Technology solutions that address all your Dispatch & EMS challenges

From Enroute CAD to EMS patient data integration, Infor’s leading solutions help you improve response times and disseminate critical information accurately and quickly, so you can better protect your responders and better serve your citizens.

Visit booth 401 or infor.com/pub-safety for more information.
There are things a calltaker can do to gather information and reassure the individual when a disability is suspected.

When disasters or large-scale incidents occur, the local Emergency Operations Center steps up to coordinate care, help restore order, and get residents to safety.
Solutions for Today’s Super Heroes

CAD+911
Mobile
IQ & Analytics

Field-based Reporting
Records Management
Jail Management

Stop by Booth #301/400 at Navigator
Kelly is a Supervisor at Waukesha (Wis.) County Communications. She helped to implement a new CAD system in 2012. She is a certified EMD and EMD-Q® and certified in the National Incident Management Training System (NIMS). She was a Record Telecommunications Center Operator in the U.S. Army (1992-1994).

Anthony is the Performance Improvement Coordinator for North Shore-LIJ’s Center for Emergency Medical Services in New York. He has worked in emergency communications since 2001 having served as EMT, field training officer, dispatcher, and communications tour commander. He is a member of the Journal’s Editorial Board and assistant editor for QTips.

Sherri is the training and operations manager for Waukesha County Communications, Wis., a combined dispatch center in southeastern Wisconsin, just west of Milwaukee, a land where the beer runs freely and locals proudly stack cheese on just about everything and call it great. You can contact Sherri at 262-446-5085 or by email at sstigler@waukeshacounty.gov.

Art is a software instructor and IAED®-certified ED-Q™ instructor for Priority Dispatch Corp.™ He has been a fire and EMS dispatcher for 18 years and works at Union County Regional Communications in Westfield, N.J. Art has been involved in 9-1-1 telecommunicator training and medical quality assurance since 1999.

PowerLinc™ Hub is a patented modular Power Distribution System that delivers high power where it is needed. Each system can provide three 20 Amp circuits while maximizing flexibility and reducing electrical contractor costs.

Whether in the console or under a raised floor, PowerLinc’s combination of extruded metal casings, metal junction boxes and armored cable provide the strength needed to withstand 24/7 critical environments.

For more information please contact:

Michael Wright | Dispatch Product Manager
p| 206-866-6434    c| 360-981-9054
mwright@evansonline.com
get the **right** information.

at the **right** time.

to the **right** people—*every call.*

Faster calltaking time means shorter time to dispatch.

ProQA® Paramount structured calltaking means all the right information is gathered.

That means faster, safer responders and safer communities.

www.prioritydispatch.net  |  800.363.9127
he young man on the cover is my son.

He is a 28-year-old mix of wonder and pluck who believes all jets passing overhead are flying to Disneyland or Phoenix (Ariz.), where his sister lives, and that all buses and trains he boards will arrive at where he’s going.

Several years ago, he discovered this wasn’t true, at least about the buses.

It was a workday and the alarm on his watch went off, signaling the end of his four-hour shift at a Mexican restaurant. He clocked out, put on his sweatshirt, slung his backpack over his shoulder, and made a hasty retreat to the bus stop. I can imagine him going about this routine. He follows a set of cautiously rehearsed steps in every day’s execution.

Routine is his margin of safety and, also, mine in developing his independence.

He was moving in the accustomed pattern when, as I was later told, a new supervisor caught up to offer assistance. They walked to the bus stop, a bus arrived, she helped him board, and watched the bus depart. He took a seat up front.

I assume my son counted the stops and when at the number associated with his stop, he went to the door and waited for the bus to pull over. He stepped out but not into a place he recognized. I can imagine his confusion and panic. This was not the right street, this was not the right corner, and he can’t find his way back home.

All ended happily thanks to several helping hands, including those of the 9-1-1 dispatcher, police officer, and my husband’s work crew. He was dropped off at home, sensibly popped open a pudding cup, and, I assume, rolled his eyes hearing a car come to a screeching halt in the driveway. It’s her again, interrupting a perfectly fine afternoon snack.

“You’re home, sweetie. You’re safe.”

The mistake was honest, unintentional. My son trusts the decisions people make for him. He trusts that a person—in this case an authority type—walking him to a bus will make sure he is boarding the right bus. The supervisor probably figured that he would “have shaken his head no” if it wasn’t the right one.

She didn’t ask. He didn’t object.

The line I walk is protective and, yet, considerate of his abilities. His line is measured and drawn to accommodate his life. He can believe that all planes fly to Disneyland or Phoenix, just as long as our two separate lines connect securely at the end of each day.
Welcome to NAVIGATOR 2015. This year’s theme, “Take the Next Step,” highlights the reason we, as a membership-driven organization, keep growing and why we continue to look forward to the high-octane event drawing close to 1,500 dedicated medical, police, and fire dispatchers and emergency communication nurses from all over the world.

Yes, this is a dynamic conference where members anticipate top-notch speakers, a tremendous mix of educational sessions suited to the many paths the profession has taken over the past several decades, vendors exhibiting state-of-the-art technology, and, as always, the opportunity to network with some of the biggest names in the industry.

And it’s more than that.

Members are core to NAVIGATOR’s success. Here, we speak the same language.

Whether it’s your first or 15th trip to the annual conference, you are the ones providing the inspiration behind the Academy’s Four Pillars of Care: Emergency Medical Dispatch (EMD), Emergency Fire Dispatch (EFD), Emergency Police Dispatch (EPD), and the Emergency Communication Nurse System™ (ECNS™). You challenge us to help you “Take the Next Step” in dispatch excellence. You motivate the Academy to develop the gold standard of best practices for the industry. We learn from one another, and through our common experience, we build the confidence to set our sights high.

This could mean achieving an Accredited Center of Excellence (ACE), employing the full complement of protocols (depending on the needs of your agency), or getting involved on the front lines of new knowledge through Academy research projects. You might come a day or two early for the pre-conference workshops with your “must attend” sessions from the three days of official conference highlighted in your On-site Guide.

In between, we enjoy talking about what we do and how, as individuals, we view our contributions to the profession.

We also know how to have fun. The fringe benefits of NAVIGATOR—the Opening Gala Reception, Closing Luncheon, Attendee Party, and awards—extend our reach. We applaud the achievements of peers while following their lead to do the same.

NAVIGATOR 2015 also carries special meaning for me. It was 10 years ago that I attended NAVIGATOR as your Academy President, a position I graciously accepted in 2004. I had been involved with the Academy for about seven years, serving in various positions, including the government affairs director.

That conference was spectacular on several levels.

We celebrated the release of the Medical Priority Dispatch System™ (MPDS®) v11.2 and the Police Priority Dispatch System™ (PPDS®) v2.0, and accompanying curriculum. We announced that work was starting on the second version of the Fire Priority Dispatch System™ (FPDS™) and the first-ever multiple-discipline Instructor Academy for new instructors. We presented a 22-minute documentary describing the origins of the MPDS and the Academy.

We praised our successes and held firm to our convictions for the future.

In my opening remarks, I talked about the staff and volunteers dedicated to making sure the protocol was the best it could be. I looked forward to the continued growth of protocols and an organization that, someday, would hold the same esteem for standards in health care as the American Heart Association and the American Red Cross. I believed our collective determination would bring greater and greater respect to the profession.

All of these things, and more, have happened in the past 10 years. The Academy is at the forefront of emergency dispatch, and we are the highly regarded standard for the industry. Our membership has nearly doubled during the past decade, as have the number of agencies achieving ACE. NAVIGATOR keeps getting bigger and better.

The Academy will always “Take the Next Step” for the millions of people depending on us each time they dial 9-1-1. And it is our pledge that we continue to take it together. •
STAND-ALONE PAIs VIOLATE STANDARD OF CARE
Treatments don’t occur in an Information Vacuum

Jeff Clawson, M.D.

Doc:
I am trying to gather some information for our Executive staff regarding full implementation vs. partial use of EMD. Do you have any information regarding legal issues that stem from only using the pre-arrival cards without starting with the case entry card? What, if any, are the state or federal laws that govern the use of EMD protocols as it would pertain to this subject? Thank you very much for any input you might have.

Thanks, Randy

Randy:
Thanks for asking the Academy about this important issue. Stand-alone pre-arrival instructions are a clear violation and omission of the current standard of care and practice in the comm. center. Several documents at the federal level address this issue, including ASTM F-1258, National Institutes of Health (NIH) EMD Position Paper, as well as things in various state rules and regulations regarding EMD. Here are a few of them:

According to the NIH: “This is accomplished through the trained EMD’s careful use of a protocol that contains the following elements:

1. Systematized caller-interrogation questions that are chief-complaint specific
2. Systematized pre-arrival instructions
3. Protocols that determine vehicle response mode and configuration based on the EMD’s evaluation of injury or illness severity
4. Referenced information for dispatcher use”

They go on to state: “Systematized interrogation is an essential component of a comprehensive medical dispatch protocol...”

And in discussing the important purposes for dispatcher interrogation they emphasize: “Enable the EMD to determine the presence of conditions or situations requiring pre-arrival instructions.”

In addition, the American Society for Testing and Materials (ASTM) states in its document F-1258 sponsored and approved by the United States Department of Transportation (USDOT):

“Section 4.12: There must be continuity in the delivery of EMD care. To safely and effectively provide correct medical care, the EMD that is medically directing, evaluating and coding, must maintain direct access to the calling party and must use a medically approved emergency medical dispatch priority reference system. The person giving the medical instruction to the caller must be the same person that asks the systematic interrogation questions.”

In medicine, treatments are never provided unless we know first what we are treating. Case Entry is the primary survey for the calltaker, while Key Questions are the secondary survey of the case (whether patient or situation), and, depending on the particular issue at hand, are always done, unless the protocol clearly omits them for known pre-defined and approved reasons (the logic system).

In addition, provision of telephone-provided instructions that are simply based on a calltaker being trained in a procedure like CPR, the Heimlich maneuver, or childbirth, but not using a scripted protocol, has been vilified by the NIH as “telephone aid” and this “is usually considered an inappropriate and unreliable form of dispatcher-provided medical care.” In other words, training specific to the hands-on, visual environment of field medicine is not sufficient in the non-visual realm of dispatch where dispatch-specific training and scripted, protocol-based interrogation and instruction is required.

Failure to make these determinations has resulted in incorrect treatments resulting in death of the patient, injuring the patient, getting callers and bystanders injured or killed, as well as being an incomplete and completely incorrect method of dispatch evaluation and help.

When you consider that the correct use of a protocol is the equivalent of a pilot’s or astronaut’s pre-flight checklist, any omission can and often will have predictable and often catastrophic consequences. Thirty-five years into the correct provision of EMD, I don’t think such an approach should receive any further consideration, given the standards and norms of the current day.

Please let me know if any further information or clarifications would be helpful.

Best regards ... Doc

Doc:
This is very good information and will hopefully assist executive staff with future decisions regarding pre-arrival instructions. I think it is a great topic for discussion, and this might help other departments answer the question before any problems arise. I would like to thank you all for your assistance.

Thanks, Randy
People converging on a scene after a disaster have the distinct tendency of increasing congestion at the scene and hampering rescue efforts. The informal actions should never be confused with dispatcher-guided Pre-Arrival or Post-Dispatch Instructions.

Dispatch instruction is coordinated behavior. I'm referring to the informal and spontaneous movement of people—known as “convergence behavior”—that tends to add to the congestion at an emergency incident making “organization and control of the rescue and relief efforts more difficult.”

The behavior includes the altruistic volunteer equipped with a shovel to dig out victims after a landslide or the uninvited conveyance of food and drink for on-scene emergency responders. Spontaneous volunteers, although well intentioned, can hinder response “by creating health, safety, and security issues, distracting responders from their duties, and interfering with response operations.”

The same applies to medical personnel arriving on scene to render voluntary assistance. Their actions—medical freelancing—although well intentioned, can conflict with established emergency medical service (EMS) protocols and consequently, represent “purposeful disregard for dispatch and response protocols at times when adherence to them is most critically required.”

Think of the adage that too many cooks spoil the broth: When there are too many people trying to do the same work at the same time they, in the process, stir discord into a situation. The result will be spoiled.

The phenomenon of convergence behavior is studied in a recent issue of the Academy’s Annals of Emergency Dispatch & Response (AEDR). The authors present a review of the behavior in Kenya during six major emergency incidents occurring over a 15-year period (1998–2013) along with the behavior’s associated risks.

**Incidents**

Droughts, floods, fires, terrorism, collapsed buildings, and disease dominate Kenya’s major incident profile, and the six incidents described in the article include a suicide bombing (Aug. 7, 1998, killing 212 people), petrol tanker accident (Jan. 31, 2009, killing 72 people), landslide (April 4, 2012, killing 8 people), explosion (May 28, 2012, killing 1), mass shooting (Sept. 21, 2013, killing 72), and train collision (October 2013, killing 11).

In each incident, onlookers and bystanders took action, believing they were doing what was necessary to reduce personal danger and provide help during a potentially life-threatening situation; in consequence, crowd surge (e.g., trampling, blocking arrival of emergency vehicles) increased the number injured and the number of people who died.

The actions of the altruistic and curious turned sometimes relatively minor incidents into major incidents, particularly considering Kenya’s lack of specific training of emergency services personnel to respond to major incidents, poor coordination of major incident management activities, and a lack of standard operational procedures and emergency operation plans.

It should be noted that convergence behavior is not unique to Kenyans, and solutions to prevent the informal and potentially disastrous gathering of family and onlookers at an emergency can be universally applied.

This is a basic assumption of human nature, requiring the development of pre-disaster protocol, with components to include public education citing the risks and dangers of convergence and recommended public actions and, at the time of the incident, both the dissemination of accurate information and the organization of a staging area for observers.

Public awareness and a regulated, streamlined approach can benefit EMS response and, also, the people who invariably converge on the scene, as long as the approach sensibly integrates the actions people are likely to take.

**Sources**

5. See note 3.
GUNG-HO FOR NAVIGATOR
Conference offers a lot of something for everyone

Anthony Guido

We are once again in NAVIGATOR mode and at a “Disney-like” destination for adults like me who have a love for $5 blackjack tables, the sounds of ringing slot machines, and a boss picking up the tab at Bobby Flay’s Mesa Grill (wishful thinking?).

Vegas may not appeal to everyone, but to me it holds special place. I was a kid when first making the trek from New York to Vegas, spending summers with my grandparents who owned a print shop on the outskirts of a very lit-up city. I climbed Mount Charleston with my then-65-year-old grandfather and took trips to Lake Mead to see that Damn Dam Tour (Hoover Dam).

What does this have to do with your career in emergency communications? Everything, especially when it comes to stacking professional odds in your favor.

“Vegas” odds are that you will probably win some and lose some at the tables or slot machines, much like giving CPR instructions to a bystander for a patient in cardiac arrest, helping a scared caller find a place that’s safe in an active assailant incident, or calming a frightened caller reporting the details of a rapidly spreading structure fire. These situations don’t always go as we would like. This is where protocol proficiency and development change the game.

Like a blackjack card-counter who has the upper hand, chances are that you as an EMD, EFD, or EPD can beat the house and create winning outcomes when confidently telling your caller exactly what to do next. This is where your PAI “full house” comes into play.

That hasn’t always been the case, at least not when and where I started in the profession.

Some 15 years ago, dispatch was “just a job” and as many saw it, a relatively dead end one, with most taking the job as a cursory step to a career position as a firefighter, police officer, or paramedic. Dispatchers who found they liked the job and stayed (like yours truly) simply accepted the limitations in pay and advancement potential.

The job has since changed into a promising career largely due to the protocol system developed 36 years ago by Jeff Clawson, M.D. Over the years, his innovative protocols have revolutionized this previously lackluster industry, leading to multiple career paths in emergency communications (e.g., information technology, emergency preparedness, training, quality, supervision, management, customer service, public relations, and beyond). Each path offers unique challenges requiring specialized skill sets and training, resulting in agencies basing promotion on an individual’s skills and capabilities, rather than based solely on seniority.

We have choices.

How do you become the right person for the dispatch career you want?

Self-development is the key, and NAVIGATOR is the ideal venue to start. The conference provides tremendous opportunities to learn, network, mentor, and—as this year’s theme emphasizes—realize the next steps in building a long and satisfying career.

NAVIGATOR is about what we do and how we can improve, and it gives us the tools to reach our goals. NAVIGATOR is the industry standard in dispatch career development, and there are plenty of us willing and eager to help those at all levels.

This year’s NAVIGATOR features more than 100 educational sessions organized into several tracks focusing on research, technology, management, leadership, quality assurance, operations, protocol (fire, police, and medical), CDE & training, motivation, and stress management.

The Special Interest track further prepares us in meeting the needs of our callers and responders.

The perceived lack of career opportunity—at least in the immediate future (such as that coveted position)—shouldn’t stop you from developing, stretching, learning, and networking with the best subject matter experts in the world. In fact, it’s the ideal time to prepare for the day your winning hand is dealt.
Throughout the history of the modern communication center as we know it, we hear the same sad tune being sung in dispatch centers all across this nation. Somehow, training dollars for dispatcher professional development seem to dwindle or disappear altogether as departments look to focus on other “priorities.”

What is interesting is that in every major critical event that has occurred in this country, after-action reports consistently suggest more training for communications personnel as one of the most important “lessons learned.”

As a longtime dispatcher, I was certainly part of the choir in my center where we would sit around and chirp incessantly about the incredible injustice we were dealt by management: They would “never let us go anywhere” for training. (Sound familiar?)

