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## **USU Consensus Conference Leads to Eight Recommendations for Medical System Response following Mass Shootings**

**Bethesda, Md.** – Clinicians who responded in the immediate aftermath of mass shootings in Las Vegas, Sutherland Springs and El Paso, Texas, Orlando and Parkland, Florida, and Dayton, Ohio, were brought together by the Uniformed Services University of the Health Sciences' (USU) National Center for Disaster Medicine and Public Health to review lessons learned and to develop medical system response recommendations for future events. Their findings, including eight recommendations, were published on July 18, "Mass Shootings in America: Consensus Recommendations for Healthcare Response," as an "article in press" in the *Journal of the American College of Surgeons*.

Although studies have looked at mass casualty incidents in general, researchers have not specifically looked at the medical system response to mass shooting incidents, according to the report. To help health care facilities and communities better respond to mass shootings, USU's NCDMPH assembled clinicians who responded directly to mass shootings from the six sites listed above, where more than 15 people were killed or injured, for a consensus conference in September 2021. Participants identified eight recommendations across three sub-groups that described a need for:

- **Readiness training:** Regular training activities that mirror the realism of actual events to help ensure readiness of the entire community system.
- **Public education:** Prior public education or immediate direction from web-based programs that can help teach the public about which hospitals are appropriate to bring mass shooting patients for care.
- **Triage:** A staged and iterative triage process at the scene, and emergency department, and to prioritize operative care.
- **Communication:** Effective communication between prehospital staff at the scene and hospitals.
- **Patient tracking:** A patient tracking system that functions from point-of-injury through subsequent care.
- **Medical Records:** Rehearsal with and rapid availability of alternative methods of patient care documentation and order entry.
- **Family reunification:** Rapid implementation of organized, well-communicated family reunification and assistance services.
- **Mental health services:** Tailored after-action mental health services for responding health care professionals.

"We recognized that mass shootings are frequent events that occur in the United States and wondered if we could learn more about how to optimize response to these incidents," said lead study author Dr.

Craig Goolsby, vice chair of USU's Department of Military and Emergency Medicine, and the science director of NCDMPH. "We identified a group of recent mass shootings and then invited clinicians who participated in the healthcare response – EMS clinicians, emergency physicians, and surgeons – to participate in our conference."

Representatives from each site first completed a two-part pre-conference survey, then gave a presentation about their response to the mass shooting. The study team then identified common themes from the survey responses and presentations. On the last day of the conference, the health care professionals broke into subgroups based on their expertise (EMS, emergency medicine, and surgery) to develop specific recommendations for each of the themes identified by the study team. After the conference, study authors reviewed each group's consensus statements to identify common themes and to make recommendations that were similar across all three groups.

The study participants created 11 additional recommendations common to two sub-groups. As an example, Dr. Goolsby noted that the participants recommended anatomic considerations for mass shooting triage.

"In other words, the location of the bullet holes on a patient is important in getting the patient the right care as quickly as possible," Goolsby said. "This change could be a pretty easy recommendation for hospitals to implement."

While mass shooting incidents are a shockingly common occurrence nationally, they are still unlikely to affect a given community on any particular day, the study authors wrote, adding that information from this conference may help prehospital and health systems fill a preparedness gap for the unique challenges of a mass shooting.

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