

Engagement and Education

Care of the Critically Ill and Injured During Pandemics and Disasters: CHEST Consensus Statement

Asha V. Devereaux, MD, MPH, FCCP; Pritish K. Tosh, MD; John L. Hick, MD; Dan Hanfling, MD;
James Geiling, MD, MPH, FCCP; Mary Jane Reed, MD, FCCP; Timothy M. Uyeki, MD, MPH, MPP; Umair A. Shah, MD, MPH;
Daniel B. Fagbuyi, MD; Peter Skippen, MBBS; Jeffrey R. Dichter, MD; Niranjana Kissoon, MBBS, FRCPC;
Michael D. Christian, MD, FRCPC, FCCP; and Jeffrey S. Upperman, MD; on behalf of the Task Force for Mass Critical Care

BACKGROUND: Engagement and education of ICU clinicians in disaster preparedness is fragmented by time constraints and institutional barriers and frequently occurs during a disaster. We reviewed the existing literature from 2007 to April 2013 and expert opinions about clinician engagement and education for critical care during a pandemic or disaster and offer suggestions for integrating ICU clinicians into planning and response. The suggestions in this article are important for all of those involved in a pandemic or large-scale disaster with multiple critically ill or injured patients, including front-line clinicians, hospital administrators, and public health or government officials.

METHODS: A systematic literature review was performed and suggestions formulated according to the American College of Chest Physicians (CHEST) Consensus Statement development methodology. We assessed articles, documents, reports, and gray literature reported since 2007. Following expert-informed sorting and review of the literature, key priority areas and questions were developed. No studies of sufficient quality were identified upon which to make evidence-based recommendations. Therefore, the panel developed expert opinion-based suggestions using a modified Delphi process.

RESULTS: Twenty-three suggestions were formulated based on literature-informed consensus opinion. These suggestions are grouped according to the following thematic elements: (1) situational awareness, (2) clinician roles and responsibilities, (3) education, and (4) community engagement. Together, these four elements are considered to form the basis for effective ICU clinician engagement for mass critical care.

CONCLUSIONS: The optimal engagement of the ICU clinical team in caring for large numbers of critically ill patients due to a pandemic or disaster will require a departure from the routine independent systems operating in hospitals. An effective response will require robust information systems; coordination among clinicians, hospitals, and governmental organizations; pre-event engagement of relevant stakeholders; and standardized core competencies for the education and training of critical care clinicians. CHEST 2014; 146(4_Suppl):e118S-e133S

ABBREVIATIONS: MCC = mass critical care

Revision accepted May 1, 2014; originally published Online First August 21, 2014.

AFFILIATIONS: From Sharp Hospital (Dr Devereaux), Coronado, CA; Mayo Clinic (Dr Tosh), Rochester, MN; Hennepin County Medical Center (Dr Hick), University of Minnesota, Minneapolis, MN; Inova Health

System (Dr Hanfling), Falls Church, VA; George Washington University (Dr Hanfling), Washington, DC; VA Medical Center (Dr Geiling), White River Junction, VT; Geisel School of Medicine at Dartmouth (Dr Geiling), Hanover, NH; Geisinger Medical Center (Dr Reed), Temple School of Medicine, Danville, PA; US Centers for Disease Control and Prevention