But here’s the good news: That old-world mentality has been evolving, and there have been some very positive winds of change blowing our way. Folks tasked with the management of communication centers have been forced, albeit slowly, to truly understand and appreciate the value of the professional dispatcher. More states are developing standardized training and embracing certification courses specifically geared toward dispatchers.

The International Academies of Emergency Dispatch® (IAED™) continues to be at the forefront of many of those initiatives, not only because of gold standard care for our customers, but also because certification, recertification, accreditation, and continuing dispatch education are expectations that bring excellence to our communication centers.

These components have been in place from the start as part of Dr. Jeff Clawson’s vision for incorporating emergency dispatch into the EMS system.

If you’re at a dispatch center where you find yourself and your co-workers participating in a never-ending complaining “choir practice,” then it’s time to find some new music toward creating a more positive ensemble. Here are a few suggestions to start:

1. Get the ear of a trusted management type. If you are operating in a fire or law enforcement environment, talk to a sergeant, lieutenant, captain, or even the chief—someone who understands the importance of well-trained and certified staff in the communication center. You can ask for their advice and assistance to best approach the decision-makers at your organization.

2. Have good sheet music. By that, I mean a workable plan. Don’t go in empty-handed. Start small if you must. Develop a training strategy that would benefit your staff and aligns with your agency’s mission, and explain why you chose the particular steps or features. Write down what you expect staff to learn, who should attend, how much it will cost, and your plan to cover staffing during scheduled training. List the long- and short-term benefits to the department.

3. Set up an audition. By that, I mean a meeting with the decision-maker. Present your “ask” professionally and purposefully. Emphasize what the training opportunity would mean to the stakeholders—the officers, the department, the community. You could cite studies showing how employee education and training can help an employer address many key workforce challenges—issues such as turn-

over of top talent, difficulty in hiring the best candidates, and keeping up with evolving trends and technologies.

4. Don’t stop singing. Carry the tune. If your audition fails and the training is not authorized, keep trying. Remember that very few ideas succeed on the first attempt. Ask about the barriers and find ways around them. Declaring a dead-end and complaining will only bring you back to the same old choir, singing that same old tune.

With preparation and practice, there is a great opportunity to teach management to sing a new song—one that will ultimately bring the sweet sounds of success through the skills and knowledge your dispatch staff reaches in their climb to an amazing crescendo!
As I write this it’s Sept. 11. I’ve just driven home from my shift at the county 9-1-1 center. My trip takes me through several small towns typical of any in the northeast U.S. Tonight, two of those towns are holding 9/11 memorial services as I pass through. Few municipalities in our area were untouched by the events of that horrific day, and 13 years ago tonight a lot of husbands, wives, friends, and neighbors never came home. No doubt many in attendance tonight are there even though they didn’t experience a loss personally.

I wasn’t working dispatch on Sept. 11, 2001; I was on vacation on the Jersey shore. My lasting memory is that of a silent sky, empty of planes.

I still can’t imagine what it was like to take calls from people who said they were going to jump rather than endure the growing terror of heat and smoke consuming their world. I do know that as emergency dispatchers, our purpose is to make a meaningful difference in the worst moment of someone’s life. We’ve got a job to do, but we can’t forget that someone in crisis is at the center of what we do regardless of how calm he or she might seem. A single statement of reassurance can make such a difference at the right moment that you couldn’t possibly put a price on it.

A long time ago my partner took a call from a frantic mom whose baby was having a first-time seizure. At one point, my partner said: “Listen—I know it’s scary. Trust me, I know it’s scary. But you have to calm down so you can help your baby, OK?” Those words were the emotional lifeline the caller needed at that moment.

Occasionally I hear things creep into an emergency dispatcher’s voice triggered by something the caller said. I cringe when the tone of a dispatcher’s voice suggests that the caller is behaving inappropriately by being excited or angry. The caller is reacting that way because of the stress from going through the situation. For us to react to their stress in a negative manner is simply not acceptable.

Most of us learned the word “empathy” in basic 9-1-1 training. Empathy is the ability to sense the other person’s emotions and let the person know it’s OK. It’s easy to forget that, especially when a caller interrupts with “just send the ambulance!” (I wish I had a Stressful Situation Detector on my 9-1-1 screen that would flash red and display the message “IT’S NOT ABOUT YOU—IT’S ABOUT WHAT’S HAPPENING TO THEM.”)

Making a difference to someone in crisis isn’t about you or what kind of person you are. It’s about letting callers know that at that moment, you’re there for them. It costs nothing, it means everything, and it shows that we’re true professionals in crisis management.

Have you made a difference to someone today? •
Dispatchers make sure man doesn’t lose his music

More than 4,000 9-1-1 calls coming into Valley Emergency Communications Center (VECC), Utah, from an unregistered cell phone during a single week in November understandably had dispatchers a bit agitated.

At least, that was the case until local police discovered the source of the calls coming in once every 10 seconds, on average.

The person triggering the misdials has a developmental delay and was contacting 9-1-1 by accident with no malicious intent. He was simply using the phone to play music on a deactivated headset. Attempts to connect to music resulted in the repeated calls to 9-1-1.

The phone had to go, but dispatchers decided certainly not the music. They quickly raised the money to buy an iPod and a $100 iTunes gift card, which they presented to him at the center.

“The staff had worked very hard to get this accomplished.”

The award—certification from the Commission on Accreditation for Law Enforcement Agencies (CALEA)—is no easy task, and that’s an understatement.

The five-phase process can take up to three years or more to complete and includes training, meeting 213 standards organized in seven areas (such as operations and education), a three-day on-site assessment, and a hearing by the commission’s Agency Review Committee to determine the agency’s compliance to applicable standards. Charleston County started preparing for CALEA accreditation in 2012 and applied to be evaluated by CALEA in July 2013.

The committee’s recommendation goes before the full board for approval and the “yea” or “nay” is given that same day. The 21-member commission meets three times a year—in March, July, and November—to review candidate agencies.

The Charleston County Consolidated 911 Center is an International Academies of Emergency Dispatch (IAED™) Accredited Center of Excellence (medical and fire), having achieved both distinctions in November 2012.

Lake said the three accreditations validate what they do.

“Accreditation ensures we are performing at nationally established standards,” he said. “That tells the public that we are doing the best for them, and it tells the staff that they are providing the best service they can do for the public.”

37 and still counting

911 Cares, the philanthropic organization created by Kevin Willett following the Sept. 11, 2001, attacks, recorded 37 activations and projects from Jan. 1 through Dec. 24, 2014. The reasons individuals and agencies asked for the support included homes lost to fire, illness, unexpected loss of a dispatcher, and consequent assistance needed by the family, and, basically, the types of tragedies and emergencies dispatchers and calltakers attend to over the phone every single day of their career.

The organization raises financial support through the proceeds from sales of 911 Cares products (online and at booths during conferences such as NAVIGATOR). Support also comes from individual contributions, fundraisers, and relief organizations, such as the American Red Cross.

911 Cares is part of the group Public Safety Training Consultants and limits its projects and activations to emergency communication personnel.
Phase I and II readiness continues to climb

The U.S. has 5,926 primary and secondary Public Safety Answering Points (PSAPs) and 3,135 counties that include parishes, independent cities, boroughs, and census areas, according to the latest figures from the National Emergency Number Association (NENA); most are moving toward Phase I and Phase II:

- 98.9 percent of PSAPs have some Phase I
- 98.0 percent of PSAPs have some Phase II
- 96.8 percent of counties have some Phase I
- 95.5 percent of counties have some Phase II
- 98.8 percent of population has some Phase I
- 98.4 percent of population has some Phase II

In a Phase I completed implementation, the calltaker automatically receives the wireless phone number, which is important since, in the event of a dropped call, the PSAP can work with the wireless company to identify the subscriber. Phase I also delivers the location of the cell tower handling the call.

Phase II allows calltakers to receive both the caller’s wireless phone number and the location information. The call is routed to a PSAP either based on cell site/sector information or on caller location information.

April celebrates telecommunicators and 9-1-1 education

The 9-1-1: The Number to Know Campaign goes the entire month of April, while National Public Safety Telecommunicators Week is traditionally held the second full week of April and its popularity continues to spread across the U.S.

The national 9-1-1: The Number to Know Campaign logo and tagline available to agencies at no cost provides cohesion across many messages and increases the recognition and credibility of local efforts.

National Public Safety Telecommunicators Week provides agencies with a full week to have fun and honor people working at the first line of response. The dedicated Facebook page shows lots of ways to celebrate, including banquets, awards, catered meals, potlucks, dress-down days (for the uniformed agencies), and proclamations. In 2014, for example, Metropolitan Nashville Emergency Communications Center brought festivities up a notch with an accessory day that staff apparently embraced (see the Facebook pictures: fuzzy mustaches and boots, for example).

As the story goes, a dispatcher from a California sheriff’s office came up with idea in 1981, and it spread from there. By the early 1990s, a resolution to create “National Public Safety Telecommunicators Week” passed in Congress. According to procedure, the resolution was re-introduced in 1993 and 1994, becoming permanent after that, without the need for yearly introduction.

For more information, go to www.know911.org

Older adults are at highest risk of home fire death

According to the recent report Characteristics of Home Fire Victims (Ahrens M. 2014; Oct.), older adults had the highest risk of fire death in the U.S. compared to other age groups.

In 2007–2011, people 65 and older were 2.4 times as likely to be killed in a home fire as the overall population. While children under five have historically also been a high-risk group, their risk has dropped to 1.1 times that of the general population.

The percentage of fatal home fire victims under five years of age fell from 18 percent in 1980 to 6 percent in 2011, while the percentage of victims 65 and older increased from 19 percent to 31 percent during the same period. The risk of home fire injury varies less with age than the risk of fire death does.

While the majority of home fire victims were white, African-Americans, relative to their share of the population, were roughly twice as likely to be fatally injured in a home fire in 2007–2011 as the overall population. The Hispanic home fire death rate was half that of the overall population.

More about the report is available from the National Fire Protection Association at www.nfpa.org
AED and CPR awareness spotlighted in June

June 1–7, 2015, marks the seventh year since Congress designated the week after Memorial Day as National CPR and AED Awareness Week, with the goal of encouraging all states, cities, and towns to establish CPR and AED training programs for the public.

Survival decreases by 10 percent for every minute that defibrillation is delayed following sudden cardiac arrest (SCA), according to the American Heart Association.

In related news, a recent study found that police officers are at increased risk for death from SCA when performing stressful duties like chasing or restraining suspects or physically fighting with them.

The research, published in November 2014, showed that while routine duties take up about 75 percent of an officer’s time, 77 percent of cardiac deaths occurred during more stressful activities. For example, 25 percent occurred during a restraint or physical altercation, 20 percent during physical training, 12 percent during pursuits, and 8 percent during rescue operations.

The remaining deaths did not fit into any of the pre-determined duty categories.

Sept. 11 icon opens for business

One World Trade Center officially opened to new occupants in November 2014, 13 years after the terrorist attack that killed 2,700 people on Sept. 11, 2001.

The redesigned high-rise was built with steel-reinforced concrete, with wider stairwells to allow firefighters to move while people exit, in case of emergency. The building’s mechanical systems are also encased in hardened concrete.

The building was designed with input from a plethora of New York City departments, including the fire departments, police departments, and city hall, and modeled from computerized simulations to calculate what would happen with people in the building when an emergency occurred.

According to reports, the 104-story One World Trade Center occupants include publishing and advertising giants, hospitality booking agents, and investment groups. The government’s General Services Administration signed up for 275,000 square feet, and the China Center, a trade and cultural facility, will cover 191,000 square feet.

The center is just steps away from the National September 11 Memorial featuring twin reflecting pools and bronze panels inscribed with the names of everyone who died in the 2001 and 1993 (World Trade Center bombing) attacks. The memorial officially opened to the public on Sept. 12, 2011, while the museum below the plaza opened on May 21, 2014.

IAED and Ambulance Today form partnership

The International Academies of Emergency Dispatch™ (IAED™) and Ambulance Today have entered a partnership agreement to enhance the distribution of EMS news and research to a global audience. Ambulance Today magazine is published four times a year from offices in Liverpool, England, and already reaches over 195,000+ people per edition online. Editorial contributions from several countries outside of Europe and recent partnership agreements with the UNISON health care union in the U.K., Falck in Denmark, the National Association of Emergency Medical Technicians (NAEMT) in the USA, and now the IAED, will expand its coverage internationally and take its global online circulation to over 275,000 prehospital readers.
Paramedic’s turn around during marathon saves a life

St. John Ambulance Intensive Care Paramedic Barry Eunson crossed the finish line of the Dublin Marathon in a way he had never intended.

He was dropped off.

The experienced runner, who works for the service in Alexandra, Central Otago, New Zealand, took the finish in stride, although up until mile marker 18 of the 26.2-mile course, he was on track for crossing the line at a time he had anticipated.

That’s when Eunson’s paramedic instincts kicked in. A runner several paces ahead collapsed; he was having a seizure and Eunson, turning around once he passed, went back to help and stayed with him for the hour it took an ambulance to negotiate the packs of runners.

That was the first incident.

As the ambulance was leaving, with Eunson inside to assist, a second runner collapsed. Eunson got out and again assisted until another ambulance arrived.

By this time, the race was over, and the ambulance driver dropped Eunson off at the finish line. He wouldn’t receive a finishing medal or T-shirt.

The story doesn’t end there.

Eunson’s friend David Burke contacted the marathon organizers and told them what had happened. They sent Eunson a shirt and medal as well as a return flight to Dublin to finish the race in 2015.

“I am pretty stoked about it,” Eunson said. “I am pleased he [the first runner] survived; I didn’t think he was going to make it. To me, meeting him will be the greater highlight than finishing the marathon.”

Source

London Ambulance Service tops Twitter tables

London Ambulance Service’s Twitter account has been named one of best in England, according to analysis of social media by agencies in the National Health Service.

The @Ldn_Ambulance account ranked second out of 50 NHS organizations using Twitter, as of December 2014.

The account has 38,600 followers and is used daily to offer advice during high-profile incidents, encourage Londoners to use 9-9-9 wisely, and also promote public awareness campaigns.

LAS was also named one of the NHS’ stealth revolutionaries—an organization with high interest and engagement with other NHS or health organizations’ social media accounts.

British Columbia Ambulance Service dispatches AEDs

BC Emergency Health Services (BCEHS) has launched a provincial database that helps emergency medical dispatchers connect callers who are assisting patients in sudden cardiac arrest with community automated external defibrillators (AEDs).

The BC AED Registry is integrated into the computer-aided dispatch (CAD) system, giving dispatchers immediate access to the closest registered AED and the ability to direct the caller to retrieve the AED and provide instructions on how to use the AED to care for the patient until paramedics arrive.

With the registry, dispatchers can locate all registered AEDs within a 300-meter radius of an incident. There are currently 377 AEDs in the registry and hundreds more unregistered throughout the province.

Registrants are required to complete monthly maintenance checks on AEDs and receive email reminders to change AED pads and batteries as well as post-incident support from BCEHS staff.

Since 2013, the provincial government has invested $2 million in the BC Public Access to Defibrillators (PAD) Program, which was matched by the Heart and Stroke Foundation. The PAD Program is committed to the installation of 750 community AEDs in public venues throughout British Columbia by 2017. BCEHS responded to 3,068 sudden cardiac arrests in 2013 and more than 2,300 in 2014. Sudden cardiac arrest is the leading cause of non-accident-related deaths among British Columbians.
Much like the county’s namesake, Boone County Public Safety Joint Communications embodies the intrepid, trailblazing spirit of American pioneer, explorer, and frontiersman Daniel Boone. ‘Course that doesn’t mean the center’s dispatchers roam the call center toting Kentucky long rifles and donning coonskin caps.

The Public Safety Answering Point (PSAP) was one of the first 9-1-1 communication centers in the state of Missouri to adopt the Fire Priority Dispatch System™ (FPDS®) and is also the first and only center in the state to achieve fire Accredited Center of Excellence (ACE) status. More recently, the Boone County center also became the first dual-ACE in the state with medical and fire accreditation.

Joe Piper, director of Boone County Public Safety Joint Communications, said typically when an agency adopts a protocol system, the domino effect is that centers in the surrounding area also start using protocol systems.

“I’d like to think that we, as a center, have started at the forefront to be at the cutting edge, not bleeding edge,” he said. “I look at that as kind of pioneering.”

The Boone County center serves 10 separate agencies and dispatches for EMS, fire, and police services. It also provides calltaking for three additional agencies. The center has a coverage area of 691 square miles that includes a service population of about 168,000 residents. Located smack dab in the heart of the state, Boone County’s seat is college town Columbia, the home of the University of Missouri and Mizzou Tiger athletics. The center averages 77,108 9-1-1 calls for service annually. It employs 37 full-time dispatchers.

Brian Maydwell, the center’s operations manager, played a key role in helping it first gain fire ACE status in August 2013, and more recently, medical ACE status in July 2014.

Both Piper and Maydwell said the PSAP’s greatest challenge in gaining ACE was not performance-based but rather a lack of funding to provide the personnel needed to evaluate the quantity of calls required for accreditation. Call it serendipity, but the center was simultaneously in the process of transitioning to a new funding mechanism passed in April 2013. Instead of being funded through Columbia’s general city fund, a tax was passed that levied a 9-1-1 service tax across the entire county, increasing the center’s revenue, Piper said.

That paved the way for continuing construction on a new state-of-the-art combined facility for Boone County Public Safety Joint Communications and the Emergency Operations Center, and converting all the center’s dispatchers and staff from city to county employees. The new tax dollars also enabled the center to contract with National Q as its regular call reviewer for medical calls in September 2013, adding to the existing National Q contract for fire call review that began in October 2012.
“It was the deciding factor that led to our EFD accreditation application in the summer of 2013,” Maydwell said. “This process was so successful that we added EMD to the National Q call review and applied for medical accreditation in the summer of 2014.”

