

Medical Resources Distribution and Allocation During the COVID-19 Emergency in the United States

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This memo outlines relevant federal and state guidelines for medical resource allocation and distribution. Part I presents an overview of federal and state policies related to various medical resource allocation. Part 2 includes links to state guidelines related to scarce resources guidelines during the COVID-19 pandemic.

PART I. ALLOCATION OF MEDICAL RESOURCES

1. Vaccine

Federal Guidelines for the Vaccine Allocation

The Centers for Disease Control and Prevention (“CDC”) has made the coronavirus vaccination recommendations for the United States, based on recommendations from the Advisory Committee on Immunization Practices (“ACIP”).² The ACIP, consisted of 15 medical and public health experts with an expertise in vaccinology, immunology, pediatrics, internal medicine, nursing, family medicine, virology, public health, infectious diseases, or preventive medicine, has developed recommendations on how to distribute vaccines across the United States.³

In case the supply for the vaccine is limited, the ACIP recommends that the decision making for allocation should be made based on the following four ethical principles.⁴

1. Maximize benefits and minimize harms — Respect and care for people using the best available data to promote public health and minimize death and severe illness.
2. Mitigate health inequities — Reduce health disparities in the burden of COVID-19 disease and death, and make sure everyone has the opportunity to be as healthy as possible.
3. Promote justice — Treat affected groups, populations, and communities fairly. Remove unfair, unjust, and avoidable barriers to COVID-19 vaccination.

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² Centers for Disease Control and Prevention, Coronavirus Disease 2019, How CDC Is Making COVID-19 Vaccine Recommendations, Updated Nov. 20, 2020, available at <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations-process.html>

³ Centers for Disease Control and Prevention, Advisory Committee on Immunization Practices (ACIP), Role of the Advisory Committee on Immunization Practices in CDC’s Vaccine Recommendations, <https://www.cdc.gov/vaccines/acip/committee/role-vaccine-recommendations.html>

⁴ Centers for Disease Control and Prevention, Coronavirus Disease 2019, How CDC Is Making COVID-19 Vaccine Recommendations, Updated Nov. 20, 2020, available at <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations-process.html>

4. Promote transparency — Make a decision that is clear, understandable, and open for review. Allow and seek public participation in the creation and review of the decision processes.

Centers for Disease Control and Prevention, Coronavirus Disease 2019, How CDC Is Making COVID-19 Vaccine Recommendations, *Id.* at FN 3.

Additionally, the CDC recommends that jurisdictions should come up with plans for three phases:⁵

Phase 1. Potentially limited supply of COVID-19 vaccine doses available:

Concentrate efforts on reaching the initial populations of focus for COVID-19 ...including those who may be part of other critical populations that might require additional vaccination efforts to ensure access to vaccine. Ensure vaccination locations selected can reach populations, manage cold chain requirements, and meet reporting requirements for vaccine supply and uptake.

Phase 2. Large number of vaccine doses available: Focus on ensuring access to vaccine for all critical populations who were not vaccinated in Phase 1, as well as for the general population; expand provider network.

Phase 3. Sufficient supply of vaccine doses for entire population (surplus of doses): Focus on ensuring equitable vaccination access the entire population. Monitor vaccine uptake and coverage; reassess strategy to increase uptake in populations or communities with low coverage.

Centers for Disease Control and Prevention, Vaccines & Immunizations, COVID-19 Vaccination Program Operational Guidance, *Id.* at FN 4.

State Guidelines for the Vaccine Allocation

Each jurisdiction’s executive summaries for interim COVID-19 vaccination playbook draft, outlining the jurisdiction’s respective responses in each COVID-19 vaccination planning section, can be found on:

<https://www.cdc.gov/vaccines/covid-19/covid19-vaccination-guidance.html>

2. Emergency Medical Supplies

Emergency medical supplies in this section generally refer to “personal protective equipment (PPE) and medical supplies needed to respond to COVID-19,”⁶ including surgical masks and gown, medical gloves and ventilators.⁷

⁵ Centers for Disease Control and Prevention, Vaccines & Immunizations, COVID-19 Vaccination Program Operational Guidance, The COVID-19 Vaccination Program Interim Operational Guidance for Jurisdictions Playbook, available at <https://www.cdc.gov/vaccines/covid-19/covid19-vaccination-guidance.html>.

⁶ Committee on Energy and Commerce, Updated – PPE and Medical Supplies, Apr.15, 2020, available at: https://case.house.gov/uploadedfiles/ec_covid19_fact_sheets.pdf

⁷Committee on Energy and Commerce, Updated – PPE and Medical Supplies, Apr.15, 2020, available at: https://case.house.gov/uploadedfiles/ec_covid19_fact_sheets.pdf

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Federal Guidelines for Medical Supplies Distribution

The Office of Science in the CDC has proposed “Ethical Guidance for Public Health Emergency Preparedness and Response: Highlighting Ethics and Values in a Vital Public Health Service” that provides points for ethical considerations when making health decisions.⁸ This serves as a general guideline for the federal and local authorities for their decision-making process.

The Trump Administration has formed the Supply Chain Stabilization Task Force operated by Federal Emergency Management Agency (FEMA). The taskforce aims to “address limited supply of critical protective and life-saving equipment... Through the National Response Coordination Center, the task force is working to find critical resources to meet urgent demand as well as increase the overall level of surge support to “hot spots” as they arise.”⁹

According to the presidential memoranda, emergency medical supplies during the COVID-19 include but are not limited to PPE and ventilators. As President Trump declared the outbreak of the COVID-19 as a national emergency, President Trump in Executive Order 13909 (Prioritizing and Allocating Health and Medical Resources to Respond to the Spread of COVID-19) has found that “health and medical resources needed to respond to the spread of COVID-19, including personal protective equipment and ventilators, meet the criteria specified in section 101(b) of the Act (50 U.S.C. 4511(b)).”¹⁰

Section b of 50 U.S.C. §4511 states:

(b) Critical and strategic materials

The powers granted in this section (to the president (*see* section(a) of the code))(comment added) shall not be used to control the general distribution of any material in the civilian market unless the President finds (1) that such material is a scarce and critical material essential to the national defense, and (2) that the requirements of the national defense for such material cannot otherwise be met without creating a significant dislocation of the normal distribution of such material in the civilian market to such a degree as to create appreciable hardship.

