Serious Illness Care, Structural Racism and Health Disparities in the Era of COVID-19: A Webinar

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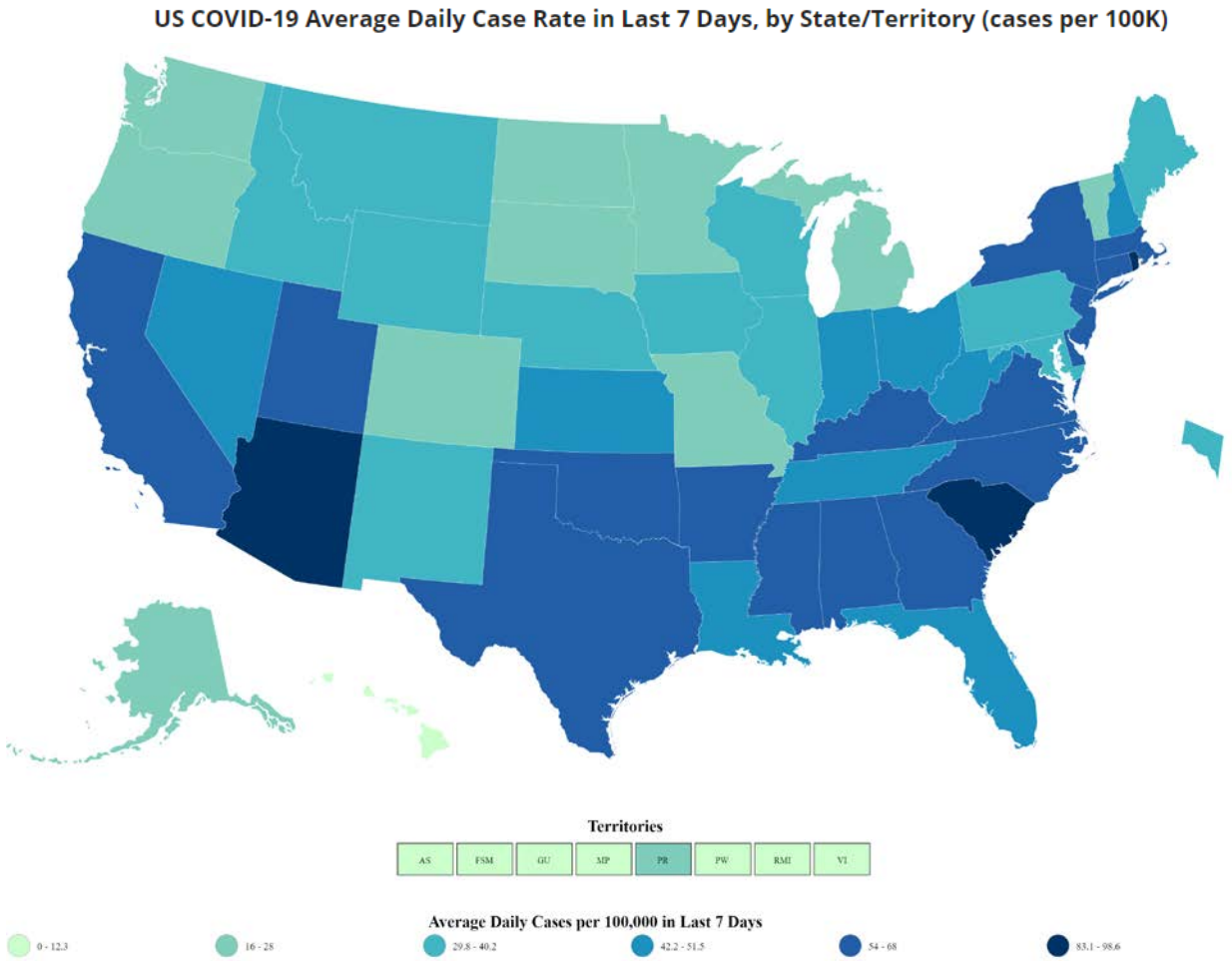
Brigham and Women's Hospital

HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

Mass General Brigham

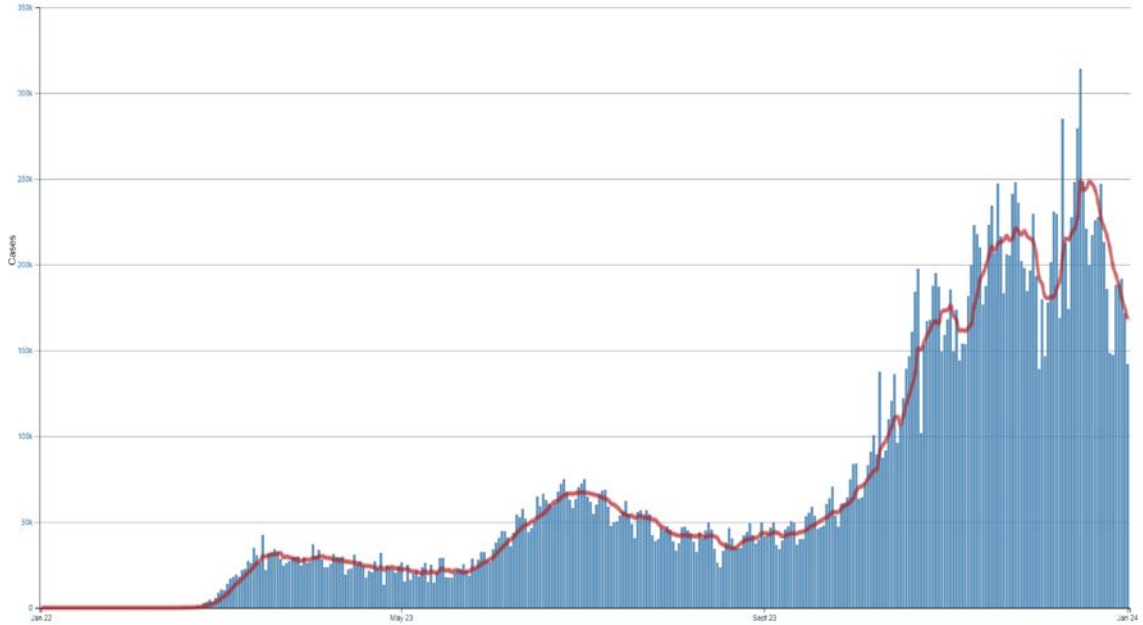
COVID-19: Where We Are Today

- As of January 26, 2021:
  - Total cases: 25,152,433
    - 133,913 new cases reported
    - Cases in last 7 days: 1,164,050
  - Total deaths: 419,827
    - January 12: US sets new record for most COVID-19 deaths reported in 1 day since the start of the pandemic with 4,327