Piper added that the National Q service frees up the center’s Qs and leadership to give line dispatchers constructive feedback on calls and provide occasions for individual Q/dispatcher interaction rather than spending that valuable time and resources reviewing calls.

Maydwell said Carlynn Page, IAED™ associate director, was instrumental in helping them through the unfamiliar process. Page kept them updated on the accreditation’s requirements and also the specific documentation each step demanded. Piper also said the workshops and opportunities to network with other accredited communication centers at the Academy’s NAVIGATOR conferences provided him and his colleagues with valuable insights into the process.

“Just from a learning and motivational standpoint that helped,” Piper said.

The benefits of accreditation, Maydwell and Piper said, are manyfold. No. 1 was the recognition of the Boone County center’s outstanding staff.

“We have believed in our administration for quite some time that Boone County has some of the best dispatchers in the world,” Maydwell said. “It’s nice to have a third party agree with and validate our opinion.”

Another perhaps less-anticipated upside of becoming an ACE is that it’s a regional and national reputation booster that spills over into recruitment. Piper said ACE status is proof that a center is exceeding the standard.

“For the employee in the center, that brings a lot of pride,” he said. “As far as recruiting, folks coming in wanting to work for us, they’re saying they want to work for us because we’re an accredited agency. They’re saying that in the interview.”

Not that becoming an ACE in fire and medical was a cinch for the Boone County center. Piper and Maydwell said there was definitely a learning curve to the process, and even though Page assisted them and answered questions along the way, it didn’t make the accreditation process a breakaway slam dunk.

“At times, the obstacles to accreditation can seem overwhelming even though they don’t cause you to lose sight of the goal,” Maydwell said. “Perseverance, diligence, and the belief that your agency has within it the ability to achieve ACE are key requirements.”

Similarly, the Boone County center’s leadership holds no illusions that with most of the ACE heavy lifting completed, they can just coast from here.

“It’s important to remember that the journey to becoming an ACE doesn’t stop at the awarding of the plaque,” Maydwell said. “It continues in the thought that once you start providing your citizens with an excellent level of service, that it must be maintained every day afterward.”

Piper said the Boone County center’s road to ACE has been highly informative and rewarding in helping them reach their goals as an organization. The center has purchased the Police Priority Dispatch System™ (PPDS®) and ProQA® software, and is currently working with its law enforcement agency partners to implement the protocols. They hope to gain police ACE status by the end of 2015.

“It’s our vision to be a totally structured calltaking agency with protocols—and to do that well,” Piper said. “We’ve held tight to that vision, and we’re not totally there, but we’re getting there, and we’re excited about that.”
Probability of happening again factors revision

Audrey Fraizer

Protocol is built on probability.

No system, no matter how robust, can cover every possibility, and that’s why the protocol systems are so dependent on user feedback, statistical evidence, experience, and trending to provide the best immediate chain of questioning and instruction for incidents more likely to happen and the array of possibilities within an incident type.

At least that’s until a call potentially provides an exception to the rule, illuminating an occasion by the very event to modify a specific protocol or set of Pre-Arrival or Post-Dispatch Instructions (PAIs/PDIs).

For example, the caller could be describing an unusual clinical presentation that does not have a reciprocal Determinant Descriptor in the Medical Priority Dispatch System™ (MPDS™).

“We change the protocols when it’s possible the same can happen again,” said Brett Patterson, IAED™ Academics and Standards Associate and Medical Council of Standards Chair. “We don’t want our EMDs caught off guard. We want something in protocol that backs them up in even the most unusual situations.”

Patterson and IAED Co-Founder Jeff Clawson, M.D., discussed “Rare EMD Encounters” during their co-hosted NAVIGATOR 2014 presentation. The session gave insight into rare dispatcher situations, including specific clinical diagnoses; advanced, portable medical equipment; dangerous scenes; and unusual patient presentations to MPDS use.

But not only was the full house treated to their perspective but, also, to present and future changes in protocol based on the unique events.

Near hanging

The first call Patterson played as an example resulted in a new BRAVO Determinant Descriptor in Protocol 25: Psychiatric/Abnormal Behavior/Suicide Attempt. The caller was reporting that his wife had hanged herself in the family barn. Screaming in the background nearly obscures the caller’s voice.

“Who’s making all the noise?” the EMD asked.

“My wife,” replied the caller. “She’s not hanging anymore. She’s yelling and foaming at the mouth.”

She is also begging her husband to breathe for her, through her mouth.

The caller’s answer and the plea to help in breathing caught the EMD off guard since the wife’s status—alert but difficulty breathing—did not fit an existing Determinant Descriptor in Protocol 25.

“We hadn’t had that type of patient,” Patterson said. “It was not the norm. She had crushed her windpipe, which resulted in the respiratory distress. She was alert.”

Patterson said the unusual situation and clinical presentation met the ‘could happen again’ criteria and, consequently, a Proposal for Change was approved by the Medical Council of Standards. The new
Protocol is dependent on user feedback, statistical evidence, experience, and trending to provide the best immediate chain of questioning and instruction for police, fire, and medical incidents.

Determinant Descriptor will be added to a future version of the MPDS.

Bullets flying

A second call opened to the sound of a rapid-firing gun and terrified screams, with a frantic caller reporting an unknown shooter opening fire at a shopping mall.

“There is blood and glass everywhere!” she cried.

Although shaken, the caller was able to answer questions and follow safety instructions despite her inability to leave her hiding place.

It was an incident that, as Patterson said, “will probably never happen in your life,” but it did hasten development of the Academy’s Active Assailant (Shooter) Protocol in the Police Priority Dispatch System™ (PPDS™).

Dr. Clawson explained that Protocol 136 came about in response to several similar incidents.

“The Police Council of Standards jumped on the idea and developed the protocol in cooperation with the NTOA [National Tactical Officers Association],” he said. “While we might not be able to stop this type of incident from happening, we can help in stopping further death and mayhem when it does happen.”

Protocol 136 was released shortly after the Sandy Hook incident and made available to all emergency communication centers, not just PPDS users. It provides responding law enforcement officers with immediate notification of the event, followed quickly by critical scene safety information. PAs give callers Evacuation or Lock Down Instructions based on their ability to leave the area undetected by an assailant and the protocol aids in gathering information pertaining to the assailant’s actions.

Brock’s Law

A third call that Patterson played resulted in the development of an Axiom in MPDS Protocol 9: Cardiac or Respiratory Arrest/Death, and led to further discussion of related changes in the upcoming release of MPDS v13.0.

In this incident, a 16-year-old boy had collapsed in the school gym during a volleyball game. The boy [Brock] was unconscious and unresponsive to pain, but his age in relation to potential cardiac arrest caught the dispatcher off guard.

She did not initially grasp that his “gasping breaths every five seconds” was an AGONAL (dying) respiratory pattern. She chose Protocol 26: Sick Person and valuable minutes into the call asked about the availability of an AED.

“She had used the AGONAL Breathing Detection tool, and he had stopped breathing,” Patterson said.

The AED was retrieved but never used. A school nurse provided CPR. The boy did not recover.

“This was a tragic case,” Patterson said. “Unnecessary use of the tool delayed the treatment of a possible cardiac arrest. EMDs should use the tool when they are unsure, not when the caller is unsure.”

Since breathing may be difficult for callers to determine in unconscious patients, the Academy added several descriptions that qualify as INEFFEC-TIVE BREATHING on Case Entry for clear recognition. A new definition for UNCERTAIN BREATHING was also added to MPDS v13.0 “A situation where a 2nd party caller is uncertain, unsure, indefinite, or ambiguous when asked if an unconscious patient is breathing.”

If a 2nd party caller (who can actually observe the patient) is uncertain whether the patient is actually breathing, the calltaker should consider the patient to be NOT BREATHING until proven otherwise.

Brock’s Law was developed in reference to the AED that was available but not used: The presence of an AED does not ensure its use; an EMD does.

Patterson said that situation emphasizes the need for greater awareness.

“We are responsible for the tools that can help,” he said.

Circulatory support devices

Patterson also discussed a new Axiom in Protocol 9 relating to externally worn circulatory support devices.

Physicians prescribe the devices (e.g., LifeVest Wearable Defibrillator) to patients following a sudden cardiac arrest. The devices monitor the patient’s heart and, if a life-threatening heart rhythm is detected, the devices can deliver a shock to restore normal heart rhythm.

While circulatory support devices are not new, the portable varieties are relatively recent additions to the market, potentially placing EMDs in unfamiliar territory.

“The EMD needs to know about the option [type the patient is using],” Patterson said. “If the device is attached to the heart by catheter, compressions could tear the muscle and cause hemorrhage. The wearable defibrillators provide loud audible warnings. They require no bystander intervention.”

In response, the Academy added Axiom 5 to MPDS v12.2, addressing the external defibrillators in context to providing CPR.

“The standard of care is CPR,” Patterson said.

According to the Axiom: It’s appropriate when advised by the machine or when no warning is audible.

Available to a larger audience

The Continuing Dispatch Education (CDE) series offers Rare EMD Encounters (CDE 57).
CRASH AND FALL
Is fall length an issue in high-impact accident?

Brett Patterson

Brett:
Should a bike fall be coded using Protocol 30 in the Medical Priority Dispatch System™ (MPDS®)? The word fall doesn’t end in Protocol 17. Should kite surfers and cross bikes also be treated in Protocol 30 because the fall length can be an issue? They easily jump higher than 3 meters (9.8 feet). When two bikers in the same lane coming from opposite directions crash into each other, this could be a very high impact accident. The average speed of a biker is 20 kilometers per hour (12.0 mph). There are people dying from these types of accidents. Should this be an indication for Protocol 29? However, the Key Question doesn’t seem to fit.

Paul Engelen
Technical Consultant
Priority Dispatch Corp.™
Amsterdam, Netherlands

Paul:
Protocol 30: Traumatic Injuries (Specific) generally handles specific injuries from bicycle accidents better than Protocol 17: Falls, unless the cyclist is hit by a car. In this case, the high mechanism of injury calls for the more appropriate code on Protocol 29: Traffic/Transportation Incidents.

In v13.0 of the MPDS there is a new definition and code on P30 called HIGH VELOCITY Impact/MASS Injury that an EMD can select when concerned about the speed or other mechanism involved in a bike accident.

As for the kite surfer, Protocol 17 should be selected for LONG or EXTREME falls due to the mechanism of injury.

It sounds like the people in the Netherlands are very active and adventurous! Let me know if this reply helps.

Brett A. Patterson
Academics & Standards Associate
Medical Council of Standards Chair

Hi Brett:
Thanks for your fast reply; it’s all clear now.
MPDS v13.0 will solve a lot of challenges. I hope it’s released soon.
To give you some nice figures (source Dutch National Bikers Union):

- One-quarter of all the movements below 7.5 kilometers (4.6 miles) are done on a bicycle
- This totals 4.5 billion bicycle rides per year
- A total of 15 billion kilometers are traveled per year
- On average, every Dutchman has 300 rides and travels a total of 878 kilometers (545.6 miles) each year
- 13.5 million Dutchmen have a bike (80 percent) (16.8 million people live in the Netherlands)

In the city, travelling by bike at speeds greater than 3 kilometers/hour (1.9 miles/hour) is 5 percent faster than travelling by car
We have almost 35,000 kilometers (21,748 miles) of bike lanes

In 1998, 144,000 bikes were reported stolen
In 2000, 900,000 bikes were reported stolen

No matter where an accident between a car and a bike takes place, the biker is by law always protected and the driver of the car is always responsible.
The International Academies of Emergency Dispatch® (IAED™) announces a new version of the Police Priority Dispatch System™ (PPDS®) that will be officially released at NAVIGATOR 2015.

PPDS v5.0 is built upon the speed and precision of each preceding version to enhance the ability of Emergency Police Dispatchers (EPDs) to gather the most appropriate and accurate information for their field responders.

“We’ve concentrated on further protocol and software refinements in the dispatch process with innovations made possible through our ProQA® software and the feedback we’ve received from our users,” said Dave Warner, Priority Dispatch System™ Program Administrator—Law Enforcement. “We’re really excited about releasing version 5.0 and, as always, hearing the feedback about how the system works for their agencies.”

PPDS v5.0 introduces two global features that place more control in the hands of the agencies. Improvements to Protocols 108 and 109 involving bombs and suspicious packages—found and threatened—have been made. There are also new Determinant Codes for PRODUCT CONTAMINATION (108-C-5) and PRODUCT CONTAMINATION threat (109-C-3).

There is a new weapon suffix M for Multiple weapon types whenever other weapon type suffixes are already listed and revisions in question sequences to provide a more logical pathway for the EPD and the caller.

Warner emphasized that enhancements in Protocol 108: Bomb Found/Suspicious Package (Letter, Item)/Product Contamination and Protocol 109: Bomb/CBRN/Product Contamination Threat have been made to ensure an appropriate and conversational interrogation for these events that vary greatly from one another in the nature of the incident.

“This is a great example of reordering questions to gather the information responders need for scene safety,” he said. “New questions pertaining to product contamination limit further exposure to callers and bystanders before responders can secure the scene.”

A big plus for agencies is the revision to the blue prompts used in gathering descriptive information. In v5.0, EPDs are now provided with specific wording to start collecting weapon, person, vehicle, and boat descriptions.

A second enhancement relies on the power of ProQA v5.1, which is the only software version available for operating PPDS v5.0. The new CAD/MDC (Mobile Data Computer) feature allows agencies to decide which information to turn on or turn off on the CAD based on a value system developed by the Academy. The feature, Key Question Answer Importance (KQAI), accelerates data flow relevant to the incident.

“This is something our users have wanted,” Warner said. “It sets the amount and type of information necessary for the specific situation. We made it a priority in software to keep the information flow manageable and relevant.”

Other enhancements include the following:

- New ECHO Determinant for OFFICER DOWN selected at Case Entry
- New definitions for PRODUCT CONTAMINATION and PRODUCT CONTAMINATION threat in Protocols 108 and 109
- New Determinant Codes in Protocol 114 accurately account for differences between a DOMESTIC and a FAMILY Disturbance/Violence situation. The domestic disturbance is defined as involving intimate relationships (such as current or former domestic partners). The family disturbance involves parties sharing a close family relationship, such as a parent-child.
- New Determinant Code in Protocol 123 designates SPECIAL LOCATION, when an agency utilizes a specialized response to address hazards in an area with terrain or natural elements that might have caused a person to go missing.

Since the release of PPDS v4.2, the IAED Police Council of Standards received and reviewed more than 100 Proposals for Change (PFCs) in developing PPDS v5.0.

Since PPDS v1.0 was released in July 2002, nearly 350 agencies have incorporated the protocols into their current standard of dispatch care and practice.

The IAED is responsible for updating and maintaining the separate protocol dispatch systems for law enforcement, fire, and medical emergency communication systems used in nearly 3,000 centers worldwide.
An employee at a discount shopping mall is directed by his supervisor to board a bus the supervisor believes is the bus route he uses to travel home each day. Little does she know that she’s inadvertently creating a missing person situation for her employee. The individual boards the bus, takes a seat, and looks ahead. After 20 minutes, he calls 9-1-1.

**The EPD answers.**

“What’s the address of the emergency?”

“I’m here.”

“What’s the phone number you’re calling from?”

“My phone.”

“What’s your name?”

“Tim.”

“Okay, Tim, tell me exactly what happened.”

“Bus.”

The EPD asks again.

“Okay, Tim, tell me exactly what happened.”

“Scared.”

Tim has boarded the wrong bus. The mistake is not the supervisor’s fault. She is new at the job and assumed that since Tim had not hesitated to board the bus, that it had to be the right route. Tim knew that a bus brings him within walking distance of his home, but not which bus to take to get home.

The EPD had little to go on, and by repeating the same questions in a variety of ways she was able to find out where Tim had been before boarding the bus. Another EPD at the center overhears the conversation and calls the lost individual’s workplace.

Tim’s supervisor confirms the EPD’s suspicions. Tim has a cognitive disability that affects his ability to communicate. The dispatcher radios local police to relay missing person information, with a description of Tim provided by the supervisor. He is wearing blue jeans, a white and gray striped short-sleeved T-shirt, and a black backpack. He has Down syndrome.

An officer locates Tim standing at the bus stop near a busy intersection, miles from his usual stop. The officer drives Tim home using address information printed on a laminated ID inside his pack.

It doesn’t always work out so well.

**Callers with cognitive disabilities**

Intellectual or developmental disabilities cover a broad range of abilities. An individual may find it difficult to engage in meaningful conversation or provide clear or concise information in an emergency situation. Thinking is generally concrete—the here and now and tangible. Abstract concepts—
space and time, for example—do not translate into something solid.

Tim thinks that as long as he gets on the bus, it will take him to the correct bus stop near his home.

Tim recognized a problem and called 9-1-1, but he had difficulty understanding the calltaker’s questions and, consequently, gave unrelated answers in a situation that was foreign to his routine. While the situation might cause an alarm to sound in individuals without cognitive delay, Tim’s inability to retrace his steps or take action magnified his anxiety. He left on a bus, but he is not going home.

While a cognitive disability should not be assumed based on the caller’s voice or pattern of answers, there are steps a calltaker can take to gather information and reassure the individual when a disability is suspected.

The first step is powering down interrogation, which is not to imply that the person is incapable of grasping directives. People with cognitive impairments (brain injuries and intellectual and developmental disabilities) need concrete information and to have the steps they need to take broken down into smaller parts. Calltakers should avoid acronyms or other non-literal verbiage and listen intently to background sounds, such as traffic noise or public address systems indicating an outdoor event.

