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Active shooter on campus!

Prepare for when, not if.

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As colleges and universities face the realities of today's educational environment, preparing for an active shooter event is a necessity. Managing emergencies on campuses is a top safety priority. Training students, faculty, and staff to respond according to guidelines developed by law enforcement and emergency management personnel in the event of an active shooter provides the greatest chances of survival (see *Quick tips for nurses in an active shooter event*). Although predicting an active shooter event is nearly impossible, preparing for one is a grim reality that must be faced.

A scarcity of literature exists regarding specific resources and plans for preparing nurses in educational settings for an active shooter event. A recent CINAHL search limited to publication dates between 2007 and 2017 in academic journals, using the search terms "active shooter" and "nursing," yielded 37 results, with only 6 nursing journal

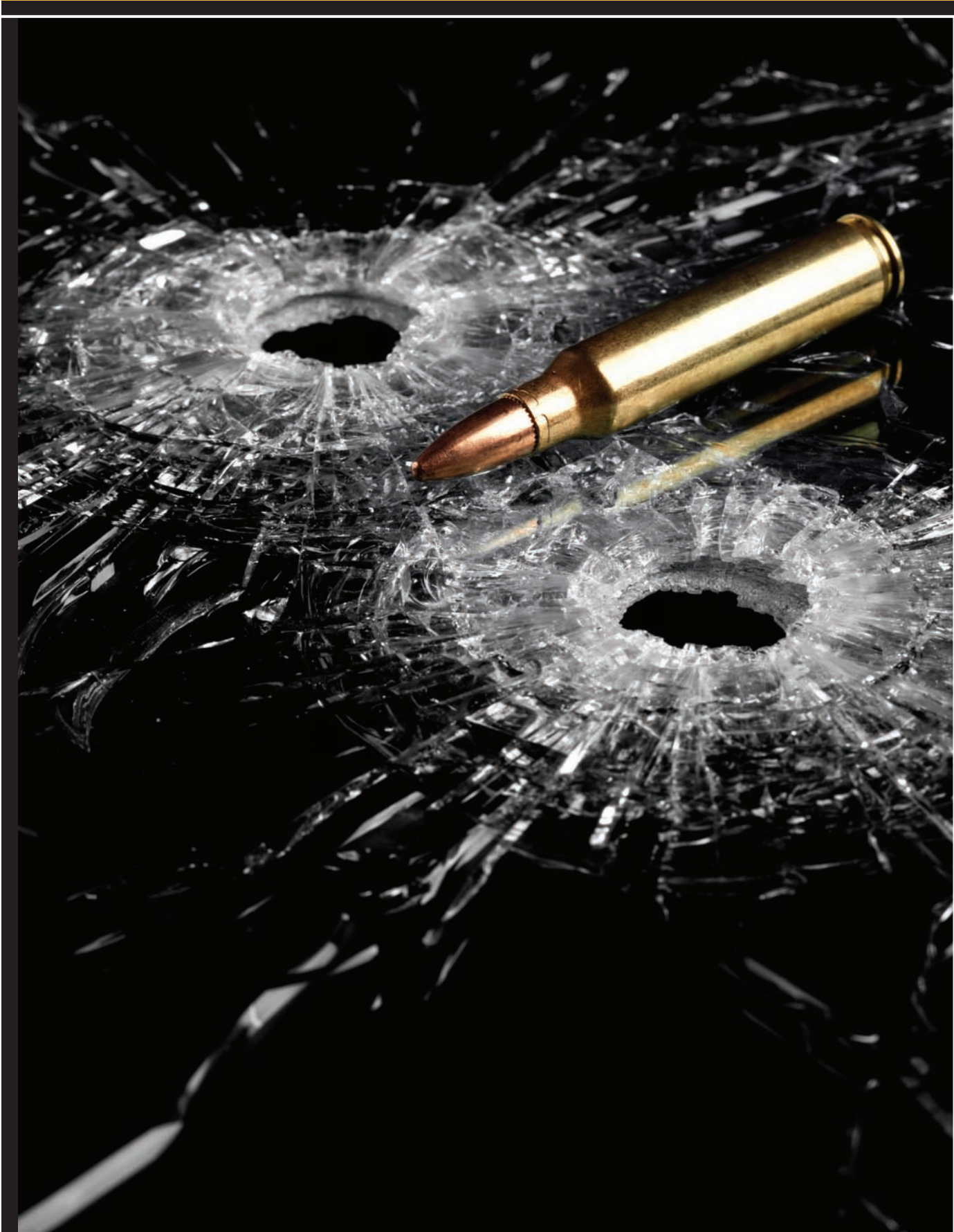
articles. The majority of publications advocated for training and preparation within hospital settings. One article focused specifically on educational facilities, but was only available for purchase through the university library.