https://covid.cdc.gov/covid-data-tracker/#cases_casesper100klast7days

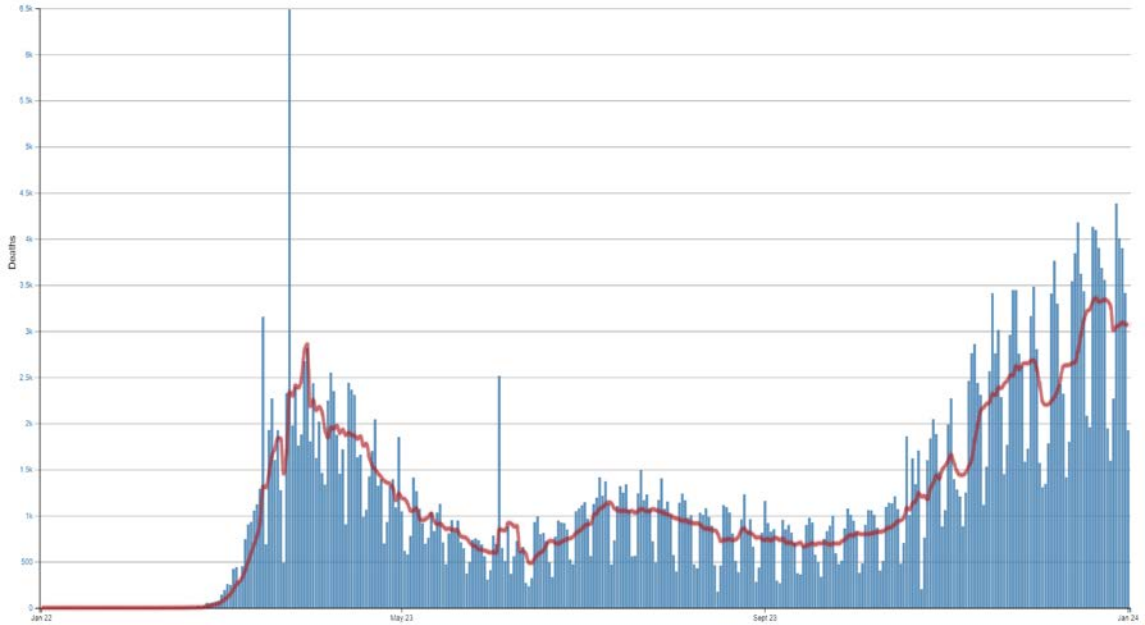
Daily Trends in Number of COVID-19 Cases (*left*) and Deaths (*right*) in the United States Reported to CDC



https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases

7-Day Moving Average for COVID-19 Cases as of January 26, 2021: 166,292

7-Day Moving Average for COVID-19 Deaths as of January 26, 2021: 3,112



https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendsdeaths

COVID-19: An overview

- Racial and ethnic disparities
- Socioeconomic status
- Urban vs. rural populations
- Palliative care
- Crisis Standards of Care

Racial and Ethnic Disparities

- The COVID-19 pandemic has disproportionally affected communities of color, highlighting long-standing health disparities and exposing the pervasiveness of structural racism in healthcare

- Common explanations for disproportionate burden:
  1. Racial/ethnic minorities have a disproportionate burden of underlying comorbidities
  2. Racial/ethnic minorities and poor populations in urban settings are more likely to live in crowded conditions and be employed in public-facing occupations

JAMA Network | Open

Original Investigation | Infectious Diseases

Assessment of Racial/Ethnic Disparities in Hospitalization and Mortality in Patients With COVID-19 in New York City

Gbenga Ogedegbe, MD, MPH; Joseph Ravenell, MD; Samrachana Adhikari, PhD; Mark Butler, PhD; Tiffany Cook, MA; Fritz Francois, MD; Eduardo Iturrate, MD; Girardin Jean-Louis, PhD; Simon A. Jones, PhD; Deborah Onakomaiya, MPH; Christopher M. Petrilli, MD; Claudia Pulgarin, MS; Seann Regan, MA; Harmony Reynolds, MD; Azizi Seixas, PhD; Frank Michael Volpicelli, MD; Leora Idit Horwitz, MD

- Findings:
  - 9722 patients
  - Black and Hispanic patients more likely to test positive
  - Among patients hospitalized Black patients were less likely to have severe illness and to die

- Meaning:
  - neighborhood characteristics may explain the disproportionately higher out-of-hospital COVID-19 mortality among Black individuals.

