9/11

20 YEARS LATER

WHAT WE LEARNED
WHERE WE'RE HEADED
WHY WE REMEMBER

EMSWORLD

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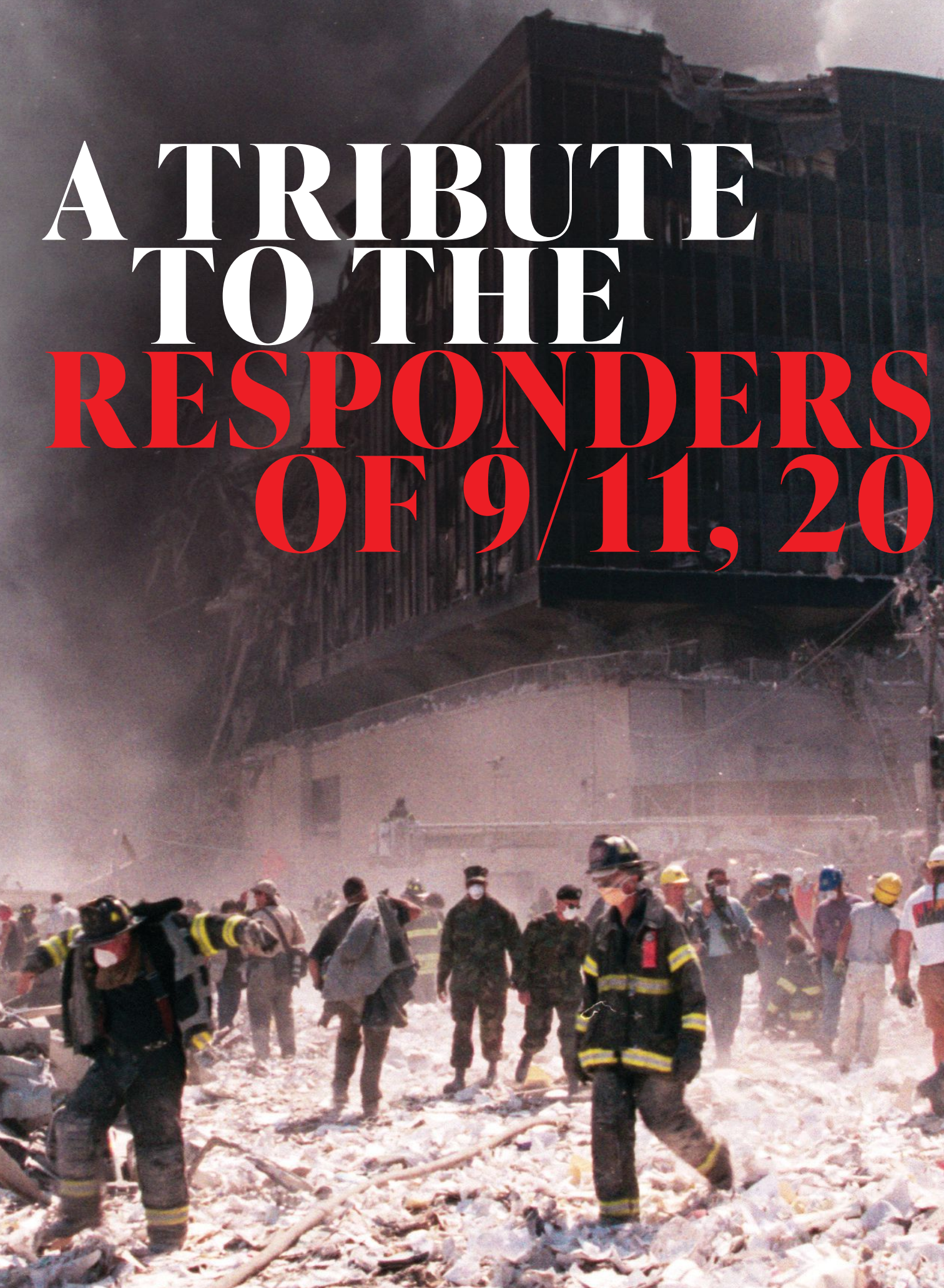
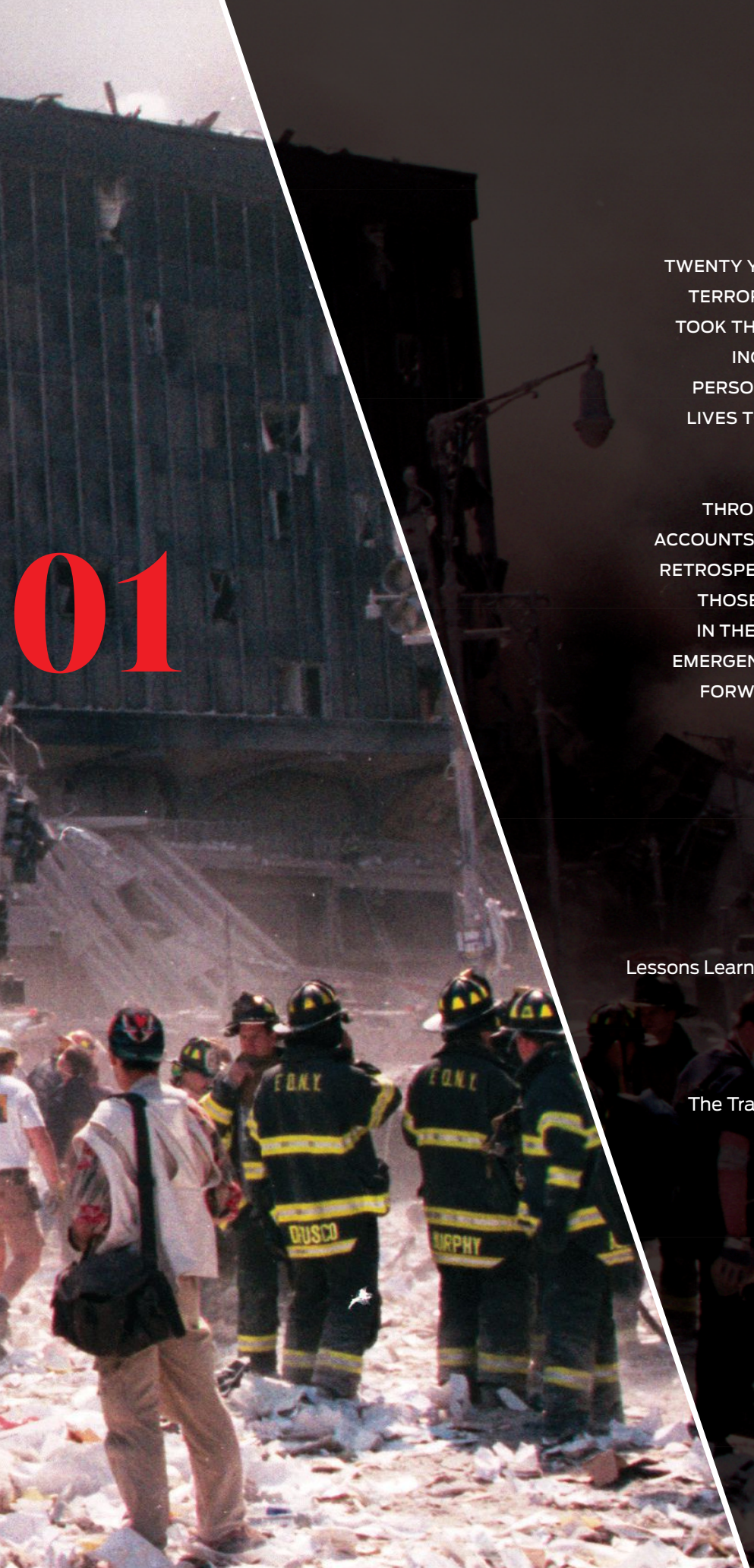


A TRIBUTE TO THE RESPONDERS OF 9/11, 20



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TWENTY YEARS AGO THIS MONTH, THE LARGEST TERROR ATTACK TO EVER OCCUR ON U.S. SOIL TOOK THE LIVES OF MORE THAN 3,000 PEOPLE, INCLUDING MORE THAN 400 EMERGENCY PERSONNEL. MORE CONTINUE TO LOSE THEIR LIVES TO INJURIES AND ILLNESSES RESULTING FROM THE ATTACK.