In this article, we provide information to help nurses in educational settings prepare for an active shooter event.

Definitions and statistics

According to the U.S. Federal Bureau of Investigation (FBI), an active shooter is defined as "one or more individuals actively engaged in killing or attempting to kill people in a populated area." In 2014, the FBI reported that 160 active shooter events occurred in the United States between 2000 and 2013, with over 1,000 casualties (486 killed, 557 wounded). An updated 2016 FBI report indicated that there were an additional 20 active shooter events each year in 2014 and 2015, resulting in 231

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casualties (92 killed, 139 wounded). The locations of reported active shooter events included businesses, educational institutions, government buildings, open spaces, residences, healthcare facilities, and houses of worship.

A mass shooting event is defined as one in which four or more people are injured or killed in a single incident, not counting the shooter. The Gun Violence Archive has reported 299 mass shooting events in 2017, with more than 300 killed and more than 1,500 injured. This includes the worst mass shooting in U.S. history, which occurred at Mandalay Bay in Las Vegas, Nev., on October 1, 2017, resulting in 58 deaths and 546 injuries when a gunman opened fire during a concert.

In educational settings

Between 2000 and 2016, the FBI reported a total of 48 active shooter events in educational settings, including elementary schools, middle schools, high schools, colleges/universities or technical schools, and school board meetings. Everytown for Gun Safety, an independent organization dedicated to reducing gun violence, reported 242 school shootings (defined as a firearm being discharged inside a school building or on school or campus grounds) since 2013. In 2015, 23 active

shooter events were reported on college campuses.

An added challenge in Texas higher education settings was created with the authorization of Texas Penal Code 46.03(a) on August 1, 2016, allowing individuals to carry concealed firearms on college campuses. As the number of active shooter events continues to rise in the United States, the need for nurses in educational settings to be prepared to respond in concert with law enforcement officers increases dramatically.

Simulation training

The following is a description of the procedures used to develop and participate in an active shooter simulation in a west Texas city. Faculty and students from a nursing program were involved in the simulation as nurses and patients in the active shooter event. The training was initiated and sponsored by a local helicopter manufacturer. Development of the active shooter simulation required many resources and steps to ensure an effective and safe learning environment.

Planning

The first step in the planning process was defining the activity and creating a plan for executing the simulation. The active shooter event was to be conducted in a simulated office building. To ensure the safety of participants, the simulation needed to be conducted in a secure location to prevent anyone from mistaking the simulation for an actual event.

The second step included identifying key personnel and initiating collaboration between the agencies that would participate in or be affected by the event. Clarification of roles and responsibilities was necessary to assist in the planning and execution of the simulation. Numerous agencies were notified about the simulation; first and foremost, law enforcement officials at the federal, state, and local levels. Law enforcement notification is critical to ensure the safety of the public and prevent

Quick tips for nurses in an active shooter event

Run: The urge for nurses may be to run toward the situation to assist, but you should run away from the shooter. Your personal safety is the first priority. Don't stop to take personal belongings, such as a purse or cell phone. As you leave a building, if law enforcement personnel are present, keep your hands high in the air to indicate you aren't the shooter. Remember, you won't be able to assist anyone if you become a victim in the incident.

Hide: Take shelter if you're unable to flee the situation. Close and lock doors, block the door, hide under desks or in a closet, turn off the lights, and don't open the door until clearly notified by law enforcement. If you have your cell phone, turn off notifications and ringers. Be as still as possible and don't attract attention.

Fight: As a last resort, fight for your life. Use physical aggression and whatever is available. Attempt to incapacitate by throwing objects at the shooter.

accidental initiation of emergency responses. The specific law enforcement agencies included the FBI, the Drug Enforcement Administration, the Department of Energy, and the Defense Security Service; the Amarillo, Tex., police department, the Randall County (Tex.) sheriff, Rick Husband Amarillo International Airport police, and Pantex nuclear weapons plant police (located northeast of Amarillo).