In providing Pre-Arrival Instructions (PAIs), give one step at a time, suggested Penny Van Dyke, assistant operations manager (retired), Prince George’s County (Md.) Public Safety Communications (PSC).

If the person gets off track—which might mean the individual is having trouble understanding—rephrase and repeat or move on to the next question and go back to the previous question when you have that answer.

Listen for signs that the person does understand and, if you’re not sure, ask the caller to state his (or her) understanding of the message or ask the individual to repeat what he said and then repeat it back. Allow additional time for the person to process the information. Don’t assume the individual can easily transfer knowledge gained in one task or another.

“Above all, you don’t want the person to hang up out of frustration,” Van Dyke said. “Keep the person on the line. Your callback might not be answered.”

The human touch

Establishing the human connection means throwing out stereotypes. Do not jeopardize the individual’s self-esteem by projecting your labels, Van Dyke said.

Yelling into the phone, slowing and exaggerating enunciation, or speaking in a “baby voice” debase the individual. Amplified expression does not enhance the individual’s comprehension, and it doesn’t help to pretend that you, the calltaker, understand when, in fact, you don’t.

Questions leading with “when,” “where,” and “how” are abstract concepts; they have no physical referents. Instead, use concrete language. For example: “Tell me something you see,” rather than “Where are you?” Avoid questions regarding time/complex sequences of events.

“Make sure communication is established,” Van Dyke said. “It’s about getting the relationship going.”

Try to draw the person out using a calming and reassuring voice, suggested Tracey Gilbert, emergency dispatcher III and 9-1-1 shift supervisor, Prince George’s County PSC.

“Be aware of strengths,” she said. “The person might be able to understand far more than he [or she] is able to communicate back to you.”

Gilbert also suggested giving additional time for the person to process the information. The answers that might seem to “come out of nowhere” might be a delay in processing and answering an earlier question.

Special accommodations and QA

Van Dyke recommends developing policies to accommodate callers with cognitive disabilities and to keep the quality assurance team in the loop by noting variations in the review process involving these calls.

According to the ED-Q™ Universal Pro-
emergency care. If your experience with people who have intellectual and developmental disabilities—and the experience of the staff as a whole—is limited, be proactive, said Jenine Wallace, emergency dispatcher III and 9-1-1 shift supervisor, Prince George’s County PSC.

“Reach out to the community and develop ways your center can make the process work,” she said. Wallace recommended contacting agencies that work with people with developmental delays for advice and holding 30-minute group meetings with fire, EMS, law enforcement, and transportation representatives to address concerns and develop processes.

“You have to create awareness,” she said. “Effective communication (with a person who has an intellectual disability) takes understanding and patience.”

What resources are available?
There are also programs to facilitate communication that are particular to an agency or state, although not specifically geared toward 9-1-1 personnel. The Arc, an organization for people with intellectual and developmental disabilities, recommends the File of Life (see Emergency Information Form (EIF) to the right) to provide critical medical information to assist medics responding to an emergency. The kit includes a refrigerator magnet, a personal size wallet/purse pouch, and a glove compartment vehicle pouch and supporting materials such as a door decal and instruction form. Arc suggests contacting your local municipality for access to the program.

An EIF is available through the American College of Emergency Physicians and the American Academy of Pediatrics, the form is filled out by parents and guardians for agency use in an emergency.

Maryland will be the first state to teach all law enforcement officers about people with intellectual and developmental disabilities in training sessions, starting this year. People with disabilities will play a part in every lesson, either in person or through videos. All police academies and veteran officers will be required to take the in-service training.

The 2014 Maryland General Assembly mandated the training following the death of Robert Ethan Saylor, 26, who had Down syndrome, when off-duty sheriff’s deputies, moonlighting as mall security officers, tried to forcibly remove him from a movie theater in January 2013. His larynx was broken, and he suffocated.

California, Delaware, New Jersey, Indiana, Louisiana, and New Mexico all have laws requiring training for responders in interacting with people who have intellectual and development disabilities. Crisis Intervention Team (CIT) programs with about 2,800 police agencies nationwide teach officers to calm excited subjects instead of automatically using force.

Colorado Life Trak is a radio transmission system designed to assist law enforcement and rescue agencies in locating lost or missing persons diagnosed with disorders complicating communication. Participants wear a personalized wristband that emits a constant tracking signal over several miles. A 9-1-1 call from the participant or a person reporting an individual lost or missing initiates a search with special tracking devices.

Equal access for speech- and hearing-impaired
The Americans with Disabilities Act (ADA) regulates equal access for people who are deaf, partially deaf, or have a speech disability. Specifically, the act requires 9-1-1 or other telephone emergency service providers to provide TTY (originally meaning Teletypewriter but today translated as Text Telephone) users with direct access and an opportunity to benefit from emergency services that is equal to the opportunity afforded others.

TTY was developed in the early 1960s and newer TTY systems incorporate Voice Carry Over (VCO) and Hearing Carry Over (HCO) communications.

**You have to create awareness. Effective communication (with a person who has an intellectual disability) takes understanding and patience.**

---

**An EIF is available through the American College of Emergency Physicians.**
Communicating with a person who has a disability doesn’t mean minimizing questions; it means asking questions in a way that best provides the information you need to assist.

In VCO, a captioned telephone allows deaf and partially deaf individuals to receive both the voice and written captions of the conversation. The calltaker communicates by typing messages to the user on a TTY and listening to the CapTel user respond by voice.

HCO allows individuals with speech disabilities, but who have normal hearing ability, to type the telephone conversation to the other person on a text display (commonly, TTY) and listen to the other person’s (calltaker) voice responses. The caller’s responses are typed directly.

Although TTY is an effective way to contact 9-1-1, Short Message Service (SMS) is becoming a primary means of phone communication for most Americans and that, of course, includes the approximately 48 million Americans who are deaf or partially deaf and 75 million Americans with speech disabilities.

To meet the new communication environment, the Federal Communications Commission (FCC) adopted rules in August 2014 requiring delivery of text-to-9-1-1 by wireless carriers and certain IP-based text application providers.

While text-to-9-1-1 is limited, it is expanding. According to the FCC (August 2014), PSAPs serving two entire states (Vermont and Maine) and portions of 16 states are accepting emergency texts. The FCC had already adopted rules requiring automatic “bounce-back” text messages where the service is not available.

Text-to-9-1-1 does not replace but is meant to augment existing voice-based 9-1-1 systems.

**Smart911**

Red flags raised during calls alerted Karl Kuehn, a 9-1-1 center manager with the city of Layton, Utah, to find a solution through the service called Smart911, which minimizes the guesswork at the time of the call and without risking the individual’s confidentiality.

Smart911 provides a safe and trusted portal for residents to volunteer the detailed information about their household that 9-1-1 calltakers and dispatchers may need in the event of an emergency. The safety profile is available upon registering the landline or cellphone, and users can supply information on everything from medical conditions, to the home’s floor plan, to the number and type(s) of pets. An option to post photographs can help in finding a missing person.

Municipalities, such as Layton, provide the service through Rave Mobile Safety. The city pays for the service but does not charge residents for its use.

During the past 18 months since Smart911 went live for Layton residents, Kuehn continues to focus his outreach on people with the greatest need, including those with disabilities or health concerns and senior citizens. Smart911 can also assist in cases of repeated domestic abuse—when the caller may be afraid to talk—by verifying names and addresses.

“The perspective is not hitting the numbers,” Kuehn said. “We encourage safety profiles for anyone who might need some special attention during an emergency. The more people that sign up, the more people we can help.”

Kuehn emphasizes user confidentiality, an important factor in a society concerned about identity theft and data sharing. No one can access the personal data without a 9-1-1 call triggering the profile stored in the Rave database, and users receive notification every six months to update their profiles. They can add, subtract, and opt out, Kuehn said. As yet, he hasn’t heard of anyone dropping out.

“We’re not trying to intrude on personal lives, and we’re going to ask most of these questions during an emergency, anyway,” he said. “The technology saves time and represents another way for us to help the community.”

**Sources**

The amazing technology built into OnStar® lets us snap into action faster in the face of an emergency. Seconds after a crash, a high-tech motion sensor analyzes the vehicle and alerts an EMD-certified OnStar Advisor of the direction and number of impact points, whether the vehicle rolled over, and its exact GPS location. From there, we make an Injury Severity Prediction to help first responders prepare for the situation with the right equipment. Plus, we can stay on the line with the driver and passengers to keep them calm and collected until help arrives. Connecting first responders to the crash scene has been part of OnStar’s mission to make a difference for over 19 years. Learn more about Automatic Crash Response, and take our comprehensive public service training at no cost online at [onstar.com/publicsafety](http://onstar.com/publicsafety).
Widespread Emergencies Call for Large-Scale Responses

EOCs equipped to handle disasters, civil unrest

Josh McFadden

Ferguson has been at the forefront of national and international news since the controversial shooting of 18-year-old Michael Brown just after noon on Aug. 9, 2014. Brown, an African-American, died on a Missouri town street after being shot by 28-year-old police officer Darren Wilson. Wilson, who is white, fired 12 rounds at Brown, hitting him at least seven times. Brown died at the scene.

Within hours of the shooting, residents began holding peaceful memorials. The turning point occurred that evening during a candlelight vigil when 150 police officers in riot gear gathered. Some people in the crowd began vandalizing vehicles and looting businesses. Others confronted the officers. Protestors burned down the convenience store and gas station from where Brown had allegedly stolen a box of cigarillos. In all, more than 30 people were arrested that first night on charges of theft, burglary, and assault.

The 2013 Boston Marathon bombing produced a chaotic scene and caused five deaths and 280 injuries. The subsequent manhunt for the perpetrators lasted four days, involved thousands of law enforcement officers, and prompted lockdowns in some areas.

In August 2005, Hurricane Katrina devastated New Orleans, La., putting 80 percent of the city underwater. In some areas, the water was as much as 20 feet deep. The massive hurricane was one of the deadliest in history, causing 1,833 deaths. It was also the costliest natural disaster in U.S. history, with more than $108 billion in damages. The hurricane left more than 1 million people looking for new
places to live. Frenzied residents resorted to looting, rioting, and general disorder in an attempt to find supplies and relief.

What do these events have in common?

In all-out citywide rioting, natural disasters, or far-reaching violent acts, careful coordination and mobilization of police, fire, and medical responders must happen quickly and efficiently in order to render appropriate aid and restore a sense of order.

This is where the Emergency Operations Center (EOC) comes in.

The EOC fills the role of coordinating the emergency response across various agencies, including police, fire, and medical responders. During a time of chaos, danger, and threats to residents’ safety, this organized, timely effort is vital. The EOC is the basis for making critical decisions and releasing crucial information during events that could have a significant impact on the lives of many people.

“Our mission is to concentrate on information management and rescue coordination,” said Mario Formisano, director of Dorchester County (S.C.) Emergency Management. “The EOC is the conduit to the county council, which makes the tough policy decisions, dependent on the EOC’s solid recommendations.”

Though an EOC’s makeup varies from locale to locale across the country, most EOC staff members in Dorchester County are county employees. Formisano said they must be organized and decisive, and they must be good communicators. Like 9-1-1 dispatchers, the EOC staff must be calm under pressure and must have the ability to follow step-by-step protocol even in the most adverse conditions. In fact, many EOC members are trained dispatchers, such as those at Sandia National Laboratories on the team of Lita Suina, Lieutenant/Shift Supervisor for the team lead.

“They are fully accredited and certified in CPR and Medical Priority Dispatch,” Suina said. “They bring the busy dispatch center experience to the unique laboratory experience.”

EOC process

In general, an EOC assigns an Emergency Support Function (ESF) member to perform given tasks. The ESF decides the personnel resources, such as fire, police, or others, needed to fulfill the assignment. That agency has the responsibility to respond to the situation according to the need and their expertise. In many ways, the EOC functions much like a 9-1-1 emergency dispatch center. The EOC also maintains management over the situation and keeps all parties involved apprised of developments and updates, and how and when the emergency is settled. The EOC keeps the public informed through alert levels, such as the five-tier system in Dorchester County, S.C., which is displayed on the county’s website during an emergency.

Formisano said on a typical day, the EOC is at level 5 (the lowest level). As situations arise, the level might rise from 4 to 2. The gravest of emergencies, such as hurricanes and widespread looting and rioting, will warrant an alert level of 1. When levels are high, the EOC works closely with city mayors to make key decisions. The determination to activate the EOC is dependent on the need in the field. Other EOCs have similar alert levels.

In Albuquerque, N.M., the Sandia National Laboratories houses the Emergency Management Communications Center due to the critical nature of the work. Sandia tests and conducts research in relation to nuclear equipment and defense systems and assess-
The initial qualification process requires the entire initial training program be tailored for each individual emergency completion response position.

—Lita Suina

er training program tailored for each individual emergency response position.“

Of course, the EOC doesn’t have to wait for a monumental emergency to be ready to act.

“There are instances where we anticipate that something is happening,” Formisano said. “We have to be in a steady state to support.”

Like its counterpart in South Carolina, Maryland’s Dorchester County is also situated in hurricane and tropical storm country and it trains annually in exercises designed by the Maryland Emergency Management Agency (MEMA).

Not all training, however, revolves around the weather. One year the training may revolve around what to do in the event there is an active shooter; another year, it may focus on what steps are taken following a core meltdown. Regardless, Goldman said every EOC in the country that operates in an area where a nuclear power plant is present has the same training program.

“The EOC would be staffed with public health, law enforcement, town council members, FEMA, MEMA, county council, and public works,” Goldman said. “Everyone has a seat at the table. When you put them shoulder to shoulder, you can come up with a solution.”

Importantly, Goldman points out that the Dorchester County EOC is not generally equipped with dispatchers or comm. center personnel. Additional dispatchers are brought into the EOC as needed, but the required minimum remains at the comm. center. Goldman said even during a disastrous event, comm. center managers don’t want to reduce the number of dispatchers and risk not having sufficient help available to respond to common emergencies like heart attacks, fires, and police-requested incidents.

“We don’t pull out dispatchers,” Goldman said. “The 9-1-1 center plays a role in large-scale emergencies, but they can’t be tied up. We don’t sacrifice the comm. center."

Reaching beyond emergency responders

In emergency situations that affect the entire community, it is generally the EOC’s job to coordinate expanded support and involve other entities in addition to police, fire, and medical.

The EOC works hand in hand with social services, if needed, as well as with the highway patrol or state police. If a disaster or event requires opening shelters, the EOC will coordinate to ensure adequate food, water, and other needed supplies are available to those who have been displaced. The EOC also oversees the process of opening and closing roads and verifying when and where it is safe for residents to drive and travel.

“The EOC determines what is needed in terms of safety and equipment,” Formisano said. “We determine where we are and where do we need to get to.”

In Maryland’s Dorchester County, the EOC is activated when large gatherings take place, such as when the annual Ironman competition comes to the county every October, bringing hundreds of participants and spectators. To help with potential problems during such events, the EOC will become mobile with an on-site command post. Ordinarily, the EOC sets up at the comm. center.

Always on standby

Much like a 9-1-1 dispatcher can’t possibly predict the exact nature of a call he or she will take, an EOC team member can’t foresee the overall magnitude of a natural disaster, riot, or violent act that may take place. Certainly, though, an EOC does have measures in place to respond appropriately to a situation, even if many unknown factors accompany the incident.

“You can’t plan for everything,” Goldman said. “We don’t say, ‘When we get 18 inches of snow, we’re going to do this.’ A lot of factors play in—what is the temperature, how much wind is there, what is the weather like behind the storm? We don’t write rigid plans; there is the same basic outline regardless of the situation.”

Whether it’s rioting, hurricanes or other powerful storms, or environmental threats of any kind, it’s the nature of the business for these dedicated professionals to be vigilantly prepared to act in perilous times and to be highly trained and agile. •
DISASTROUS DELIVERY
Suspicious packaging should be your first clue

Audrey Fraizer

On April 15, 2013, two brothers allegedly walked within yards of the finish line of the Boston Marathon unchallenged by security, dropped two bags containing pressure cooker bombs, and strolled away moments before they exploded. Three people were killed and hundreds more suffered serious injuries. At least 17 people lost a leg, including a 27-year-old Texas woman who underwent surgery to amputate her left leg below the knee in November 2014, nearly 19 months after the attack, because of persistent and acute neurological pain.

Greater Boston shut down the Friday following the marathon bombings while authorities hunted down the suspects. A year later, police departments from New Jersey sent SWAT units, bomb squads, aerial surveillance, and K-9 teams to secure the area for the 2014 Boston Marathon. The race would go on.

According to the NBC News broadcast “Boston Bombing Anniversary,” law enforcement officers erected 8,000 steel barricades—1,200 more than in 2013—around the race route, established at least 40 checkpoints, and commanded four times the number of K-9 units present in 2013. Another 3,500 uniformed and undercover officers spread out along the marathon route, looking for anything suspicious in the crowd of spectators or among the 36,000 runners (one-time increase of 9,000 runners over the normal 27,000 runner cap) expected to start the race. Forty new security cameras, both fixed and mobile, sent video to a fleet of upgraded command post trucks and the Boston PD’s 180,000-square-foot glass encased headquarters. Spectators passing the security checkpoints were allowed to bring belongings only in clear bags, not backpacks or purses.

The tragedy generated innumerable studies, reviews, and after-action reports. There were calls for greater monitoring of foreign travelers; better information sharing among federal, state, and local government police agencies; and demands for more security and more surveillance at major events.

Explosives haven’t been the only threat to the public.