THROUGH THIS COLLECTION OF FIRST-HAND ACCOUNTS, CANDID TESTIMONIALS, AND SINCERE RETROSPECTIVES, EMS WORLD COMMEMORATES THOSE RESPONDERS WHO LOST THEIR LIVES IN THE ATTACK, TAKES STOCK OF WHERE THE EMERGENCY COMMUNITY IS TODAY, AND LOOKS FORWARD TO EMERGING SERVICE LINES AND INITIATIVES OF PREPAREDNESS.

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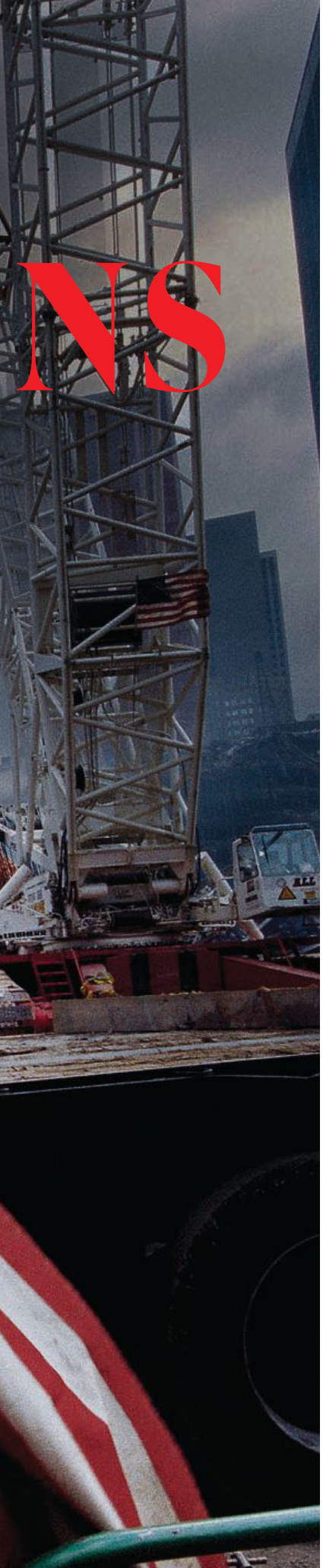
Featuring photos by:
Scott Spitzer, National EMS Museum

LESSO LEARNED

BY CAROL BRZOZOWSKI

Photo: Scott Spitzer Photography



SEPTEMBER 11, 2001 WAS A DAY WHEN EVERYONE ALIVE AT THE TIME REMEMBERS WHERE THEY WERE. FDNY EMS Chief Lillian Bonsignore was instructing skills practice at the FDNY EMS Training Academy.

"We heard a plane hit the World Trade Center," she says. "We assumed it was an accident and figured it would be a small plane."

Turning on the TV, they saw it had been a passenger plane.

Shortly after the second plane hit, academy instructors and students went into activation, with a significant number boarding city buses to head to the scene, where they encountered clouds of green dust.

"In our lifetime, we'd only known these towers to be part of the cityscape," says Bonsignore. "To see that they were knocked down, there was disbelief, chaos, fear, and not really knowing what type of situation we'd roll into. We knew it was not going to be good."

As FDNY lives were lost trying to help others, leadership had to be quickly reestablished.

"In the face of uncertainty, strength and perseverance prevails," Bonsignore says. "Everybody pulled out the best in themselves and just got to work."

Hank Christen, a retired human performance technology consultant in the fields of emergency response and counterterrorism for the Department of Defense, federal response, and local government public safety agencies, was part of a Florida-based disaster medical assistance team supporting urban search and rescue that spent 17 days at the World Trade Center after the 9/11 attack.

They set up medical treatment areas around the site to treat victims but found no one alive. Their second objective was treating rescuers and others needing medical care.

Oren Barzilay, president of FDNY EMS Local 2507, was working at the FDNY communication center a mile away from the World Trade Center on 9/11 when he saw the events unfold on television.

"We were sending as many resources as possible because we anticipated so many bodies, but it never happened," he says. "Later that evening after my shift, I decided to go out and see if we could help with the rubble. There were hundreds, if not thousands, of rescuers there. Everybody was anticipating to find the bodies, but we just couldn't find bodies."

Joseph Schmider is Texas EMS director, a member of the National Association of State EMS Officials (NASEMSO) board of directors, and chair of its Health and Medical Preparedness Council.

He was regional EMS director for Bucks County, Pa. on 9/11.

"It was the first time in my career that we opened up the emergency operations center," he says. "There were all sorts of rumors going on. We wondered, *How do we protect ourselves and protect the county?*"

Bruce Evans, president of the National Association of Emergency Medical Technicians (NAEMT) and fire chief for the Upper Pine River Fire Protection District in Bayfield, Colo., was fire chief in the Las Vegas suburb of Henderson, Nev. at the time.

"Nobody in Las Vegas is a stranger to high-rise firefighting," he says. "We knew this was going to be a significant battle with a catastrophic outcome."

Susan Bailey, NAEMT president-elect and director of the Louisiana Bureau of Emergency Medical Services, was glued to the TV with other EMS workers at the East Baton Rouge Parish fire station.

"We were shocked," she says. "We really didn't know that there was that much animosity toward the United States. As the towers started collapsing, I remember seeing the picture of that man who jumped out the window. All I could think of was, *Those are patients. How do you help them?"*

WHAT CHANGED AFTER 9/11

Some of the biggest changes that occurred after 9/11 were related to the McKinsey & Company report that praised the FDNY actions that saved lives but critiqued the lack of interagency cooperation between the fire and police departments and communications breakdowns between commanders and frontline responders.

Subsequently, significant focus was placed on communications and interoperability, both internally and externally, establishment of counterterrorism training, and professional leadership development, says Bonsignore.

"We had to build out our entire leadership structure again after that. There was a heavy focus put on incident management. We increased a lot of our resources and training," she says. "It put everything front and center for us to be in a position where the impossible had become possible. All of those initiatives were extremely important to the department."

INCIDENT COMMAND STRUCTURE

Many lessons were learned that day and later implemented. Among them were implementation of the National Incident Management System (NIMS) and a broader use of the Incident Command System (ICS).

Photo: Scott Spitzer Photography

We had to build out our entire leadership structure again. There was a heavy focus put on incident management.

"Fire, police, and EMS agencies are decentralized in the United States. Prior to 9/11 many had their own codes, terminology, and methods for doing things," notes Gary Ludwig, a longtime paramedic and emergency leader who provides expert witness services, litigation support, and consultation on EMS, fire, and 9-1-1 matters.

"The implementation of NIMS changed that dynamic and proved its value in hurricanes such as Katrina and wildfires in California, Tennessee, Florida, and other regions. It is so important that public safety agencies and the decision makers are singing out of the same hymnal when it comes to large-scale events."

"It's extremely relevant to the nation to continue implementing and improving the national system as incidents throughout the nation keep happening, whether it's manmade or natural incidents," agrees Barzilay.

"As we can see in Florida in the building collapse, you see our entire nation sending resources to help the state of Florida. It's clearly important to keep our men and woman engaged with each other so we can help each other out."

