United States

- Centers for Disease Control and Prevention, [clinical guidance for state and local readiness, which houses the AHRQ reports on Altered Standards of Care in Mass Casualty Events and the resource brief, Optimizing Surge Capacity: Hospital Assessment and Planning.](#)
    - This webpage provides an annotated list of resources that offer guidance on standards of care during crisis situations, how to expand surge capacity of healthcare facilities, and care for special populations like the hearing impaired and pediatrics.

- Centers for Medicare & Medicaid Services, [Current Emergencies](#)
    - This webpage houses an extensive list of resources including general information on coronavirus epidemiology, updates on the government's actions, press releases, clinical & technical guidance for health care facilities and labs, billing & coding guidance, and Medicare, Medicaid & CHIP coverage information.

- Centers for Disease Control and Prevention, [Ethical Guidelines in Pandemic Influenza (2007)](#)
    - This document proposes a foundation for decision making in preparing for and responding to pandemic influenza. It addresses ethical considerations (1) in vaccine and anti-viral drug distribution prioritization and (2) in the development of interventions that would limit individual freedom and create social distancing. Factsheet and checklists derived from this guidance are available at https://www.cdc.gov/os/integrity/phethics/ESdocuments.htm

- *Centers for Disease Control and Prevention, [Ethical Considerations for Decision Making Regarding Allocation of Mechanical Ventilators during a Severe Influenza Pandemic or Other Public Health Emergency (2011)](#)
    - This document supplements [CDC's Ethical Guidelines in Pandemic Influenza. It proposes a conceptual framework for decision making and planning specific to allocation of mechanical ventilators. It is not intended to provide detailed guidance, rather, it discusses which core ethical principles and special considerations should guide ventilator allocation as well as who should make ventilator allocation decisions.](#)

- Centers for Disease Control and Prevention, [Ethics Subcommittee Documents](#)
    - This webpage provides an annotated list of ethics resources relevant to public health emergencies published by the CDC's Ethics Subcommittee. The documents listed offer general guidance on all-hazard public health emergency

preparedness and response as well as ethical guidance specific to pandemic influenza, allocation of ventilators, and stockpiling of antiviral interventions.

- CDC's Pandemic Influenza [Triage Tools](#) and [User Guide](#)
    - This toolkit is designed for healthcare professionals and community healthcare leaders to manage influenza-like illness and medical surge during a pandemic. The tools provide a timely and accurate patient and resource assessment that aids in face-to-face patient encounters, mobilizing necessary resources at the community level, and to direct patients to the appropriate site of care.

- Department of Health and Human Services, [Healthcare Emergency Preparedness Information Gateway](#)
    - Technical Resources, Assistance Center, and Information Exchange (TRACIE) is an online resource center created to meet the information and technical assistance needs of professionals in healthcare emergency preparedness. The site offers resources including topic collections, tools, fact sheets, and webinars that are searchable by keywords, an assistance center that provides technical support and answers preparedness-related questions, and a peer-to-peer discussion board that allows near-real time communication with peers and members of ASPR. Click here to access the [Ethics Topic Collection](#).

- Veterans Administration National Center for Ethics in Health Care, [Ethical issues in Pandemic Influenza Preparedness and Response, which includes Meeting the Challenge of Pandemic Influenza: Ethical Guidance for Leaders and Health Care Professionals in the Veterans Health Administration (2010)](#)
    - This webpage lists resources from the VHA Pandemic Influenza Ethics Initiative including ethical guidelines developed by National Center for Ethics in Health Care, fact sheets, and materials to guide discussion forums. The guidelines "[Meeting the Challenge of Pandemic Influenza" discusses the unique obligations and decision processes of VHA](#) leadership, ethical duties of healthcare professionals and reciprocal institutional responsibilities, allocation of scarce life-saving resources, restrictions on individual liberties, and hospice and palliative care planning.

Florida

- Florida Count Education Council, [Pandemic Influenza Benchguide: Legal Issues Concerning Quarantine and Isolation (2019)](#)

- o This benchguide serves as a repository of information that judges and attorneys can utilize in court proceedings. It provides an overview of both federal and Florida public health law, discusses the specific role of the Florida courts in a public health emergency, and evaluates current statutory and regulatory issues associated with quarantine and isolation. It also provides links to relevant Florida Statutes and Florida Administrative Code Rules.

- Florida Department of Health, [Pandemic Influenza: Triage and Scarce Resource Allocation Guidelines (2011; *draft*)](#)
  - o These guidelines apply the framework set forth by the Institute of Medicine to provide detailed guidance on adult and pediatric patient triage and allocation of resources during a pandemic or other public health emergency. It makes recommendations for allocation of medical and staffing resources in 3 situation levels: conventional, contingency, and crisis and discusses. The document illustrates its guidance using decision trees and charts.