Biological threats
Biological agents are organisms or toxins that can kill or incapacitate people, livestock, and crops; the three basic groups that would likely be used as weapons are bacteria, viruses, and toxins.

Anthrax—a biological threat caused by Bacillus anthracis—has been used as a weapon around the world for nearly a century. In 2001, 22 people, including 12 mail handlers, were infected by anthrax through powdered anthrax spores deliberately put into letters mailed through the U.S. postal system. Five of these 22 people died. No suspect has ever been charged.

It doesn’t take a lot of the substance to kill and maim and according to the Cen-
Threats to the public sparked the development of suspicious package policies nationwide and tightening of existing policies.

Public threat

These threats to the public sparked the development of suspicious package policies nationwide and the tightening of existing policies. Not surprisingly, the International Academies of Emergency Dispatch (IAED) was ahead of the emergency communication pack in developing a protocol for handling a caller’s report of a suspicious package and/or bomb threat from a dispatch perspective in v5.0 of the Fire Priority Dispatch System (FPDS), released in 2009.

In 2013, the IAED made further refinements by issuing a single protocol to address suspicious package emergencies in the release of FPDS version 6.0.

Protocol 74: Suspicious Package (Letter, Item, Substance)/Explosives is now a standalone Chief Complaint Protocol; its former protocol companion—Bomb Threat—has been moved to a separate Chief Complaint, Protocol 76: Bomb Threat.

Gary Galasso, Priority Dispatch System (PDS) Program Administrator—Fire and Medical, said the two incidents no longer worked together under the same Chief Complaint.

“There used to be a fairly clear delineation,” said Galasso during the FPDS Protocol 76: Bomb Threat—has been moved to a separate Chief Complaint, Protocol 76: Bomb Threat.

Gary Galasso, Priority Dispatch System (PDS) Program Administrator—Fire and Medical, said the two incidents no longer worked together under the same Chief Complaint.

“There used to be a fairly clear delineation,” said Galasso during the FPDS Version 6.0 Update session at NAVIGATOR 2014. “But then we started to see the lines blurring between the two types of incidents.”

Co-sponsor Mike Thompson, PDS Program Administrator—Fire and Medical, said FPDS users would likely see more evolution in the two Chief Complaints, particularly in respect to improvised explosive devices.

“We have a finger on the pulse,” Thompson said.

Identifying the suspicious package or explosive device

A suspicious package can come in all shapes and sizes, although the prevalent characteristics include: excessive tape or string; excessive postage or postage that hasn’t been canceled by the post office; excessive weight, protruding wires, or aluminum foil; handwritten, misspelled, or poorly typed address; incorrect titles or names; aluminum foil; handwriting; misspelled, or poorly typed address; incorrect titles or names; or “Do not X-ray.” There may be a strange odor or sound coming from the package. Oily stains, discolorations, or powdery substance present on the wrapping material might indicate dangerous residue.

An explosive—dynamite or military ordnance, for example—might be in a package that is oblong or round. An antenna or wire (color) may be protruding from the package. A threatening letter might accompany the package or the sender may have scrawled threatening words on the wrapping material.

Suspicious package and explosive policy

The checklist available from the U.S. Department of Homeland Security for handling suspicious packages mirrors suspicious package policies developed at universities, medical centers, and other public and private businesses and residential settings.

- Remain calm
- Do not open the package or letter
- Do not shake or empty the contents of a suspicious package or envelope
- Do not carry the package or envelope, show it to others, or allow others to examine it
- Put the package or envelope on a stable surface; do not sniff, touch, taste, or look closely at it or any contents that may have spilled
- Do not touch your eyes, nose, or other body parts
- Shut off window air conditioning units and fans
- Isolate the package and secure the room by shutting all doors and windows
- Thoroughly wash hands with soap and water
- Report to supervisor and call 9-1-1
- Advise fellow co-workers to avoid the area
- Don’t leave the area until told to by responding officers
- Ensure that all persons who have touched the letter wash their hands with soap and water
- Make a list of all persons who touched the letter or package and who were in the area when the letter was opened
- After examination of package, shower with soap and water

For example, the University of Central Florida’s Bomb Threat or Suspicious Package policy (effective May 23, 2014) states: If the suspicious letter or package is unopened, it should be left unopened. The contents of any suspicious envelope or package should not be shaken or emptied. According to the policy:

Everyone should vacate the immediate area and close any door, or section off the area, to prevent others from entering. All persons who may have come into contact with the suspicious item should wash their hands with soap and water to prevent spreading any powder or other chemicals to their faces. A list of all individuals who handled or were within close proximity to the suspicious

An explosive—dynamite or military ordnance, for example—might be in a package that is oblong or round. An antenna or wire (color) may be protruding from the package. A threatening letter might accompany the package or the sender may have scrawled threatening words on the wrapping material.

Suspicious package and explosive policy

The checklist available from the U.S. Department of Homeland Security for handling suspicious packages mirrors suspicious package policies developed at universities, medical centers, and other public and private businesses and residential settings.

- Remain calm
- Do not open the package or letter
- Do not shake or empty the contents of a suspicious package or envelope
- Do not carry the package or envelope, show it to others, or allow others to examine it
- Put the package or envelope on a stable surface; do not sniff, touch, taste, or look closely at it or any contents that may have spilled
- Do not touch your eyes, nose, or other body parts
- Shut off window air conditioning units and fans
- Isolate the package and secure the room by shutting all doors and windows
- Thoroughly wash hands with soap and water
- Report to supervisor and call 9-1-1
- Advise fellow co-workers to avoid the area
- Don’t leave the area until told to by responding officers
- Ensure that all persons who have touched the letter wash their hands with soap and water
- Make a list of all persons who touched the letter or package and who were in the area when the letter was opened
- After examination of package, shower with soap and water

For example, the University of Central Florida’s Bomb Threat or Suspicious Package policy (effective May 23, 2014) states: If the suspicious letter or package is unopened, it should be left unopened. The contents of any suspicious envelope or package should not be shaken or emptied. According to the policy:

Everyone should vacate the immediate area and close any door, or section off the area, to prevent others from entering. All persons who may have come into contact with the suspicious item should wash their hands with soap and water to prevent spreading any powder or other chemicals to their faces. A list of all individuals who handled or were within close proximity to the suspicious
letter or package should be compiled for public safety authorities.

If the suspicious letter or package is opened, personnel should remain calm and immediately report the incident to the police by calling 9-1-1. Any instructions given by the dispatcher should be followed.

Protocol 74

If a caller reports that she or he has received a suspicious package (letter, item, or substance) or has found a possible explosive, the EFD completes Case Entry Questions and goes directly to Protocol 74 to continue a more specific interrogation.

At every step in a suspicious package incident, scene safety is a priority for both the people involved at the scene and responders arriving on scene.

The first Key Question on Protocol 74, “What type of building is involved?” relates directly to the Determinant suffixes on this protocol. The EFD will add these suffixes to the Determinant Code to inform responders of risks and resource considerations.

The next Key Question solicits a description of the item. The calltaker may compare the caller’s description to the appropriate Additional Information section for a list of possible indications of a suspicious package or explosive device. If the package is leaking or if residue is visible, the EFD asks for the type of substance (solid, liquid, powder, or gas).

The EFD then asks for the exact location of the item to collect more information for responders. If anyone is sick or injured, the EFD will notify EMS or arrange for a medical response.

The final Key Question is intended only for business callers: “Will you be evacuating/leaving the building/area?”

Following the completion of the brief Key Question interrogation, the EFD should initiate a response by sending the appropriate Determinant Code with any applicable suffixes (C, G, H, N, O, R), which are explained in the following section, Determinant Suffixes.

Once the appropriate response has been sent, the EFD should provide the universal Post-Dispatch Instruction-a (PDI-a): “I’m sending the fire department to help you now. Stay on the line, and I’ll tell you exactly what to do next.”

If the EFD is speaking with a private caller, he or she must instruct the caller not to touch or handle the item (PDI-c).

If the EFD is speaking with a business caller, he or she should encourage the caller to follow company policy regarding bombs/suspicious packages/letters/items (PDI-b). Building evacuations should be handled according to local policy (Rule 1). An evacuation may place more people in greater danger if not conducted properly (Axiom 2).

After providing appropriate PDIs to the caller, the EFD should review the Critical EFD Information reminders to notify appropriate agencies if applicable (law enforcement, bomb squad). These resources may be critical in successfully handling these incidents.

Finally, the EFD should follow the appropriate DLS Link to either Panel B-7 “Bomb/Potential Explosives” or Panel B-8 “Suspicious Package (Suspected Contamination)” for further instructions tailored to each situation, including warnings not to touch or approach the item, to leave the immediate area, and to keep all bystanders away, etc. These instructions may help prevent the caller and bystanders from exposing themselves to greater danger before responders can secure the scene.

Determinant Suffixes

Determinant suffixes on Protocol 74 delineate the type of problem (where the package was found) for specific response and safety purposes:

- C = COMMERCIAL/INDUSTRIAL building
- G = GOVERNMENT building
- H = HIGH LIFE HAZARD/HIGH RISE
- N = NON-DWELLING building/structure
- O = Open area
- R = Residential building

A COMMERCIAL/INDUSTRIAL building is defined with the primary purpose of conducting activities of business, industry, or trade.

A HIGH LIFE HAZARD (e.g., churches, hospitals, large apartment complexes, lodging locations, nursing homes, schools, and subway or metro stations) is particularly onerous because of difficulties in exiting or lack of mobility among residents that threatens multiple lives.

For dispatch purposes, local fire administration is responsible for defining and authorizing what constitutes a GOVERNMENT building and the actual height of structures constituting HIGH RISE.

Sources
3 See note 2.

YOU MUST BE FIRE CERTIFIED TO TAKE THIS QUIZ

Answers to this quiz are found in the article “Disastrous Delivery,” which starts on page 34. Take this quiz for 1.0 CDE unit.

1. Spectators passing through security checkpoints at the Boston Marathon 2014 were allowed to bring belongings only in:
   a. clear bags.
   b. backpacks.
   c. purses.
   d. none of the above

2. The three basic groups of biological agents that would likely be used as weapons are:
   a. people, livestock, and crops.
   b. bacteria, viruses, and toxins.
   c. nuts, grains, and legumes.
   d. aerosols, powders, and inhalants.

3. Suspicious Package (Letter, Item, Substance)/Explosives is addressed on:
   a. FPDS Protocol 61.
   b. FPDS Protocol 74.
   c. FPDS Protocol 76.

4. Bomb threat is addressed on:
   a. FPDS Protocol 61.
   b. FPDS Protocol 74.
   c. FPDS Protocol 76.

5. Characteristics of a suspicious package include:
   a. excessive postage.
   b. protruding wires.
   c. oily stains, discolorations, or powdery substance present on the wrapping material.
   d. all of the above

6. The University of Central Florida’s Bomb Threat or Suspicious Package policy states: If the suspicious letter or package is unopened:
   a. it should be left unopened.
   b. it should be opened.
   c. it should be immediately sent back to the sender.
   d. it should be delivered to the addressee.

7. At every step in a suspicious package incident, scene safety is a priority for both the people involved at the scene and responders arriving on scene.
   a. true
   b. false

8. According to immediate Post-Dispatch Instructions, the EFD tells the private caller:
   a. to move the package away from people.
   b. to open the package to verify the contents.
   c. not to “touch or handle the item.”
   d. to deliver the package to the addressee.

9. Further instructions tailored to each situation, including warnings not to touch or approach the item, to leave the immediate area, and to keep all bystanders away are found in:
   a. Panel B-7 “Bomb/Potential Explosives” or Panel B-8 “Suspicious Package (Suspected Contamination).”
   b. Panel B-3 “Person on Fire.”
   c. Panel B-2 “Caller Danger—Not Trapped.”
   d. Case Exit.

10. Determinant Suffix C in Protocol 74 means:
    a. crowded outdoor venue.
    b. church.
    c. COMMERCIAL/INDUSTRIAL building.
    d. crash site.
When Thunder Roars
Lightning strikes in several deadly ways

Audrey Fraizer

Augustin Navarrete-Guerrero was closing his car windows at a construction site; Larry Webb was casting his fishing pole from the shore at the edge of a lake; Thomas Coburn Wartell was riding his motorcycle along a highway; James Donald McDaniel was picking blueberries from a patch; and Marguerite Tomany and Marianne Povell Mellnlick were walking along the beach.

What do all these people have in common?

They were among the 24 people in the United States who were in the wrong place when lightning struck during 2014.1 While no region of the country is immune to thunderstorms, the Southern states have the highest thunderstorm activity and, generally, the highest number of lightning-related fatalities.

In 2014, Florida recorded six deadly strikes. Two victims in Georgia were finishing up yardwork. Two fatalities in each of four states included victims hiking along an exposed trail, building a treehouse, and horseback riding.2

Brief but deadly

The typical thunderstorm is 15 miles in diameter and lasts an average of 30 minutes, but the lightning accompanying these storms is the third-highest cause of weather-related deaths in the U.S. (behind flash floods and tornadoes). During the last 30 years (1984–2013), the U.S. averaged 51 reported lightning fatalities per year, which is a fraction of the number actually struck by lightning: only about 10 percent of people who are struck are killed, leaving 90 percent with various degrees of disability.3

Lightning can strike at any time during the year—although about 70 percent of lightning fatalities occur in June, July, or August—and contrary to a commonly-held belief, golfers do not account for the highest number of fatalities.

According to a detailed analysis, 2006–2013, by John S. Jensenius Jr., lightning safety specialist for the National Oceanic and Atmospheric Administration (NOAA)4:

“From 2006 to 2013, there were a total of 30 fishing deaths, 16 camping deaths, 14 boating deaths, and 13 beach deaths. Of the sports activities, soccer saw the greatest number of deaths with 12, as compared to golf with eight. Around the home, yardwork (including mowing the lawn) accounted for 12 fatalities. For work-related activities, ranching/farming topped the list with 14 deaths.”

Males accounted for the majority of fatalities—81 percent—with 90 percent killed while fishing or participating in other outdoor sports. Routine events, such as hedge clipping, accounted for the greatest number of fatalities among women (36 percent).5

What is lightning?

Lightning is the transfer of an electrical charge.
Lightning strikes above the ground may result in significant falls, causing injuries that may be more serious than those incurred from the strike.

Direct strikes and conduction each account for only 3–5 percent of lightning deaths and injuries.

**Protocol 15: Electrocution/Lightning**

A lightning strike is a high-level prehospital medical emergency. The heat produced when lightning moves over the skin can produce burns, but the current moving through the body is of greatest concern because it can affect the brain and nervous system.

The intense shock depolarizes the entire myocardium (muscle layer of the heart responsible for the heart’s pumping action). Respiratory arrest due to muscle spasming and a suppressed respiratory system may continue after circulation returns.

Unless ventilation is supported, a secondary cardiac arrest will develop.

The heart quickly uses up the available oxygen supply and stops beating again. Immediate ventilation support may improve the outcome. For this reason, “If cardiac arrest in an unconscious patient is confirmed, the CPR Ventilations 1st pathway should be selected for care” (MPDS Protocol 15, Rule 2).

The EMD answering a call involving a lightning strike will need to know whether the patient is completely alert and whether breathing is normal.

The airway of an unconscious patient must be constantly maintained (Rule 4).

An ECHO response—selected at Case Entry only—should be sent for patients reportedly NOT BREATHING/INEFFECTIVE BREATHING.

The suffix codes “E” (electrocution) and “L” (lightning) delineate the type of problem for specific response and safety purposes.

The force of the charge is not the only danger. Lightning strikes above the ground may result in significant falls, causing injuries that may be more serious than those incurred from the strike. Answering all Key Questions should ensure that this is not overlooked (MPDS Protocol 15, Axiom 2).

**Bystanders**

If at risk from ongoing lightning, the bystander should wait until danger has passed or move the patient to a safer place, if possible. Based on warnings in Protocol 15:

- Axiom 3: “Each year many potential rescuers are injured attempting to help. The caller should be advised to attempt a rescue only if it is safe to do so."
- PDI-E: “Take shelter immediately inside an enclosed vehicle or building.”
- CEI: “Advise the caller and responders of any potential hazards. (This could include ongoing lightning.)

**When thunder roars, go indoors**

Lightning will put you on notice a few seconds before it strikes:

- Hair stands on end
- Skin tingles
- Light metal objects vibrate or buzz
- Metallic taste in mouth
- Palms sweat
- Smell of ozone (swimming pool smell)

These warning signs indicate an immediate danger to life.

People caught outdoors should quickly take cover in a car or other shelter, but never inside a tent. If no shelter is in sight and you’re caught in an open field, “look...
for a dry, low-lying area such as a valley and become the smallest target possible. Do this by crouching down with your heels touching, head between the knees, and ears covered. Minimize your contact with the ground and do not lie down flat."\(^{12}\)

Sheltering inside does not guarantee safety.

Lightning can reach indoors through contact with the telephone or plumbing. If lightning strikes the phone line outside a house, the strike will travel to every phone on the line. A lightning strike to or near a house can convey an electrical charge to the metal pipes used for plumbing. The PVC (polyvinyl chloride) now used for indoor plumbing mitigates the danger.\(^{13}\)

**Dave’s story**

The National Weather Service features survivor stories on its website, including this one from Dave:

*One minute I was walking along fine and the next I wasn’t sure which way was up or down.*

It started raining very hard, but I could not feel anything. I could see blood dripping down across my eyes, but could not close them.

I truly believe that I had died, at least for a short period of time.

That was almost two years ago. I’ve been on many medications since then for chronic pain, heightened startle response, near total inability to sleep, heart palpitations, headaches, nausea, dizziness, fatigue, memory problems, inability to concentrate, and loud ringing in my ears.