Peter Dworsky, International Association of EMS Chiefs president, had been deployed to the Twin Towers on 9/11 and emphasizes the importance a comprehensive ICS provides in command and control, as well as shared resources.

"When logistics officers are requesting things, they know what we're requesting. Each division of emergency services—police, fire, EMS, and public health—tend to use the same words saying different things. The use of NIMS and ICS makes it very clear when I'm requesting resources that people understand what I'm requesting."

It's critical to follow NIMS as it's structured, Schmider points out.

While people were anxious to help during 9/11, "you just can't take off and leave your community," he adds. "You follow the Incident Command System. It happened with Katrina and Superstorm Sandy and with every major disaster. I am sure it's happened in Florida with the condo collapse. There are people showing


MORGUE

up who want to help, but they're not within the system. They become a liability instead of a benefit."

Bailey concurs. After 9/11, she took required courses related to NIMS implementation. Their importance became evident during 2005 when Hurricane Katrina swept through the Gulf Coast.

"We had a structure," says Bailey. "Other state and federal agencies came in. We spoke the same language, knew what was going on with each group, knew to go to the incident commander and that there was a different section within the structure. It is so very important we were all speaking the same language."

"The main help of the system in New York was to get us resources," Christen says. "We had plenty of resources and plenty of support. We didn't run out of things."

PERSONAL ACCOUNTABILITY

"Freelancing and self-dispatching to the World Trade Center was as bad as I have ever seen," says Ludwig. "Professional fire and EMS associations had to send out messages to not dispatch yourself, which is strongly discouraged.

"State mutual aid systems and resources can be brought in from FEMA and the federal government if needed. Self-dispatching when you are not part of the system creates confusion for those dealing with you when you show up."

Those doing so are not entitled to workers' compensation if they get hurt, since they are not representing their employer, Ludwig says, adding it also depletes the responders' own community of their services.

"When I teach ICS, I use the example of how you wouldn't walk into a Marriott hotel and keep walking down the halls until you find an empty room and set up," says Christen. "You have to go check in somewhere."

Schmider concurs.

"If you're not tracking, you don't know what the long-term impact will be, so freelancing turns into a liability, not a benefit. It takes away resources needed to help with the response. Now you've got to take care of these other people who just did their own thing. That's just not right. It's like going to a house fire or car crash. You follow the process because you never truly have the full picture."

In the moment, though, people wanted to help, and extra hands were welcome. Later, less-impromptu arrangements led to a wide range of support during the recovery.

"We had people from all over the country over there, and nobody knew who they were," says Barzilay. "We welcomed them with open arms. As a first responder, when you see another uniform, you always want to treat them as they're one of your own. You never thought about the possibility of somebody who's not supposed to be there.

"Accountability is extremely important these days, as we know of secondary incidents that could take place, or somebody just trying to take us out after we arrive over there. Personnel accountability is definitely something that should be forced at these incidents."

Bailey says during Hurricane Katrina, not only did first responders self-dispatch, but lay people claiming to be physicians showed up at shelters.

"Everybody took their word for it," she says. "We learned it's very important there be a reporting agency to track who is working where. For federal reimbursement, it's very important for your FEMA and state contracts that were activated to know who and how many people were working where."

Dworsky concurs that despite their best intentions, people who showed up uninvited to help at the World Trade Center became a hindrance.

"If I request you through the proper channels. I also know that you are supposed to be coming with a certain capability and equipment, the personal protective equipment and medical equipment that's assigned to you, and a skill set," he says.

TRAINING AND COLLABORATION

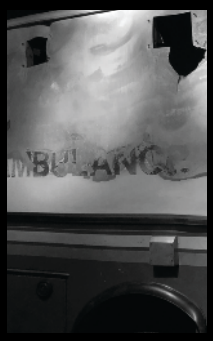
Ramped-up joint training following 9/11 has laid the foundation for a stronger response.

"It is said, 'Don't become friends during a disaster. Know the people ahead of time.' It is so important that you have these relationships ahead of time because you get so much more done when you're not meeting the people for the first time," notes Schmider, who as Pennsylvania's EMS director after 9/11 assembled joint training sessions.

"It helps you understand each other's role and the importance of each person and their positions and limitations. People have to have those relationships before that disaster, or it can become a secondary disaster."

Ludwig points out that New York and Arlington County, Va., by themselves, did not have enough resources to deal with the enormous events of 9/11.

"Chances are that your community will not either," he adds. "Resources will have to be brought in from the outside. As they say, 'Make a friend before you need a friend.' Joint training



A FLATTENED VEHICLE, A PARTNER LOST

As the towers fell, a volunteer medic took refuge under a FedEx truck

BY JOSHUA D. HARTMAN, MBA, NRP

I had been a paramedic for three years and a father of twins for eight months when hell rained down on lower Manhattan on 9/11. There are thousands of stories from hundreds of responders, each unique and important for the history and future of the city of New York, the United States, and the world.

I responded to the World Trade Center (WTC) from my office in midtown Manhattan as a volunteer paramedic for Hatzalah. I was picked up at 0850 after Flight 11 struck the North Tower at 0846. I arrived just after Flight 175 struck the South Tower at 0903. I did not see the planes striking the towers until on TV several days later.

Upon arriving at Vesey and West Streets, at the base of the WTC complex, the incident commander assigned me and another paramedic to a mobile emergency response vehicle (MERV). We were responsible for triaging patients exiting the towers, but after we saw just a few patients, the world went dark at 0959 as the South Tower collapsed.

A plume of smoke blocks long and stories high rose from the ground, making it impossible to see. I instinctively jumped out of the MERV, dodging copy machines and other flying debris as I sought refuge under a FedEx truck for almost an hour. I watched feet run past me, seeking places to hide, and jumping into the Hudson River as the North Tower collapsed soon after. The MERV I was in had just been flattened (which I later learned resulted in my partner's death). I laid praying the truck above me would not have the same fate. Once I was able to, I walked a mile to a makeshift hospital, where I waited with hundreds of fellow first responders for the patients that never came.

Joshua D. Hartman, MBA, NRP, is senior vice president of the Cardiovascular and Public Safety divisions at HMP Global, the parent company of EMS World.

with your surrounding mutual aid departments and those in your region is vitally important to the success of any operation."

Christen notes there often isn't enough joint training because it can be costly and require a lot of coordination.

"No single agency can do this," he says. "At the World Trade Center, we had to throw in every resource you can imagine. If you look at what's happened in Miami-Dade County with the building collapse, there are law enforcement issues, medical issues, legal issues, public relations issues, and political issues. All of those things take it into a National Incident Command System. There are no silos."

Adds Barzilay, "It's important for us to have joint training, as we all have different missions and should all know each other's jobs."

"Everyone has to speak the same language. We have to work together," notes Bailey. "In certain areas law enforcement wants to be in charge. In certain areas fire wants to be in charge. In certain areas EMS wants to be in charge. But at the end of the day, there has to be somebody to whom each of these three groups answer to keep things organized."

Those discussions also have to encompass transportation departments and agricultural departments, she adds. "If there's a disaster, there are no gas stations open. That fuel has to be able to come in," Bailey points out. "In planning meetings everyone needs to know their role. Everybody determines the minimum amount of notice you need to respond.

"If we do mass evacuations and need passenger or school buses, sometimes it's hard to get a large number together. If we need to have 48 or 72 hours' notice, it's important to know that. Joint training—especially planning—is very important so that everybody knows how long it's going to be until whatever help you need is going to arrive."

Joint training should not be a one-off occurrence, notes Dworsky, adding "it's a constant understanding and interaction."

SCENE SAFETY AND SECURITY

"We need to keep people out of the area who don't belong there because we don't know why they're there," notes Dworsky. "Some people are just interested bystanders. Other people are there because they're opportunists for souvenirs at a disaster, stolen valor, or are causing secondary issues.