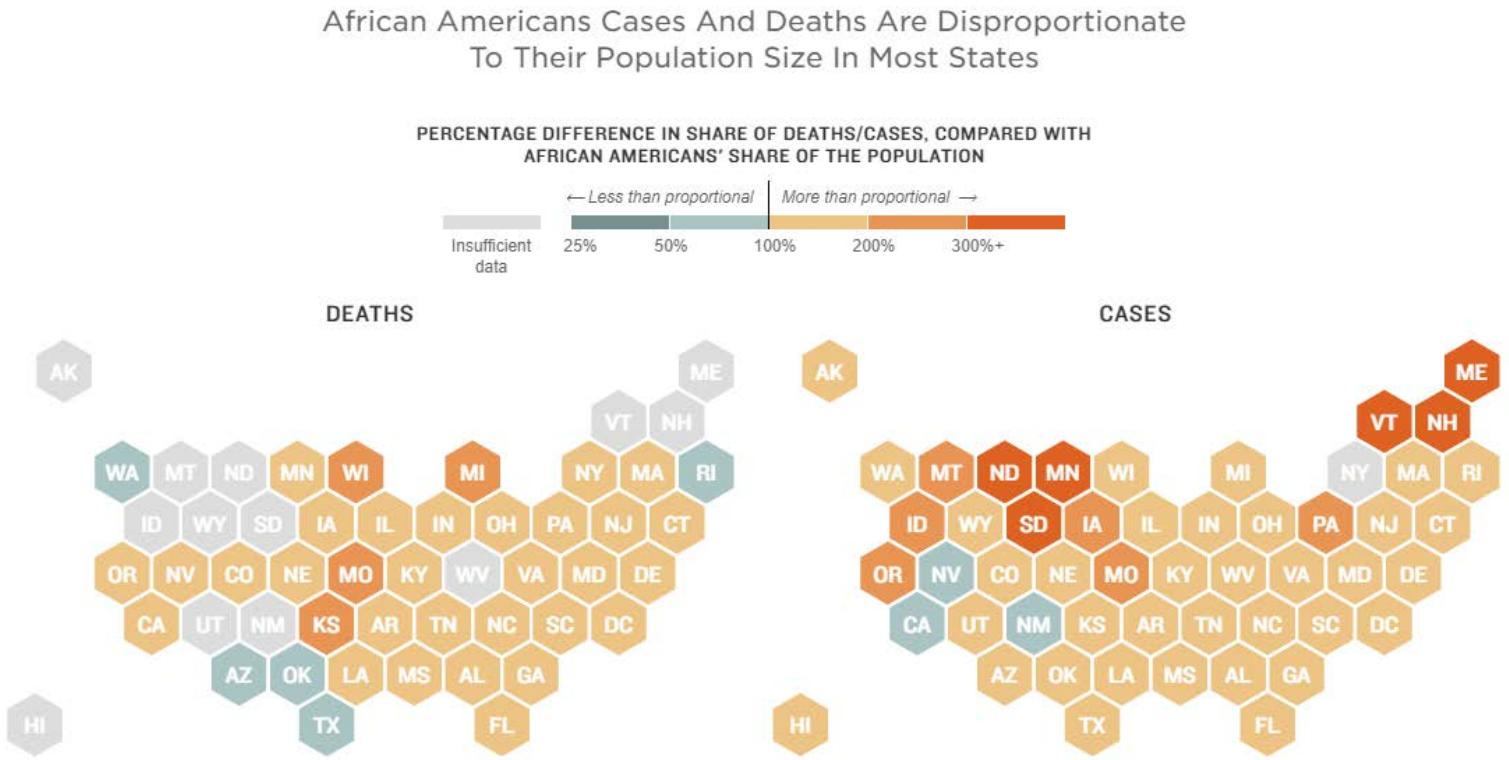
Social Inequities Explain Racial Gaps in Pandemic, Studies Find

Higher rates of infection and mortality among Black and Hispanic Americans are explained by exposure on the job and at home, experts said.

Dr. Gbenga Ogedegbe conducted a study of coronavirus infections among Black and Hispanic patients. "We hear this all the time — 'Blacks are more susceptible,'" he said. In fact, "it is all about the exposure." Gabriela Bhaskar for The New York Times

https://www.nytimes.com/2020/12/09/health/coronavirus-black-hispanic.html

Data shows COVID-19 disproportionately affects communities of color



https://www.npr.org/sections/health-shots/2020/09/23/914427907/as-pandemic-deaths-add-up-racial-disparities-persist-and-in-some-cases-worsen

- For example, Sept. 2020 data from a sampling of states shown on the left:

Cases and Deaths by Black or African American Race alone:			
	% of total population	% of cases	% of deaths
Louisiana	32	41	47
Illinois	14	19	26
North Carolina	21	24	30
Michigan	14	25	39
Alabama	27	38	41
California	6	4	8

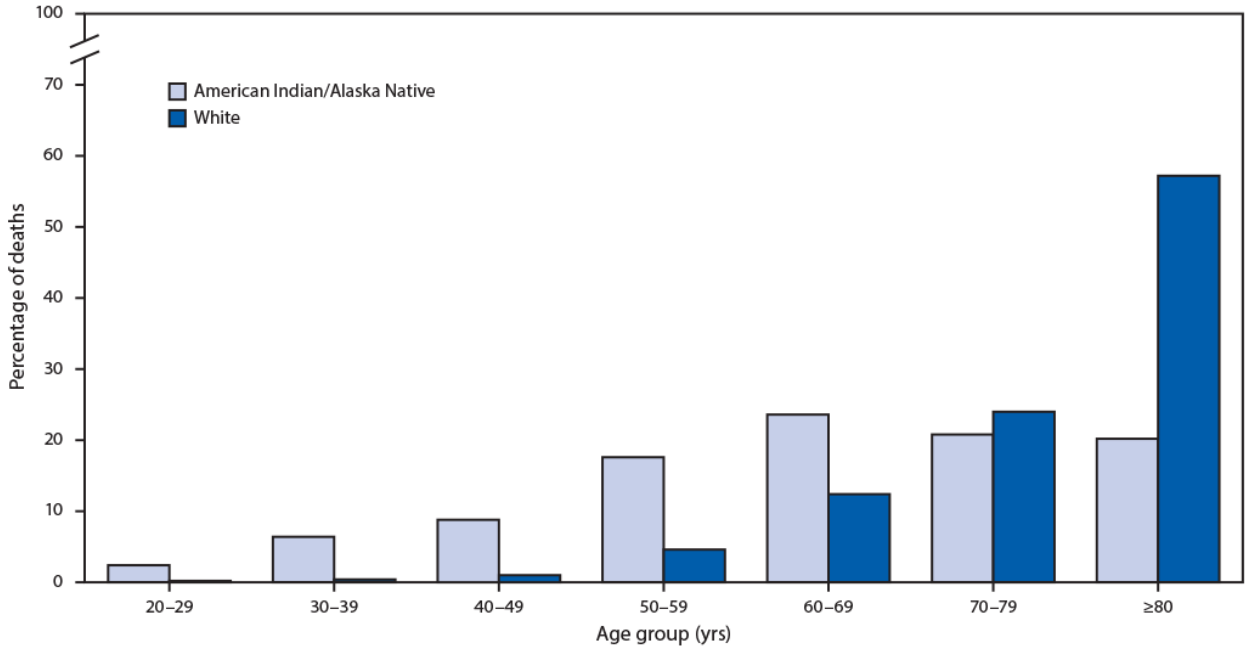
https://covidtracking.com/race/dashboard

- The analysis also found that Hispanic and Latino infection rates are disproportionate in most states; and in most states with sufficient data, Native Americans are disproportionately affected. White, non-Hispanic rates have stayed disproportionately low.

