crisis capacity ONLY, use when no other respirators are available)	Not-acceptable (crisis capacity ONLY, use when no other respirators are available)
<b>Surgical Mask</b>	Not to be used even in crisis	Not-acceptable (crisis capacity ONLY, use when no other respirators are available)	Not-acceptable (crisis capacity ONLY, use when no other respirators are available)	Not-acceptable (crisis capacity ONLY, use when no other respirators are available)

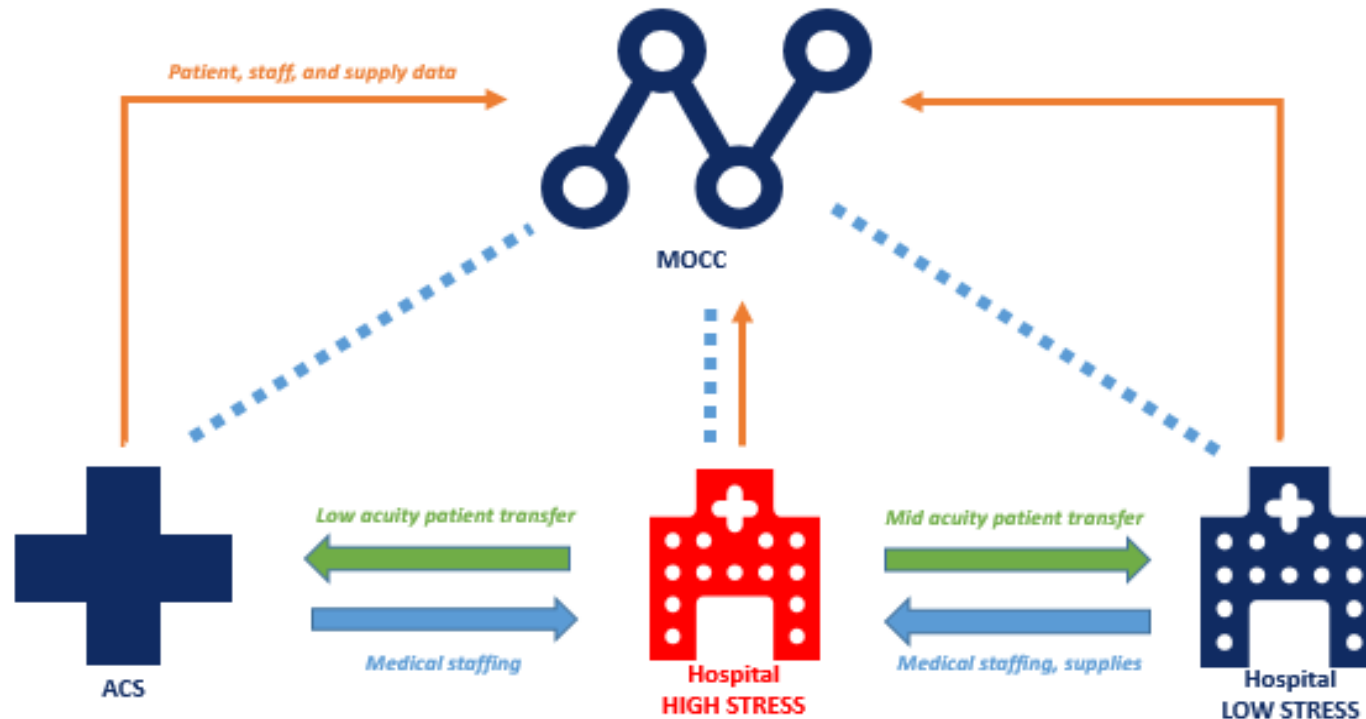
## CDC/NIOSH Respirator Infographic

	 Surgical Mask	 N95 Respirator	 Elastomeric Half Facepiece Respirator
<b>Testing and Approval</b>	Cleared by the U.S. Food and Drug Administration (FDA)	Evaluated, tested, and approved by NIOSH as per the requirements in 42 CFR Part 84 <sup>2</sup>	Evaluated, tested, and approved by NIOSH as per the requirements in 42 CFR Part 84
<b>Intended Use and Purpose</b>	Fluid resistant and provides the wearer protection against large droplets, splashes, or sprays of bodily or other hazardous fluids. Protects the patient from the wearer's respiratory emissions.	Reduces wearer's exposure to particles including small particle aerosols and large droplets (only non-oil aerosols)	Reusable device made of synthetic or rubber material
<b>Face Seal Fit</b>	Loose fitting	Tight fitting	Tight fitting
<b>Fit Testing Requirement</b>	No	Yes	Yes
<b>Designed for Reuse</b>	No	No	Yes
<b>User Seal Check</b>	No	Yes. Required each time the respirator is donned (put on)	Yes. Required each time the respirator is donned (put on)
<b>Filtration</b>	Does NOT provide the wearer with a reliable level of protection from inhaling smaller airborne particles and is not considered respiratory protection	Filters out at least 95% of airborne particles including large and small particles	May be equipped with filters that block 96%, 99%, or 100% of very small particulates. Also may be equipped to protect against vapors/gases.