"Not knowing who someone is presents a security challenge. We don't want uninvited people showing up at the command post, operating the scene, and putting other responders or themselves at risk."

Safety considerations protect all responders,

Dworsky points out, adding everyone needs to know where the hazards are that they are going into and ensure they have the proper PPE to be operating at that time.

"Just the nature of a building collapsing because it became unstable makes it even more suspicious than any structure that remains standing," says Ludwig. "I cannot stress enough the value that structural engineers play when determining structural stability, where shoring should occur, and even where victims stand the best chance of survival."

Site security is equally important, he adds.

"Only trained personnel should be in the collapse zone or potential collapse zones with proper PPE," he says. "A nurse was killed in the Murrah Federal Building bombing when she climbed into the structure to try to assist victims. While it's noble that people want to help, a security perimeter is essential to protect untrained personnel."

Christen notes a case during Hurricane Andrew in which generators were stolen out of the equipment area.

"It's not a problem in Miami-Dade County, because they have had hundreds of law enforcement officers there right now," he says of the Surfside condo collapse. "They can control entry and exit. But it's a problem that's not going to go away."

Safety also is an ongoing issue, he adds.

"When we walked around the buildings at the World Trade Center, there were buildings surrounding it with debris sticking into those buildings. We had a case where a piece of glass fell off one of the buildings and went right through a tent and through a cot that we had in our treatment area," says Christen, adding that fortunately there had not been a patient in the cot.

"I fully agree with the provision in the ICS that you have a scene safety officer with the authority to suspend a tactical operation if it's dangerous to the rescuers," he says. "One of the things I've always preached when I teach is everyone goes home whole, meaning that we want you to be at shift change with a cup of coffee, talking about the night you had last night, and you're not in the hospital, and you're breathing normally, and you're OK. We have to take care of ourselves and at the same time, obviously, the safety of victims. Sometimes we're remiss in that the physical fitness of responders also is an important safety issue."

While the dangers inherent in the collapse of the Twin Tower were obvious, "What's not seen are the hidden dangers that caused cancer and respiratory illnesses" post 9/11, says Bailey.

THE LAST CAR IN THE LOT

I never knew its driver—only that they wouldn't be coming home

BY TOM GREVE

I am not an EMT, paramedic, or first responder. But I witnessed history on September 11, 2001.

As we approach the anniversary of that fateful day, there are so many memories and stories. It is safe to say anyone old enough has a memory. The most poignant to me is the last car in the lot.

I was working at 52nd at 6th in midtown Manhattan when I heard about a plane that hit the World Trade Center. The radio station reported a small plane, and my coworkers commented on how and why this could have happened. Nobody thought it was a day that would change the world.

When the second plane hit the tower, my production manager asked to leave and make sure his pregnant sister was safe. Thankfully she was. He was unaware his firefighter brother, Michael T. Weinberg, had responded and was only minutes away from being crushed under his truck when the first tower came down. His funeral in Queens was the first of many.

I left my office at 2 p.m. to try to find a way home. Manhattan was in lockdown. All bridges and tunnels were closed, and train and bus traffic had stopped. The Air Force Reserve from South Jersey had F-16s circling the city. We learned later they were "locked and loaded" with orders to shoot down anything flying near the Island of Manhattan. That's a sight I hope to never see again.

The *New York Times* ran personal stories for weeks about those who perished. I would recognize faces of people I did not know but saw on the train as we made our way to and from work—faces to which you may have nodded politely as they asked to sit next to you on a crowded train, never saying much other than good morning or TGIF. One of those faces drove a green SUV that remained in its commuter lot for two weeks, never moving, getting dusty and waiting for a driver that would not be coming home. I never knew their name.

Tom Greve is business development manager at EMS World.

MEMORIES OF 9/11

Learn from the past, or you may repeat it

BY NICHOLAS MILLER, MS, NRP

I was the paramedic for St. Louis' Lambert International Airport on Monday, September 10, 2001...the last day of normalcy. On that day family members could follow their loved ones through the screening checkpoints all the way to the terminal. No one had to take off their shoes, and people could take all the liquids they wanted on the plane—even pocketknives! I returned one week later to a very different airport: nearly empty, with armed National Guard members everywhere. Security was now paramount. No one knew if or when things would return to normal. The expectation of future attacks was very real.

Over the next few years there were changes in how we operated as paramedics. Antidote kits for nerve agents were screwed to the wall in the driver's compartment of the ambulance. We got respirators and Tyvek suits. They upgraded our radio equipment. Training for terrorist attacks was increased. Paramedic textbooks added new chapters to address these issues. A new reality was sinking in.

I remember watching the tragedy via television and feeling frustrated I could not be there to help. That frustration was a strong motivator for me to teach paramedicine to USAF pararescuers and later to USAF IDMT medics and U.S. Navy SOT-P medics. In later years the tragedy would come closer to home as I learned John "Eddie" Willett, a fraternity brother, was murdered in the Twin Towers on that day.

In recent years I have taught hundreds of students as a paramedic educator. When they would convey their thoughts of the day to me in class, I found that their understanding at times was surprisingly inaccurate. A new realization came to me: The paramedic students of today are the first generation to be born after 9/11/2001. They have never known life before it. With all that is happening in 2021, it is important as ever that we remember the lessons of that momentous day. Those who forget the lessons of history are doomed to repeat them.

Nicholas Miller, MS, NRP, is senior content and program director for EMS World and EMS World Expo. Reach him at nick@emsworld.com.

Bailey adds that in a disaster, "It's very important that these areas be secured and restricted so that when you enter into these areas to do rescue and recovery or clean-up, there is a secure way for people to go one way in and one way out.

"Somebody has to monitor those entry and exit points so we know who is in there, that they have the proper equipment and PPE they need, and they have the proper credentials to do what needs to be done."

ENGINEERING AND CONSTRUCTION

FDNY has done an extraordinary job of keeping the names and memories of those perished at the forefront through remembrance ceremonies on the anniversary each year, notes Bonsignore.

"Every one of those names are read out loud and talked about," she says. "For those who were down there that are still here, it's important to know you're never forgotten.

"The towers that collapsed stood tall for our entire lifetimes, for the most part. To see that and the wreckage that came along with it in such a populated area of the city was unbelievable. I can still smell it when I go down there, and 20 years later I feel like it was the same day."

Evans points out that since 9/11, there have been favorable changes in building construction.

"We're currently in a big discussion at the federal level about infrastructure," he points out. "We have a lot of aging infrastructure. We have a lot of newer building techniques. It's important in reflecting on 9/11 that at the time that construction was considered great.

"But now if you look at new buildings that are of that size, you're looking at wider stairwells, split banks of elevators, better fire-resistant construction—all these things are key and are more of the technical issues that in some cases aren't necessarily tied to the emotion of the event.

"Engineers have solutions for a lot of these problems. We really need to engage in it and not wave it off, because if you look at the price tag of many of these things, you really have to manage the risk appropriately and start putting some money to these engineering solutions."

THE OBLIGATION TO REMEMBER

To educate the younger generation of EMS workers who only know 9/11 as a story, it's important they learn their history, says Bonsignore.

"Once you put your right hand up and swear

Your today can end today, and what you have today, you may not have tomorrow.

an oath to serving this city, anything can happen at any point," she says.

