

Issue Brief

Preparing for and Responding to Hospital and Intensive Care Unit (ICU) Surge

March 23, 2020 (Updated as of 4 p.m. ET)

OVERVIEW

In a pandemic response, hospitals and ambulatory centers may reach capacity and must enact emergency surge plans. Many hospitals have surge plans that involve transfer or diversion to other nearby hospitals not experiencing surge. COVID-19 infection and its rapid onset could quickly overwhelm any local and/or state healthcare system. State public health agencies may be asked to provide guidance and policy direction for emergency hospital surge. The following policy actions and resources offer information for public health officials to address this surge during a pandemic.

STATE, FEDERAL, AND INTERNATIONAL POLICY ACTIONS

Jurisdictions have enacted a variety of strategies to plan for or mitigate capacity surges in response to COVID-19:

- **Maryland** hospitals are using [triage tents](#) to screen potential COVID-19 cases.
- The governors of **New York state** and **Maryland** have issued executive orders for expanded hospital capacity.
- **Massachusetts** and **New Jersey** hospitals are restricting visitors to their facilities.
- Hospitals in **North Carolina** are launching [tele-intensive care units](#) (tele-ICU or eICU).
- **New Mexico** hospitals are [mobilizing](#) resources and exploring non-hospital settings to set up additional patient capacity.
- The governor of **California** issued an [executive order](#) to increase capacity in clinics, mobile health care units, and adult day health care facilities.
- The governor of **Kansas** issued an [executive order](#) to temporarily expand the state's healthcare system capacity by authorizing out-of-state doctors to provide telemedicine services to patients.
- Internationally, China [built](#) the 645,000 square foot Huoshenshan Hospital in ten days to accommodate COVID-19 patients in Wuhan.

RESOURCES

- [Surge toolkit and facility checklist: Reopening a shuttered hospital to address surge](#) – Agency for Healthcare Research and Quality. July 2018.
- [Expanding ICU facilities in an epidemic: recommendations based on experience from the SARS epidemic in Hong Kong and Singapore](#) – Gomersall et. al. 2006.
- [Hospital seasonal influenza/pandemic preparedness checklist](#) - California Hospital Association. Feb. 28, 2020.
- [The Coronavirus in Oregon: Moving to an emergency response to improve the healthcare system's capacity](#) – statement by former Gov. John Kitzhaber. March 15, 2020.
- [Surge hospitals: Providing safe care in emergencies](#) – Joint Commission on Accreditation of Health Organization. 2006.
- [Guidelines for managing hospital surge capacity](#) – Wisconsin Department of Health Services. 2015.

- [Work system barriers and strategies reported by tele-ICU nurses: A case study](#) – Hoonakker and Carayon. 2018.
- [Hospital surge evaluation tool: User manual for controllers and evaluators](#) – HHS, Office of the Assistant Secretary for Preparedness and Response. December 2014.
- [U.S. ICU resource availability for COVID-19](#) – Society of Critical Care Medicine. March 25, 2020.
- [Prepare to care for COVID-19: Get your practice ready](#) – CDC. March 15, 2020.
- [Standards Interpretation Frequently Asked Questions](#) - Joint Commission. Updated routinely.

For questions, feedback, or additional information, please email preparedness@astho.org.