50 U.S.C. §4511(b), Priority in contracts and orders.

⁸ Office of Science, CDC, Ethical Guidance for Public Health Emergency Preparedness and Response: Highlighting Ethics and Values in a Vital Public Health Service, available at https://www.cdc.gov/os/integrity/phethics/docs/White_Paper_Final_for_Website_2012_4_6_12_final_for_web_508_compliant.pdf

⁹ FEMA, Coronavirus (COVID-19) Pandemic: Supply Chain Stabilization Task Force, available at <https://www.fema.gov/fact-sheet/coronavirus-covid-19-pandemic-supply-chain-stabilization-task-force>.

¹⁰ Donald J. Trump, Executive Order on Prioritizing and Allocating Health and Medical Resources to Respond to the Spread of Covid-19 (“Executive Order 13909”), Mar. 18, 2020, available at <https://www.whitehouse.gov/presidential-actions/executive-order-prioritizing-allocating-health-medical-resources-respond-spread-covid-19/>.

Therefore, President Trump has stated in the Executive Order that the executive department or agency, such as the Secretary of Health and Human Services, may use the appropriate authority under the code to determine:

...in consultation with the Secretary of Commerce and the heads of other executive departments and agencies as appropriate, the proper nationwide priorities and allocation of all health and medical resources, including controlling the distribution of such materials (including applicable services) in the civilian market, for responding to the spread of COVID-19 within the United States.

At Sec. 2(b), Donald J. Trump, Executive Order 13909 at FN 9.

The Memorandum on Allocating Certain Scarce or Threatened Health and Medical Resources to Domestic Use further defined that the power includes:

... the following scarce or threatened materials designated by the Secretary of Health and Human Services under section 102 of the Act:

(a) N-95 Filtering Facepiece Respirators, including devices that are disposable half-face-piece non-powered air-purifying particulate respirators intended for use to cover the nose and mouth of the wearer to help reduce wearer exposure to pathogenic biological airborne particulates;

(b) Other Filtering Facepiece Respirators (e.g., those designated as N99, N100, R95, R99, R100, or P95, P99, P100), including single-use, disposable half-mask respiratory protective devices that cover the user's airway (nose and mouth) and offer protection from particulate materials at an N95 filtration efficiency level per 42 CFR 84.181;

(c) Elastomeric, air-purifying respirators and appropriate particulate filters/cartridges;

(d) PPE surgical masks, including masks that cover the user's nose and mouth and provide a physical barrier to fluids and particulate materials; and

(e) PPE gloves or surgical gloves, including those defined at 21 CFR 880.6250 (exam gloves) and 878.4460 (surgical gloves) and such gloves intended for the same purposes.

Donald J. Trump, Memorandum on Allocating Certain Scarce or Threatened Health and Medical Resources to Domestic Use, Presidential Memoranda, Apr. 3, 2020, available at <https://www.whitehouse.gov/presidential-actions/memorandum-allocating-certain-scarce-threatened-health-medical-resources-domestic-use/>

The taskforce is National Resource Prioritization Cell ("NRPC"). The NRPC aims to distribute resources throughout the nation and private industry more effectively.¹¹ More specifically, the NRPC serves to provide uniform recommendations for the government and private industry prioritization, which will effectuate efficient and equitable distribution among federal, state and private sector operations.¹² The NRPC addresses

¹¹ *Id.*

¹² *Id.*

two necessary aspects of the federal COVID-19 pandemic response: “1. Execute solutions to address critical medical supplies and equipment needs”¹³ and “2. Stabilize the supply chain for personal protective equipment and other medical supplies.”¹⁴ In deciding priority for resources distribution, the NRPC combines data streams provided by FEMA, the U.S. Department of Health and Human Services (“HHS”), and CDC in order to analyze the COVID-19 activities and determine the areas that most urgently require resources.¹⁵ FEMA has also set up a system where individuals and businesses can donate medical supplies and equipment to aid the government’s response to COVID-19.¹⁶

Currently, Established jointly by the HHS, CDC, and FEMA, a team of experts in NRPC make the analysis every seven days.¹⁷ “The team provides proposals on resource distribution to the Unified Coordination Group (UCG) – comprised of HHS, CDC, FEMA, and White House Task Force – to develop a Resource Prioritization Bulletin. This bulletin informs private sector medical and surgical distributors on the latest priority jurisdictions in greatest need of specific medical supplies and equipment.”¹⁸

The data analyzed by the NRPC includes, but not limited to: demographic information for population factors, internal supply data (donations and Strategic National Stockpile inventories), Supply chain data tower (private sector and FEMA distribution), Disease activities including, but not limited to: confirmed cases, increases in confirmed cases, total mortality and increases in mortality over seven days.¹⁹

The seven-day analysis is conducted pursuant to the following scheme:

DAY 1

National Response Coordination Center (NRCC) identifies high demand and limited resources in need of national prioritization. Members of the NRPC discuss the current data and modeling sources to understand what information analysis is available. The Data and Analytics Task Force extracts identified datasets to give to the NRPC.