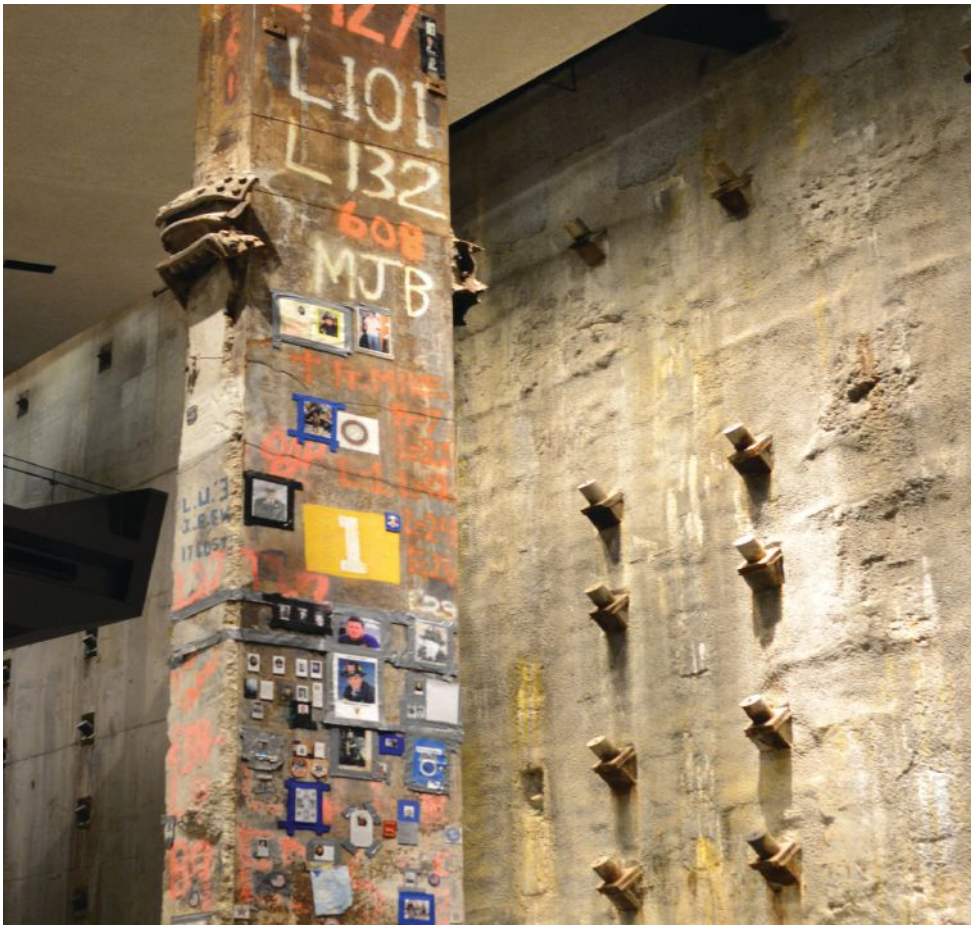
Each FDNY EMS class participates in a remembrance ceremony, lays a wreath, and visits the 9/11 Museum to learn about the details of the day and the role of FDNY in the attack.

"They walk into this almost like a school trip, and they walk out of it knowing it's hallowed ground," Bonsignore says. "They walk out of it with a different sense of reality for the job they're taking on.

"Some of them are very impacted by that experience. But when they leave, they understand it's important for us to stand shoulder to shoulder, no matter what is good or bad, and that we rely on each other to take care of the city. Sometimes your life gets put at risk, so they understand the expectation."

For Bonsignore, the biggest lesson of 9/11 is this: "Your today can end today, and what you have today, you may not have tomorrow. You should spend every day just remembering that. And the people you have and the memories you have with those people can come to a very abrupt ending.

"I wish people would understand that more and not get caught up in the little things that bother them. Realize the good that happens around you and really take your time to enjoy it. Because there are thousands of people who went to work on a normal day on 9/11 and didn't come home. They only exist today in the memories of their families and friends."



Carol Brzozowski is a Florida-based writer and frequent contributor to EMS World.

WHAT STILL NEE ACCOM

BY CAROL BRZOZOWSKI

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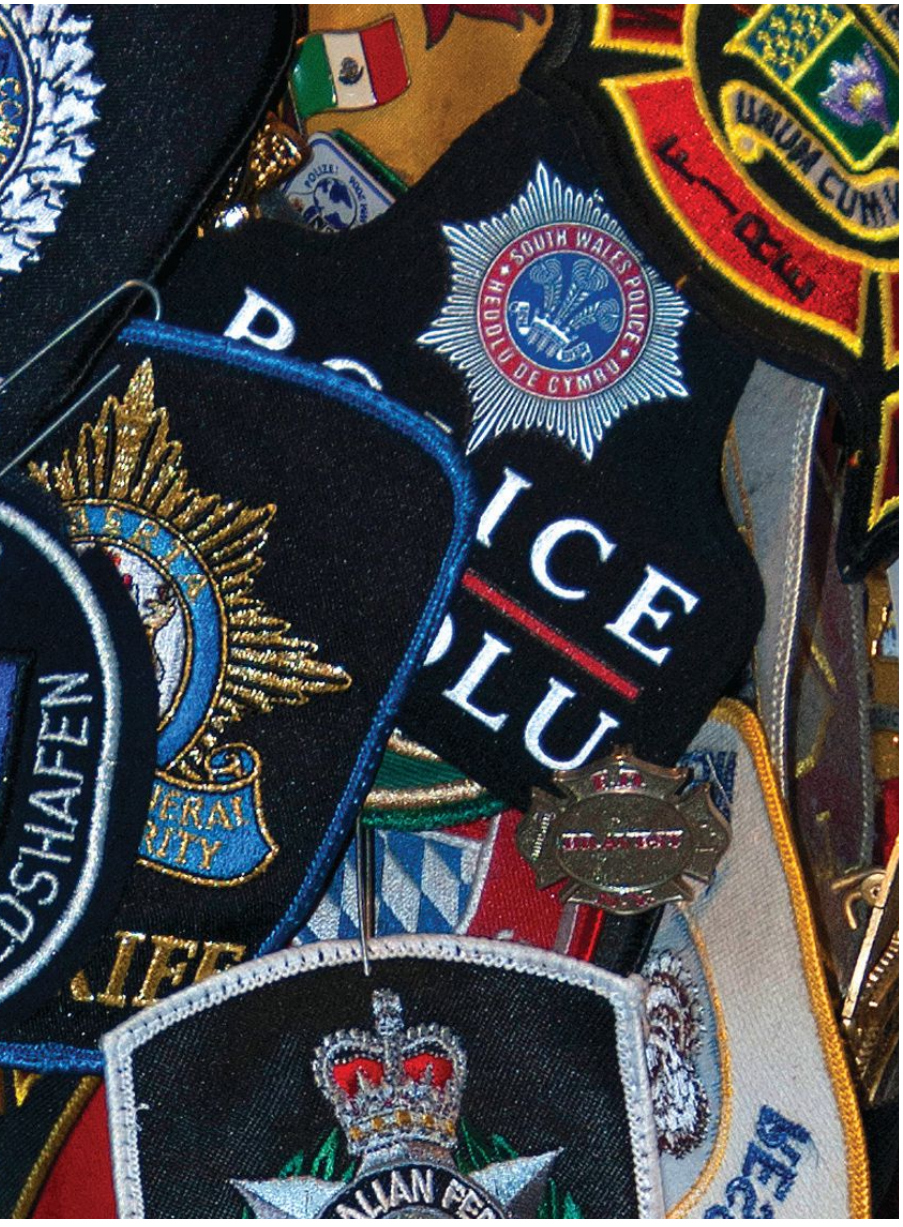


THE UNTHINKABLE BECAME REALITY ON SEPTEMBER 11, 2001.

And it created a new set of challenges for EMS, including the need for comprehensive communications and increased funding.

"Did you ever think they were going to fly a plane into the Twin Towers? We have to be aware of that kind of crazy stuff and take threats seriously. I don't think we do," notes Susan Bailey, president-elect of the National Association of Emergency Medical Technicians (NAEMT) and director of the Louisiana Bureau of EMS.