COVID-19 Mortality Among American Indian and Alaska Native (AI/AN) Persons

- COVID-19 mortality rate among AI/ANs was 1.8 times that of non-Hispanic Whites
- Mortality was higher among men than women
- Greatest disparity among 20-49 years

FIGURE. Percentage distribution of COVID-19–associated deaths among American Indian/Alaska Native* and non-Hispanic White persons aged ≥20 years, by age group† — 14 states,§ January 1–June 30, 2020



Abbreviation: COVID-19 = coronavirus disease 2019.

* Includes Hispanic and non-Hispanic ethnicities.

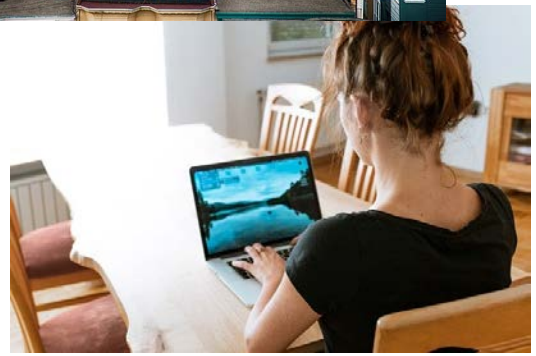
† Percentages by age group are not age-adjusted.

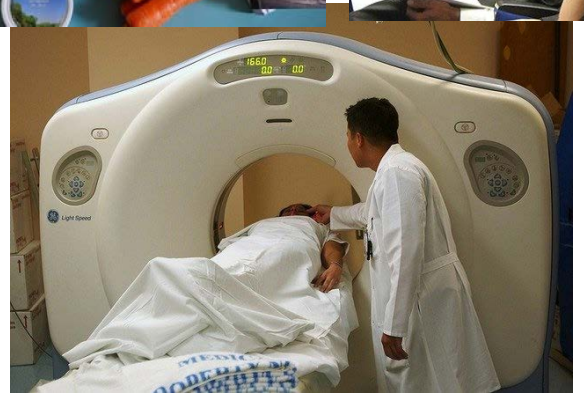
§ Alaska, Arizona, Louisiana, Minnesota, Mississippi, Nebraska, New Mexico, New York, North Dakota, Oklahoma, Oregon, South Dakota, Utah, and Washington.

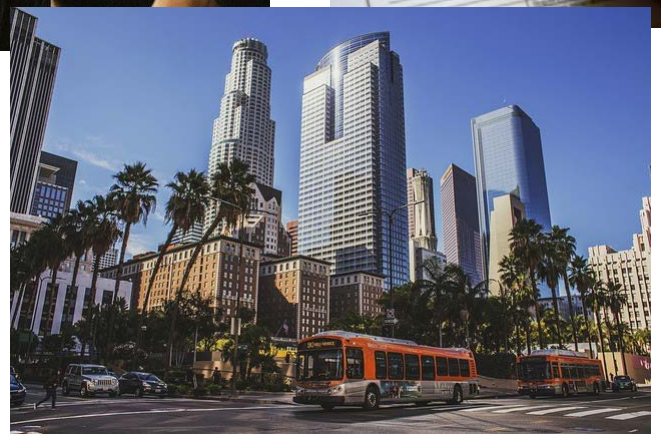
Arrazola J, Masiello MM, Joshi S, et al. COVID-19 Mortality Among American Indian and Alaska Native Persons — 14 States, January–June 2020. MMWR Morb Mortal Wkly Rep 2020;69:1853–1856. doi:10.15585/mmwr.mm6949a3

Socioeconomic status and COVID-19

- Socioeconomic status influences:







Images from Pixabay

Not all Americans are at equal risk for COVID-19

Journal of Community Health
https://doi.org/10.1007/s10900-020-00944-3

ORIGINAL PAPER

Check for updates

The Impact of Socioeconomic Status on the Clinical Outcomes of COVID-19; a Retrospective Cohort Study

Christine Little[1] · Mathilda Alsen[2] · Joshua Barlow[1] · Leonard Naymagon[3] · Douglas Tremblay[3] · Eric Genden[2] · Samuel Trosman[2] · Laura Iavicoli[4] · Maaike van Gerwen[2,5]

Accepted: 29 October 2020

- COVID-19 positive patients who resided in high poverty areas were significantly younger, had a higher prevalence of comorbidities and were more likely to be female or a minority when compared to individuals living in low poverty areas.

Assessing the Impact of Neighborhood Socioeconomic Characteristics on COVID-19 Prevalence Across Seven States in the United States

Elham Hatef, Hsien-Yen Chang, Christopher Kitchen, Jonathan P. Weiner and Hadi Kharrazi*

Department of Health Policy and Management, Center for Population Health Information Technology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

- Zip codes with higher ADI (more disadvantaged neighborhoods) had higher COVID-19 prevalence compared to zip codes across the country and in the same state with lower ADI (less disadvantaged neighborhoods).

Opinion

Social Distancing Is a Privilege

The idea that this virus is an equal-opportunity killer must itself be killed.

By Charles M. Blow
Opinion Columnist

April 5, 2020

https://www.nytimes.com/2020/04/05/opinion/coronavirus-social-distancing.html

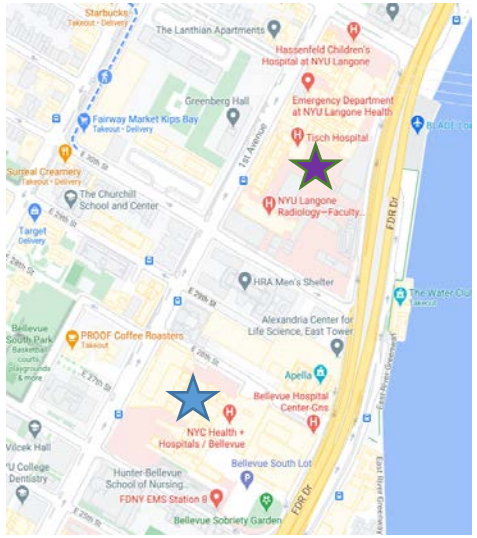
"…in a nation where too many black people have been made to feel that their lives are constantly under threat, the existence of yet another produces less of a panic. The ability to panic becomes a privilege existing among those who rarely have to do it.
I wholeheartedly encourage everyone who can to stay home, but I'm also aware enough to know that not everyone can or will, and that it is not simply a pathological disregard for the common good."