DAY 2

The NRPC determines which information is most reliable and weights variables to decide what information will be used to create recommendations for this cycle. The NRPC provides the Data and Analytics Task Force the weighting of the variables.

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ Committee on Energy and Commerce, Updated – PPE and Medical Supplies, Apr. 15, 2020, available at https://case.house.gov/uploadedfiles/ec_covid19_fact_sheets.pdf

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ FEMA, Coronavirus (COVID-19) Pandemic: National Resource Prioritization Cell, released on Apr. 17, 2020, available at <https://www.fema.gov/fact-sheet/coronavirus-covid-19-pandemic-national-resource-prioritization-cell>

DAY 3

The NRPC drafts a prioritization table based on the agreed upon factors and weights. The prioritization table is reviewed, and subject matter experts apply operational judgement to adjust prioritization recommendations. The NRPC briefs the recommended prioritization to the NRCC.

DAY 4

The NRPC provides the recommended prioritization to the NRCC. NRPC finalizes the prioritization table and provides the recommendations to the UCG.

DAY 5-7

The prioritization bulletin is provided to the private sector for use in determining distribution of their supplies. NRPC evaluates the effectiveness of the previous seven-day process and makes any adjustments to continually improve the process. FEMA, Coronavirus (COVID-19) Pandemic: National Resource Prioritization Cell, *Id.* at FN 18.

Additionally, to overview various efforts made by the federal government in more detail, see the Committee on Energy and Commerce’s report on PPE and Medical Supplies on Apr.15, 2020, available at: https://case.house.gov/uploadedfiles/ec_covid19_fact_sheets.pdf

Issues in the Implementation of Federal Guidelines

This new supply distribution system under FEMA became a source of conflict, as states’ efforts to procure their own supplies pursuant to Trump Administration’s past stance (that each state should procure their own supplies) were suddenly frustrated.²⁰ Mainly, when FEMA commandeered and took over the shipments of medical supplies from companies that were in the process of delivering medical supplies according to their respective contracts with each state, the state governments were not able to receive their promised shipments of supplies, and the federal guidelines created confusion and “hybrid system of distribution — divided between the federal government, local officials and private health care companies”²¹

Strategic National Stockpile

The CDC maintains the Strategic National Stockpile (“SNS”), which consists of “large quantities of medicine and medical supplies to protect the American public if there is a public health emergency, such as a terrorist attack, flu outbreak and/or earthquake, severe

²⁰ Zolan Kanno-Youngs & Jack Nicas, 'Swept Up by FEMA': Complicated Medical Supply System Sows, The New York Times (Apr. 6, 2020), available at <https://www.nytimes.com/2020/04/06/us/politics/coronavirus-fema-medical-supplies.html>

²¹ Zolan Kanno-Youngs & Jack Nicas, 'Swept Up by FEMA': Complicated Medical Supply System Sows, The New York Times (Apr. 6, 2020), available at <https://www.nytimes.com/2020/04/06/us/politics/coronavirus-fema-medical-supplies.html>

enough to deplete local supplies.”²² Should federal and state authorities decide that any state needs SNS, they can be delivered to any state within 12 hours.²³ Through the open POD (Point of Dispensing) sites, each state is equipped with plans to make a timely distribution of the SNS supplies to local communities.²⁴

More information can be found on the webpage:
<https://www.phe.gov/about/sns/Pages/default.aspx>

State Guidelines on Medical Supplies

Part II includes state guidelines on scarce and other medical resources allocation and distribution during the COVID-19 pandemic.

Additionally, for more information on state guidelines, COVID-19 Crisis Standards of Care Resource List on the U.S. Department of Health & Human Services homepage is available at:
<https://files.asprtracie.hhs.gov/documents/4-9-20-state-level-csc-plans-guidance-policy.pdf>

3. Ventilators

Federal Ethical Guidance

The Office of Science in the CDC offers ethical considerations guidance, specifically in regards to decision making about allocation of mechanical ventilators during a pandemic.²⁵ It outlines principles governing ventilator allocation during the time of emergency and triage process specific to each circumstance. The full version of the guidance is available at
https://www.cdc.gov/os/integrity/phethics/docs/Vent_Document_Final_Version.pdf

Additionally, the HHS has issued “Additional Statements on Optimizing the Use of Ventilators during the COVID-19 Pandemic (Mar. 31, 2020)” in order to deal with ventilator distribution during the COVID-19 pandemic. It defines circumstances in which more extreme measures, such as ventilator sharing, should be employed.²⁶

State Ethical Guidelines

²² Alabama Public Health, Strategic National Stockpile, available at <https://www.alabamapublichealth.gov/cep/sns.html>

²³ Alabama Public Health, Strategic National Stockpile, available at <https://www.alabamapublichealth.gov/cep/sns.html>

²⁴ Alabama Public Health, Strategic National Stockpile, available at <https://www.alabamapublichealth.gov/cep/sns.html>

²⁵ The Office of Science, CDC, Ethics Subcommittee Documents, available at <https://www.cdc.gov/os/integrity/phethics/ESdocuments.htm>.

²⁶ Charlene Babcock, Nader M. Habashi, & Lorenzo Paladimo, Additional Statements on Optimizing the Use of Ventilators during the COVID-19 Pandemic (Mar. 31, 2020).

Twenty-six, about half of the states have public ventilator allocation guidelines.²⁷ For example, New York provides for a specific guideline pertaining to ventilator allocation: https://www.health.ny.gov/regulations/task_force/reports_publications/docs/ventilator_guidelines.pdf

The relevant policies for other states can be found within the state guidelines for scarce resources in the section 2.