"I noticed right after 9/11, there was a bunch of training and money available to do all of these threat assessments," she says. "Twenty years later, the money and the training have weaned off. Are we truly ready?"

The fact is, EMS is many places is still vulnerable to terrorism.

VULNERABILITIES

It's critical to take EMS terrorism training seriously, Bailey notes, adding it starts with the telecommunicators asking the right questions in response to calls to dispatch EMS providers in a way that creates situational awareness.

Vigilance became a collective responsibility. There are vulnerabilities throughout the U.S.

"We have to be ready in our daily lives, whether we're on duty or not. We have to remain vigilant," says Bailey. "We cannot forget that while this was a huge, horrific attack, that doesn't rule out smaller attacks, like a school shooting or a bomb in a trash can at the Boston Marathon."

Not everyone can afford the training costs to send someone to Texas A&M's "Disaster City," for example, says Hank Christen, a retired human performance technology consultant in the fields of emergency response and counterterrorism.

THE EPITOME OF SERVICE AND SACRIFICE

I rarely discuss it, but the experience still lives with me every day

BY KEVIN T. COLLOPY, MHL, FP-C, NR-P, CMTE

It's a bit stunning to consider that the World Trade Center terrorist attack was 20 years ago. At the time of the attacks, I had been volunteering with my fellow Colgate University undergraduates for just over a year, and most of us had completed our EMT training just a few months earlier.

Of the five of us SOMAC Ambulance alumni who traveled to Ground Zero to provide support during the recovery efforts, three of us are still active in prehospital care today.

Some of the memories vividly etched in my mind? Fellow Americans pointing automatic weapons at my ambulance while inspecting us at a checkpoint. Arriving at a forward staging point to see Morgue spray-painted on the side of a restaurant. Walking to the rescue site and thinking, *This is what a war zone looks like. Wait—this is a war zone!*

We often speak of generation-changing events. For my generation our event was 9/11. The attack drove many of us into service careers, and many of my peers found 9/11 altered their career paths. For myself, 9/11 was one of three transformational events in a short series that cemented my career in prehospital care.

My peers and fellow first responders responding to 9/11, the Pentagon, and Pennsylvania demonstrated the epitome of service, commitment, and sacrifice. They were heroes to thousands they'd never meet. My career has been centered around these examples, and while I have rarely discussed my 9/11 experience, it resonates with me daily.

9/11 defined how I envision collaboration, peer and public support of EMS and fire, the EMS family, and a willingness to serve. I've now lived with my EMS family for 21 years and have no regrets. None of us should ever compare our career-changing experiences. Rather, we need to endeavor to understand the experiences we have had and that others will have—they are all impactful.

Kevin T. Collopy is clinical outcomes manager for AirLink/VitaLink Critical Care Transport in North Carolina. He is a 20-year member of the EMS World Editorial Advisory Board.

"Terrorism meets its objective effectively when it kills people and creates injuries," he adds. "The central threat of terrorism is to create bodies, morbidity, and injuries, and have people turn on the television and say, 'Look at the death and destruction.' EMS responds to injuries and medical problems, but it often has been left out in the thinking about this. There are fire funds, law enforcement funds. Where is the EMS funding when the problem is an issue of bodies, injury, and morbidity?"

Joseph Schmider, state EMS director for the Texas Department of State Health Services, EMS/Trauma Systems, and chair of the National Association of State EMS Officials' Health and Medical Preparedness Council, makes the case that EMS personnel have to believe in scene safety.

"We're so used to just running in, and you can't," he says. "You have to look around the environment. It comes with experience."

That point was hammered home as a part of the COVID response, Schmider says.

"I was doing some education on EMS, and I would say we need to use PPE and really understand why we're using it. The same with safety. We can't just jump out and start running toward a disaster without looking around to see what's behind the door."

FUNDING AND REPRESENTATION

"It's known worldwide that ambulances are used for terrorist attacks," notes Oren Barzilay, president of FDNY EMS Local 2507. "It's very easy for any EMS agency to gain access to any public or private facility these days. After September 11, it was very hard for us to gain entry to any facility until we had clearance or special decals. But as the years went by, everything went back to where it was before September 11."

He attributes that to a lack of funding to upgrade security measures.

"EMS needs to step up a little bit more and demand their seat at the table," says Peter Dworsky, president of the International Association of EMS Chiefs.

"They need to be fully integrated into intelligence distribution," he says. "Fire and police do it very well. EMS is still struggling outside the major urban areas. There have been major strides with the federal Emergency Services Sector Coordinating Council. We just don't get the downstream information."

Or the needed funding. Many believe EMS didn't get its fair share of post 9/11 funds, although funding has improved as it's gained more seats at the table.

"EMS is so diverse," Bailey points out. "I think it goes back to educating federal authorities, congressional representatives, and senators to explain how EMS functions. Many think all EMS is fire-based. In Louisiana, we have very few fire-based EMS systems in our state."

"There are not many for-profit fire services. I don't know if there are any for-profit law enforcement agencies. But to say you can't give money to for-profit agencies when you're calling them to respond, I don't think there is one for-profit agency that would say 'if you're not going to pay us, we're not coming anymore,' because that's not what EMS does."

But the point needs to be made that it costs money to send equipment, vehicles, and personnel to a disaster site, as well as finance daily operations, Bailey says.

"Medical supplies are expensive. If you want federal, state, or even local dollars, you have to account for your money," she says. "Information has to be provided on how much it costs to run a call. Some larger services have that, but smaller volunteer services don't."

THE EMS IDENTITY CRISIS

Christen agrees there is no singular EMS model, with paid, volunteer, private, and fire-based EMS operations sharing the landscape.

"Even within an ICS, it's not structured," he adds. "There's a medical unit in the Incident Command System. EMS should be called a branch similar to a fire branch, a law enforcement branch, an air operations branch. EMS, police, and fire should be like a three-legged stool. If one is not respected or recognized as part of a valuable service, then it collapses.

"I think there are too many people who had a first aid course who think they understand EMS, but they really don't. They need to keep working together and understand each other's role in the operation."

"EMS has an identity crisis that rolls back at us quite often," notes Dworsky. "We spend a lot of time trying to explain to politicians what EMS is as opposed to the fire service, which has done a very good job over the years of creating that national identity.

"Everybody knows when the big red truck shows up, it's the fire department. When they look for money, it's easier for them to represent themselves as a much larger organization. They're parked on the street. The fire is very visible. The media is there. When EMS shows up to a call, I'm sitting in someone's living room, not in public view.

"Because of that, we don't have the real seat at the table that we should. We're the smaller entity," says Dworsky.

Barzilay notes that despite EMS doing the bulk of the workload at a disaster scene such as 9/11, budget funding doesn't reflect that.

"We are short-staffed. We are lacking equipment. We are years behind in technology. Our wages are far behind fire and police—a 40% pay gap," he adds.

"We on a daily basis here in EMS are forced to work additional tours because of the lack of manpower. If any disaster were to happen to us today, the surrounding neighborhoods will be impacted because there will be poor resources in those communities to assist them."

We have to be ready in our daily lives, whether we're on duty or not. We have to remain vigilant.

DISPATCH AND COMMUNICATIONS

Another challenge: the lack of a comprehensive communication solution. It's not an unusual scenario for a number of entities to respond to an incident with radios on different frequencies that are incompatible because they are either legacy systems or new technology such as encrypted radios that can cost thousands of dollars and is financially out of reach for a small or volunteer operation, Christen adds.

"You have tactical channels, which don't use the dispatch channel. How many places are there where police talks to fire? I've run into this in my area in the Florida Panhandle, where you need military support, and the military entities have different frequencies civilians can't even use."

