PREPARING FOR THE WORST

Disaster Drills Prepare Emergency Responders for the Real World

PROVIDED BY
TTUHSC EL PASO EXTERNAL COMMUNICATIONS

PHOTOS BY TOMMIE MORELOS

Department of Emergency Medicine Professor Stephen Borron, MD, left, who organized the disaster drill, monitors a resident as he prepares to help a patient who has trouble breathing.

An active shooter is rampaging through a building while simultaneously setting it on fire. Soon, victims are flooding the hospital. Many have gunshot wounds, others have suffered lacerations, and some are choking from smoke inhalation. All are panicked.

This illustrates the mock disaster drill that emergency medicine residents were surprised with in September. Their task was to save as many lives as possible.

"We do this at least every two years, mainly because we want to be ready when disaster strikes," said Department of Emergency Medicine Professor Stephen Borron, MD, who coordinated the disaster drill. "We try to simulate disasters in an environment where everyone can make mistakes, but it doesn't hurt anyone. This helps us learn from our mistakes and increases our preparedness."

Borron is known for creating realistic disaster scenarios to prepare residents for what they may face in the real world. In the past, victim injuries have mimicked those in the news—like the shrapnel injuries that were seen at the Boston Marathon bombing. The scenarios are always large-scale, with mass casualties that usually overwhelm emergency responders.

Mock, also known as *moulage*, injuries are taken as seriously as if they were real. Two hours before this year's surprise drill, students from the Gayle Greve Hunt School of Nursing (GGHSON)—who were charged with playing the victims—were applying makeup, fake wounds and charcoal to imitate burns. They also memorized their symptoms and rehearsed their characters. One student played a worried pregnant woman, terrified that her unborn baby had been injured. Another played an injured patient who was also drunk, causing a scene in the emergency room.

"It was absolutely helpful; simulation is one of the key parts of residency," said Adam Villalba, MD, a third-year resident in emergency medicine who participated in the drill. "It's something that you will always remember as a physician and can refer back to in the future. The mistakes that you make here in simulation are the most valuable lessons because you're less likely to make them when you're out actually performing them in real life."

Juan E. Rodriguez, EMT-P, an instructor from the Department of Emergency Medicine applies moulage, or mock injuries, to a nursing student. Gayle Greve Hunt School of Nursing students played victims during a mock disaster drill on campus.

Villalba was tasked with treating incoming patients at TTUHSC El Paso's Regional Simulation and Training Center, which was set up as a hospital. Other residents were dropped off at the scene of the crime to triage victims.

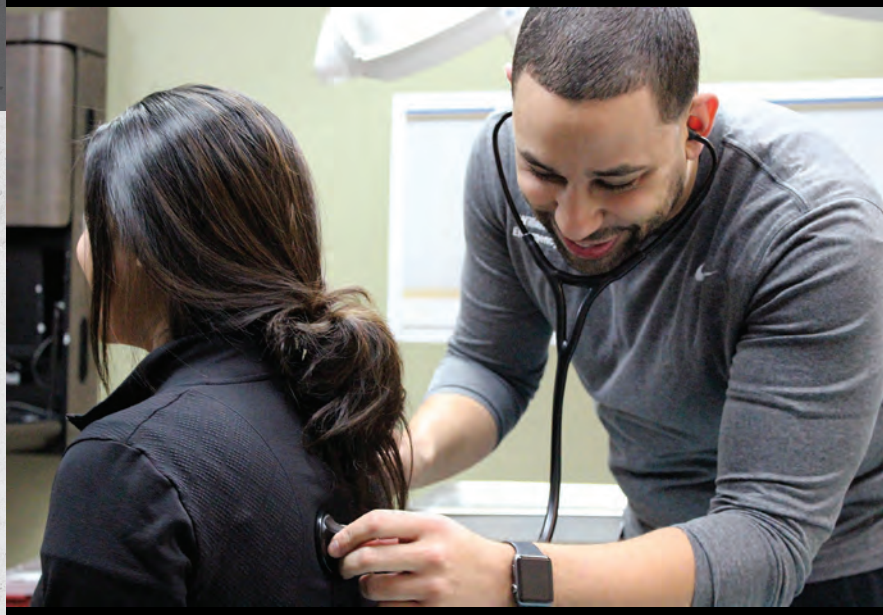
Nurses in the GGHSON also had the opportunity to test their skills. Those who were not playing victims and evaluating the medical care they received were paired with emergency responders to treat incoming patients at the hospital or directly at the crime scene.

"What was unique about the experience is that I was not expecting to work one-on-one with another doctor," said James Parker, a GGHSON student in his final year. "It was interesting to see how we could interact with each other to benefit the patient."

During the two-hour drill, residents and nurses encountered a plethora of drawbacks that they are also likely to face in the real world, including a shortage of blood and operating rooms.

"That's when our health care providers are really tested," Borron explained. "Their decisions at that point in time will affect whether patients live or die; it's up to them to apply what they've learned to achieve the best possible outcome."

A patient is evaluated on a gurney before she is sent to a hospital. If the patient's condition is serious, she is given priority admission to the emergency room.



WHEN A DRILL BECOMES REALITY

For William Garcia, MD, (Resident '17) these surprise exercises were good practice. After completing his residency, he became an emergency room physician at West Houston Medical Center in Houston, Texas.

But less than two months after starting his new job, Hurricane Harvey hurled the city into chaos. West Houston Medical Center was one of the few hospitals that remained open; patients soon overwhelmed the hospital, with only three physicians on call.

Disaster mode kicked in.

"Primary care clinics closed; dialysis clinics closed; we had to really step up to the plate to make up for this influx of patients who needed help," Garcia said.

That's when skills Garcia learned at TTUHSC El Paso came into play. "As residents, we focused on triaging and evaluating patients to see who was a true emergency," he added.

Each day, up to 50 patients came to the hospital desperate for dialysis. However, the facility didn't have enough machines to provide everyone treatment, which meant Garcia and the team had to establish a protocol to see who needed dialysis the most. If patients didn't fit the standard, they were sent home or only given half of a full dialysis to stabilize.

"It was not easy to turn people away," Garcia said.

If Garcia learned anything at TTUHSC El Paso, it was that empathy is important in emergency situations like this; people need to feel safe.

"It's not an easy time for them or us," he said. "But you need to remain compassionate and understanding, whether you see 10 patients in a day or 35."

Despite the four-day madness, Garcia said he never lost confidence in his ability to treat the influx of patients.

"My residency training taught me to step up to the plate," he said. "While the whole situation may have been stressful, I felt very confident in how I was treating my patients."