Other Resources

Minnesota Healthcare System Preparedness Program Strategies for Scarce Resources provide detailed strategies for each type of scarce resources, such as hemodynamic support and IV fluids, mechanical ventilation and external oxygenation, and blood products.²⁸ States such as Colorado²⁹ refers to the resource in their scarce resources strategies. The full pdf version of the guidance is available at:

<https://www.cidrap.umn.edu/sites/default/files/public/php/Strategies%20for%20Scarce%20Resource%20Situations.pdf>

Minnesota's Comprehensive Guideline for Ethical Health Resources Distribution has also been an important reference for states such as Tennessee,³⁰ as they come up with their own guidelines. The guideline, called "For the Good of Us All: Ethically Rationing Health Resources in Minnesota in a Severe Influenza Pandemic (2010)" is available at:

<https://www.health.state.mn.us/communities/ep/surge/crisis/ethics.pdf>

4. Personal Protective Equipment (PPEs)

Federal Guidelines Related to PPEs

The CDC proposes "optimization strategies for PPE offer a continuum of options for use when PPE supplies are stressed, running low, or exhausted."³¹ The CDC recommends that healthcare facilities plan and optimize the use of PPE in response to COVID-19 by using the PPE Burn Rate Calculator available on <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html>.

²⁷ Gina M. Piscitello & Esha M. Kapania et al., Variation in Ventilator Allocation Guidelines by US State During the Coronavirus Disease 2019 Pandemic: A Systematic Review, *Jama Network* (2020), doi:10.1001/jamanetworkopen.2020.12606

²⁸ Minnesota Healthcare System Preparedness Program, Patient Care Strategies for Scarce Resource Situations, available at <https://www.cidrap.umn.edu/sites/default/files/public/php/Strategies%20for%20Scarce%20Resource%20Situations.pdf>

²⁹ See Colorado under Part II.

³⁰ See Tennessee under Part II.

³¹ Centers for Disease Control and Prevention, Coronavirus Disease 2019, Optimizing Supply of PPE and Other Equipment during Shortages, Updated Jul. 16, 2020, available at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/general-optimization-strategies.html>

The CDC recommends states to have a plan for PPE resources management for three types of circumstances.³²

1. Conventional capacity: measures consisting of engineering, administrative, and PPE controls that should already be implemented in general infection prevention and control plans in healthcare settings.
2. Contingency capacity: measures that may be used temporarily during periods of anticipated PPE shortages. Contingency capacity strategies should only be implemented after considering and implementing conventional capacity strategies. While current supply may meet the facility's current or anticipated utilization rate, there may be uncertainty if future supply will be adequate and, therefore, contingency capacity strategies may be needed.
3. Crisis capacity: strategies that are not commensurate with U.S. standards of care but may need to be considered during periods of known PPE shortages. Crisis capacity strategies should only be implemented after considering and implementing conventional and contingency capacity strategies. Facilities can consider crisis capacity strategies when the supply is not able to meet the facility's current or anticipated utilization rate.

Centers for Disease Control and Prevention, Coronavirus Disease 2019, Optimizing Supply of PPE and Other Equipment during Shortages, *Id.* at FN 31.

In addition, the CDC's summary on optimizing the supply of PPEs during shortages can be found at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/strategies-optimize-ppe-shortages.html>

5. Allocation of Other Medical Resources

EX.1) Remdesivir

Pursuant to HHS recommendation to create a committee for ethical allocation framework in each state, Pennsylvania has created a committee-based guideline that “develop a broad, fair, and equitable framework for how to allocate scarce, emerging COVID-19 treatments. This document addresses remdesivir (RDV) in particular...”³³ The Pennsylvania committee do not control the supplies of RDV, as the distribution of RDV to acute care healthcare facilities is calculated following the HHS formula, allowing supplies proportional to the total number of COVID-19 positive patients admitted to the respective facility. The formula states:

$$\text{Total number of COVID inpatients} / 7 \text{ days} + \text{Total number of COVID vent patients} / 7 \text{ days} = \text{raw score}$$

³² Centers for Disease Control and Prevention, Coronavirus Disease 2019, Optimizing Supply of PPE and Other Equipment during Shortages, Updated Jul. 16, 2020, available at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/general-optimization-strategies.html>

³³ Commonwealth of Pennsylvania, Ethical Allocation Framework for Emerging Treatments of COVID-19, <https://www.health.pa.gov/topics/disease/coronavirus/Pages/Guidance/Ethical-Allocation-Framework.aspx>; Pennsylvania Department of Health, Summary of Remdesivir allocation, formula, available at <https://www.health.pa.gov/topics/disease/coronavirus/Pages/Guidance/Summary-of-Remdisivir-Allocation.aspx>

individual raw score / \sum all raw scores = Allocation Score

The clinical eligibility criteria for patients to receive RDV are consistent with the FDA's EUA for emergency use of RDV for the treatment of hospitalized COVID-19 patients. Commonwealth of Pennsylvania, Ethical Allocation Framework for Emerging Treatments of COVID-19, *Id.* at FN 32.

More generally, Pennsylvania adopts ethical goals of allocation framework that is consistent with accepted standards during public health emergencies, and the Interim Pennsylvania Crisis Standards of Care for Pandemic Guidelines. The five ethical goals are:

1. To safeguard the public's health by allocating scarce treatments to maximize community benefit.
2. To create meaningful access for all patients. All patients who meet clinical eligibility criteria should have a chance to receive treatment.
3. To ensure that no one is excluded from access based on age, disability, religion, race, ethnicity, national origin, immigration status, gender, sexual orientation, or gender identity and to ensure that no one is denied access based on stereotypes, perceived quality of life, or judgements about a person's worth.
4. To ensure that all patients receive individualized assessments by clinicians, based on the best available objective medical evidence.
5. To proactively mitigate health disparities in COVID-19 outcomes.