Additionally, each operation has different dispatch centers. Helicopters responding to a medical incident can't talk to ground fire companies, Christen points out.

"It's a question of setting up procedures and training," he says. "The best model is the one used by the wildland fire entities where they have air-to-air frequencies."

Wildland firefighting serves as a model for a comprehensive communication solution, he adds.

"The National Incident Management System and Incident Command System came from them," he says. "It's not unusual for wildland fire teams to get on the scene and be told to leave their radios in their car and be given radios through a comprehensive command system."

"Initially, all disasters are local because for the first number of hours, it's just the local agencies responding," agrees Dworsky, adding EMS needs to be integrated and trained into regional communications plans.

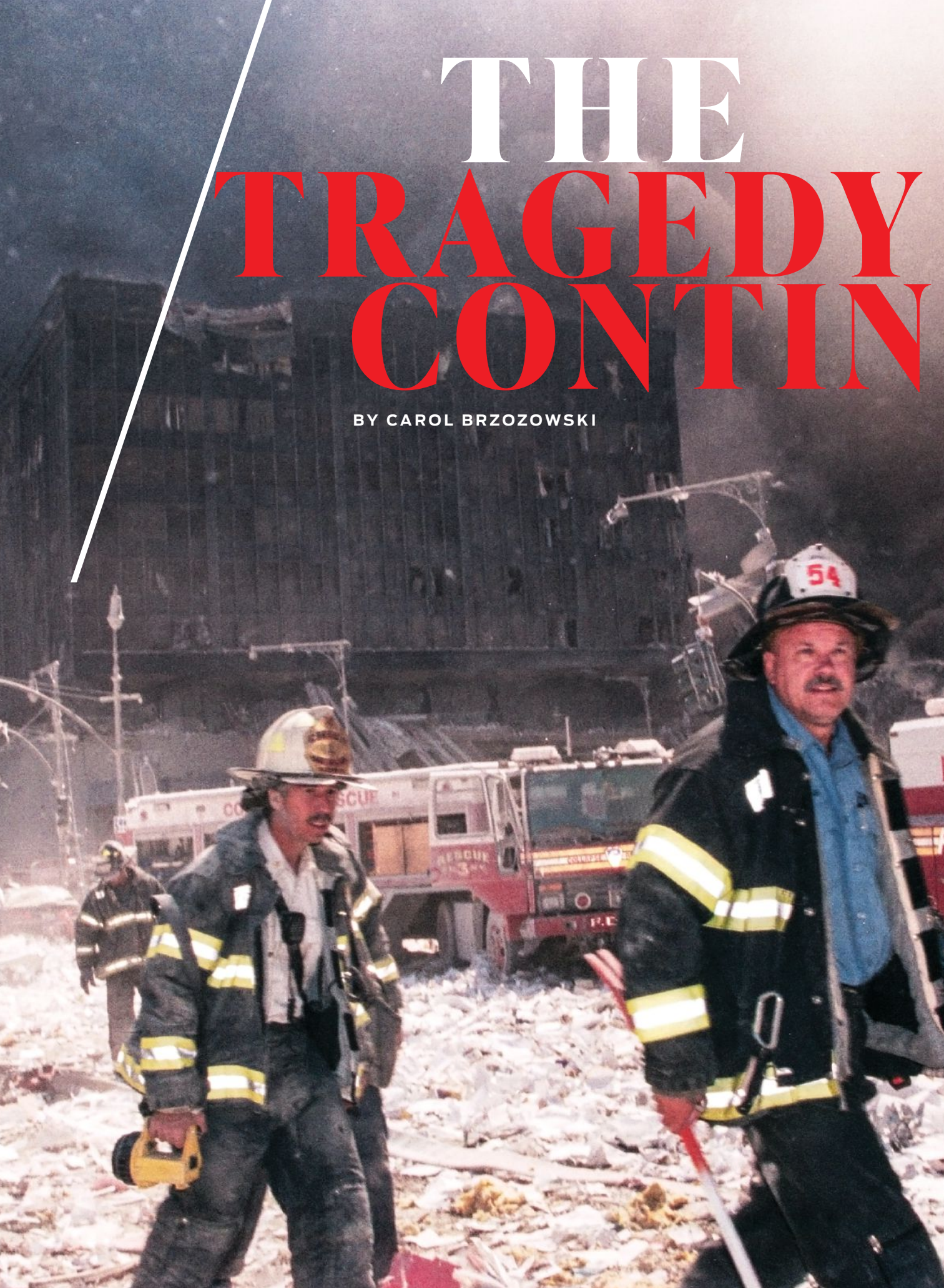
Barzilay notes that FDNY has integrated its radios for optimal communication.

"Instead of going through a dispatcher protocol where I need to speak to a fire company instead of talking to my dispatcher when he's calling their dispatch, we can talk directly with each other, which cuts down on time and breakdown of communication," he notes. "The interoperability the city integrated is a good tool for us when it comes to disaster response."

Carol Brzozowski is a Florida-based writer and frequent contributor to EMS World.

THE TRAGEDY CONTIN

BY CAROL BRZOZOWSKI



UES

ON 9/11, AS THE WORLD TRADE CENTER'S TWIN TOWERS WERE DESTROYED BY TERRORISTS, FDNY EMS Chief Lillian Bonsignore was part of an initial deployment to conduct triage.

"It didn't take long to figure out there was not a lot of triaging to be done," she says.

Efforts turned to identifying people, including 343 firefighters and paramedics who lost their lives. Since then, another 252 have died from related illnesses.

"For our department to lose so many folks in one blow like this was an operational challenge, but for most of us, it was an unprecedented kind of emotional challenge," she says.

"It was horrifying. It wasn't just our department leadership and members, although that was what shook us. It was everybody who was in those buildings. The chaos that existed—you didn't know who was gone and who wasn't gone at that point."

Bruce Evans, president of the National Association of Emergency Medical Technicians (NAEMT) and fire chief for the Upper Pine River Fire Protection District in Bayfield, Colo., knew a few people from FDNY who perished in the 9/11 tower collapse.

One was Patrick "Paddy" Brown.

"Paddy was a legend at FDNY," recalls Evans. "His brother Michael was an ER physician we knew very well in Las Vegas. When that tower collapsed, Mike left Las Vegas to look for his brother on the pile, having been a former FDNY guy when he was going through medical school."

RESCUE-RELATED ILLNESSES

Dr. Michael Brown spent several months there looking for his brother in the pile before his brother's remains were found in December. He wrote a book about his experience, *What Brothers Do*. Last year he succumbed to cancer that Evans believes was probably 9/11-related.

Evans points out World Trade Center cough syndrome and additional cancers that resulted from working on the piles. While some people seemed to be susceptible to the syndrome when working there during particular periods, on days when it rained, "that was probably responsible for keeping a lot of the particulate matter down, containing some of the pollutants and toxins coming off all the burning rubble on the inside."

Pile workers were exposed to everything from human remains to printer ink to asbestos and pulverized concrete, says Evans.

"The cancer situation has been absolutely horrendous for a lot of those folks, and there's been congressional testimony on it," he adds. "In some cases there was so much printer ink that people were sweating it out of their pores.

"The National Institutes of Health has presented on this over and over again, about issues of people getting particulates into their lungs."

Many of the chemicals to which pile workers were exposed are showing up years later with rare cancers, notes Evans.

"The additional monies that certain Congressional representatives have fought tooth and nail to make sure stay intact even when Congress was trying to lessen the funds has been instrumental for a lot of those families," he says.

HEALTH SURVEILLANCE

Evans offers gratitude for those physicians who have been monitoring the FDNY workers since 9/11.