<b>Leakage</b>	Leakage occurs around the edge of the mask when user inhales.	When properly fitted and donned, minimal leakage occurs around edges of the respirator when user inhales	When properly fitted and donned, minimal leakage occurs around edges of the respirator when user inhales
<b>Use Limitations</b>	Disposable. Discard after each patient encounter.	Ideally should be discarded after each patient encounter and after aerosol-generating procedures. It should also be discarded when it becomes damaged or deformed; no longer forms an effective seal to the face; becomes wet or visibly dirty; breathing becomes difficult; or if it becomes contaminated with blood, respiratory or nasal secretions, or other bodily fluids.	Reusable and must be cleaned/disinfected and stored between each patient interaction

### Footnotes:

1. Surgical N95s should be reserved for surgical settings.
2. [FDA International Umbrella EUA](#)
3. Refer to NIOSH's [PPE-CASE-P2020-0113-508](#) 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



# 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

The image shows a screenshot of a NEJM Catalyst article and a related infographic. The article, titled "Alternative Care Sites for the Covid-19 Pandemic: The Early U.S. and U.K. Experience," is a commentary by Gregg S. Meyer, MD, MSc, Bonnie B. Blanchfield, CPA, ScD, Richard M. J. Bohmer, MB ChB, MPH, James Mountford, MB ChB, MPH & W. Craig Vanderwagen, MD, RADM, USPHS (RET), dated May 22, 2020. The infographic, titled "ALTERNATIVE CARE SITES: THE FEDERAL EXPERIENCE IN NEW YORK CITY," features the TRACIE logo (HEALTHCARE EMERGENCY PREPAREDNESS INFORMATION GATEWAY) and a photograph of healthcare workers in full PPE. Below the photo is a map of New York State with counties highlighted in red and numbered 4, 7, and 8, indicating the locations of shared alternative care sites.

# Crisis Standards of Care



- 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.



