

Preparing for Active Shooters with Safety Technology

Mobile technology for widespread communications could help save lives during a mass shooting event.

Stefanie Valentic EHS Today | Sep 16, 2019

For the past 30 years, Joel Vetter, chief of fire rescue services for Suffolk County, New York, has seen an evolution in the types of threats that call for emergency preparedness.

He's observed schools and the American public at large move from simple procedures such as stop, drop and roll to full-scale drills to prepare for mass shooting situations, or what he considers, "the new norm."

"In today's culture, unfortunately with the threat in our region of gang violence, the opioid epidemic and the risk of mass shootings or gun violence, **there are risk factors that are telling us not if, but more of when a large scale mass casualty incident will happen,**" Vetter says.

The need for dedicated emergency preparedness professionals was borne out of the civil defense era, he notes. Before the terrorist attack on Sept. 11, 2001, retired military, fire chiefs or police chiefs put on the metaphorical hat to provide emergency support for large-scale events. Since then, the need for such officials has transitioned into a full-time profession.

"It's blossomed into a career path specifically out of the presidential declarations post-Sept. 11, which now has people with higher education and degrees focused on the five phases of emergency management: **prevention, preparedness, response, recovery, mitigation,**" he explains. "That's a change in comparison to back when everything was more of a reactive environment to where now we are posturing, leaning forward with governmental services and solutions in a proactive manner."

The widespread adoption of the Internet, cell phones and social media has opened the door to new technology advancements that are changing the way crucial information reaches the

public. In a time when the prevalence of mass shootings in America touches every citizen in some capacity, these new platforms are assisting law enforcement and emergency management officials with identifying and broadcasting events in an effort to save lives.

Implementation

Suffolk County, the easternmost county in New York state, has an estimated population of nearly 1.5 million residents. The coastal county is susceptible to natural disasters such as tropical storms, hurricanes and flooding.

Seven years ago, Suffolk County's Department of Fire, Rescue and Emergency Services (FRES) began using **Smart911**, a software that allows citizens to provide 911 call takers and first responders with critical information. Before the implementation, manual paper databases and binders were maintained, which caused inefficient methods of data access during situations when seconds count.

"When a storm came, we had a very tedious process of manually calling and trying to figure out who needed our help," Vetter says.

Smart911 allowed the department to be more proactive during natural disasters and other emergency situations. Once the platform was built out and dispatchers and other personnel were trained, Vetter began to research the mechanism needed to propagate messages from FRES to the general public.

Dissemination

Now that Suffolk County had a way of collecting and accessing data with the click of a button, connecting that to alert software was the next step.

In 2018, Vetter spearheaded the implementation of the **Rave Mobile Panic** smartphone app, which is supported through \$2 million of county funding. The measure is aimed directly at enhancing communications in response to potential active shootings in the county's schools, although it is used in a broader scope of emergencies.

"We use the systems across the board in all kinds of emergencies, whether it's a weather event and we're tailoring information to maybe a snow event, or those that have cardiac conditions or other concerns," Vetter says. "Maybe we're sending them targeted messaging about safety

techniques. It could also be useful in a large, violent situation where we're pre-notifying the public and connecting the information that we have in seconds or minutes to regional areas to be able to avoid situations."

Instead of utilizing multiple apps, Panic Button app users can use the integrated system to receive information sent directly from the county as well as National Weather Service alerts. Vetter describes it as a one-stop shop that services Suffolk County residents.

Users of this technology can also send messages directly back to FRES with **Eyewitness tip** software, which is also interconnected with both Smart911 and Rave Panic, allowing for immediate responses to emergencies.

Adoption

Although Suffolk County has invested millions of dollars into transforming emergency management, the challenge remains to convince citizens to utilize these platforms to promulgate urgent information in the event of a mass shooting or disaster.

It's nearly impossible to have every single person adapt to these new methods of communication. However, with platforms such as Smart911, users can create multiple profiles for parents, children and other family members.

"By me being able to build my parents and my in-laws and grandparents into my profile, it's something that they don't have to manage, and I don't have to go to multiple locations," Vetter explains. "It's one family profile."

FRES also has benefited from municipalities and universities who have already taken strides to invest in these technologies. Stony Brook University, a state school in Suffolk County, is already using Rave. Vetter says it was just a matter of exchanging facility and student profile data that allowed FRES to enhance the immediate response to emergencies at the school.

Since the implementation, the department already has seen the benefits. Vetter recounts a specific example in which a school principal used Rave Panic to assist a bus driver who was in cardiac arrest.

"The principal, who was outside every day doing his job, pushed the medical Panic Button," he says. "That not only allowed him to connect to 911, it instantaneously notified the school security as well as the school nurse of the incident and where he was."

By the time the principal connected with 911 operators, the school nurse arrived with an AED along with a security officer. The transportation director also was able to receive an alert to the incident, which allowed him to secure a spare driver, allowing children to depart from school and go home.

As for the driver in cardiac arrest, Vetter says, "The person in medical crisis was able to receive a quicker response and a more appropriate level of care with that information."

In another instance, Vetter describes how embedded GPS allowed dispatchers to save the life of a paddleboarder who fell off his paddleboard and couldn't make his way back on it.

"The 911 operators in fire rescue were able to plot and ping his phone as he drifted in the water," he says. "Instead of sending the boats to where we think they are, when a dispatcher says, 'Where are you exactly in the water?' someone can tell them, 'I think I'm six or seven miles off of this spot.' We knew his exact location, and we were able to send the boats to where he was drifting to and not where he was."

Vetter goes on to say, "It drastically took a process that might be extensive, and it shrunk it down to a very small footprint. We have usage like that almost on a weekly basis to where the communication center has now chalked it up to this is just them doing their job. But the technology is definitely improving the response times and the outcomes to situations."