"They really have done yeoman's work on the data collection on these folks," he says. "The presentations I've seen at the National Institutes of Health and National Academy of Medicine have been absolutely phenomenal, to the point where they've traced just about everything that did happen: who was there, how long they were there, the contaminants that were there, and some of the results of the air monitoring that weren't necessarily made public early on. All of this is critical for surveillance and long-term issues."

Evans sees some similarities in this year's Surfside, Fla. condo collapse.

"It's a similar situation, only it wasn't taken down from a terrorist event," he says. "It was doing the same thing: aerosolizing those toxins

> **The air seemed clear in the daytime, but at night in the floodlights, he noticed dust floating in the air.**

and creating these small fires that were giving out very toxic and acrid smoke. You've got pulverized concrete and all the other things that come in, like debris."

Hank Christen, a retired human performance technology consultant in the fields of emergency response and counterterrorism for Department of Defense agencies, federal response agencies, and local government public safety agencies who was part of the 9/11 rescue effort, says he gets physicals through the World Trade Center Health Program, a federal health program administered by the National Institute for Occupational Safety and Health, part of the Centers for Disease Control and Prevention that's authorized through 2090.

The program provides no-cost medical monitoring and treatment for certified WTC-related health conditions to those directly affected by the 9/11 attacks.

Christen remembers how the air seemed clear in the daytime, but at night in the floodlights, he noted dust floating in the air the entire time he was there.

Christen notes in the Surfside condo collapse that rescue workers were wearing breathing equipment because there was a fire burning in the rubble. At the World Trade Center, there also were fires burning throughout the site.

"From an air quality perspective, it was hostile," he adds.

"Unfortunately, we have learned an incalculable lesson with the lives that have been lost to cancer of those who worked the pile at the World Trade Center," says Gary Ludwig, a long-time paramedic and emergency leader who provides expert witness services, litigation support, and consultation on EMS, fire, and 9-1-1 matters.

He notes he was pleased to see emergency personnel working the pile at the Surfside building collapse wearing respirators.

Frequent water and air quality readings are critically important to ensuring the safety of those working on a pile of debris, he adds.

"The air and water can be laced with countless toxins from fuel, dust, pulverized concrete, bird droppings, asbestos, plus other products. After firefighters come off the pile, it is important they are properly deconned. We cannot repeat the mistakes from what the workers on the WTC pile experienced."

PPE AND SUPPLIES

Susan Bailey, president-elect of the National Association of Emergency Medical Technicians (NAEMT) and director of the Louisiana Bureau of EMS, says the importance of PPE was evident

"THEY'RE ALL GONE"

A loved one survived, but few other casualties came

BY MICHAEL MCCABE

As I finally reached my office at McCabe Ambulance Service on 9/11, we were already mobilizing. As we awaited formal deployment instruction, our location in Bayonne, N.J., just five miles from Manhattan, afforded us a clear visual of the towers. We all stood ready but could only wonder what had happened. That uncertainty came to a screeching halt the moment the second plane penetrated the second tower. It was a surreal and numbing feeling. We knew we were under attack.

We started our caravan toward the Holland Tunnel. As we approached the mouth of the tunnel, with every intention of reporting to Ground Zero, something happened that undoubtedly impacted all of our fates that day: We got rerouted. Rather than reporting to the WTC site, we were instructed by NYC communications to establish a triage and treatment area on Ellis Island, directly across from the towers on the Jersey side.

I began leading a convoy that way. As I made my way through downtown Jersey City, we came to a pause near Exchange Place. This transportation hub sits quite literally directly across from the World Trade Center. At 0959 we looked left, and the South Tower crumbled in front of our eyes like a house of cards. To this day it remains the most surreal moment I have experienced in my career.

Everything slowed down. Voices screamed, but it was almost dreamlike. I attempted to contact my father, a fellow supervisor who'd headed toward the city, on our frequency, but there was no response. I was convinced he was dead. I pushed forward with the convoy.

Once we crossed the bridge onto the island, we stripped our units of equipment and established a makeshift triage and treatment area. We waited and waited, but the victims never came. We received a few ferry boats half-filled with police and fire personnel covered in asbestos and dust, all saying the same thing: "They're all gone." A short time into our operation, I was elated to see my father emerge. He had made it out alive, but everyone he had spoken to moments earlier, unfortunately, did not.

Mike McCabe is chief of EMS at McCabe Ambulance Service, Bayonne, N.J.

during 9/11, a point even more critical now during the COVID pandemic.

"Having PPE and the ability to store PPE for long periods of time is so very crucial because we may not need it every day, but when we need it, we need it," Bailey points out, adding there were people helping on the 9/11 piles who weren't wearing PPE.

"They were digging through rubble, doing what they needed to do to help fix the situation and make it better. PPE is so very important to reduce the exposure of the whatever it is that caused the cancer or the respiratory illnesses."

"The FDNY and the city are concerned about the risk of cancer exposure," says Oren Barzilay, president of FDNY EMS Local 2507. "However, I don't think we're doing enough to treat those who are sick from it already. We have so many people who are fighting the World Trade Center ailments. We have hundreds who have died after the fact.

"We're going to go solve this issue. I don't think we're there yet."

EMOTIONAL BURDEN

Evans points out that many retired FDNY personnel live in Las Vegas.

"I started getting phone calls from a lot of wives of firefighters retired from FDNY, asking what they could do, saying their husbands were really struggling with not being on the job, knowing their coworkers were buried under the rubble.

"That's caused a lot of stress and PTSD for those folks. I don't think we've really addressed the folks that were connected to that event who couldn't go and help. They really wanted to help. And there are some long-term consequences that came for those folks."

FDNY EMS Chief Lillian Bonsignore says the COVID-19 pandemic is "the biggest thing we've seen since 9/11. What we've noticed in similar events is when first responders are exposed to high numbers of deaths and a high level of tragedy for an extended period of time, there is an emotional toll that takes on people.

"It's a very heavy burden to bear. Having mental health resources in place for those people is critically important. We should always remember that the people who respond to save the lives of other people sometimes need their own lives saved."

Carol Brzozowski is a Florida-based healthcare writer and a frequent contributor to EMS World.

HISTORY REPEATS ITSELF

We learned a lot, but we have a long way to go

BY ERIK GAULL, NRP, CEM, CPP

I remember a surreal drive, lights and siren, to the Washington, D.C. EOC thinking this was the event for which I had spent my whole life training. The attacks transformed the country's thinking about terrorism from *It's something that happens in other countries* to a concrete reality with which we all had to contend. The attacks galvanized attention on the roles of first responders and emergency managers and gave them both a level of gravitas that was previously unattainable. For a brief period (two years, maybe slightly more) there was little we could ask for in terms of authority, equipment, and training that would not be granted.

Are we more ready today to respond to another large-scale attack? Unfortunately not. The federal government attempted to solve the problem of preparedness for terrorism by throwing money at EMS, fire, and law enforcement agencies. A really good gap analysis was never performed, and agencies procured equipment they didn't really need or have the training for. Lots of equipment got purchased and sat on shelves, unused and with a dwindling cadre of people trained to use it. I think we're somewhat better coordinated, but I think we still have a long way to go. For a current case in point, consider the vast USAR resources spent on one building: the Surfside condominium in Florida. What if Surfside were an entire neighborhood rather than one building? I don't think we're significantly better prepared than in 2001.

To the younger generations of emergency responders: Train hard. History repeats itself.

Erik S. Gaull, NRP, CEM, CPP, is senior client partner for Samsung Electronics America in Washington, D.C. He is a 20-year member of the EMS World editorial advisory board.

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AM

A total of 412 emergency workers in New York City lost their lives responding to the terror attack on the World Trade Center, including responders from the Fire Department of New York, New York City Police Department, Port Authority of New York and New Jersey, and private EMS agencies. EMS World honors their memory, as well as those who continue to succumb to injuries and illnesses related to 9/11.

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