While it is very difficult to remember exactly what happened that day, it is even more difficult to forget. I am here to tell you there is nothing good that comes from being struck by lightning, and I strongly urge everyone to take every precaution possible to avoid it.

If you are unfortunate enough to experience lightning firsthand, you very likely will regret it every single day for the rest of your life.\(^{14}\)

---

**Sources**

2. See note 1.
9. See note 3.
10. See note 3.
12. See note 3.
YOU MUST BE MEDICAL CERTIFIED TO TAKE THIS QUIZ

Answers to this quiz are found in the article “When Thunder Roars,” which starts on page 38. Take this quiz for 1.0 CDE unit.

1. How does lightning rank in the number of weather-related fatalities reported in the U.S. each year?
   a. first
   b. second
   c. third
   d. fourth

2. What percentage of people struck by lightning are actually killed?
   a. 5 percent
   b. 10 percent
   c. 15 percent
   d. 25 percent

3. Males accounted for the majority of fatalities—81 percent.
   a. true
   b. false

4. The massive electrical discharge of lightning contains:
   a. 250 amps.
   b. 400 amps.
   c. 1,000 amps.
   d. 20,000 amps.

5. Which of the following types of lightning develop as the downward-moving leader approaches the ground and when the main channel discharges?
   a. conduction
   b. direct strike
   c. side flash
   d. streamers

6. If cardiac arrest in an unconscious lightning strike patient is confirmed, the CPR Ventilations 1st pathway should be selected for care.
   a. true
   b. false

7. An ECHO response should be sent for:
   a. NOT BREATHING/INEFFECTIVE BREATHING.
   b. Not alert.
   c. Unknown status.
   d. Alert and breathing normally.

8. What are the two suffixes found in Protocol 15?
   a. A and D
   b. E and L
   c. I and M
   d. O and D

9. Before lightning strikes, signs may include:
   a. hair standing on end.
   b. sweaty palms.
   c. the smell of ozone.
   d. all of the above

10. Lightning can reach indoors through contact with the:
    a. plumbing
    b. telephone
    c. fireplace
    d. a and b
    e. a and c

To be considered for CDE credit, this answer sheet must be received no later than 04/30/16. A passing score is worth 1.0 CDE unit toward fulfillment of the Academy’s CDE requirements. Please mark your responses on the answer sheet located at right and mail it in with your processing fee to receive credit. Please retain your CDE letter for future reference.
The caller was in a vehicle moving fast through a part of town located outside the jurisdiction of the 9-1-1 center where the call was received. This made it impossible for EMD Debbie Cook to determine her coordinates.

English was not the caller’s first language, and despite several attempts, Cook was unable to patch in a Spanish language translator.

Cook strained to listen and was eventually able to recognize three words—“Wal-Mart,” “university,” and “Arby’s”—that created a mental map of a familiar area in Coles County, Ill., a county adjoining Douglas County. The woman on the phone was most likely driving along a commercial district of Charleston, Ill.

The Douglas County (Ill.) Sheriff’s Office calltaker started piecing together the caller’s situation, judiciously forming a picture from the tone of her voice.

“I could hear the desperation, and I could tell she was in some sort of pain,” Cook said. “She sounded scared. I didn’t know if she was being followed, but I knew she was fleeing from someone.”

A deputy in the communication center whom Cook signaled contacted police in Coles County. The search for the caller by law enforcement personnel in Coles County was initiated. Cook relayed up-to-the-minute information to the neighboring 9-1-1 center.

For 20 minutes Cook talked to the driver. She was able to understand more of why the driver was so frightened. The caller was in danger, a victim of domestic abuse, and she was frantic to put increasing distance between the attacker and herself.

Peter Buckley, Chief Deputy, Douglas County Sheriff’s Office, said he could see the intensity on Cook’s face.

“Debbie was calm and focused,” he said. “I could tell she had made a connection with the caller even without speaking the same language.”

Cook was finally able to convince the caller to pull over next to the Arby’s fast food restaurant, which would provide a definitive location for officers on the lookout for the car.

Cook directed the patrol car to the scene. The woman was found injured but safe, and that was gratifying to Cook despite the frustration she initially experienced when she was unable to connect to the translator and couldn’t speak the driver’s language.

“We worked through the situation, and I was relieved to get her the help she needed,” Cook said. “That was the important part.”

Buckley nominated Cook for an award based on the Oct. 29 (2013) call, and she was thrilled when she was announced as Telecommunicator of the Year at the annual Illinois Sheriff’s Association public service employee recognition ceremony.

“I always find myself grinning when I think of the award,” she said. “I was surprised, and it was such an honor to be recognized by my peers.”

Cook followed a fairly usual route to the telecommunicator profession. A friend who worked in the dispatch center told her about an opening. Cook applied, and 21 years later she is still there and happily so.

The job, however, wasn’t an immediate sell and, in fact, she said it took a couple of months to get over the feeling she had made the “worst mistake ever.”

Then it dawned on her: Emergency dispatch complemented her personality and the type of work she wanted for her career.

“This is about helping people,” she said. “My ability to help people keeps the passion going.”

The two telecommunicators assigned to every shift at the sheriff’s office dispatch for five law enforcement agencies and 11 fire departments in Douglas and Edgar counties. They answer fire, law enforcement, and medical calls. According to the sheriff’s office annual report (2012), they received 144,308 calls for service in 2011, of which 16,854 were made to 9-1-1. Telecommunicators also assist walk-ins coming to the front desk and take calls for the county’s animal control office.
MD Jennifer Davis didn’t expect every call to have a silver lining but, at the same time, she has found the brighter side that comes with the 9-1-1 profession.

Two prime examples occurred two months apart.

The first call, on May 14, 2014, came from a distraught mother whose one-year-old toddler would not respond to her following a fall into a rural pond near their home. He was unconscious and not breathing.

“My stomach dropped,” said Davis, a Winnebago County (Wis.) Communications Center dispatcher. “No one likes to receive calls like this, especially one involving a child.”

Davis quickly put her emotions aside and concentrated on helping the mother bring back her son’s breathing, but first, there was another matter at hand.

“Mom was hysterical,” Davis said. “I told her to focus on what she needed to do for a good outcome.”

For the next six minutes, Davis provided CPR instructions, using the medical ProQA® software. Prior to the arrival of any first responder or public safety unit, and after several cycles of rescue breathing and chest compressions, counting out loud over the phone to keep the pace, Davis heard a most liberating sound.

“The child was trying to start crying,” Davis said. “A lot had happened in a little amount of time and the outcome was great.”

The arriving paramedics stabilized the boy and transported him to the hospital. He had survived.

The second call on Aug. 4, 2014, came from a fitness center. A man training for a bicycle race had experienced a sudden cardiac arrest, and a nurse on scene was performing CPR, leaving Davis to coordinate response.

Again, she remained calm throughout the situation, providing updates and assuring the caller that help was on the way.

Davis’ poise and ability to put callers at ease are an asset to the agency, said Mark Habeck, Captain at Winnebago County Sheriff’s Office where he oversees all 9-1-1 communication center operations.

“Jen’s able to maintain her composure and calm the caller,” he said. “Her actions directly resulted in saving the child’s life.”

EMD Jennifer Davis didn’t expect every call to have a silver lining but, at the same time, she has found the brighter side that comes with the 9-1-1 profession.

Two prime examples occurred two months apart.

The first call, on May 14, 2014, came from a distraught mother whose one-year-old toddler would not respond to her following a fall into a rural pond near their home. He was unconscious and not breathing.

“My stomach dropped,” said Davis, a Winnebago County (Wis.) Communications Center dispatcher. “No one likes to receive calls like this, especially one involving a child.”

Davis quickly put her emotions aside and concentrated on helping the mother bring back her son’s breathing, but first, there was another matter at hand.

“Mom was hysterical,” Davis said. “I told her to focus on what she needed to do for a good outcome.”

For the next six minutes, Davis provided CPR instructions, using the medical ProQA® software. Prior to the arrival of any first responder or public safety unit, and after several cycles of rescue breathing and chest compressions, counting out loud over the phone to keep the pace, Davis heard a most liberating sound.

“The child was trying to start crying,” Davis said. “A lot had happened in a little amount of time and the outcome was great.”

The arriving paramedics stabilized the boy and transported him to the hospital. He had survived.

The second call on Aug. 4, 2014, came from a fitness center. A man training for a bicycle race had experienced a sudden cardiac arrest, and a nurse on scene was performing CPR, leaving Davis to coordinate response.

Again, she remained calm throughout the situation, providing updates and assuring the caller that help was on the way.

Davis’ poise and ability to put callers at ease are an asset to the agency, said Mark Habeck, Captain at Winnebago County Sheriff’s Office where he oversees all 9-1-1 communication center operations.

“Jen’s able to maintain her composure and calm the caller,” he said. “Her actions directly resulted in saving the child’s life.”

Davis, of course, takes it all in stride. It’s her job; it’s what she’s paid to do.

Anybody else in the center would have done the same thing. And, yes, she does put “helping people” at the top of her list of reasons she loves the job.

But never in a million years did she think emergency communications would be her niche, her career of choice by default of answering a classified ad.

“No, I wouldn’t want to do anything else,” said Davis, who started at the center four years ago with a background in customer service. “I can’t say enough about the good we do and the great support network here.”

And the good outcomes?

“They recharge my batteries,” she said. “It’s a great thing to be able to do.”

Habeck nominated Davis for Winnebago County’s 2014 Life Saving Award, which will be announced in 2015.

The sheriff’s office operates the 9-1-1 communication center for all of Winnebago County. There are 31 dispatchers and one lieutenant at the Public Safety Answering Point (PSAP) handling all law, fire, and emergency medical services for nine law enforcement agencies, 14 fire departments, one ambulance service, and 12 first responder groups.

According to the Winnebago County annual report (2013), Winnebago County Communications Center handled 43,809 9-1-1 calls, or about 120 calls each day.

A MOST LIBERATING SOUND

EMD’s instructions bring back to toddler

Mom was hysterical. I told her to focus on what she needed to do for a good outcome.

—Jennifer Davis

Mom was hysterical.
I told her to focus on what she needed to do for a good outcome.

—Jennifer Davis
It was May 19, 2013, and I was enjoying my off day when several dispatchers from where I work took a barrage of wireless 9-1-1 calls reporting two females on a motorcycle who had hit a parked vehicle. The call was not within our center’s jurisdiction; however, our center takes wireless 9-1-1 calls for the entire county. My shift partner sent me a text, knowing that I had recently taken up riding a motorcycle with my significant other, Sarah.

“Kelly, are you OK?” I never got it. I was not OK.

We had been riding through a residential area at 30–35 mph, and struck a parked car while cresting a hill to avoid moving vehicles. Sarah did somersault over the top of the car. I flew approximately 20 yards through the air.

People passing by the scene immediately called 9-1-1 and started checking on both of us. An off-duty EMT from one of our dispatch agencies was there and was able to help before the ambulance arrived. Because my condition seemed to be worse, he checked my status, and positioned me to protect my spine and make it more comfortable to alleviate my apparent pain.

I didn’t know he was there.

The accident resulted in a burst thoracic vertebra, five pelvic fractures, a broken cheekbone, a concussion, and road rash. A wonderful neurosurgeon spent at least six hours operating on my spine. My spine at the level of thoracic to lumbar vertebrae was fused with metal hardware.

The outlook was not good. The outcome was up in the air.

I spent three days in the intensive care unit and another 11 days in recovery at the hospital. I have a hazy recollection of visitors, who, I was told, came daily. I don’t recall my agonizing screams, which I was also told about, when moved from bed to wheelchair.

I was approved for 30 days of physical therapy and by the time of my release, I was commanding skills I needed for greater independence, like eating and grooming without assistance. I was walking, albeit slowly, for short distances using a walker, but still I was up and walking.

I returned to work part time on Aug. 1. In a few weeks, I was ready to go back full time, and I was welcomed with open arms by my work family.

There is very little I cannot do that I did before the accident.

I work a limited medically cleared schedule of nine hours a day, but I’m working toward an unlimited schedule.

My pelvic fractures have healed; the pain is minimal. I am walking more and more with forearm crutches.

I am able to maneuver throughout the center and troubleshoot any issue that comes up. I am proficient in CAD and all the equipment we use daily at the center. I am an EMD-Q® and have my hands in several ongoing projects. When something or someone demands my attention, I am faster in the wheelchair than I was on foot!

I have been at this job for nearly 10 years, almost eight as a supervisor and now more than a year “on wheels.” I can’t imagine myself at a different job, and I never even considered the idea of leaving Waukesha (Wis.) County Communications because of the accident.

I am blessed. I am lucky. I am alive. A positive frame of mind allows me to continue to do the job I love.
When looking for a B-to-B media partner, it's important to find a company that has a proven track record, a targeted circulation of buyers that can purchase your company's products and services ... and the marketing expertise to customize a media program that delivers results.

Hendon Media Group connects law enforcement with current news and the latest and most innovative products and services in the industry including personal protective gear, tactical weapons, mobile equipment, software, radio and dispatch systems, surveillance equipment, patrol vehicles and much more.

We actively engage with our subscribers through multiple B-to-B channels including print publications, digital editions (for Notebooks, iPhones, iPads, Androids, Blackberrys), an expo, eNewsletters, video clips, webinars and white papers.

All together, these channels deliver over 400,000 potential buyers and specifiers who can purchase or influence the purchase of law enforcement products and services!

LEARN. GROW. CONNECT. DISCOVER.

90+ hours of education and training sessions keep you in front of the latest 9-1-1 issues and provide the tools for career advancement.

Daily events provide countless opportunities to network and connect with your peers and industry leaders.

Hear incredible and inspiring keynotes from Olympic gold medalist Amy Van Dyken and former NASA astronaut Mike Massimino.

Explore the cutting-edge expo hall, featuring 120+ interactive exhibits, to see the future of emergency communications up close and personal.

LEARN MORE AND REGISTER AT WWW.NENA.ORG/NENA2015
A program introduced in February 1975 at the Francis Scott Key Bank in Frederick, Md., offered the community’s first real alternative to a telephone that was, after all, “just one more useless piece of furniture” for individuals who were deaf or had partial hearing loss.

Now, thanks to the initiative and empathy of bank Assistant Vice President Horman Kinsley, they would have free access to a teletypewriter (TTY) for communication with the bank, police, and the city’s two fire departments.

“Deaf and hearing-impaired persons will now be able to get medical and protective aid just like hearing persons through this auxiliary hook-up,” said Kinsley, who had partial hearing loss. They could also, he continued, “phone the bank and transact business just like a person with normal hearing.”

Communication was two-way. The bank could contact the same individuals using a setup between the bank TTY and a home system (often bank funded). The home system connected to a floor lamp that flashed on during bank-initiated calls.

The bank was not the first in the country to adapt a TTY for use by those who were deaf or had partial hearing loss, although it was among the first establishments to provide access in a place of commerce. In 1976, the TTY network consisted of more than 2,500 TTYs, predominantly in locations serving the hearing-impaired, including schools and vocational rehabilitation offices.

Their use took off from the independence TTY provided to the hearing- and speech-impaired. TTY offered individuals the ability to make personal business or social contacts on their own without the loss of privacy the assistance of family or friends necessitated and, according to the Oskaloosa Herald, the TTY also provided “peace of mind in knowing they can secure help in emergencies.”

The beginnings

Ironically, TTY owes its existence to Alexander Graham Bell, who invented the telephone primarily to help his wife; she was deaf, and Bell wanted a device that could amplify sound and, consequently, enhance her ability to communicate.

Technology during the next
century caught up to Bell, and in the 1960s the TTY was developed to the profound benefit of the hearing- and speech-impaired. The first system was introduced in 1954 in New Jersey and in 1964 deaf physicist Robert Weitbrecht and two of his colleagues, also deaf, invented the modern TTY by connecting two teletype machines with a telephone wire.

Their invention sparked the Alexander Graham Bell Association for the Deaf Inc. to approach AT&T (American Telephone and Telegraph) for a donation of more than 1,000 of its obsolete and surplus machines. They succeeded. Four years later, the Teletypewriters for the Deaf was started in Indiana.

In most cases, early TTYs were made from components stripped off donated machines (phones, teletype, and acoustic couplers) and refurbished parts. The TTYs were far from portable, weighing up to 300 pounds, each with a keyboard and paper for printing messages. Like a newspaper teletype machine, the clunky TTYs were extremely noisy.

The Telephone Pioneers of America, a volunteer organization of career AT&T employees, took the project under their wings in the early 1970s, and through their connections acquired old Western Union teletype-writers—known as Model No. 15—that could be fitted with a coupling device and hooked up to a standard telephone. The refurbished machines were given, without cost, to families based on need; the waiting list could take months to fulfill.

By 1998, there were an estimated 4 million TTY users nationwide, including thousands of specially designed public use TTYs installed at airports, mass transit stations, government buildings, hospitals, schools, and shopping malls. The initial bulky machines eventually came down in size, with some models small enough (less than five pounds) to carry in a case and connect to an ordinary phone.

**Message sent**

The TTY system has worked much the same throughout the first 20 years.

The letters the caller typed in the message were turned into electrical signals that traveled over normal telephone lines. When the signals reached another TTY, they were converted back into letters—the same message—that printed on a paper roll on the receiver’s end.

The messages were in code, abbreviations of common phrases, much like today’s text messages. For example, when a person was finished typing a statement, he or she typed “GA,” indicating that his or her portion of the message was completed and the other party should “go ahead.” When either party was ready to end the call, “SK GA” was typed, meaning “signing off or go ahead.”