Disparities in hospital care

https://www.nytimes.com/2020/07/01/nyregion/Coronavirus-hospitals.html

"Certain hospitals are located in the heart of a pandemic that hit on top of an epidemic of poverty and stress and pollution and segregation and racism,"

- Dr. Carol Horowitz, director of the Institute for Health Equity Research at Mount Sinai



COVID-19 mortality rate:

NYU Langone: 11%

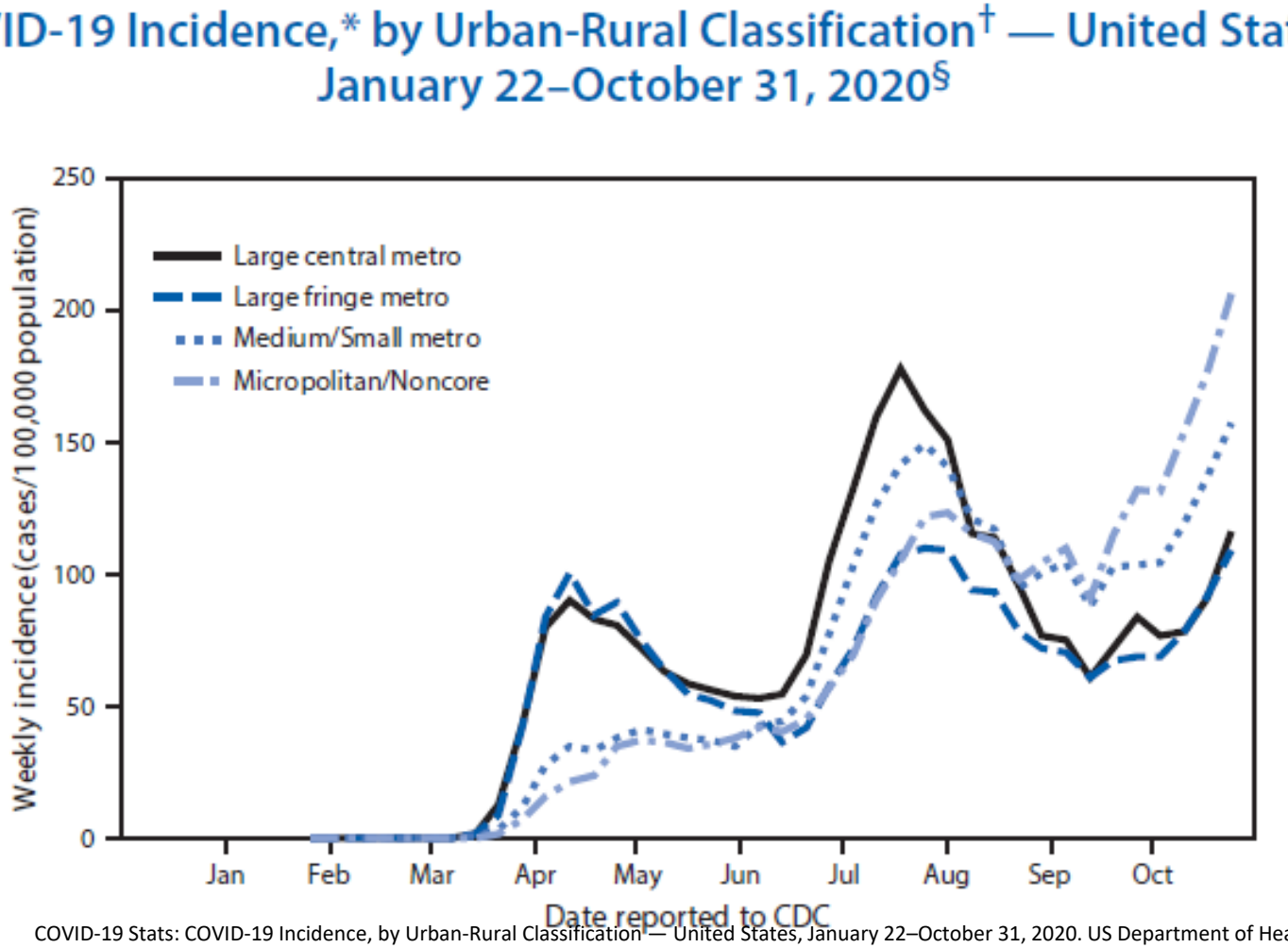
Bellevue Hospital Center: 22%

- NYC April 2020 data suggests patients at some community hospitals were 3x more likely to die as patients at medical centers in the wealthiest parts of the city
  - Of 17,500 confirmed COVID-19 deaths, more than 11,500 lived in zip codes with median household incomes below the city median
- Underfunded, community safety net hospitals often face lower numbers of staffing, worse equipment, and less access to drug trials and advanced treatments compared to private, academic medical centers

The New School – Center for New York City Affairs article: key considerations for NY policymakers to assist public and safety net hospitals

http://www.centernyc.org/urban-matters-2/2020/4/28/covid-19-and-hospital-inequality-why-its-getting-worse-and-how-to-fix-it