Commonwealth of Pennsylvania, Ethical Allocation Framework for Emerging Treatments of COVID-19, *Id.* at FN 32.

To see California's guidance for allocating Remdesivir for COVID-19, see <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Guidance-for-Counties-Regarding-Allocation-of-Remdesivir-for-COVID-19.aspx>

To see South Dakota's guidance on Remdesivir allocation, see: https://doh.sd.gov/documents/COVID19/Remdesivir_Allocation_Criteria.pdf

EX.2) Bamlanivimab

The state of Wisconsin has developed framework specifically for Bamlanivimab allocating during the COVID-19 pandemic. The report can be found at: <https://www.dhs.wisconsin.gov/publications/p02831.pdf>

PART II. STATE GUIDELINES

For many states, the guidelines merely serve as non-binding best-practices guidance for the government and the hospitals. Some created guidelines that specifically address COVID-19, while others used their general guidelines for emergent situations.

Finally, last updated on November 30, 2020, this list does not reflect the guidelines that have since been modified or updated.

Alabama

Alabama Crisis Standards of Care Guidelines: Managing Modified Care Protocols & the Allocation of Scarce Medical Resources during a Healthcare Emergency (Feb. 28, 2020):

<https://www.adph.org/CEPSecure/assets/alabamacscguidelines2020.pdf>

**See page 9 for 6-tiered system for allocation of scarce resources

Alaska

Guidance on Use of Personal Protective Equipment for Healthcare Personnel Caring for COVID-19 Patients (March 28, 2020):

http://dhss.alaska.gov/dph/Epi/Documents/phan/AKPHAN_20200328_COVID_PPE.pdf

Arizona

Crisis Standards Of Care Plan: A Comprehensive and Compassionate Response, 3rd Edition (2020): <https://www.azdhs.gov/documents/preparedness/emergency-preparedness/response-plans/azcsc-plan.pdf>

**See page 11 for Table 2—Allocation of Resources along the Care Capability Continuum

California

California SARS-CoV-2 Pandemic Crisis Care Guidelines: Concept of Operations Health Care Facility Surge Operations and Crisis Care (Jun. 2020):

<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/COVID-19/California%20SARS-CoV-2%20Crisis%20Care%20Guidelines%20-June%208%202020.pdf>

**See page 12 for Triage

Additionally:

Guidance for Hospitals Regarding Allocation of Scarce Medications for COVID-19 (May 11, 2020): <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/GuidanceForHospitalsRegardingAllocationOfScarceMedicationsForCOVID19.aspx>

Allocation of Remdesivir for COVID-19: Guidance for Counties (May 20, 2020):

<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Guidance-for-Counties-Regarding-Allocation-of-Remdesivir-for-COVID-19.aspx>

Colorado

CDPHE All Hazards Internal Emergency Response and Recovery Plan; Annex B: Colorado Crisis Standards of Care Plan (Apr. 5, 2020):

<https://drive.google.com/file/d/1pH6RF2Wi4h0vTE6Bb5uBUzeTspUZhNhQ/view>

**See page 90 for IV. Crisis Standards of Care Triage Scoring System

Connecticut

Standards of Care: Providing Health Care During A Prolonged Public Health Emergency, Standards of Care Workgroup, CT Department of Public Health (Oct. 2010):

<https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/legal/StandardsofCarefinalpdf.pdf>

** See page for 11 for A. Allocating Scarce Resources

D.C.

Modified Delivery of Critical Care Services in Scarce Resource Situations: Overview of an strategy to be implemented by the DC Emergency Healthcare Coalition and its Member Organizations, (Jun. 6, 2013):

<https://files.asprtracie.hhs.gov/documents/modified%20delivery%20of%20critical%20care%20services.pdf>

Delaware

DPH HAN – Strategies for Optimizing the Supply of PPE – N95 Respirators (Mar. 20, 2020):

<https://www.dhss.delaware.gov/dhss/dph/php/alerts/dhan427.html>

DPH HAN – Strategies for Optimizing the Supply of PPE – Facemasks (Mar. 20, 2020):

<https://www.dhss.delaware.gov/dhss/dph/php/alerts/dhan426.html>

DPH HAN- Strategies for Optimizing the Supply of PPE – Isolation Gowns (Mar. 20, 2020):

<https://www.dhss.delaware.gov/dhss/dph/php/alerts/dhan425.html>

DPH HAN – Strategies for Optimizing the Supply of PPE – Eye Protection (Mar. 20, 2020):

<https://www.dhss.delaware.gov/dhss/dph/php/alerts/dhan424.html>

Florida

Pandemic Influenza: Triage and Scarce Resource Allocation Guidelines (Draft Ver. 10.5) (Apr. 5, 2011): <https://www.hsdl.org/?view&did=732274>

Georgia

UPDATED Interim Guidance for Clinicians Evaluating, Reporting, and Requesting Diagnostic Testing for Possible COVID-19 Cases (“Guidance for Georgia Clinicians”)(Jul. 22, 2020): The PDF file can be downloaded at: <https://dph.georgia.gov/covid-19-materials-and-resources>

Hawaii

State of Hawaii COVID-19 PPE Distribution Program (Sep. 3, 2020):

<https://hawaiicovid19.com/wp-content/uploads/2020/10/Free-PPE-for-Hawaii-English.pdf>

**See Attachment A for PPE Resources for Hawaii

Idaho

Crisis Standards of Care (2020): [https://coronavirus.idaho.gov/wp-](https://coronavirus.idaho.gov/wp-content/uploads/2020/10/Crisis-Standards-of-Care-Plan_Final_Posted_Signed.pdf)