In the 1980s, TTY modems made their first appearance, linking TTYs to computers. TTY machines were installed on shelves or in drawers below pay phones, and today most pay phones have TTYs. Today’s TTYs are small, flat keyboards—no larger than a laptop—each with a telephone perched above the keyboard.

**Communication centers**

No emergency operator support for the deaf or hearing-impaired caller existed from 1876 through 1990.

Once Automatic Location Identification (ALI) support became more common in the early 1990s, the deaf and hearing-impaired callers who phoned 9-1-1 were supposed to tap a pencil on the mouthpiece of the phone to alert the Public Safety Answering Point (PSAP) operator. Most callers and many PSAP dispatchers were unaware of the system, and even if the dispatcher was aware of the tapping sound, ALI didn’t work on all calls.

In the mid-1990s, the Federal Communications Commission (FCC) mandated the installation of TTYs at all PSAPs, along with dispatcher training on operating the device. TTY 9-1-1 callers were still directed to tap the TTY spacebar to alert the dispatcher to manually connect his or her TTY.

**Modern times**

Technology has again caught up with the TTY. Between 1999 and 2006, the number of TTYs listed in the U.S. Blue Book (a directory of TTY users) dropped from 55,000 to 30,000. In recent years, the numbers had continued to decline with the ease and availability of text messaging and the Internet, although some users do have portable TTYs that can be plugged into cellphones.

Current digital cellphones have a TTY setting that turns off voice compression and many smartphones have a TTY software application, allowing the user to text type from the cellphone keypad, and the cell carrier network server converts TTY modem tones to legacy TTY devices.

**Cautionary note**

Despite modern technology, the National Association of the Deaf (NAD), however, makes this message clear: “Don’t Throw Away Your TTY.”

When there is a power outage and no Internet service, having an ‘old-fashioned’ TTY with battery backup power and a regular telephone landline may be your only way to connect to a 9-1-1 emergency communication center. No other technology connects you directly and as securely to the 9-1-1 operator during an emergency.

NAD President Bobbie Beth Scoggins advises, “The NAD urges all individuals to keep their telephone line and use their TTY first for calling 9-1-1. Protect the health and safety of yourself and the people you love. Don’t throw away your TTY.”

**Sources**

5. See note 3.
Bradshaw Consulting Services, Inc.

**MARVLIS Client for iOS**

Mobile Area Routing and Vehicle Location Information System (MARVLIS) is a family of integrated products designed to reach the bottom line: saving time and money by getting the right resources to the right location at the right time to best meet your client’s needs. Using geographic information system (GIS) technology combined with wireless communication and the Global Positioning System (GPS), MARVLIS is bringing fundamental changes to the management and deployment of time sensitive services for a higher level of performance. Dynamic display of available resources, demand forecasting, real-time coverage analysis and intelligent routing are just a few of the ways MARVLIS is helping to save your most important asset.

MARVLIS Client for iOS is one of the two in-vehicle solutions that are offered as part of the MARVLIS suite. Client for iOS serves as your in-the-field connection back to dispatch. Much like our Window’s Client, Client for iOS utilizes GPS and wireless communications to display real-time maps and routes recommended by MARVLIS Server as well as providing valuable information to empower the field worker for better performance.

Hardware costs are continuously trending up and training for complicated field solutions can be cost prohibitive. Client for iOS can be deployed on an iPad that is intuitive to operate for the field user and less expensive than traditional solutions.

Please stop by booths 213 to find out how MARVLIS can help you save lives, time, and money.

Denise Amber Lee Foundation

Based on the overwhelming response to our “A Victim’s Plea, Meeting Expectations” training class this past year, the Denise Amber Lee Foundation has developed two additional training presentations for 2015. These presentations are developed in cooperation with seasoned 9-1-1 professionals from the US and Canada. Our highly acclaimed training schedule in 2014 elicited responses like these; “Best training class I have attended in my 21 years in public safety,” “this class was by far the most inspirational in my 17 years of dispatching.”

On the heels of the new released American National Standards Institute (ANSI) QA/QI Standard, the Denise Amber Lee Foundation is offering QA/QI Consulting utilizing the top QA/QI minds in the country to assist our foundation with its mission of improving the level of 9-1-1 service to all citizens. If you are looking for help and guidance in initiating a QA/QI program or improving existing QA/QI procedures, give our professional consultation team a try.

For more information, visit deniseamberlee.org

Harris

Harris’ Symphony™ Console was designed for simple, efficient dispatch operation. Features in the latest software release include: full paging so users can quickly page out to fire stations; AES encryption for secure transmissions; conventional control capability; and remote AUX I/O, which allows users to address alarm notifications from the dispatch screen.

Symphony runs on an innovative, reliable, hardware platform that is compact, silent, and easy to install and maintain. This hardware is highly integrated with a dynamic user interface featuring patented Baton™ technology that simplifies workflow by putting the features dispatchers use most where they need them. This completely customizable user interface allows individual dispatchers to work in a manner that makes sense to them. The Baton provides a heads-up display of radio system status and controls to the dispatcher directly on their main CAD interface, using the same mouse and keyboard.
HigherGround, Inc.

HigherGround is excited to announce Mobile Recording – a feature of our Next Generation Capture911 solution for recording interactions in public safety to support and streamline incident reconstruction. In an ever evolving world of technologies to be captured in order to accurately reconstruct an incident, the addition of Mobile Recording brings PSAP’s one step closer to actually being at the scene.

Mobile Recording allows emergency service dispatch centers to record calls and associated metadata on existing mobile devices. The calls are recorded locally, and then uploaded to the Capture911 platform via the mobile provider or Wi-Fi network, for a holistic view of all recorded interactions related to an incident.

The Mobile Recording tool allows users to define a “whitelist” of telephone numbers or contacts that get recorded 100% of the time, or alternatively users can establish a “blacklist” of calls which do not get recorded, or a combination of the two features.

Easy-to-use, easy to set up on the mobile devices, and equally easy to install on existing Capture911 platforms. Once Mobile Recording is integrated into the recording solution, the PSAP supervisors can search mobile interactions just as they would a telephone or radio call, based on multiple criteria. Data such as date/time, inbound/outbound, telephone number, contact name, station, and device ID are all defined criteria within the HigherGround Capture911 interface.

PLANTRONICS, INC.

The New Plantronics EncorePro 500 headset series is an all-new generation of headsets designed for the future, and built on experience, powered by a 50+ year obsession with perfecting headsets, and backed by a worldwide network of services and support. Three innovative models deliver greater comfort for all-day wearing, superior noise-canceling for clearer calls, and increased reliability so conversations can continue without worry. And they’ll help you meet OSHA / Noise at Work regulations.

The all-new Plantronics EncorePro 540 is a quantum leap in convertible headset design. It’s a 3-in-1 headset without compromise – all of the wearing styles are designed with quality and comfort in mind, in a system that is simple to convert but delivers a secure, positive fit and finish. The HW540 shares the advances of the other members of the new family, with high-quality audio, a flexible mic with visual positioning guides, soft ear cushions, and durable-yet-lightweight materials for all-day wearing.

The Plantronics EncorePro 510 and 520 are the next generation of our most popular over-the-head monaural and binaural headsets. Completely re-imagined for the demands of the modern customer, they have soft ear cushions for all-day wearing comfort, metal joints that deliver durability and reliability and a flexible mic with visual and tactile positioning guides for precise positioning and clearer conversations.

Rely on Plantronics to meet the highest standards of quality and reliability, and for crisp, clear communications every time.

For more information, please visit plantronics.com/gov

The Genesis Group

PULSE is an advanced vehicular response and call-tracking system that optimizes response times, helping first responders fulfill compliance agreements, cut costs, and most importantly, save time, property, money and lives. PULSE alerts its users upon detecting service that does not meet contractual standards, then provides administrators and review boards with comprehensive data for constant improvement analysis. PULSE displays live incident data and replays it using Google Maps™, and provides on-demand reports for critical analysis. Additional features include geofencing, Healthcare Facility Inbound Unit Tracker, Map Widgets (Active Responses, Geofence Violations, Optional Unit Status Display, End-of-Shift Notification and more.

To learn more or request a demo go to www.genesisworld.com/PULSE
TriTech
BOOTH #301

Selecting mission critical software can be a daunting task and today’s PSAPs require a reliable partner to guide them through the requirements that are present and emerging. TriTech Software Systems, a proven public safety provider with more than 20 years’ experience supporting 2,700 installations, now offers an IP-based next generation PSAP solution. Utilizing TriTech’s experience in virtualization techniques, Inform 911 achieves the highest levels of availability while reducing the overall IT footprint and providing fast and easy management capabilities. Inform 911 manages voice, text, and multimedia communications and incorporates it within the emergency call workflow, thereby minimizing the information overload for an already overwhelmed call taking staff. Focusing on affordability and greater savings, Inform 911 can also leverage the architecture and scalability of Inform CAD to consolidate hardware and computing resources when the two are used together. As a truly next generation PSAP solution, Inform 911 is SIP-based and supports connectivity to both legacy networks and next generation ESINets.

For more information, visit TriTech.com

VPI
BOOTH #201

VPI Call Playback for Priority Dispatch® AQUA®

Priority Dispatch and VPI have partnered to streamline the case review process and make your job much easier. Now you can conveniently playback audio and optional desktop screen video recordings related to cases of interest directly from your AQUA Evolution case review interface – eliminating time-consuming need to search for recordings within a separate recording system. Don’t need a new call logging recorder yet? No Problem. VPI offers the AQUA Call Playback capability as a complement to any recording system – we non-invasively record a copy of your console audio for immediate playback within AQUA. The recorder also provides redundant console audio recordings in case your other recorder ever fails.

For more information, visit VPI-corp.com

FirstWatch
BOOTH #313

Ask us about the NEW FirstWatch-ProQA® Dashboard & Report which provides managers, supervisors & QA/QI teams with an automated, real-time tool to monitor and improve call center operations, as well as the effectiveness of your teams ProQA usage.

Product Features

- Ability to benchmark across agencies
- Seamlessly interfaces with ProQA/Paramount for EMD, Fire and Police
- FREE to existing FirstWatch customers with ProQA interface
- Multiple ProQA measures in one dashboard view
- Monitor Pre/Post caller instructions
- Determine if the appropriate dispatch level was assigned
- Improve call processing times
- Refreshes automatically!

See real world examples at FirstWatch.net
Mercury™ looks different than conventional consoles because it is different. Professional grade, high performance technology furniture, the forward-thinking design was created for your telecommunicators, IT team, and center managers. Mercury optimizes floor space and gives every station an expanded work zone. The re-allocation of surface space allows placement of interface equipment for optimum convenience and comfort. All environmental and ergonomic controls move with the user thanks to Mercury's patented Dynamic Ergonomic System.

Mercury is built with steel, uni-frame construction and the robust materials necessary for your 24/7 environment. Choose a fully equipped Dispatch console with an array of adjustable environmental controls or select the Command model for lighter duty applications. Tour both the Mercury Dispatch and Command consoles in Navigator booth #217.

Watson Dispatch is the leading manufacturer of console furniture for emergency / public safety communications. The company pioneered ergonomically engineered adjustable furniture for call centers and today has over 10,000 consoles installed in nearly 2,500 centers across North America. Based at its advanced design and manufacturing facility outside Seattle, Watson operates a nationwide service and installation network. The company’s consoles accommodate the latest radio, telephone, and CAD technologies. Ruggedized for 24-7 call center environments, Watson consoles provide personalized fit and comfort for all emergency communications professionals. Visit www.watsondispatch.com to explore more exceptional features and benefits.

For more information, visit watsonfurniture.com
Infor

BOOTH #401

Emergency responder organizations need to optimize and maintain critical assets while providing the right resources to anticipate and address the needs of the public in real time. For more than 25 years, Infor has provided comprehensive, reliable and integrated public safety solutions. More than 3,600 Public Sector customers rely on Infor’s solutions like Enroute computer-aided dispatch (CAD), records management systems (RMS), mapping, mobile data computing, automatic vehicle locating, EMS clinical integration, asset management and more. Infor is a ProQA® Titanium-certified CAD vendor for fire, police, and medical dispatch protocols.

Visit us at www.infor.com/pub-safety

Priority Dispatch

BOOTH #613

Priority Dispatch Corp.™ (PDC™) is the leader in multi-service 9-1-1 dispatch calltaking solutions and is endorsed by the internationally recognized International Academies of Emergency Dispatch®. While many have attempted to provide products and training for communication center calltaking, PDC is the only company to take a comprehensive systems approach. The Priority Dispatch System™ has been in use for more than 35 years with substantial, frequent updates. Historical data shows the system reduces the risks to field responders, lowers the cost of emergency services and liability for local governments, and increases the quality of service and citizen satisfaction. The Priority Dispatch System is available in ProQA® software format, which interfaces with most CAD and phone systems, as well as in a cardset format. We also offer AQUA® quality assurance and improvement software, training, consulting, and Academy accreditation support.

For more information, email info@prioritydispatch.net, call 800-363-9127, or visit us at prioritydispatch.net

TriTech

BOOTH #301

TriTech Software Systems’ sole focus is public safety software. The company’s experienced team of more than 350 industry experts each contribute, on average, more than a decade of industry experience. TriTech has delivered the most trusted public safety software for over two decades and continues to lead the market with innovative, enterprise-wide solutions for call-taking, dispatch, records management, jail management, analytics and intelligence, field-based reporting, patient care reporting, and billing. For the best end-to-end integrated solution with unparalleled workflow to serve any size and type of agency, join the 2,700+ agency installations serving over 200 million citizens across 7 countries who rely on one company – TriTech Software Systems.

For more information on TriTech, visit tritech.com

NENA/TheCall

BOOTH #523

NENA: The 9-1-1 Association serves its more than 7,000 members and the greater public safety community as the only non-profit professional organization solely focused on 9-1-1 policy, technology, operations, and education issues. NENA exists to ensure that 9-1-1 is prepared to meet the needs of all citizens making requests for assistance by developing standards and resources for 9-1-1 systems and operations; providing education, training, and certifications for 9-1-1 professionals; informing policymakers about issues facing 9-1-1; and educating the public about 9-1-1 systems, their importance, and their proper uses.

Learn more at www.nena.org
OnStar

OnStar, the leading provider of in-vehicle safety, security and communication services, is exhibiting to educate the First Responder community about the vital and life-saving information OnStar can provide to 911 centers. OnStar provides services to over 6 million subscribers in the U.S., Canada and China, and is available on most GM models for 2013. OnStar offers a comprehensive portfolio of safety services, including Automatic Crash Response, Injury Severity Prediction, Emergency Medical Dispatch, Stolen Vehicle Slowdown and Remote Ignition Block. Working together, we can help to save lives and keep our roadways safe.

More information can be found at onstar.com/publicsafety

PSTC

The PSTC “family of companies” is your one stop shop for all of your 9-1-1 and emergency communications needs. Please stop by our booth and learn more about our in-person, in-service training, our amazing 911 CARES project and our innovative DVD based training. PSTC is proud of our many in-service and supervisory workshops. Whether it’s training, appreciation products or DVDs, PSTC is your answer. Stop by our booth for a FREE training DVD. We are also the only company that offers Gordon Graham training DVDs!

For more information, visit p tstc911.com

Evans

With over 10,000 locations installed in the past 34 years, Evans designs and manufactures furniture and turnkey solutions for public safety, government, command and control, and homeland security environments. Evans’ worldwide headquarters and 170,000 SF manufacturing plant is located in Calgary, Alberta, Canada with US operations centers in Washington DC, Grapevine, Texas and a dedicated Public Safety office in Bainbridge Island, Washington. Get with it, get Evans……

For more information, visit evansonline.com

911Trainer.com

911Trainer.com

Proud home of 9-1-1 Reality Simulation loaded with 9-1-1 Academy training products to expand or enhance your Comm Center learning environment. Visit booth 200 and see how you can get your trainees “Floor Ready” using simulation training. John Famiilo of Oswego NY 9-1-1 says, “9-1-1 Reality is easy to use and offers our staff with excellent training opportunities.” Improve retention, speed up learning, and let them practice multi tasking, call taking, radio, text and new premise history and flags. Wireless, portable, zero learning curve created for TRAINING by 9-1-1 Trainers. Labs are customized to fit your agency needs and areas specific addressing.

For more information, visit 911trainer.com

Bradshaw Consulting Services, Inc.

Bradshaw Consulting Services is proud to offer the MARVLIS suite of products designed to improve the delivery of time-critical services such as EMS, Fire, and even Mobile Integrated Healthcare or Community Paramedicine. Efficiency and effectiveness are the goals that drive BCS toward creating valuable partnerships with clients and industry leaders. It is that focus that results in high performance solutions, like MARVLIS, that integrate GIS technology with spatial reasoning to solve real world problems in public safety.

For more information, visit bradshawconsulting.com, email ccm@fitchassoc.com, or call (816) 431-2600.

CCM

The Communication Center Manager (CCM) Course, now celebrating its 13th year, is a one-of-a-kind program that presents the latest management and leadership practices used by emergency service providers around the world. It has proven to be successful for business leaders and students in implementing effective changes in today’s communication center. CCM is structured as an accelerated program designed to deliver minimum time investment with maximum results. A small group of up to 40 students progresses through two dynamic, separate weeks of education and training, building a lifelong network of peers and colleagues.

For more information, visit fitchassoc.com, email ccm@fitchassoc.com, or call (816) 431-2600.
Concept Seating

*BOOTH #302*

The leader in 24/7 seating introduces the new 3142r1 and an updated version of the 3150HR Operator Chair. All models rated to 550lb, have a unique suspension system and a six year warranty that covers normal wear and tear. Available in fabric, Alternative Leather and Leather.