Summary of Suggestions

1. We suggest integrated communication systems and a robust infrastructure of the electronic health record system to facilitate tracking the number of people affected by a mass event, including the types and severity of injuries and detection of secondary illnesses.
2. We suggest, when power is intact, virtual ICUs, point-of-care testing, portable monitoring systems with Global Positioning System, and telemedicine facilitate transfer and sharing of clinical information. Such technologies need to be established and used prior to mass critical care delivery in order to provide familiarity to the users.
3. We suggest aggregated essential clinical information be included with other key ICU logistical communication so that bidirectional transfer of information permits a consistent delivery of health care across the spectrum.
4. We suggest public health/government officials at centralized or regional emergency management coordinating centers use expert medical guidance, such as burn, neuro, or trauma critical care, specific to the nature of the incident to inform decision-making for mass critical care delivery.
5. We suggest every ICU clinician participate in disaster response training and education.
6. We suggest expectations regarding clinician response to pandemics or disasters be delineated in contractual agreements, medical staff bylaws, or other formal documents that govern the array of responsibilities to the health-care system.
7. We suggest hospitals employ and/or train ICU physicians in disaster preparedness and response.
8. We suggest hospitals ensure appropriate ICU leadership with knowledge and expertise in the management of surge capacity, disaster response, and ICU evacuation.
9. We suggest critical care leaders be invited to participate in health-care coalitions so they can facilitate sharing expertise, resources, and knowledge between ICUs in the event of a regional disaster.
10. We suggest incorporation of disaster medicine into critical care training curricula will facilitate future ICU clinician training and engagement in disaster preparedness and response activities.
11. We suggest expert opinions be considered in mass critical care education curricula.
12. We suggest an independent panel of multidisciplinary specialty society experts determine the core competencies for mass critical care education curriculum.
13. We suggest translating competencies into multidisciplinary learning modules become a core focus of academic, professional organizations, governmental, and nongovernmental organizations whose students and responsible agencies may be called upon to provide mass critical care.
14. We suggest standing committees in education, or a reasonable equivalent in relevant stakeholder groups, review and endorse the curriculum and competencies.
15. We suggest educational activities draw on all modern modalities of education (including access via web-based learning, simulation, or other modalities for remote learners) and include incremental (individual, organizational, community), realistic, and challenging training opportunities.

(Dr Uyeki), Atlanta, GA; Harris County Public Health and Environmental Services (HCPHES) (Dr Shah), Houston, TX; The George Washington University (Dr Fagbuyi), Children's National Medical Center, Washington, DC; BC Children's Hospital (Dr Skippen), University of British Columbia, Vancouver, BC, Canada; Allina Health (Dr Dichter), Minneapolis, MN; Aurora Healthcare (Dr Dichter), Milwaukee, WI; BC Children's Hospital and Sunny Hill Health Centre (Dr Kissoon), University of British Columbia, Vancouver, BC, Canada; Royal Canadian Medical Service (Dr Christian), Canadian Armed Forces and Mount Sinai Hospital, Toronto, ON, Canada; and Children's Hospital Los Angeles (Dr Upperman), Keck School of Medicine, University of Southern California, Los Angeles, CA.

FUNDING/SUPPORT: This publication was supported by the Cooperative Agreement Number 1U90TP00591-01 from the Centers of Disease Control and Prevention, and through a research sub award agreement through the Department of Health and Human Services [Grant 1 - HFPEP070013-01-00] from the Office of Preparedness of Emergency

Operations. In addition, this publication was supported by a grant from the University of California–Davis.

COI grids reflecting the conflicts of interest that were current as of the date of the conference and voting are posted in the online supplementary materials.

DISCLAIMER: American College of Chest Physicians guidelines and consensus statements are intended for general information only, are not medical advice, and do not replace professional care and physician advice, which always should be sought for any medical condition. The complete disclaimer for this consensus statement can be accessed at <http://dx.doi.org/10.1378/chest.1464S1>.

CORRESPONDENCE TO: Asha V. Devereaux, MD, MPH, FCCP, 1224 10th Place #205, Coronado, CA 92118; e-mail: ashadevereaux@icloud.com

© 2014 AMERICAN COLLEGE OF CHEST PHYSICIANS. Reproduction of this article is prohibited without written permission from the American College of Chest Physicians. See online for more details.

DOI: 10.1378/chest.14-0740

Download English Version:

<https://daneshyari.com/en/article/2899894>

Download Persian Version:

<https://daneshyari.com/article/2899894>

[Daneshyari.com](https://daneshyari.com)