[content/uploads/2020/10/Crisis-Standards-of-Care-Plan_Final_Posted_Signed.pdf](https://coronavirus.idaho.gov/wp-content/uploads/2020/10/Crisis-Standards-of-Care-Plan_Final_Posted_Signed.pdf)

Strategies for Scarce Resource Situations (2020): [https://coronavirus.idaho.gov/wp-](https://coronavirus.idaho.gov/wp-content/uploads/2020/10/2020_ID_CSC_Strategies_v2_Final_Posted-1.pdf)
[content/uploads/2020/10/2020_ID_CSC_Strategies_v2_Final_Posted-1.pdf](https://coronavirus.idaho.gov/wp-content/uploads/2020/10/2020_ID_CSC_Strategies_v2_Final_Posted-1.pdf)

Illinois

Pandemic Influenza Preparedness and Response Plan, V. 5.1. (Mar. 2020):

<http://dph.illinois.gov/sites/default/files/publications/illinois-pandemic-influenza-plan-version-51march-2020.pdf>

**See page 55 for Antiviral and Vaccine Purchase and Distribution

Guidelines on Emergency Preparedness for Hospitals During COVID-19:

<https://www.dph.illinois.gov/sites/default/files/Guidelines%20on%20Emergency%20Preparedness.pdf>

**See page 6 for B. Ethical Conservation of Scarce Resources

Indiana

2020 Crisis Standards on Patient Care Guidance: Triage and Ventilator Allocation Guidelines (Apr. 2020): <https://webdocs.hallrender.com/wp-content/uploads/Indiana-Vent-Allocation-FINAL-04.03.2020.pdf>

COVID-19 Response Plan (Mar. 2020): https://www.coronavirus.in.gov/files/ISDH%20COVID-19%20Response%20Plan_March%202020_sm.pdf

**See page 55 for VIII. Medical Countermeasures: Diagnostic Devices, Vaccines, Therapeutics and Respiratory Devices

Iowa

An Ethical Framework for Use in a Pandemic: Report of the Iowa Pandemic Influenza Ethics Committee (Sep. 2007):

http://publications.iowa.gov/17889/1/panflu_ethical_guidelines_manual.pdf

**See page 14 for C. Triage

Kansas

Toolkit for COVID – 19, Kansas Department of Health and Environment:

<https://int.nyt.com/data/documenthelper/6847-kansas-triage-guidelines/02cb4c58460e57ea9f05/optimized/full.pdf#page=1>

**See page 12 for Appendix B. Interim Guidelines for Tertiary Triage Protocol for Allocation of Scarce Resources in Acute Care Hospitals in Kansas

Kentucky

Crisis Standards of Care: Guidance for the Ethical Allocation of Scarce Resources during a Community-Wide Public Health Emergency (Mar. 31, 2020):

<https://www.kyha.com/assets/docs/COVID19/Update/CrisisStandardsofCareFinal.pdf>

Louisiana

ESF-8 Health & Medical Section State Hospital Crisis Standard of Care Guidelines in Disasters, V. 4. (Feb. 2018):

<https://cdn.ymaws.com/www.lhaonline.org/resource/resmgr/imported/Louisiana%20CSOC%20Guidelines%20in%20Disasters.pdf>

**See page 9 for Duty to Steward Resources – Distributive Justice

Maine

DHHS/Maine CDC All Hazards Emergency Operations Plan (Jun. 2015):

<https://www.maine.gov/dhhs/mecdc/public-health-systems/phep/documents/mainecdcallhazeop.pdf>

Maryland

Maryland Framework for the Allocation of Scarce Life-sustaining Medical Resources in a Catastrophic Public Health Emergency (Aug. 24, 2017):

https://www.law.umaryland.edu/media/SOL/pdfs/Programs/Health-Law/MHECN/ASR%20Framework_Final.pdf

**See from page 16 for Triage Team

Massachusetts

Crisis Standards of Care Planning Guidance for the COVID-19 Pandemic (Apr. 7, 2020):

<https://www.mass.gov/doc/crisis-standards-of-care-planning-guidance-for-the-covid-19-pandemic/download>

**See from page 13 for V. Strategies for Maximizing Critical Care Resources (Allocation Framework)

Michigan

Guidelines for Ethical Allocation of Scarce Medical Resources and Services During Public Health Emergencies in Michigan, V. 2. (Nov. 16, 2012):

<http://www.mimedicaethics.org/Documentation/Michigan%20DCH%20Ethical%20Scarce%20Resources%20Guidelines%20v.2.0%20rev.%20Nov%202012%20Guidelines%20Only.pdf>

**See from page 19 for Allocation Criteria

Minnesota

Allocation of Ventilators & Related Scarce Critical Care Resources During the COVID-19 Pandemic (updated May 4, 2020):

<https://www.health.state.mn.us/communities/ep/surge/crisis/ventilators.pdf>

Implementing Ethical Frameworks for Rational Scarce Health Resources in Minnesota during Severe Influenza Pandemic (2010):

<https://www.health.state.mn.us/communities/ep/surge/crisis/implement.pdf>

Mississippi

Mississippi Pandemic Influenza Incident Annex (Jun. 14, 2019):

https://msdh.ms.gov/msdhsite/_static/resources/2944.pdf

**See page 168 for Section II. BB. Allocate Scarce Resources

Missouri

Pandemic Influenza Response Plan (Mar. 2020):

<https://health.mo.gov/emergencies/panflu/pdf/panfluplan.pdf>

**See page 10 for Pandemic Planning Guidance

Montana

Scarce Resource Management & Crisis Care Guidance (2020): <https://mtha.org/wp-content/uploads/2020/04/Montana-Crisis-Care-Guidance-Final.pdf>