COVID-19 in Rural vs. Urban Populations



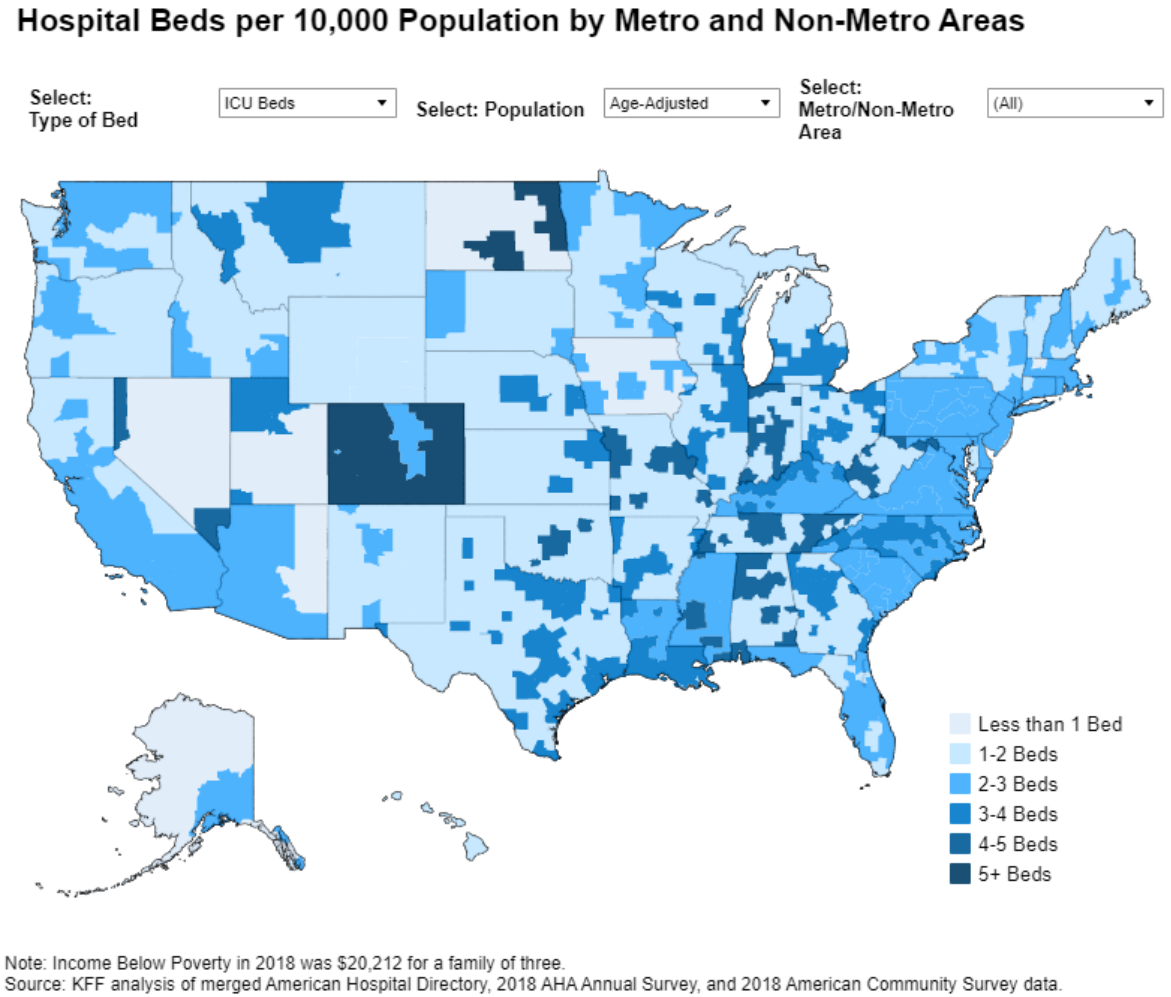
COVID-19 Stats: COVID-19 Incidence, by Urban-Rural Classification — United States, January 22–October 31, 2020. US Department of Health and Human Services/Centers for Disease Control and Prevention MMWR Morb Mortal Wkly Rep 2020;69:1753. doi:10.15585/mmwr.mm6946a6.

COVID-19 and Rural America

- Rural communities may be uniquely vulnerable:
  - have higher levels of poverty
  - have fewer job opportunities and heightened vulnerability to labor market shocks
  - lack access to healthcare, have a heightened reliance on Telehealth
  - have older and health-compromised populations
  - face barriers to enrollment in clinical trials
  - have limited access to COVID-19 testing

Differences in urban vs. rural hospital bed capacity

- Non-metro populations more likely to be older, sicker
- After adjusting for population age, differences in ICU capacity between non-metro and metro areas become more pronounced (1.6 beds per age-adjusted population vs 2.9 beds).
- Non-metro areas have about 10% fewer hospital beds per age-adjusted 10,000 population



Note: Income Below Poverty in 2018 was $20,212 for a family of three.
Source: KFF analysis of merged American Hospital Directory, 2018 AHA Annual Survey, and 2018 American Community Survey data.

https://www.healthsystemtracker.org/brief/urban-and-rural-differences-in-coronavirus-pandemic-preparedness/

COVID-19 and Palliative Care

- “Palliative care aims to relieve physical pain and psychological, social, and spiritual suffering while supporting the patient's treatment goals and respecting the patient's racial, ethnic, religious, and cultural values. Like all good patient care, palliative care is based on the fundamental ethical principles of autonomy, beneficence, nonmaleficence, justice, and duty.” – ACS Statement on Palliative Care

- During the pandemic, palliative and hospice patients and their families face symptoms, emotional distress, and decision making in the face of uncertainty and limited options

- Due to their expertise and training, palliative care providers are uniquely suited to address these challenges

- Challenge: Palliative care consult teams are a limited resource
- Alternatives:
  - Primary palliative care is the responsibility of every provider caring for a seriously ill patient, with palliative care teams available to consult providers
  - Palliative care consult criteria may need to temporarily become stricter
  - Limit number of palliative care providers who have direct contact with the patient to the bare minimum
  - Discourage existing palliative care and hospice patients from coming to the hospital or any clinic avoid becoming infected with COVID-19
  - Prepare for health care in the context of scarcity
  - Utilize evidence-based communication education curriculum (ie. VitalTalk) to prepare other clinicians to have difficult conversations

Resources:

capc https://www.capc.org/covid-19/health-equity/addressing-disparities/

VITALtalk https://www.vitaltalk.org/guides/bridging-inequity/

This Issue | Views 11,097 | Citations 3 | Altmetric 59 | Comments

Viewpoint

April 28, 2020

To Face Coronavirus Disease 2019, Surgeons Must Embrace Palliative Care

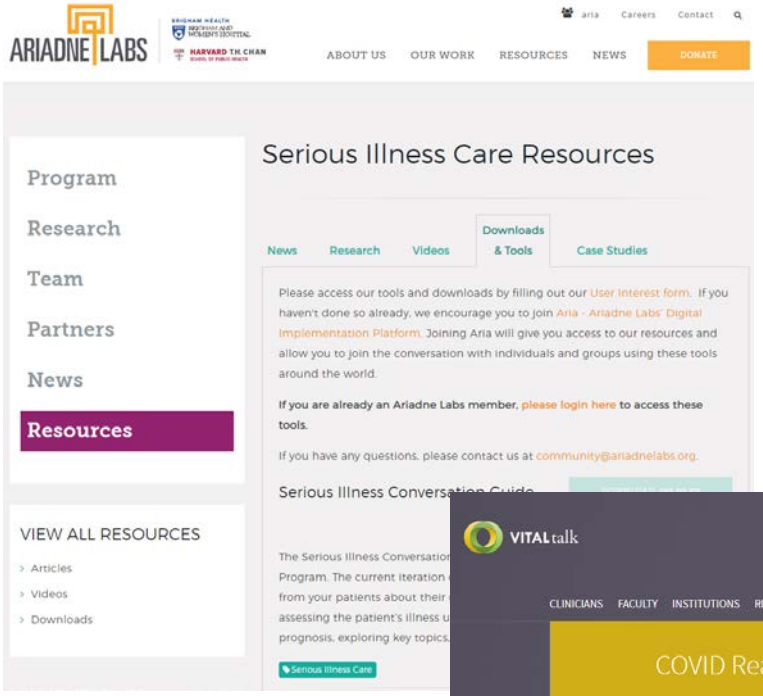
Zara Cooper, MD, MSc[1]; Rachelle E. Bernacki, MD, MS[2]

» Author Affiliations | Article Information

JAMA Surg. 2020;155(8):681-682. doi:10.1001/jamasurg.2020.1698

COVID-19 Resource Center

1. Use serious-illness communication strategies to disclose prognosis and establish goals of care
2. Treat total pain, including psychological, social, emotional, and spiritual components
3. Care for the family unit
4. Support clinicians



https://www.ariadnelabs.org/areas-of-work/serious-illness-care/resources/#Downloads&%20Tools

https://www.vitaltalk.org/guides/covid-19-communication-skills/

AMERICAN COLLEGE OF SURGEONS

Bulletin Brief

Bulletin Brief: January 26

"Postoperative mortality (4.2 million patients/year) is difficult and is higher with COVID-19 infection. It is particularly challenging during the pandemic, with families unable to visit their loved ones. Hospitals have made difficult decisions to balance minimizing COVID transmission with the provision of compassionate/high-quality patient care. As surgeons, we are healers. Our ultimate goal is to provide patient-centered surgical care to improve health and life. But when perioperative mortality is looming, we help patients/families make end-of-life decisions. The bond and trust patients have with their surgeons has never been more important. As surgeons, we have an important role in providing care/support for our dying patients. They will not die alone…"

Lena M. Napolitano, MD, FACS, FCCP, FCCM, Member, ACS Board of Regents

Crisis Standards of Care during COVID-19

- Crisis Standards of Care (CSC) provide a framework for fair allocation of scare resources during emergencies, based on strong ethical principles, the rule of law, the importance of provider and community engagement, and steps that permit the equitable and fair delivery of medical services to those who need them
- Key principles:
  - Fairness
  - Duty to Care
  - Duty to Steward Resources
  - Transparency
  - Consistency
  - Proportionality
  - Accountability

Ethical and equity implications

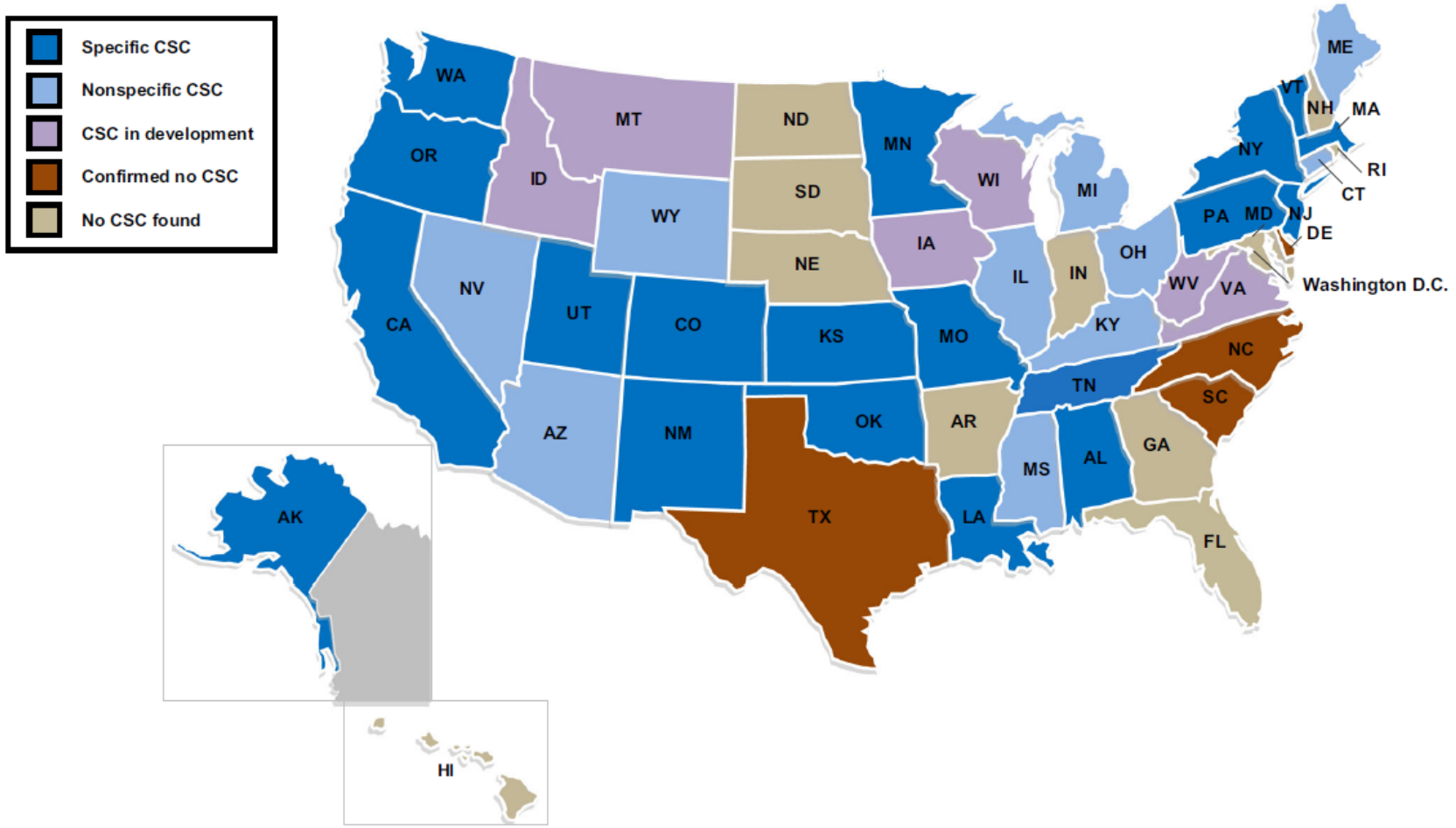


Fig. 2 Crisis Standards of Care across the USA, by status of development as of May 3, 2020