An incident command post (ICP) was established, allowing the various law enforcement agencies to collaborate and determine which agency would be the first to respond to the scene. In a real active shooter event, the ICP is essential to the establishment of communication, coordination of efforts, and dissemination of information to the public.

The third step included notification of public agencies in the area and an invitation to participate in the event. Emergency medical services (EMS), Amarillo College EMS students, and the City of Amarillo Fire Department participated in the event, but were informed initially to make them aware of potential injuries from participation. Hospital personnel were invited to participate to provide tertiary care, with specific notification given to ED staff and hospital administrators. Local hospitals were on alert, including BSA Health System and Northwest Texas Healthcare System. A helicopter company was on-site during the simulation. The Texas Tech University Health Sciences Center communication director participated in the event by taking videos and photos.

Community support services were notified, including utility companies, the local media, and the American Red Cross, to inform the public that the simulation was a training activity and not an actual active shooter event. In a real situation, the media are involved to keep the public informed of unfolding events and remind the public to stay away from the area.

During the planning phase, several meetings were necessary to set up the rules

of engagement. Communication between the various departments was established by defining the roles for each entity during the simulation. The defined roles included securing the area (police, SWAT) and evacuating the victims (fire department). Police escorted the fire department into the building to complete Simple Triage and Rapid Treatment (see *The START adult triage algorithm*). Victims were carried out of the building using a police escort. EMS personnel transported the victims out of the area to the local hospitals. American Red Cross personnel were on the scene, supporting emergency first responders with water and additional identified needs.

Methods

An active shooter event is usually a high-intensity, short-duration incident. In the described simulation, all casualties were sustained within 20 minutes; FBI statistics indicate that most mass shootings last less than 10 minutes. The national average response time of law enforcement is approximately 10 minutes. The findings also reflect the damage that can occur in a matter of minutes: 44 of 63 incidents (70%) studied ended in 5 minutes or less; 23 ended in 2 minutes or less. Police response time may be delayed in heavy urban areas due to traffic and in rural areas due to the distance of trained emergency response personnel.

At the end of our simulation scenario, the shooter was killed by law enforcement. Active shooter events usually resolve in one of the following ways:

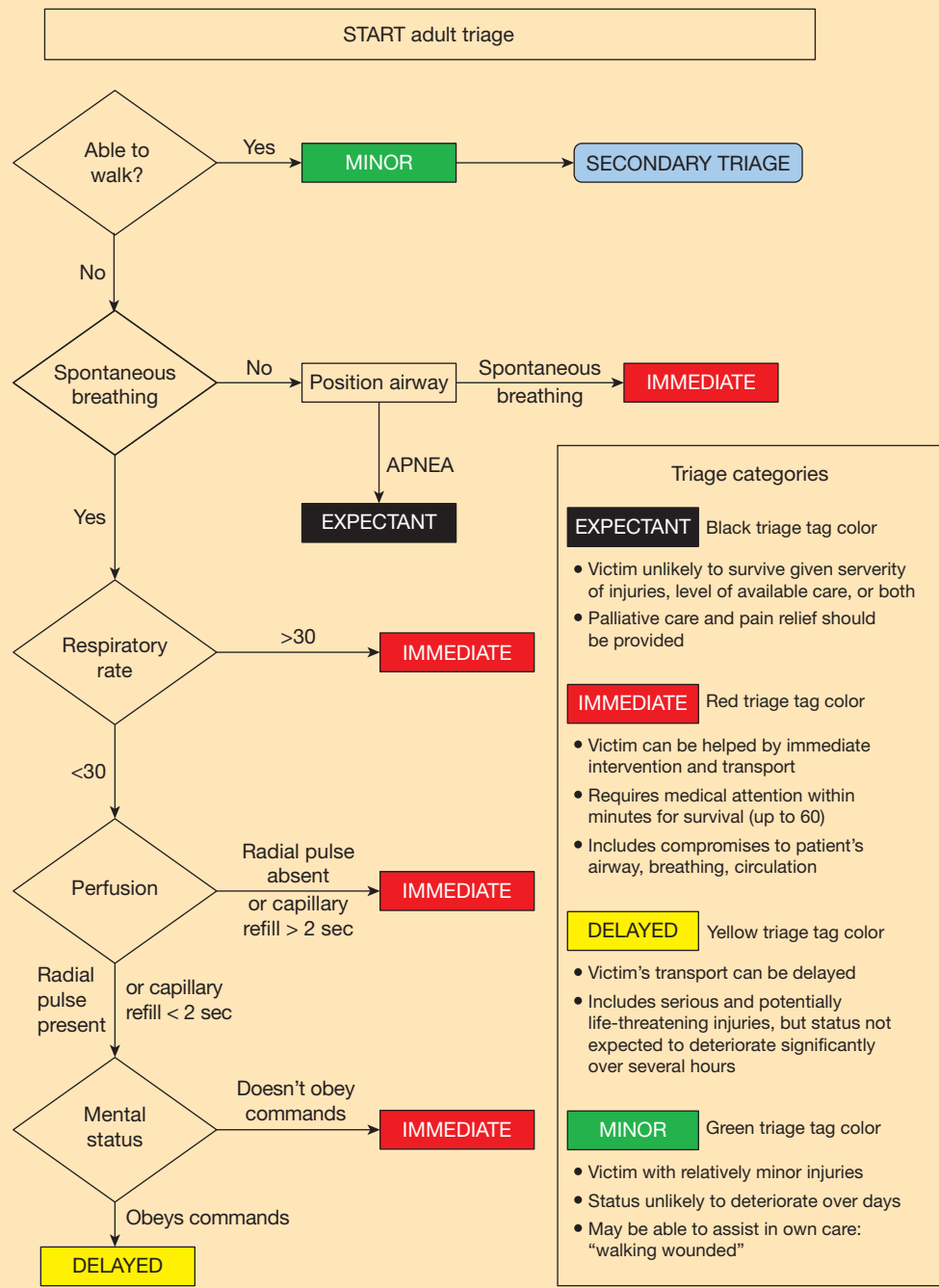
- The shooter is killed or captured by law enforcement.
- The shooter kills him- or herself.
- The shooter is killed or captured by civilians at the scene.
- The shooter expends all means of violence and surrenders.
- The shooter barricades him- or herself.

Communication is critical during any emergency. Simulated active shooter events are no exception. Communication

An active shooter event is usually a high-intensity, short-duration incident.

The START adult triage algorithm

Simple Triage and Rapid Treatment, or START, is a rapid assessment method used to triage victims during a mass casualty event. Victims are quickly labeled according to the assessment process described below.



between different services must be pre-planned to enhance collaboration and execution, thereby controlling and decreasing the risks of unintended consequences. In our simulation, there were limited issues with interservice coordination due to deconflicting the communication plan before the simulation. Inclusion of senior leaders from major services down to entry teams and EMS responders will prevent confusion and improve outcomes.

After action

If medical resources are overwhelmed during or following an active shooter event, it's deemed a mass casualty incident. Receiving hospitals may need to initiate their mass casualty plan. Even after the primary shooting has ended, there's no guarantee of an end to hostilities. There may be other shooters or even a secondary attack aimed at first responders. For this reason, EMS and law enforcement personnel must practice and work together to be able to enter a dangerous area as a cohesive team.

Limitations

Preparing for an active shooter simulation requires extensive resources. Involving as many agencies as possible provides a broader perspective and a more realistic simulation. Communication between all agencies involved is critical to establish a clear plan of action. Time must be allotted for planning and coordinating the simulation, as well as preparing the simulation site and moulage (creating mock injuries) of victims. Participating agencies must schedule time for personnel to be available to perform an active role in the simulation. Including multiple simulated victims in the scenario will reveal potential weaknesses in the use of current resources and establish a clear picture of how resources would be utilized in a real event.

All participating community agencies and local businesses will be called on to provide financial support. Donations can also help offset costs. Supplies that

may be needed include providing meals and water for participants, building and location sites, and establishing media coverage. Simulation equipment includes moulage, simulated weapons and ammunition, emergency vehicles, and site security officers. Offering clinical hours or continuing education may provide added incentives for volunteer participants.