# HRWG Resources for EMS Agencies



<b>Mitigate Absenteeism by Protecting 911 Telecommunicators' Psychological Health and Well-being during the COVID-19 Pandemic</b>	<a href="https://www.911.gov/pdf/Strategies_to_Mitigate_Telecommunicator_Absenteeism.pdf">https://www.911.gov/pdf/Strategies_to_Mitigate_Telecommunicator_Absenteeism.pdf</a>
<b>Managing Patient and Family Distress Associated with COVID-19 in the Pre-hospital Care Setting</b>	<a href="https://www.ems.gov/pdf/Managing_Patient_and_Family_Distress_Associated_with_COVID-19.pdf">https://www.ems.gov/pdf/Managing_Patient_and_Family_Distress_Associated_with_COVID-19.pdf</a>
<b>Mitigate Absenteeism by Protecting EMS Clinicians' Psychological Health and Well-being during the COVID-19 Pandemic</b>	<a href="https://www.ems.gov/pdf/Strategy_to_Mitigate_EMS_Workforce_Absenteeism.pdf">https://www.ems.gov/pdf/Strategy_to_Mitigate_EMS_Workforce_Absenteeism.pdf</a>
<b>Burnout, Self-Care &amp; COVID-19 Exposure for First Responders</b>	<a href="https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Personnel_Health_and_Safety/Burnout_Self-Care_COVID-19_Exposure_for_First_Responders.pdf">https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Personnel_Health_and_Safety/Burnout_Self-Care_COVID-19_Exposure_for_First_Responders.pdf</a>
<b>Burnout, Self-Care &amp; COVID-19 Exposure for Families of First Responders</b>	<a href="https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Personnel_Health_and_Safety/Burnout_Self-Care_COVID-19_Exposure_for_Families_of_First_Responders.pdf">https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Personnel_Health_and_Safety/Burnout_Self-Care_COVID-19_Exposure_for_Families_of_First_Responders.pdf</a>
<b>COVID-19 Behavioral Health Resources for First Responders</b>	<a href="https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Personnel_Health_and_Safety/COVID-19_Behavioral_Health_Resources_for_First_Responders.pdf">https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Personnel_Health_and_Safety/COVID-19_Behavioral_Health_Resources_for_First_Responders.pdf</a>
<b>Personal Protective Equipment (PPE) Supply for EMS</b>	<a href="https://www.ems.gov/pdf/Federal_Guidance_and_Resources/PPE_and_Infection_Control/PPE_Supply_for_EMS.pdf">https://www.ems.gov/pdf/Federal_Guidance_and_Resources/PPE_and_Infection_Control/PPE_Supply_for_EMS.pdf</a>
<b>Safe Preservation of PPE by EMS</b>	<a href="https://www.ems.gov/pdf/Federal_Guidance_and_Resources/PPE_and_Infection_Control/Safe_Preservation_of_Personal_Protective_Equipment_by_EMS.pdf">https://www.ems.gov/pdf/Federal_Guidance_and_Resources/PPE_and_Infection_Control/Safe_Preservation_of_Personal_Protective_Equipment_by_EMS.pdf</a>
<b>PPE Supply Calculator</b>	<a href="https://www.ems.gov/files/EMS_PPE_Supply_Estimator.xlsx">https://www.ems.gov/files/EMS_PPE_Supply_Estimator.xlsx</a>
<b>COVID-19 Testing for First Responders</b>	<a href="https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Personnel_Health_and_Safety/COVID-19_Testing_for_First_Responders.pdf">https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Personnel_Health_and_Safety/COVID-19_Testing_for_First_Responders.pdf</a>
<b>Redirecting 911 Calls for Information &amp; Low Acuity Medical Complaints</b>	<a href="https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Operations/Redirecting_911_Calls_for_Info_and_Low_Acuity_Medical_Complaints.pdf">https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Operations/Redirecting_911_Calls_for_Info_and_Low_Acuity_Medical_Complaints.pdf</a>
<b>Considerations for State EMS Offices in Response to COVID-19</b>	<a href="https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Operations/Considerations_for_State_EMS_Offices_in_Response_to_COVID-19.pdf">https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Operations/Considerations_for_State_EMS_Offices_in_Response_to_COVID-19.pdf</a>
<b>COVID-19: Considerations, Strategies, and Resources for EMS Crisis Standards of Care</b>	<a href="https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Crisis_Standards_of_Care/COVID-19_Considerations_for_EMS_Crisis_Standards_of_Care.pdf">https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Crisis_Standards_of_Care/COVID-19_Considerations_for_EMS_Crisis_Standards_of_Care.pdf</a>
<b>EMS and 911 Resource Guide</b>	<a href="https://www.ems.gov/pdf/EMS_and_911_Resource_Guide.pdf">https://www.ems.gov/pdf/EMS_and_911_Resource_Guide.pdf</a>
<b>Rural EMS COVID-19 Preparedness Checklist</b>	<a href="https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Operations/Rural_EMS_COVID-19_Preparedness_Checklist.pdf">https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Operations/Rural_EMS_COVID-19_Preparedness_Checklist.pdf</a>
<b>Heat Related Stress</b>	<a href="https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Personnel_Health_and_Safety/Heat_Related_Stress.pdf">https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Personnel_Health_and_Safety/Heat_Related_Stress.pdf</a>
<b>Prolonged EMS Transfer</b>	<a href="https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Operations/Prolonged_EMS_Transfer.pdf">https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Operations/Prolonged_EMS_Transfer.pdf</a>