Cleveland Manchanda EC, Sanky C, Appel JM. Crisis Standards of Care in the USA: A Systematic Review and Implications for Equity Amidst COVID-19. J. Racial and Ethnic Health Disparities. 2020. doi:10.1007/s40615-020-00840-5

- Systematic review of 29 publicly available state-level CSC found wide variability in CSC existence and specificity
- CSC may disproportionately impact disadvantaged populations due to inequities in comorbid condition prevalence, expected lifespan, and other effects of systemic racism

CSC Controversies

- Ethical challenges:
  - Lives saved vs. life-years saved
  - Incorporating co-morbidities and long-term prognosis into scoring schemes
  - Prioritizing health care workers
- Practical challenges:
  - Timely dissemination of information
  - Effective facilitation of tabletop exercises

NEJM Catalyst | Innovations in Care Delivery

COMMENTARY

Addressing Challenges Associated with Operationalizing a Crisis Standards of Care Protocol for the Covid-19 Pandemic

Aimee Milliken, PhD, RN, Martha Jurchak, PhD, RN, Nicholas Sadovnikoff, MD, William B. Feldman, MD, DPhil, MPH, Sejal B. Shah, MD, Mark Galluzzo, , Judith Krempin, , Eric Goralnick, MD, MS

Vol. No. | August 12, 2020
DOI: 10.1056/CAT.20.0384

If CSC guidelines do not incorporate co-morbidities and instead rely on short-term measures alone such as SOFA score, patients will often end up with the same scores. Depending upon how algorithms are designed to break ties, prioritization scoring may default to considerations of age, lottery, or first-come, first-served principles, each of which has its own ethical challenges."

Los Angeles Times

CALIFORNIA

‘Triage officers’ would decide who gets care and who doesn’t if COVID-19 crushes L.A. hospitals

Doctors and nurses treat COVID-19 patients in a makeshift ICU wing at Harbor-UCLA Medical Center last week. (Dania Maxwell / Los Angeles Times)

By JAMES RAINEY, SOUMYA KARLAMANGLA, JACK DOLAN

JAN. 8, 2021 | 5 AM

CORONAVIRUS AND PANDEMIC >

Airline travelers to U.S. must pass COVID-19 tests under new rule effective Jan. 26

San Francisco’s COVID surge less than in December, but stay-home order remains

L.A. County approaching 1 million coronavirus cases as officials brace for new hospital surge

Children apologize to their dying elders for spreading COVID-19 as L.A. County reels

ICU capacity in California

Cases statewide »

2,784,366 confirmed

30,930 deaths

As of January 12, 3:24 p.m. Pacific

https://www.latimes.com/california/story/2021-01-08/la-county-covid-rationing-triage

Health Services

Los Angeles Department of Health Services
Guidance for Allocation of Scarce Critical Care Resources During a Public Health Emergency
Summary Overview

The COVID-19 pandemic has shown that a surge of COVID-19 patients can overwhelm a health system’s ability to treat all patients in need of care. When available resources of a specific kind exceed the demand for those resources, decisions must be made about who will receive them and who will not. As a result, the Los Angeles County Department of Health Services (DHS) has developed guidance for its facilities regarding the triage of critically ill patients and allocation of resources when a public health emergency creates demand for critical care resources (e.g., ventilators, critical care services, staffing, space, etc.) that outstrips available supply. For a more detailed discussion of the guidelines and their background and underlying reasoning, please refer to the full DHS “Guidance for Allocation of Scarce Critical Care Resources During a Public Health Emergency”.

The guidance provides for designation of Triage Officers at each hospital who will have authority and responsibility for assessing availability/scarcity of resources and working collaboratively with administrators and clinicians to allocate them according to the principles described below, with the overall goal of doing the most good for the most people.

The Guidelines are intended to be used at a time of “crisis” care, meaning when a facility is so overwhelmed with patients that it is simply unable to deliver typical standards of care (as opposed to “conventional” care, which is normal standard of care provided under normal circumstances, and “contingency” care, often associated with surge conditions, wherein the goal is normal standard of care, but may require changes in standard operating procedures to achieve that). (Appendix A provides information about how resources might be allocated during a crisis, and how to prepare for that process.)

These Guidelines are grounded in the following Ethical and Guiding Principles:

- Maximization of public health – doing the most good for the most people.
- Duty to care – a commitment to delivering the best care possible given the available resources.
- Duty to Steward Resources – all resources should be carefully allocated according to their known scarcity, likelihood of renewal, and the extent to which they can be replaced or reused.
- Distributive and Procedural Justice – allocating resources to maximize the chances of fairness and equity, and minimize the influence of biases such as ageism, sexism, racism, or ableism.
- Autonomy – during a period of crisis care, the principle of autonomy may be offset by other principles; nonetheless, patients should always be treated with dignity and respect.
- Reciprocity – in recognition of their critical role in fighting the pandemic, front-line health care workers (interpreted broadly to include all professions and support personnel) are afforded some preference in the allocation of scarce resources.
- Transparency - the potential for triage and resource allocation should be explained to patients and families when they present to the hospital for care, and individual

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http://file.lacounty.gov/SDSInter/dhs/1101085_DHSScarceResourcesGuidelines-Summary1.5.2021.pdf

In conclusion:

1. Need for comprehensive data by race and ethnicity
2. Social determinants of health must be at the heart of policy initiatives
3. Need for broad, interdisciplinary body of work examining rural populations
4. Incorporate palliative care, both in the immediate and long-term, to optimize care and relieve suffering
5. Duty to plan