- Florida Hospital Association, [COVID-19 Updates](#)
  - o This webpage compiles data, reports and resources on the COVID-19 pandemic from the Florida Department of Health, CDC, CMS, and the WHO. It provides updated information on federal and Florida government actions and other relevant topics.

- [Florida Public Health Association](#)
  - o FPHA serves Florida's public health professionals and students through advocacy, professional development, and networking to improve Florida's health. The organization has a variety of interest groups and committees and offers educational training opportunities.

Other States

- Arizona Department of Health Services, [Pandemic Influenza Response Plan (2019)](#)
  - o This is a general response plan for Pandemic influenza. It identifies the duties of responsible parties, discusses operational logistics, and provides detailed guidelines for surveillance, infection control and prevention, healthcare operations, travel restrictions, and other preparedness activities.

- [Colorado Crisis Standards of Care Plan (2018)](#)
    - This plan provides the structure for coordinating response activities and guidelines for altering normal patient care, staffing, medical equipment, supplies, and treatment decisions in any type of healthcare setting during a public health emergency. This plan is designed according to an ethical and legal framework in order to assist healthcare providers in their decision making with the intention of maximizing patient survival and minimizing adverse outcomes.

- Illinois Department of Public Health (IDPH), [ESF-8 Plan (2018)](#)
    - This plan serves to provide operational guidance to the IDPH and its response partners, detailing public health and medical preparedness, response, and recovery actions in the event of a public health emergency. It provides the command structure, communications protocol, requests for resources process, and the procedure for the inter-regional transfer of medical supplies and equipment as they relate to IDPH.

- Tennessee Altered Standards of Care Workgroup, [Guidance for the Ethical Allocation of Scarce Resources during a Community-Wide Public Health Emergency as Declared by the Governor of Tennessee (2016)](#)
    - This document serves an ethical framework for government leaders and healthcare professionals to guide decision making at the state, local, and facility level during preparation for and response to a community-wide emergency. It provides patient triage tools and references strategies for scarce resource situations from the Minnesota Healthcare System Preparedness Program.

- Michigan Department of Community Health Office of Public Health Preparedness, [Guidelines for Ethical Allocation of Scarce Medical Resources and Services During Public Health Emergencies in Michigan (2012)](#)
    - This report provides guidance in making choices about resource and service allocation during public health emergencies. These guidelines do not present a formalized series of instructions, rather, a set of criteria that can be employed by decision-makers in various circumstances. It provides specific guidance on legal issues relevant to resource allocation and to hospitals and emergency medical services.

- Minnesota Department of Health, [Minnesota Pandemic Ethics Project (2010)](#)

- o This webpage presents the project's recommended ethical frameworks and procedures for rationing health-related resources in a severe influenza pandemic, such as antiviral drugs, vaccines, masks and respirators, and mechanical ventilators. The project also released a review article on relevant literature and government plans for responding to pandemic influenza.

- Minnesota Department of Health, [Patient Care Strategies for Scarce Resource Situations (2019)](#)
  - o This document provides charts displaying core clinical strategies for scarce resource situations specifically for oxygen, staffing, nutritional support, medication administration, hemodynamic support and IV fluids, mechanical ventilation, and blood products. It also provides resource reference and triage cards that address unique system response issues relevant to burn therapy, pediatrics, ECMO, and palliative care.

- New York State Task Force on Life and the Law, New York State Department of Health, [Ventilator Allocation Guidelines (2015)](#)
  - o This update of the 2007 guidelines provides revised adult guidelines to reflect recent medical advances, additional chapters on pediatric and neonatal populations, and a comprehensive examination of legal issues relevant to implementing these guidelines. In addition to detailed clinical ventilator allocation protocols, this document provides an account of the logic, reasoning, and analysis behind the guidelines.

- Utah Department of Health, [Disease Investigation Plan (2015)](#)
  - o This disease plan addresses the importance of novel influenza to public health, describes the disease and it epidemiology, and makes recommendations for disease control measure, case reporting, and case investigation.

- Indiana University Center for Bioethics; Indiana State Department of Health, [Ethics guide for health care practitioners: working under conditions of an influenza pandemic. Plan, prepare, practice. (2009)](#)
  - o This Ethics Toolkit provides practical input on ethical key issues facing health care practitioners in carrying out their clinical responsibilities during an influenza pandemic. It provides a case-based discussion on altered standards of care,

vaccine and antiviral provision, triage, and workforce management. It also contains a single sheet "Patient Guide" on page 15.

