Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Development of an Anesthesiology Disaster Response Plan  245
Mac Staben, Jesse Raiten, Meghan Lane-Fall, and Michael Scott

Events during the 2020 COVID-19 pandemic have demonstrated how disasters can disrupt the flow of health care delivery. Disaster events may become more common, and health care providers need proper training in how to manage patients affected by these events. Literature from anesthetic management from prior disasters, other specialties, and low-income and middle-income countries, offers guidance for how to respond to disasters. An effective disaster response requires a comprehensive plan that is rehearsed and well executed. Health care workers responding to a disaster may suffer physical and psychological consequences.

The Initial Response to a Pandemic: Anesthesiology Experiences from China at the Onset of COVID-19  255
Jing Wu, Xueyin Chen, Xiangdong Chen, Shanglong Yao, and Renyu Liu

This article documents experiences from frontline anesthesia providers in Wuhan, China, mainly from the anesthesiologists in Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, Hubei, China. Those experiences offer valuable insight into the processes used to optimize the emergency response system, and the medical resources and emergency allocation, as well as providing information on the role anesthesiologists played in managing the pandemic.

Development of a Critical Care Response - Experiences from Italy During the Coronavirus Disease 2019 Pandemic  265
Emanuele Rezoagli, Aurora Magliocca, Giacomo Bellani, Antonio Pesenti, and Giacomo Grasselli

Italy was the first western country facing an outbreak of coronavirus disease 2019 (COVID-19). The first Italian patient diagnosed with COVID-19 was admitted, on Feb. 20, 2020, to the intensive care unit (ICU) in Codogno (Lodi, Lombardy, Italy), and the number of reported positive cases increased to 36 in the next 24 hours, and then exponentially for 18 days. This triggered a response that resulted in a massive surge in ICU bed capacity. The COVID19 Lombardy Network organized a structured logistic response and provided scientific evidence to highlight information on COVID-19 associated respiratory failure.
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**Anesthesiology and Critical Care Response to COVID-19 in Resource-Limited Settings: Experiences from Nepal**  
Gentle S. Shrestha, Ritesh Lamsal, Pradip Tiwari, and Subhash P. Acharya  

It is difficult to predict the future course and length of the ongoing COVID-19 pandemic, which has devastated health care systems in low- and middle-income countries. Anesthesiology and critical care services are hard hit because many hospitals have stopped performing elective surgeries, staff and scarce hospital resources have been diverted to manage COVID-19 patients, and several makeshift COVID-19 units had to be set up. Intensive care units are overwhelmed with critically ill patients. In these difficult times, low- and middle-income countries need to improvise, perform indigenous research, adapt international guidelines to suit local needs, and target attainable clinical goals.

**Anesthesiology in Times of Physical Disasters—Earthquakes and Typhoons**  
Tsui Sin Yui Cindy, Ranish Shrestha, Bajracharya Smriti Mahaju, and Ashish Amatya  

Nepal and Hong Kong both are susceptible to natural disasters due to their geographic locations. Nepal suffers from frequent earthquakes, and Hong Kong regularly experiences typhoons of varying severity. Natural disasters may present acutely or with some advance warning. In either case, it is critical that disaster response plans are well established in advance of any incident. This article discusses the anesthetic and critical care implications of such natural disasters, using Nepal and Hong Kong as case studies.

**Mass Casualty and the Role of the Anesthesiologist**  
Derek Nicholas Lodico and Rear Admiral Darin Via  

The anesthesiologist, upon completion of their training, is expected to be the liaison to the operating room and the patient. Key components of the anesthesiologist’s training and daily routine make them an ideal participant and leader when it comes to their potential involvement in a mass casualty event. Airway expertise, vascular access, ongoing triage, hemodynamic vigilance, resuscitation, and real-time adaptation to a changing and critical care environment are a few of the skills that encompass the daily routine and value the anesthesiologist brings to an emergency management team.

**Battlefield Medicine: Anesthesia and Critical Care in the Combat Zone**  
J. Michael Jaeger, Darian C. Rice, and Brooke Albright-Trainer  

The US Military Joint Trauma System has been developed to mitigate the harsh conditions under which medical providers care for combat casualties and provide continuity of care from the battlefield to US medical centers. We review the components of this system with emphasis on combat trauma care under fire and the role of the anesthesiologist and intensivist in this continuum of care. An important link in the chain of survival is the Air Force Critical Care Aeromedical Transport Team, which provides critical care while transporting casualties from the theater to higher levels of care outside the war zone and home.
This article addresses the importance of anesthesiologists providing regional anesthesia techniques that are beneficial to the care of trauma patients in the field. It also discusses the advantages and risks associated with regional anesthesia in the field along with how to avoid those risks. In addition, it describes some of the benefits of modern ultrasound techniques compared with landmark techniques with stimulation and other important considerations when performing regional anesthesia in the field. The article gives the unique indications, risks, and key points of the most useful regional techniques for anesthesiologists operating in field environments.

COVID-19 challenged many facets of medicine. At the frontlines of managing the health care of the infected were anesthesiologists and critical care physicians, especially those in large cities. The Hospital of the University of Pennsylvania [HUP] was no exception. Through simulations, online education platforms, and most importantly creative scheduling that allows acquisition of skills and ACGME milestones to be met, COVID-19 allowed the Department of Anesthesiology and Critical Care at HUP to meet the challenges presented during the surge and create a template for future challenges to the US health care system.

In March 2020, the COVID-19 pandemic reached New York City, resulting in thousands of deaths over the following months. Because of the exponential spread of disease, the New York City hospital systems became rapidly overwhelmed. The Department of Anesthesiology at New York Presbyterian (NYP)-Columbia continued to offer anesthesia services for obstetrics and emergency surgery, while redirecting the rest of its staff to the expanded airway management role and the creation of the largest novel intensive care unit in the NYP system. Tremendous innovation and optimization were necessary in the face of material, physical, and staffing constraints.

The COVID-19 pandemic has seen many hurdles to crucial research processes, in particular those that depend on personnel interactions, in providing safeguards against the incipient infectious disease. At the same time, there was a rapid redirection of research, driven by popular and social media and demand for pandemic-related content, to the detriment of non–COVID-19 research and perhaps to COVID-19 research itself. This article provides historical context to research redirection and discusses approaches to optimizing research methodology in the setting of COVID-19 pandemic.