CritiCall Pre-Employment Testing Software

*BOOTH #101*

CritiCall pre-employment testing software is designed to measure dispatcher/calltaker applicants’ job-related behaviors and skills such as data entry, multi-tasking, decision-making, memory recall, map reading, and more. The computerized test, which is virtually self-administering and self-scoring, is used by over 1,200 public safety agencies. Many users have reported a dramatic reduction in turnover and an increase in the productivity of those they hire after adopting CritiCall for their pre-employment testing. Custom Test Writer and Validation Wizard included. NEW! TactiCall customizable dispatcher training software is now available. TactiCall helps assess and train dispatchers on speech and protocols necessary to succeed. Demos available.

For more information, visit criticall911.com

DataTech911

*BOOTH #614*

DataTech911’s EMS solutions enhance the speed and effectiveness of emergency response. DataWatch911 is a proven tool that provides real-time metrics utilizing CAD data for emergency management to efficiently manage agency performance. FirstResponse911 maintains the exchange of information across PSAPs to reduce response times and coordinate emergency response. StatusNet911 is always on so dispatchers, emergency response agencies, hospital MICNs and emergency coordinators across jurisdictions can share information, monitor hospital diversions, triage capacities, bed availability, etc. During an MCI, all emergency personnel at the scene, dispatch center and in the hospital ED can monitor and manage patient allocation and unit assignments.

For more information, visit datatech911.com

Denise Amber Lee Foundation

*BOOTH #103*

The Denise Amber Lee Foundation is a non-profit initiative of Nathan Lee whose wife was kidnapped, raped, and murdered in 2008. No doubt Denise would be alive today if a 9 minute 9-1-1 cell phone call from a bystander witnessing the abduction had been handled appropriately. Even though there were at least 4 patrol cars within a mile of this call, it was never dispatched. Denise leaves behind a loving husband and two small boys. Nathan, determined not to have Denise die in vain, is partnering with the 9-1-1 industry and using the powerful emotional ammunition of this tragic event to drive change to public policy. The Foundation seeks legislative changes to funding, training, certification, and technology so that no other family has to endure this type of pain and suffering again.

For more information, visit deniseamberlee.org

Emergency CallWorks

*BOOTH #601*

Emergency CallWorks® offers the only natively integrated, browser-based, dispatch technology in the industry for 9-1-1 call taking, incident management (CAD) and GIS systems. Providing superior 24-hour support, reliable tracking and emergency remote hosting, our innovative web-based approach reduces your Back Office infrastructure by up to 45%. Our simpler, easier-to-use workflow approach is designed to work the way you do today. DispatchStation® manages receiving and dispatching emergency calls for service. CaliStation® provides NG9-1-1 and mapping only options for existing CAD users looking to migrate to NG9-1-1.

For more information, visit emergencycallworks.com

Eventide, Inc.

*BOOTH #704*

Eventide is a leading developer of recording systems for mission-critical communications, with thousands of satisfied users worldwide. Eventide’s NexLog recorders reliably capture and archive your important 9-1-1 calls and emergency dispatch traffic, and provide your users with a richly-featured web-based application for incident replay & export. NexLog recorders are designed to interoperable with the widest range of 9-1-1, NG9-1-1, 9-1-1, dispatch, and P25 radio systems. Stop by our booth at Navigator to see how Eventide’s NexLog suite of products can help you meet your agency’s critical call-handling and EMD needs.
EXACOM, Inc
BOOTH #602

EXACOM is a leading manufacturer of multi-media recording solutions for public safety and the federal government. The EXACOM “Hindsight-G2” recording system addresses the latest in recording initiatives with integrations to address both NG911 and P25IP radio Systems.

For more information, visit exacom.com

FirstWatch
BOOTH #313

Ask us about the FirstWatch-ProQA® / Paramount Dashboard & Report (FREE for FirstWatch customers with ProQA interface). Provides Comm. Center managers, supervisors & QA/QI teams with an automated, real-time tool to monitor and improve call center operations, as well as the effectiveness of your teams ProQA usage. More than 300 Public Safety teams across the USA & Canada count on FirstWatch every day, to monitor CAD, ProQA, ePCR, RMS, Phone and Hospital data in real-time, automatically! Performance, Operational, Clinical and Quality measures, in real-time via your iPad or iPhone, there’s an App for that - it’s FirstWatch!

See real world examples at FirstWatch.net

Global Software
BOOTH #413

As a public safety agency, you need technology that can adjust to the way that you operate — every day.

At Global Software, we connect people with information through proven software solutions that evolve over time. Our comprehensive suite of products gives your frontline responders the critical edge when it matters most, while providing you freedom and flexibility in your own system configuration. With integrated computer aided dispatch (CAD), records management software (RMS), wireless mobile applications and regional data sharing, Global delivers reliable, integrated and timely solutions that ensure a safer community.

For more information visit globalsoftwarecorp.com or email info@globalsoftwarecorp.com today.

Guardian Tracking
BOOTH #416

Performance management software that provides a centralized and standard method of documentation to gain an accurate reflection of employees’ overall performance. Employees are an organization’s most valuable asset – Improve organizational culture, create more engaged employees, and save careers with Guardian Tracking.

Harris
BOOTH #603

Harris is an international communications and information technology company serving government and commercial markets in more than 125 countries. Headquartered in Melbourne, Florida, the company has approximately $5 billion of annual revenue and about 14,000 employees — including 6,000 engineers and scientists. Harris is dedicated to developing best-in-class assured communications® products, systems and services.

Additional information about Harris Corporation is available at harris.com

HigherGround, Inc.
BOOTH #304

HigherGround, Inc. is a premier software developer of recording solutions for performance monitoring and incident reconstruction. These solutions are designed to deliver timely, accurate information for analytics and decision support to improve operations, performance and ultimately increase profitability. HigherGround applications are used by call centers as well as by organizations in public safety, financial services, healthcare, government and many other industries.

HigherGround’s award-winning solutions have earned a remarkable reputation in mission critical and emergency responder environments. Capture911™ has been installed in more than 1000 PSAPs and government agencies over the past decade. In addition, HigherGround’s Instant Retrieval software (IRR) is a proven industry standard for call recording and is used as an OEM product in consoles produced by several industry leaders such as SolaCom and Cassidian – an Airbus Company.
InterAct
BOOTH #105
InterAct creates interconnected software products that support dispatchers, incident responders (law, fire, EMS), and correctional officers worldwide. We bring the benefits of cloud computing to public safety. Our cloud applications connect public safety practitioners to each other and the information they need anywhere, anytime. Our cloud options are more reliable, less costly, easier to use, and more secure. We believe the benefits of cloud computing are so great that its adoption has become a key success factor in achieving the mission that we share with our customers: the safety and well-being of citizens and their communities.

For more information, visit interact911.com

Intergraph
BOOTH #514
Intergraph's NextGen capabilities in CAD, including text and video integration integrated, and Thin Client capabilities in inPursuit WebRMS provides the latest functionality to meet your agencies needs. Utilizing the Business Intelligence feature allows agencies to utilize their data to not only save lives, but to also save time and money. Our solution protects 1 in 12 people around the world and helps agencies make Smarter Decisions.

For more information, visit kps.com

International Academies of Emergency Dispatch
BOOTH #111
The IAED™ is a non-profit, standard-setting organization promoting safe and effective emergency dispatch services worldwide for more than 35 years. Comprised of three allied Academies for medical, fire, and police dispatching, the IAED supports first responder-related research, unified protocol application, legislation for emergency call center regulation, and strengthening the emergency dispatch community through education, certification, and accreditation.

For more information, visit emergencydispatch.org

Keystone Public Safety, Inc.
BOOTH #616
Keystone Public Safety has been in the public safety market providing dispatch software applications to meet the needs of police and fire departments nation-wide since 1988. Keystone’s staff, is a technically oriented group of professionals who understand the complexities of automating public safety agencies. Clients range in size and scope of application uses, from sites integrating only a few systems users in a single location, to large multijurisdictional, multi-agency sites with numerous remote locations. Keystone authors its application software products using knowledge gained first hand from each new client and installation, and with continuing input from our active users associations.

For more information, visit kps.com

Ma-Chis LCITE.
BOOTH #317
TRANSCOM is the Department of Energy unclassified Tracking and Communication Web Application that monitors the progress of “high visibility” shipments, i.e. spent nuclear fuel, high-level and Transuranic radioactive waste. MaChis is the DOE TRANSCOM System contractor managing and operating the system and a TRANSCOM Communication Center. TRANSCOM users, DOE shippers, carriers, state and local governments and various federal agencies, access the web application from a PC or mobile device. Users have access to shipment information (positions, messages, mapping functions, routes and bill of lading data). Users also have access to 24/7 help desk where a system operator provides system support.

Motorola
BOOTH #205
Motorola Solutions is a leading provider of mission-critical communication solutions and services for public safety and commercial customers. Through leading-edge innovation and communications technology, it is a global leader that enables its customers to be their best in the moments that matter. You can find our solutions at work in a variety of industries including manufacturing, retail, hospitality, law enforcement, fire, emergency medical service, transportation and logistics, education, healthcare, energy, utilities, and government services.

For more information, visit motorolasolutions.com
National Center for Missing & Exploited Children

Public-Safety Telecommunicators are the first responders for cases of missing and sexually exploited children. Decisions made in screening calls, providing advice to parents, collecting information for patrol officers, and NCIC entry all contribute to the swift recovery of missing children. The National Center for Missing & Exploited Children (NCMEC) provides educational materials, technical assistance, and training to help 9-1-1 Call Centers effectively respond to reports of missing and/or sexually exploited children. Visit www.missingkids.com/911 to learn about the FREE training opportunities available to agencies implementing these best practices pertaining to calls of missing and exploited children. Email 911@ncmec.org with questions.

For more information, visit missingkids.com/911

New World Systems

New World’s Aegis™ Public Safety Software solutions offer unmatched application integration that reduces data entry and provides fast information and communication across disciplines for law enforcement, fire and EMS. With extensive input from a large customer base, New World continues to enhance and further integrate CAD, Records, Mobile, Corrections, Information Sharing, Analytics and Dashboard solutions. This protects our customers’ long-term investments and ensures agencies are ready for advances in data sharing, mobility, intelligence, Next Generation 9-1-1 and future requirements.

For more information, visit newworldsystems.com

Russ Bassett

Russ Bassett, is an innovative leader in the design of public safety dispatch furniture. Our unique multi-platform design, unparalleled structural integrity, height adjustable, advanced technology integration and customization options make us the most flexible console manufacturer on the market.

For more information, visit russbassett.com

SAVE Corporation


For more information, visit 911simulators.com

Police Legal Sciences, Inc.

PLS Dispatch Pro is an online training platform created by a dedicated team of career dispatcher/trainers, attorneys, and medical professionals. Monthly lessons deconstruct actual 911 calls in terms of Fundamental Skills, Professionalism, Customer Service, Civil Liability and Outcomes. Each lessons provides 1 hour of Continuing Dispatcher Education credit which can be applied to state CDE requirements; APCO recertification for EMDs; and/or IAED™ re-certification for EMD, EFP, EPD and ETC. This is high-quality, 24/7, cost effective training accelerates the learning curve for new hires and sharpens the performance of career dispatchers. Free PLS Dispatch Pro lessons demonstration lessons are available.

For more information, visit policelegalsciences.com

For more information, please visit plantronics.com/gov
**Schedule Express by Informer Systems**

**BOOTH #605**

ScheduleExpress™ was designed to address the complex 24/7/365 scheduling problems facing public safety agencies. A Cloud-Based Service, ScheduleExpress allows you to build and maintain shift-based schedules as it also uniquely automates the absence, trade, overtime, training and special assignment processes – from request through approval – effectively eliminating paperwork, man-power costs and substantially reducing errors, omissions and abuse. Our customers across North America, from Boston to San Diego, Orlando to Salt Lake City, and Houston to Syracuse, have reduced time management of their workforce by 40‐60%. Come see why so many agencies are choosing ScheduleExpress for all their scheduling needs!

For more information, visit informersystems.com

---

**Spillman Technologies**

**BOOTH #405**

Spillman Technologies provides comprehensive public safety software solutions for more than 1,200 police departments, sheriff’s offices, communications centers, fire departments, and correctional facilities nationwide. Spillman specializes in integrated software, including CAD, RMS, Mobile Data & Field Reporting, Mapping & GIS, Intelligence-Led Policing & Analytics, JMS, Fire, Data Sharing, and Personnel & Resources. Spillman provides efficient multi-jurisdictional and multidiscipline dispatching with integrated mapping, customizable screen configurations, the ability to dispatch using the command line or the mouse, real-time integration with Spillman's mobile and RMS solutions, and advanced searching, reporting, and dashboard analytics.

For more information, visit spillman.com

---

**Steelpower Chairs**

**BOOTH #417**

Our Steelpower chairs offer great comfort, extreme durability with ergonomics for 24/7 use. We offer several models because seating is a personal preference to each individual. Our Anti-Microbial material (no more odors) It’s very easy to clean and helps to keep our customers healthier. All of our chairs pass GSA-FNEW-83-269E testing.

For more information, visit steelpower.com

---

**SunGuard Public Sector**

**BOOTH #505**

A proven leader in public safety and government information technologies, SunGard Public Sector provides integrated enterprise-wide solutions for public safety and justice agencies, city and county governments, and non-profits. Our innovative software and services solutions enable public safety agencies to connect departments, officers, telecommunicators, and citizens with information at the point of need. More than 115 million citizens in North America reside in communities where SunGard Public Sector products are in use. SunGard Public Sector software suites include ONESolution for Windows, NaviLine for IBM’s iSeries platform, and the PLUS Series. The comprehensive ONESolution product line includes computer-aided dispatch, records management, jails management, mobile computing, and justice applications, alongside a full enterprise-wide software suite for local government finance, human resources, and community services.

For more information, visit sungardps.com
The Genesis Group

**BOOTH #700**

PULSE is an advanced vehicular response and call-tracking system that optimizes response times, helping first responders fulfill compliance agreements, cut costs, and most importantly, save time, property, money and lives. PULSE alerts its users upon detecting service that does not meet contractual standards, then provides administrators and review boards with comprehensive data for constant improvement analysis. PULSE displays live incident data and replays it using Google Maps™, and provides on-demand reports for critical analysis. Genesis has been providing two-radio software and public safety communications software to the industry since 1989.

To learn more or request a demo go to www.genesisworld.com/PULSE

---

Watson Dispatch

**BOOTH #217**

Watson Dispatch is the leading manufacturer of console furniture for emergency and public safety communications. The company pioneered ergonomically engineered adjustable furniture for call centers and today has over 10,000 consoles installed in nearly 2,500 centers across North America. Based at its advanced design and manufacturing facility outside Seattle, Watson operates a nationwide service and installation network. The company’s consoles accommodate the latest radio, telephone, and CAD technologies. Ruggedized for 24-7 call center environments, Watson consoles provide personalized fit and comfort for all emergency communications professionals. Explore more features and benefits at www.watsondispatch.com and in Navigator booth #217.

For more information, visit watsonfurniture.com

---

VPI

**BOOTH #201**

VPI is the world’s leading provider of mission-critical communications recording, speech analytics and quality assurance systems. VPI’s unique Call Playback integration with Priority Dispatch® AQUA® enables you to conveniently playback audio and optional desktop screen video recordings related to cases of interest directly from your AQUA case review interface – eliminating time-consuming need to search for recordings within a separate recording system. VPI’s intuitive Web-based software is Next Generation 9-1-1 ready, supports digital, IP and P25 recording, and is fully open standards for hardware platform flexibility and ease of integrations.

For more information, visit VPI-corp.com

---

Waldorf College

**BOOTH #503**

Waldorf College, based in Forest City, Iowa, has been providing quality education and leadership development to thousands since 1903. Today, Waldorf’s regionally accredited online degrees and certificates reflect the academic excellence of more than 100 years of education. Today, the excellence continues with online degrees in areas such as Fire Science, Occupational Safety, Communications, Business and Organizational Leadership.

Waldorf also features these benefits to aid your education:
- Textbooks Provided Through Waldorf Book Grant
- Complimentary Tutoring
- Affordable Tuition
- No Scheduled Online Sessions
- No ACT or SAT Required for Online Programs

Check us out! Please visit our website at: www.waldorf.edu/online

---

Xybix System, Inc.

**BOOTH #513**

As a trusted industry leader, Xybix has been providing ergonomic furniture for mission critical 24/7 environments for over 20 years. Our innovative approach has pioneered the way users think about their dispatch furniture. Xybix’s user friendly, ergonomic, workstations have top-of-the-line features including; US Patented Rollervision®, a focal depth adjustment monitor array, antimicrobial work-surfaces and more. Xybix recently announced its exclusive partnership with LifeSpan Fitness to bring treadmill desks and bikes into the emergency management industry. Our team of experienced professionals is available to answer any questions and help you get the most from your furniture.

For more information, visit xybix.com
Two weeks that will change your life...

...and unleash your inner superhero.

THE COMMUNICATION CENTER MANAGER COURSE
ONLINE SESSION BEGINS: Aug. 24, 2015
ON-SITE: Sept. 20-25 & Nov. 8-13, 2015

“CCM was life-changing. I learned a lot and developed solid relationships with people I might never have known.”

— Michel Gravel
New Brunswick EMS
Moncton, NB, Canada

Presented by: Fitch & Associates on behalf of IAED™

NENA has approved this course as credit toward recertification for the Emergency Number Professional designation.

Online registration for the 2015 course is now open. Go to www.emergencydispatch.org/certccmcourse or call Sharon Conroy at (816) 431-2600 for more course curriculum and registration information.

International Academies of Emergency Dispatch™