- Iowa Pandemic Influenza Ethics Committee, An Ethical Framework for Use in a Pandemic
  - This ethical framework document is intended for use by local public health officials aims to provide a foundation for decision making in preparing and responding to pandemic influenza. The document focuses on four ethical topics: General Ethical Considerations, Protection of Individual Rights, Triage, and Duty to Care and Health Professional's Protection.

- North Carolina Institute of Medicine, North Carolina's Ethical Guidelines for an Influenza Pandemic (2007)
  - This document addresses ethical issues in pandemic influenza including the duty of healthcare workers and those in critical industries, the reciprocal obligations to protect workers, the balance of individual rights and public need, and the prioritization of limited resources.

- South Carolina Pandemic Influenza Ethics Task Force, South Carolina Prepares for Pandemic Influenza: An Ethical Perspective (2009)
  - This document provides recommendations regarding workforce, disease containment, hospital care, legal concerns, and public information in accordance with four basic ethical principles: individual liberty, community solidarity, trust, and professionalism.

Municipalities

- Los Angeles County Medical and Health Operational Area Coordination Program, Allocation of Scarce Resources Guide (2017)
  - This guide aims to provide health-related departments with an all-hazards standardized approach and decision-making tool that can be used during an incident response to allocate scarce resources. It includes Assessment Worksheets for general health, mental health, and public health services.

International

- Italy: SIAARTI (Società Italiana di Anestesia, Analgesia, Rianimazione e Terapia Intensiva): [Raccomandazioni di etica clinica per l'ammissione a trattamenti intensivi e per la loro sospensione, in condizioni eccezionali di squilibrio tra necessità e risorse disponibili (Clinical ethics recommendations for admission to intensive treatments and for their suspension, in exceptional conditions of imbalance between needs and available resources. English translation.](#)
    - This document provides recommendations for developing criteria for allocation of intensive interventions that require scarce resources. The recommendations touch on topics such as the ethical principles that should guide clinical practices, establishing a "ceiling of care", use of ECMO, information exchange, shared decision making, and visitation restrictions.

- World Health Organization, [Ethics in epidemics, emergencies and disasters: Research, surveillance and patient care (2015)](#)
    - This training manual outlines core competencies in ethical practices during epidemics, emergencies and disasters. The manual has two parts: Part 1 covers ethical conduct of research and surveillance, discussing the conflict between the common good and individual autonomy, standards for ethical oversight, and publication ethics. Part 2 covers ethics in patient care, including triage, resource allocation, standards of care, and the professional duties of health care workers in these contexts.

- World Health Organization, [Guidance for Managing Ethical Issues in Infectious Disease Outbreaks (2016)](#)
    - This document complements general guidance on public health ethics. It aims to assist policy-makers, health care providers, researchers, and other stakeholders in developing practical strategies and tools to uphold critical ethical principles in outbreak situations. The document is organized around 14 specific guidelines, each addressing key aspects of epidemic planning and response.

- World Health Organization, [Ethical issues in pandemic influenza planning](#)
    - This webpage provides an annotated list of ethics resources on pandemic influenza including WHO's work: "[Ethical considerations in developing a public health response to pandemic influenza" and "Research Ethics in International Epidemic Response" as well as additional resources from other reputable organizations.](#)

- World Health Organization. (2014). Hospital preparedness for epidemics. World Health Organization. https://apps.who.int/iris/handle/10665/151281
    - o This guide is intended to provide a foundation for healthcare facilities to establish and maintain preparedness for epidemics. Each chapter covers a relevant topic in epidemic preparedness and is clearly outlined into goals, general principles, basic requirements, and preparedness, response, and recovery tasks.

- International Journal of Health Policy Management, Key Ethical Issues Discussed at CDC-Sponsored International, Regional Meetings to Explore Cultural Perspectives and Contexts on Pandemic Influenza Preparedness and Response (2016)
    - o This article explores cultural perspectives on ethical considerations relevant to pandemic influenza preparedness and response. The authors map outcomes from CDC-sponsored meetings in Africa, Asia, Latin America, and the Eastern Mediterranean according to key ethical challenges outlined in WHO's guidelines: transparency and public engagement, allocation of resources, social distancing, obligations to and of healthcare workers, and international collaboration.

Other Resources

- American College of Epidemiology, COVID-19 Resources
    - o This webpage provides a brief overview of COVID-19 and links to recommendations to the general public and relevant resources from the CDC, WHO, and several major journals.

- The *AMA Journal of Ethics* offers curated resources of ethical relevance to the COVID-19 pandemic
    - o This webpage offers a curated list of resources that aim to promote ethical reflection and decision making during the COVID-19 pandemic. It also includes relevant Code of Medical Ethics Opinions.