According to the standards of best practice for simulation, debriefing is a "learner-centered reflective conversation... intended to assist learners in examining the meaning and implications of actions taken during a simulated experience." Participants in a simulated active shooter event must be debriefed; however, debriefing may be limited due to the time needed to meet with all of the personnel involved in the simulated event. Faculty may need to schedule additional debriefing time or assign reflective journal entries to ensure that student participants are fully debriefed.

Repeating simulations, reviewing limited resources, and increasing community involvement boost awareness and the potential for a positive outcome in a real active shooter event. For methods of improving community involvement during an active shooter event, see *Increasing community involvement*. Considering alternative sites to practice scenarios, especially on campuses where guns are now allowed, may improve student involvement and preparation.

Organizational preparedness

An active shooter event on a campus can have devastating consequences. Policy, if not already developed, should be well thought out to be achievable, sustainable, and realistic. Once policy is established or reviewed, a tabletop exercise should be done with all key leaders. A tabletop exercise provides a step-by-step process to establish timelines and ensures that the basic components of the plan don't conflict, such as having first responders

If medical resources are overwhelmed during or following an active shooter event, it's deemed a mass casualty incident.

Increasing community involvement

- **Open community casting call for training exercises.** A larger involvement of community participants will improve diversity and inclusion based on the needs of your area. Broader community participation increases not only awareness of the event, but also demonstrates the commitment of law enforcement and EMS personnel to all groups within the community. Agencies such as the American Red Cross can increase community exposure by supporting simulation events while providing training for their roles within the disaster management plan.
- **Public service announcements (PSAs) to educate the community.** PSAs can direct community members to existing resources to increase preparedness for an active shooter event. Resources that may be useful include:
 - The Federal Emergency Management Agency's free interactive, web-based course Active Shooter: What You Can Do (www.training.fema.gov/is/courseoverview.aspx?code=IS-907) and 4-hour virtual tabletop exercise for college campuses are suitable for healthcare providers, educators, and EMS personnel (a list of available trainings may be obtained at <https://training.fema.gov/programs/emivttx.aspx>).
 - The U.S. Department of Homeland Security's Active Shooter: How to Respond training is specifically for private citizens, human resources or security personnel, workshop participants, and first responders (https://www.dhs.gov/xlibrary/assets/active_shooter_booklet.pdf).
 - The California Hospital Association's Planning for Active Shooter Incidents is a guide for hospitals to prepare healthcare personnel; multiple resources are available, including a pocket card (www.calhospitalprepare.org/active-shooter).
 - The City of Houston's Run. Hide. Fight. Surviving an Active Shooter Event video demonstrates the steps to survive an active shooter event (<https://www.youtube.com/watch?v=5VcSweJU2D0>).
 - The Texas A&M Engineering Extension Service's 16-hour training program is for law enforcement, firefighters, and EMS responders (<https://teex.org/Pages/services/exercise-technical-assistance.aspx>).
 - The National Academy of Medicine's Health and Medical Response to Active Shooter and Bombing Events provides information on how to prepare and respond to an event, initial actions by first responders, secondary considerations, hospital priorities and actions, and community recovery (<https://nam.edu/wp-content/uploads/2016/06/Health-and-Medical-Response-to-Active-Shooter-and-Bombing-Events.pdf>).
- **Training for specific institutions with a historic background of active shooter events (universities, clinics, or churches).** As community members and law enforcement personnel work together, trust is established and strengthened.

enter the area before police officers have cleared it.

Upon completion of a tabletop exercise, a full-scale simulation is done to "pressure test" the plan. Reviewing the responses during an active shooter simulation through debriefing helps ascertain

what went well, but particular attention must be given to what went wrong. Corrective actions can be made for identified areas of concern.

If you're in a state that has a campus carry law, like Texas, additional training must be provided for students and faculty members who choose to carry concealed weapons. Training should teach armed carriers how not to be perceived as a threat by law enforcement entry teams and include campus police and local law enforcement agencies. Interprofessional collaboration is required to decrease role confusion and enhance synergy of action for entry teams, as well as rescue and recovery teams.

State of readiness

Preparing faculty, students, and community members for an active shooter event on campus through simulation can improve outcomes. Proper planning and training increase the odds of survival and decrease the number of potential casualties. The resources provided in this article are merely a starting point. Make sure your campus is ready for when, not if, an active shooter event occurs. ■

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