**See page 31 for Scarce Resource Allocation in Crisis Care Guidance: Triage Protocol

Emergency Support Function: Annex #8 Public Health & Medical Services (Mar. 1 2016):

<https://readyandsafe.mt.gov/Portals/105/Emergency/DOCS/Planning/ESF%20%20%238%20Update.pdf>

Nebraska

Refers to CDC guidelines as well as those of Nebraska Medicine, such as:
Nebraska Medicine COVID-19 PPE Guidance: Extended Use and Reuse of Facemasks, Respirators and Protective Eyewear For Healthcare Personnel (Updated Apr. 20, 2020):
<https://www.nebraskamed.com/sites/default/files/documents/covid-19/COVID-Extended-Use-Reuse-of-PPE-and-N95.pdf?date=04212020>

PPE Emergency Department Flowsheet (Updated Apr.22. 2020):
<https://www.nebraskamed.com/sites/default/files/documents/covid-19/ppe-emergency-department-flowchart.pdf>

Nevada

Crisis Standards of Care Crisis Level Guidance for COVID-19 (Apr. 2, 2020):
https://nvhealthresponse.nv.gov/wp-content/uploads/2020/04/NV_DHHS_DPBH_CSCRecommendations_COVID-19_040220_ADA.pdf

**See page 3 for Nevada Crisis Standard of Care – Code of Ethics

New Hampshire

New Hampshire State Triage Committee Crisis Standards of Care Clinical Guidelines (Jun.23 2020): <https://www.dhhs.nh.gov/dphs/cdcs/covid19/documents/stc-csc-clinical-guidelines-06252020.pdf>

Additionally, see:

New Hampshire Crisis Standards of Care Plan (Apr. 17, 2020):
<https://www.dhhs.nh.gov/documents/nh-csc-plan.pdf>

** See page 5 for Crisis Standards of Care Plan

Governor’s COVID-19 Equity Response Team: Initial Report and Recommendations (Jul. 12, 2020): <https://www.governor.nh.gov/sites/g/files/ehbemt336/files/documents/equity-response-team.pdf>

** See page 38 for Equitable Resource Allocation

New Jersey

Allocation of Critical Care Resources During a Public Health Emergency (Adapted from the University of Pittsburgh Model Policy)(Apr. 11, 2020):
<https://www.state.nj.us/health/legal/covid19/FinalAllocationPolicy4.11.20v2%20.pdf>

Allocation of Scarce Resources: DOH Executive Directive No. 20-006 (Apr. 11, 2020):
<https://www.state.nj.us/health/legal/covid19/FinalExecDirective20-006.pdf>

Allocation of Scarce Resources: Attorney General Directive No. 2020-03 (Apr. 11, 2020)::
<https://www.state.nj.us/health/legal/covid19/AG%20Directive%202020-03%20Allocation%20Policy%20FINAL.pdf>

New Mexico

New Mexico Statewide Acute Care Medical Surge Plan for COVID-19 Pandemic Response (Apr. 2020): <https://cvmodeling.nmhealth.org/wp-content/uploads/sites/4/2020/05/NM-CSC-Plan-V.4.17.20.pdf>

**See page 13 for Central Command – Call and Triage State Plan

New York

Ventilator Allocation Guideline (Nov. 2015):

https://www.health.ny.gov/regulations/task_force/reports_publications/docs/ventilator_guidelines.pdf

North Carolina

North Carolina Protocol for Allocating Scarce Inpatient Critical Care Resources in a Pandemic (Apr. 6, 2020): https://nciom.org/wp-content/uploads/2020/04/North-Carolina-Protocol-for-Allocating-Scarce-Inpatient-Critical-Care-Resources-in-a-Pandemic_FINAL-4-6-2020_rev.pdf

Guidelines for Allocation of Personal Protective Equipment (PPE) to Healthcare Settings (May 27, 2020): <https://files.nc.gov/covid/documents/Healthcare-Setting-PPE-Allocation-Letter.pdf>

North Dakota

State of North Dakota Hospital Coordination and Vulnerable Population Protection Plan 2020 Covid-19 Pandemic Response (Updated May 14, 2020):

<https://ndresponse.gov/sites/www/files/documents/covid-19/Additional%20Resources/Hospitals%20and%20VP3%20FINAL.pdf>

Ohio

(Unofficial Guidance) Guidelines for Allocation of Scarce Medical Resources Ver. 1 (Apr. 5, 2020): <https://ohiohospitals.org/OHA/media/OHA-Media/Documents/Patient%20Safety%20and%20Quality/COVID19/Ohio-Guidelines-for-Allocation-of-Scarce-Medical-Resources-CLEAN-FINAL.pdf>

State of Ohio Emergency Operations Plan: Emergency Support Function #8 Public Health and Medical Services (2016): https://www.ema.ohio.gov/Documents/Ohio_EOP/ESF-8%20-%20Public%20Health%20and%20Medical%20Services%20-%202016.pdf

The state of Ohio adopts the guideline for the use of ventilators and other respiratory devices provided by the U.S. Food and Drug Administration (FDA) (“*Information on Use of Ventilators and Other Respiratory Devices Protecting Against COVID-19*”):

https://coronavirus.ohio.gov/wps/wcm/connect/gov/a50f47cf-9440-4e3b-997b-721525eb96ea/COVID-19+Guidance+on+Ventilators.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-a50f47cf-9440-4e3b-997b-721525eb96ea-n6IOx0c

Likewise, the state of Ohio proposes healthcare providers to consider *Surgical Mask and Gown Conservation Strategies* from the U.S. Food and Drug Administration (FDA) and CDC to manage their PPE supplies: <https://coronavirus.ohio.gov/wps/portal/gov/covid-19/healthcare->