- National Academy of Medicine, crisis standards of care
    - o This book builds on IOM's 2009 letter report, Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations. It provides a systems-based framework for the development and implementations of crisis standards of care planning. It details the functions and tasks of key stakeholders and addresses

legal, ethical, palliative, and mental health issues that are likely to arise in disaster situations.

- Wynia/Hick STAT First Opinion article providing an overview of ethical principles and considerations in making triage decisions for COVID19: [If Covid-19 gets bad, triage will be needed. Are we ready for that?](#)
  - This article highlights the most widely used guidelines for crisis standards of care and their ethical framework. It calls to attention the need for evidence-based, point of care triage tools for clinicians, the incorporation of simulations in emergency preparedness, and for appropriate education for medical trainees.

- Hick/Hanfling/Wynia/Pavia NASEM Perspective article on hospital planning for COVID-19 triage: [Duty to Plan: Health Care, Crisis Standards of Care, and Novel Coronavirus SARS-CoV-2](#)
  - In this discussion paper for health care planners and clinicians, the authors discuss the application of Crisis Standards of Care (CSC) principles in panning for resource shortages during the COVID-19 pandemic. The article reflects on CSC implementation at systems level as well as in emergency departments, inpatient services, outpatient services, alternative care sites, and emergency medical services.

- Helpful guidance on hospital prep from the Johns Hopkins Center for Health Security: [What US Hospitals Should Do Now to Prepare for a COVID-19 Pandemic](#)
  - The purpose of this article is to offer to American hospital administrators and clinicians specific judgment on what hospitals should do to prepare for a COVID-19 pandemic. The article makes an argument for urgent preparedness, defines preparedness, and highlights top priorities in responding to the COVID-19 pandemic.

- Kaiser Health News article on the state-by-state nature of pandemic preparedness and response, with quotes from Wynia, Hick and Hodge: [During a Pandemic, States' Patchwork of Crisis Strategies Could Mean Uneven Care](#)
  - The article draws attention to the inadequacy of States' crisis plans and the need for a more detailed, local application of National Crisis Standards of Care in planning for resource shortages during the COVID-19 pandemic.

SPECIAL TOPICS

Role of Students

- [Should medical students continue clinical rotations during a pandemic?](#)
    - This opinion article was written by a third year medical student, Canon Brodar, at University of Miami Miller School of Medicine. The article highlights ethical guidance from the AAMC and AMA and provides a personal perspective of the role and responsibilities of medical students in public health emergencies.

Privacy, HIPAA

- U.S. Department of Health and Human Services, [HIPAA and Public Health](#)
    - This document explains the exceptions to HIPAA regulations in which it is necessary to access protected health information to ensure public health and safety.

- HHS Office of Civil Rights, February 2020 Bulletin, [HIPAA Privacy and Novel Coronavirus](#)
    - This bulletin was released to ensure that HIPAA covered entities and their business associates are aware of the ways that patient information may be shared in an outbreak of infectious disease or other emergency situation, and to serve as a reminder that the protections of the Privacy Rule are not set aside during an emergency.

Informatics

- Association of Public Health Laboratories, [sample HL7 messages and coding guidelines for public health labs sending COVID-19 results to CDC; and a coding spreadsheet with specific LOINC and SNOMED codes.](#)
    - This webpage provides a summary of the current state of the laboratory response to COVID-19, and resources for public health laboratories actively conducting or preparing to conduct testing for the virus such as coding guidelines, federal guidance, and webinars.

- National Library of Medicine and others, [COVID-19 Open Research Dataset (CORD-19) of scholarly literature about COVID-19, SARS-CoV-2, and the coronavirus group (2020)](#)

- This dataset is a free resource of over 29,000 scholarly articles, including over 13,000 with full text, about COVID-19 and coronavirus-related research. It is intended to mobilize researchers to apply recent advances in natural language processing to generate new insights in support of the fight against COVID-19.

- Regenstrief Institute's LOINC, [pre-release codes](#)
  - This webpage provides a list of Special Use codes that are developed in response to the COVID-19 pandemic. LOINC supports the use of these codes but be aware that downstream users may not be ready to handle prerelease codes until officially published.

- [Omaha System Guidelines](#)
  - This web site provides evidence-based practice guidelines/standardized care plans for clinical practice or public health policy in coded format for use by healthcare practitioners and consumers. It organizes guidelines relevant to COVID-19 by role: Teaching, Guidance, and Counseling, Treatments and Procedures, Case Management, and Surveillance

Compilation and Annotations by Michele Benjamin (MS2020), Florida International University College of Medicine, March 28, 2020.