<b>Strategies for Managing a Surge in COVID-19 Cases</b> <i>(also referred to as the Surge Roadmap)</i>	<a href="https://files.asprtracie.hhs.gov/documents/strategies-for-managing-surge-roadmap-final.pdf">https://files.asprtracie.hhs.gov/documents/strategies-for-managing-surge-roadmap-final.pdf</a>
<b>Rural Healthcare Surge Readiness Web Portal</b>	<a href="https://www.ruralhealthinfo.org/healthcare-surge-readiness">https://www.ruralhealthinfo.org/healthcare-surge-readiness</a>
<b>Healthcare Workforce (HCW) Staffing Playbook</b>	<a href="https://files.asprtracie.hhs.gov/documents/hcw-staffing-playbook-v9-20201104.pdf">https://files.asprtracie.hhs.gov/documents/hcw-staffing-playbook-v9-20201104.pdf</a>
<b>Strategies for Managing a Surge in Healthcare Provider Demand</b>	<a href="https://files.asprtracie.hhs.gov/documents/healthcare-workforce-strategies-for-managing-a-surge-in-healthcare-provider-demand.pdf">https://files.asprtracie.hhs.gov/documents/healthcare-workforce-strategies-for-managing-a-surge-in-healthcare-provider-demand.pdf</a>
<b>Healthcare Facility Onboarding Checklist</b>	<a href="https://files.asprtracie.hhs.gov/documents/healthcare-facility-onboarding-checklist-fillable-final.pdf">https://files.asprtracie.hhs.gov/documents/healthcare-facility-onboarding-checklist-fillable-final.pdf</a>
<b>COVID-19 Pandemic Personal Protective Equipment (PPE) Preservation Best Practices</b>	<a href="https://files.asprtracie.hhs.gov/documents/fema-fact-sheet-ppe-preservation-best-practices-update---14-july-2020.pdf">https://files.asprtracie.hhs.gov/documents/fema-fact-sheet-ppe-preservation-best-practices-update---14-july-2020.pdf</a>
<b>PPE Preservation Strategies and Resource Request Process Guide</b>	<a href="https://files.asprtracie.hhs.gov/documents/personal-protective-equipment--ppe--preservation-implementation-strategy-final-.pdf">https://files.asprtracie.hhs.gov/documents/personal-protective-equipment--ppe--preservation-implementation-strategy-final-.pdf</a>
<b>PPE Preservation Planning Toolkit</b>	<a href="https://files.asprtracie.hhs.gov/documents/ppepp-toolkit-fact-sheet-hrwg.pdf">https://files.asprtracie.hhs.gov/documents/ppepp-toolkit-fact-sheet-hrwg.pdf</a>
<b>Elastomeric Half-Mask Respirators and Powered Air-Purifying Respirators in Healthcare and Emergency Medical Service Settings</b>	<a href="https://files.asprtracie.hhs.gov/documents/elastomeric-half-mask-respirators-and-powered-air-purifying-respirators-in-healthcare-and-ems-settings-fact-sheet.pdf">https://files.asprtracie.hhs.gov/documents/elastomeric-half-mask-respirators-and-powered-air-purifying-respirators-in-healthcare-and-ems-settings-fact-sheet.pdf</a>
<b>Respirators for Healthcare during COVID-19: Authorized Use &amp; Avoiding Fraudulent Products</b>	<a href="https://files.asprtracie.hhs.gov/documents/fact-sheet-fraudulent-respirators-8-july-2020.pdf">https://files.asprtracie.hhs.gov/documents/fact-sheet-fraudulent-respirators-8-july-2020.pdf</a>
<b>Alternate Care Site (ACS) Toolkit, 3<sup>rd</sup> edition</b>	<a href="https://files.asprtracie.hhs.gov/documents/acs-toolkit-ed1-20200330-1022.pdf">https://files.asprtracie.hhs.gov/documents/acs-toolkit-ed1-20200330-1022.pdf</a>
<b>ASC Resource Package</b>	<a href="https://files.asprtracie.hhs.gov/documents/alternative-care-site-resource-package.pdf">https://files.asprtracie.hhs.gov/documents/alternative-care-site-resource-package.pdf</a>
<b>Mission Critical Resources for Healthcare Partners</b>	<a href="https://files.asprtracie.hhs.gov/documents/mission-critical-resources-for-healthcare-partners.pdf">https://files.asprtracie.hhs.gov/documents/mission-critical-resources-for-healthcare-partners.pdf</a>
<b>Behavioral and Mental Health Resources</b>	<a href="https://files.asprtracie.hhs.gov/documents/hrwg-behavioral-and-mental-health-resources.pdf">https://files.asprtracie.hhs.gov/documents/hrwg-behavioral-and-mental-health-resources.pdf</a>

# 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!***