[providers-and-local-health-districts/for-healthcare-providers/preserving-personal-protective-equipment](#)

Oklahoma

Hospital Crisis Standards of Care – Draft (2010):

<https://www.ok.gov/health2/documents/Hospital%20Crisis%20Standards%20of%20Care.pdf>

Oregon

COVID-19 Crisis Care Guidance for Emergency Medical Services Surge (Aug. 14, 2020):

<https://nasemso.org/wp-content/uploads/Oregon-Crisis-Care-Guidance-EMS.pdf>

Interim Guidance: Use of Personal Protective Equipment by Health Care Personnel in Resource-Constrained Settings (Sep. 23, 2020):

<https://sharedsystems.dhsoha.state.or.us/DHSForms/Served/1e2288t.pdf>

Pennsylvania

Interim Pennsylvania Crisis Standards of Care for Pandemic Guidelines (Mar. 22, 2020):

<https://www.health.pa.gov/topics/Documents/Diseases%20and%20Conditions/COVID-19%20Interim%20Crisis%20Standards%20of%20Care.pdf>

**See page 27 for Implementation of Triage Guidelines

Rhode Island

Crisis Standards of Care Guidelines (As of Apr. 27, 2020):

<https://health.ri.gov/publications/guidelines/crisis-standards-of-care.pdf>

**See page 17 for Strategies for Triage and Prioritization

South Carolina

There is no online guideline, but South Carolina has launched a *COVID-19 Emergency Supply Chain Collaborative*, which is a partnership between the state's Department of Commerce, the South Carolina Hospital Association, and the South Carolina Life Sciences Industry. The purpose of the portal is to connect healthcare providers and healthcare equipment suppliers efficiently. It can be reached at: <https://sccovid19.org/>

South Dakota

Remdesivir Allocation Criteria (Jun. 10, 2020):

https://doh.sd.gov/documents/COVID19/Remdesivir_Allocation_Criteria.pdf

Tennessee

Guidance for the Ethical Allocation of Scarce Resources during a Community-Wide Public Health Emergency as Declared by the Governor of Tennessee, Version 1.6 (Jul. 2016):

http://www.midsouthepc.org/wp-content/uploads/2018/05/2016_Guidance_for_the_Ethical_Allocation_of_Scarce_Resources.pdf

**See page 4 for Strategies for Scarce Resource Situations (Contingency Capacity)

Texas

Texas Health and Human Services proposes following the CDC guideline for PPE supply management (“*Optimizing Personal Protective Equipment (PPE) Supplies*”) at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>. More information can be found at <https://www.dshs.state.tx.us/coronavirus/healthprof.aspx>

According to Texas Health and Human Services:

Requests for Assistance from DSHS (PPE, etc.):

Hospitals and healthcare professionals should follow their normal process of trying to locate emergency medical supplies, personal protective equipment (PPE), and other healthcare resources with their regular vendors and exhaust all possible options. These options may include contacting any sister facilities for coordination, reaching out to local partners or stakeholders, looking at any possible reallocations within the Public Health Region, Healthcare Coalition, Regional Advisory Council regions, or other medical supply agencies, given established priority groups. If hospitals and healthcare professionals cannot obtain any PPE from their vendor(s) and have exhausted all alternative options, they should send their official requests to their local office of emergency management via the State of Texas Assistance Request (STAR) process. Please ensure you provide all relevant details for your request, to include type of item, POC information, and delivery address.

Texas Health and Human Services, Information for Hospitals & Healthcare Professionals, available at <https://www.dshs.state.tx.us/coronavirus/healthprof.aspx#assist>.

Utah

Utah Crisis Standards of Care Guidelines (Updated Nov. 12, 2020): <https://coronavirus-download.utah.gov/Health/Utah-Crisis-Standards-of-Care-Guidelines-v9-11122020.pdf>

** See page 5 for Utah Crisis Standards of Care Protocol

Vermont

Vermont Crisis Standards of Care Plan Ver. 1.1 (May 18, 2020):

<https://www.healthvermont.gov/sites/default/files/documents/pdf/Vermont%20CSC%20Plan%2005.18.2020.pdf>

** See Appendix 2 at page 38 for Triage Guidance

Virginia

Critical Resource Shortages Planning Guide:

<https://www.vdh.virginia.gov/content/uploads/sites/10/2019/01/VA-Critical-Resource-Shortages-Planning-Guide.pdf>

** See page 15 for Planning Guidance

Washington

Scarce Resource Management & Crisis Standards of Care (Last updated Mar. 29, 2020):

https://nwhrn.org/wp-content/uploads/2020/03/Scarce_Resource_Management_and_Crisis_Standards_of_Care_Overview_and_Materials-2020-3-16.pdf

** See page 4 & 5 for Scarce Resources Cards & Scarce Resource Triage Algorithms and Worksheets

West Virginia

State of West Virginia Remdesivir Protocol for Use of West Virginia's Allocation of Remdesivir Solution for Injection (Version 1)(May 2020): <http://www.wvha.org/getmedia/658ebea4-c1c6-4738-ae23-72285929ec85/WV-Remdesivir-Protocol-Version-1-0-05152020.pdf.aspx>

Wisconsin

Ethical Allocation Framework for Bamlanivimab Treatment of COVID-19 in Wisconsin (Nov, 2020): <https://www.dhs.wisconsin.gov/publications/p02831.pdf>

Wyoming

Pandemic Influenza Response Plan (Revised on Jun. 30, 2019): <https://health.wyo.gov/wp-content/uploads/2020/03/Pandemic-Influenza-Response-Plan-June-2019.pdf>

** See Appendix C: Pandemic Planning Guidance for Local Public Health from page 47 for Pandemic Planning Guidance for Local Public Health.